

List of diseases and biological functions in the proximal nerve stumps at 0.5 h, 1 h, 3 h, 6 h, 9 h, 1 d, 4 d, 7 d, and 14 d after nerve injury		
0.5 hour		
Category	P value	Molecules
Endocrine System Development and Function	3.89E-06-1.63E-02	GSTA1, SLC22A2, IL6
Lipid Metabolism	3.89E-06-1.47E-02	GSTA1, SLC22A2, IL6, AGTPBP1
Small Molecule Biochemistry	3.89E-06-1.96E-02	RGS9, CXCL3, HNMT, B3GAT1, GSTA1, SYT1, SLC22A2, IL6, AGTPBP1, A2M
Vitamin and Mineral Metabolism	3.89E-06-1.8E-02	CXCL3, Gucy2d, GSTA1, SYT1, SLC22A2, IL6, A2M
Inflammatory Response	7.1E-04-2.12E-02	CXCL3, HNMT, MMP8, SLC22A2, IL6, A2M
Cell-To-Cell Signaling and Interaction	9.68E-04-1.8E-02	IQSEC3, CXCL3, PRSS2, SLC22A2, SYT1, IL6, A2M
Cellular Movement	9.68E-04-2.05E-02	CXCL3, SCN2B, MMP8, IL6, A2M, TBX18
Hematological System Development and Function	9.68E-04-2.12E-02	CXCL3, MMP8, IL6, A2M

Immune Cell Trafficking	9.68E-04-2.12E-02	CXCL3, MMP8, IL6, A2M
Cellular Development	1.04E-03-2.12E-02	CXCL3, MMP8, IL6, A2M, TBX18
Cellular Growth and Proliferation	1.04E-03-2.12E-02	CXCL3, ADCY2, IL6, A2M
Connective Tissue Development and Function	1.04E-03-2.12E-02	CXCL3, ADCY2, IL6, A2M, TBX18
Hematopoiesis	1.04E-03-2.12E-02	CXCL3, IL6
Infectious Diseases	1.04E-03-1.8E-02	PRSS2, IL6, A2M
Inflammatory Disease	1.04E-03-1.93E-02	HNMT, SCN2B, IL6, A2M
Lymphoid Tissue Structure and Development	1.04E-03-2.12E-02	CXCL3, IL6
Skeletal and Muscular System Development and Function	1.04E-03-2.12E-02	CXCL3, IL6, A2M, TBX18

Tissue Development	1.04E-03-2.12E-02	CXCL3, MMP8, SYT1, IL6, A2M, TBX18
Cancer	1.19E-03-2.12E-02	RGS9, IQSEC3, SCN2B, MAGEE1, PRSS2, PCDH19, TMEM60, RALGAPB, DHRS7C, ZNF609, IL6, NPAS2, AGTPBP1, TBX18, CXCL3, MMP8, CFI, LRP11, GSTA1, SLC22A2, ADCY2, HNMT, ABHD3, KLHL31, DMXL2, NUDT19, STMN3, B3GAT1, PPP2R5E, SYT1, A2M, ABCD4, LRIF1
Organismal Injury and Abnormalities	1.19E-03-2.12E-02	RGS9, IQSEC3, SCN2B, MAGEE1, PRSS2, PCDH19, TMEM60, RALGAPB, DHRS7C, ZNF609, IL6, NPAS2, AGTPBP1, TBX18, CXCL3, MMP8, CFI, LRP11, GSTA1, SLC22A2, ADCY2, HNMT, ABHD3, KLHL31, DMXL2, NUDT19, STMN3, B3GAT1, PPP2R5E, SYT1, A2M, ABCD4, LRIF1
Neurological Disease	1.27E-03-2.02E-02	RGS9, CXCL3, ADCY2, SCN2B, HNMT, Gucy2d, PCDH19, B3GAT1, IL6, A2M, AGTPBP1, ABCD4, DMXL2
Cardiovascular Disease	1.65E-03-1.8E-02	SCN2B, CFI, IL6
Cardiovascular System Development and Function	1.65E-03-2.12E-02	IL6
Cell Cycle	1.65E-03-1.96E-02	IL6, A2M
Cell Death and Survival	1.65E-03-2.02E-02	CXCL3, MMP8, CFI, GSTA1, IL6, A2M, AGTPBP1
Cell Morphology	1.65E-03-1.96E-02	Gucy2d, IL6, A2M

Cell-mediated Immune Response	1.65E-03-2.12E-02	CXCL3, IL6
Cellular Assembly and Organization	1.65E-03-1.8E-02	RGS9, IQSEC3, SYT1, IL6, A2M
Cellular Compromise	1.65E-03-1.8E-02	CXCL3, GSTA1, IL6, AGTPBP1
Cellular Function and Maintenance	1.65E-03-2.12E-02	SYT1, IL6, A2M, TBX18
Connective Tissue Disorders	1.65E-03-2.12E-02	CXCL3, HNMT, SCN2B, CFI, IL6
DNA Replication, Recombination, and Repair	1.65E-03-1.65E-03	SLC22A2
Developmental Disorder	1.65E-03-1.8E-02	CXCL3, HNMT, MMP8, PCDH19, IL6, TBX18, ABCD4
Digestive System Development and Function	1.65E-03-1.8E-02	IL6
Embryonic Development	1.65E-03-2.12E-02	MMP8, IL6, A2M, TBX18

Endocrine System Disorders	1.65E-03-8.2E-03	IL6, DMXL2
Gastrointestinal Disease	1.65E-03-2.01E-02	RGS9, IQSEC3, SCN2B, MAGEE1, PCDH19, PRSS2, RALGAPB, TMEM60, ZNF609, IL6, NPAS2, AGTPBP1, TBX18, CXCL3, MMP8, CFI, LRP11, SLC22A2, ADCY2, HNMT, ABHD3, KLHL31, DMXL2, NUDT19, STMN3, B3GAT1, PPP2R5E, SYT1, A2M, ABCD4
Hematological Disease	1.65E-03-1.47E-02	CXCL3, CFI, B3GAT1, IL6, A2M
Hepatic System Development and Function	1.65E-03-1.8E-02	IL6
Hepatic System Disease	1.65E-03-1.8E-02	IL6
Hereditary Disorder	1.65E-03-2.08E-02	RGS9, ADCY2, SCN2B, HNMT, MMP8, PCDH19, CFI, IL6, A2M, ABCD4, TBX18, DMXL2
Immunological Disease	1.65E-03-1.74E-02	CXCL3, HNMT, CFI, B3GAT1, IL6
Metabolic Disease	1.65E-03-1.63E-02	MMP8, IL6, A2M, ABCD4
Molecular Transport	1.65E-03-1.96E-02	CXCL3, Gucy2d, B3GAT1, GSTA1, SYT1, SLC22A2, IL6, A2M
Nervous System Development and Function	1.65E-03-2.05E-02	CXCL3, IQSEC3, Gucy2d, B3GAT1, SYT1, IL6, NPAS2, AGTPBP1, A2M

Ophthalmic Disease	1.65E-03-1.74E-02	CXCL3, MMP8, CFI, IL6
Organ Development	1.65E-03-2.12E-02	SYT1, IL6, TBX18
Organismal Development	1.65E-03-2.12E-02	MMP8, IL6, A2M, TBX18
Organismal Functions	1.65E-03-1.15E-02	IL6
Protein Trafficking	1.65E-03-1.65E-03	SYT1
Renal and Urological Disease	1.65E-03-2.08E-02	CFI, IL6, TBX18, ABCD4
Skeletal and Muscular Disorders	1.65E-03-2.12E-02	RGS9, CXCL3, ADCY2, HNMT, SCN2B, IL6, A2M
Tissue Morphology	1.65E-03-2.12E-02	CXCL3, IQSEC3, Gucy2d, B3GAT1, IL6, AGTPBP1, A2M
Tumor Morphology	1.65E-03-1.8E-02	B3GAT1, IL6
Amino Acid Metabolism	3.29E-03-1.96E-02	IL6
Dermatological Diseases and Conditions	3.29E-03-1.05E-02	RGS9, IQSEC3, SCN2B, MAGEE1, PCDH19, DHRS7C, RALGAPB, ZNF609, IL6, NPAS2, AGTPBP1, TBX18, DMXL2, NUDT19, STMN3, MMP8, CFI, B3GAT1, GSTA1, SYT1, SLC22A2, A2M, LRIF1

Gene Expression	3.29E-03- 1.96E-02	IL6
Humoral Immune Response	3.29E-03- 1.47E-02	IL6
Hypersensitivity Response	3.29E-03- 9.83E-03	IL6
Organ Morphology	3.29E-03- 1.47E-02	CXCL3, IL6
Psychological Disorders	3.29E-03- 1.82E-02	RGS9, ADCY2, SCN2B, IL6, A2M
Respiratory Disease	3.29E-03- 1.94E-02	CXCL3, ADCY2, HNMT, STMN3, ABHD3, MMP8, CFI, B3GAT1, SLC22A2, IL6, AGTPBP1, DMXL2
Reproductive System Disease	4.18E-03- 1.96E-02	RGS9, IQSEC3, ADCY2, SCN2B, HNMT, MAGEE1, ABHD3, PCDH19, KLHL31, DHRS7C, RALGAPB, ZNF609, IL6, NPAS2, AGTPBP1, TBX18, DMXL2, CXCL3, MMP8, CFI, GSTA1, SLC22A2, A2M, ABCD4
Carbohydrate Metabolism	4.73E-03- 1.37E-02	CXCL3, ADCY2, ABHD3, B3GAT1, IL6
Antimicrobial Response	4.93E-03- 1.96E-02	IL6, A2M
Drug Metabolism	4.93E-03- 2.12E-02	GSTA1, SYT1, SLC22A2, IL6
Hair and Skin Development and Function	4.93E-03- 1.47E-02	IL6

Reproductive System Development and Function	6.56E-03-1.47E-02	IL6
Respiratory System Development and Function	6.56E-03-1.15E-02	MMP8, IL6
Behavior	6.6E-03-2.05E-02	B3GAT1, IL6, NPAS2
Organismal Survival	8.2E-03-8.2E-03	CXCL3
Post-Translational Modification	8.2E-03-1.47E-02	MMP8, IL6
Protein Degradation	8.2E-03-8.2E-03	MMP8
Protein Synthesis	8.2E-03-8.2E-03	MMP8
Cell Signaling	9.83E-03-1.8E-02	RGS9, CXCL3, Gucy2d, IL6, SYT1, NPAS2, A2M
Nucleic Acid Metabolism	9.83E-03-9.83E-03	RGS9
Free Radical Scavenging	1.8E-02-1.8E-02	CXCL3

1 hour		
Category	P value	Molecules
Cell Signaling	5.24E-06-1.23E-03	BANK1, CXCL3, ALOX12B, DUSP3, CXCL13, CD2, ICOS, CCL20, IL6, AQP4, A2M
Molecular Transport	5.24E-06-7.47E-03	BANK1, CXCL3, CXCL13, CD2, ICOS, CCL20, IL6, AQP4, TTN, A2M
Vitamin and Mineral Metabolism	5.24E-06-8.72E-03	BANK1, CXCL3, CXCL13, CD2, ICOS, CCL20, GSTA1, IL6, AQP4, A2M
Cellular Function and Maintenance	6.3E-06-7.47E-03	CXCL3, USH2A, HTR4, CD2, CXCL13, ICOS, CCL20, OBSCN, IL6, AQP4, TTN, A2M
Cell-To-Cell Signaling and Interaction	6.75E-06-9.33E-03	BANK1, RBFOX1, CXCL3, DUSP3, CXCL13, CD2, ICOS, CCL20, IL6, A2M, Muc4
Cellular Growth and Proliferation	6.75E-06-8.09E-03	BANK1, RBFOX1, CD2, HTR4, CCL20, OBSCN, IL6, TTN, CXCL3, CXCL13, ICOS, A2M, ACTC1
Cellular Movement	2.05E-05-8.79E-03	SCN2B, CD2, Cyct, IGF2BP3, CCL20, Rnase2 (includes others), IL6, AQP4, SYNPO2, CXCL3, CXCL13, STMN3, ICOS, MMP12, ACTC1, A2M
Hematological System Development and Function	2.05E-05-9.33E-03	BANK1, CXCL3, DUSP3, HTR4, CD2, CXCL13, ICOS, CCL20, IL6, MMP12, TTN, A2M

Humoral Immune Response	2.05E-05-7.47E-03	BANK1, CD2, CXCL13, ICOS, CCL20, IL6
Immune Cell Trafficking	2.05E-05-9.33E-03	BANK1, CXCL3, DUSP3, CD2, CXCL13, ICOS, CCL20, IL6, MMP12, A2M
Inflammatory Response	2.05E-05-9.33E-03	BANK1, CXCL3, DUSP3, KMO, CD2, CXCL13, ICOS, Rnase2 (includes others), CCL20, IL6, MMP12, A2M
Lymphoid Tissue Structure and Development	2.05E-05-8.72E-03	BANK1, CXCL3, CD2, CXCL13, ICOS, CCL20, IL6, A2M
Cell-mediated Immune Response	2.65E-05-7.47E-03	CXCL3, CD2, CXCL13, ICOS, CCL20, IL6
Embryonic Development	4.18E-05-7.48E-03	BANK1, CXCL13, ICOS, CCL20, OBSCN, IL6, A2M, ACTC1, TTN
Organ Development	4.18E-05-7.48E-03	BANK1, SCN2B, CXCL13, ICOS, OBSCN, IL6, ACTC1, TTN
Organismal Development	4.18E-05-7.48E-03	BANK1, CXCL13, ICOS, OBSCN, IL6, MMP12, A2M, ACTC1, TTN
Tissue Development	4.18E-05-7.48E-03	BANK1, CXCL3, HTR4, CXCL13, ICOS, OBSCN, CCL20, IL6, MMP12, A2M, ACTC1, TTN
Tissue Morphology	4.18E-05-8.72E-03	BANK1, CXCL3, CXCL13, HTR4, ICOS, CCL20, IL6, MMP12, ACTC1, TTN, A2M
Cardiovascular Disease	5.11E-05-8.28E-03	SCN2B, IL6, AQP4, ACTC1, TTN

Cellular Assembly and Organization	5.11E-05-7.47E-03	CD2, ICOS, OBSCN, IL6, A2M, ACTC1, TTN
Cellular Development	5.11E-05-8.28E-03	BANK1, CXCL3, HTR4, CD2, ICOS, OBSCN, CCL20, IL6, MMP12, ACTC1, TTN, A2M
Hereditary Disorder	5.11E-05-8.28E-03	RBFOX1, ALOX12B, USH2A, SCN2B, HTR4, IL6, AQP4, TTN, MAL2, ICOS, ACTC1, A2M, ABCD4
Organismal Injury and Abnormalities	5.11E-05-9.33E-03	BANK1, RBFOX1, ALOX12B, USH2A, SCN2B, KMO, CD2, HTR4, IGF2BP3, TMEM60, OBSCN, CCL20, EPC2, TIGD2, IL6, OR2C1, AQP4, TTN, CXCL3, MAL2, CXCL13, ICOS, GSTA1, MMP12, ACTC1, A2M, ABCD4
Skeletal and Muscular Disorders	5.11E-05-9.33E-03	RBFOX1, SCN2B, HTR4, CCL20, IL6, AQP4, TTN, CXCL3, CXCL13, MAL2, ICOS, GSTA1, MMP12, ACTC1, A2M
Skeletal and Muscular System Development and Function	5.11E-05-7.48E-03	CXCL3, SCN2B, HTR4, OBSCN, IL6, A2M, ACTC1, TTN
Gastrointestinal Disease	8.2E-05-7.47E-03	BANK1, RBFOX1, USH2A, KMO, HTR4, IGF2BP3, CCL20, OBSCN, TMEM60, TIGD2, IL6, OR2C1, TTN, CXCL3, CXCL13, ICOS, GSTA1, MMP12, ACTC1, A2M
Immunological Disease	8.2E-05-9.33E-03	BANK1, CXCL3, KMO, CXCL13, CD2, ICOS, CCL20, IL6, MMP12
Ophthalmic Disease	8.2E-05-7.47E-03	CXCL3, USH2A, CXCL13, CCL20, IL6, AQP4
Connective Tissue	1.53E-04-7.47E-03	CXCL3, CXCL13, HTR4, IL6

Development and Function		
Hematopoiesis	1.75E-04-9.08E-03	CXCL3, CXCL13, CD2, HTR4, ICOS, CCL20, IL6
Cancer	1.97E-04-9.17E-03	RBFOX1, USH2A, KMO, HTR4, CD2, IGF2BP3, CCL20, TMEM60, OBSCN, EPC2, TIGD2, IL6, OR2C1, TTN, CXCL3, CXCL13, MMP12, A2M, ACTC1
Amino Acid Metabolism	2.23E-04-5.61E-03	KMO, IL6
Cell Morphology	2.23E-04-7.84E-03	HTR4, CD2, ICOS, IL6, MMP12, AQP4, ACTC1, TTN, A2M
Small Molecule Biochemistry	2.23E-04-8.72E-03	ALOX12B, KMO, GSTA1, IL6
Cardiovascular System Development and Function	2.64E-04-7.48E-03	SCN2B, ICOS, OBSCN, IL6, MMP12, ACTC1, TTN
Cell Death and Survival	3.54E-04-9.22E-03	CXCL3, CD2, ICOS, GSTA1, IL6, MMP12, ACTC1, TTN
Dermatological Diseases and Conditions	5.26E-04-8.5E-03	CXCL3, ALOX12B, CXCL13, CD2, CCL20, IL6, MMP12, A2M
Endocrine System	5.74E-04-5.61E-03	GSTA1, IL6

Development and Function		
Lipid Metabolism	5.74E-04-8.72E-03	ALOX12B, GSTA1, IL6
Hematological Disease	6.61E-04-8.5E-03	BANK1, CXCL3, HTR4, CXCL13, CD2, ICOS, CCL20, IL6, MMP12, A2M
Organ Morphology	7.03E-04-7.48E-03	CXCL3, ALOX12B, SCN2B, CXCL13, IL6, ACTC1, TTN
Cellular Compromise	7.73E-04-7.47E-03	CXCL3, CD2, ICOS, OBSCN, GSTA1, IL6, AQP4
Hepatic System Disease	9.59E-04-7.47E-03	USH2A, KMO, IGF2BP3, OBSCN, CCL20, TIGD2, IL6, TTN
Cell Cycle	1E-03-9.33E-03	CD2, ICOS, IL6, A2M
Gene Expression	1E-03-9.33E-03	CD2, IL6
Protein Synthesis	1.3E-03-8.87E-03	BANK1, IGF2BP3, ICOS, IL6
Infectious Diseases	1.35E-03-8.32E-03	CXCL13, ICOS, IL6, MMP12, AQP4, A2M
Inflammatory Disease	1.35E-03-9.33E-03	KMO, CD2, CXCL13, ICOS, CCL20, IL6, AQP4, A2M
Neurological Disease	1.85E-03-9.32E-03	RBFOX1, CXCL3, USH2A, SCN2B, CXCL13, MAL2, HTR4, ICOS, CCL20, IL6, AQP4, ACTC1, A2M, ABCD4
Auditory Disease	1.87E-03-3.74E-03	USH2A, AQP4

Connective Tissue Disorders	1.87E-03-9.33E-03	CXCL3, SCN2B, CXCL13, HTR4, ICOS, CCL20, IL6, MMP12
Developmental Disorder	1.87E-03-7E-03	CXCL3, ALOX12B, USH2A, HTR4, CD2, Rnase2 (includes others), IL6, MMP12, ACTC1, TTN, A2M, ABCD4
Digestive System Development and Function	1.87E-03-7.47E-03	IL6
Endocrine System Disorders	1.87E-03-9.17E-03	RBFOX1, BANK1, KMO, HTR4, CXCL13, IGF2BP3, ICOS, OBSCN, GSTA1, IL6, A2M, TTN
Hepatic System Development and Function	1.87E-03-7.47E-03	IL6
Metabolic Disease	1.87E-03-8.72E-03	RBFOX1, BANK1, KMO, HTR4, CXCL13, ICOS, GSTA1, IL6, A2M, ABCD4
Nervous System Development and Function	1.87E-03-7.47E-03	RBFOX1, HTR4, IL6, AQP4, A2M
Organismal Functions	1.87E-03-7.47E-03	KMO, IL6, TTN

Renal and Urological Disease	1.87E-03-1.87E-03	IL6, ABCD4
Reproductive System Disease	1.87E-03-9.17E-03	IGF2BP3, IL6, AQP4
Tumor Morphology	1.87E-03-5.61E-03	IL6
Hair and Skin Development and Function	2.95E-03-5.61E-03	ALOX12B, IL6
Psychological Disorders	3.04E-03-9.32E-03	RBFOX1, SCN2B, MAL2, HTR4, CCL20, IL6, AQP4, A2M
Hypersensitivity Response	3.74E-03-7.47E-03	CD2, ICOS, IL6
Reproductive System Development and Function	3.74E-03-7.47E-03	Cyct, IL6, AQP4
Respiratory Disease	3.74E-03-7.47E-03	CXCL3, CD2, ICOS, IL6, MMP12
Protein Trafficking	4.05E-03-7.47E-03	CD2, ICOS, IL6, A2M, TTN
Antimicrobial Response	4.71E-03-5.61E-03	CXCL13, Rnase2 (includes others), IL6

Nutritional Disease	5.48E-03-5.48E-03	HTR4, IL6
Drug Metabolism	5.61E-03-5.61E-03	IL6
Respiratory System Development and Function	7.47E-03-7.47E-03	IL6

3 hours		
Category	P value	Molecules
Cellular Growth and Proliferation	5.13E-09-1.37E-03	AFAP1L1, PROK2, HTR4, GDNF, TRH, CCL20, IL6, CSF3, AREG, SERPINB2, CXCL3, REG3G, CAMP, IL1RL2, IL1RN, MMP8, S100A8, PRDM1
Cellular Development	1.49E-08-1.37E-03	AFAP1L1, PROK2, HTR4, GDNF, TRH, CCL20, IL6, CSF3, AREG, SERPINB2, CXCL3, REG3G, CAMP, IL1RL2, IL1RN, MMP8, PRDM1, S100A8
Hematological System Development and Function	1.49E-08-1.37E-03	PROK2, HTR4, GDNF, CCL20, IL6, CSF3, SERPINB2, CXCL3, REG3G, CAMP, IL1RL2, Retnlg, IL1RN, MMP8, PRDM1, S100A8
Hematopoiesis	1.49E-08-1.37E-03	PROK2, CXCL3, CAMP, IL1RL2, GDNF, HTR4, IL1RN, CCL20, PRDM1, IL6, CSF3
Lymphoid Tissue	1.49E-08-1.37E-03	CXCL3, REG3G, CAMP, IL1RL2, GDNF, HTR4, IL1RN, Pzp, CCL20, PRDM1, IL6, CSF3

Structure and Development		
Tissue Development	1.49E-08-1.37E-03	AFAP1L1, PROK2, HTR4, GDNF, TRH, CCL20, IL6, CSF3, AREG, CXCL3, REG3G, CAMP, IL1RL2, IL1RN, MMP8, S100A8, PRDM1
Immune Cell Trafficking	1.56E-08-1.37E-03	PROK2, CXCL3, CAMP, GDNF, Retnlg, IL1RN, MMP8, CCL20, PRDM1, S100A8, IL6, CSF3
Inflammatory Response	1.56E-08-1.37E-03	PROK2, GDNF, CCL20, IL6, CSF3, SERPINB2, AREG, CXCL3, CAMP, IL1RL2, IL1RN, MMP8, Pzp, PRDM1, S100A8
Cellular Movement	1.82E-08-1.37E-03	PROK2, GDNF, TRH, CCL20, IL6, CSF3, SERPINB2, AREG, CXCL3, CAMP, IL1RN, Retnlg, MMP8, PRDM1, S100A8
Hematological Disease	2.09E-08-1.37E-03	CXCL3, CAMP, HTR4, GDNF, IL1RN, PRDM1, IL6, CSF3
Immunological Disease	2.09E-08-1.37E-03	CXCL3, CAMP, HTR4, IL1RN, MMP8, Pzp, CCL20, S100A8, PRDM1, IL6, CSF3, AREG
Organismal Injury and Abnormalities	2.09E-08-1.37E-03	AFAP1L1, PROK2, HTR4, GDNF, TRH, CCL20, IL6, CSF3, SRXN1, SERPINB2, AREG, CXCL3, CAMP, IL1RL2, IL1RN, MMP8, Pzp, PRDM1, S100A8, ARHGEF9
Cell Death and Survival	2.46E-08-1.37E-03	PROK2, GDNF, TRH, IL6, CSF3, SRXN1, AREG, SERPINB2, CXCL3, REG3G, CAMP, IL1RN, MMP8, Pzp, PRDM1, S100A8, GSTA1
Cell-To-Cell Signaling and Interaction	3.64E-08-1.37E-03	CXCL3, CAMP, GDNF, TRH, IL1RN, CCL20, PRDM1, S100A8, IL6, CSF3, AREG
Tissue Morphology	5.36E-08-1.37E-03	PROK2, GDNF, HTR4, TRH, CCL20, IL6, CSF3, SERPINB2, CXCL3, CAMP, REG3G, IL1RL2, IL1RN, MMP8, PRDM1, S100A8
Connective Tissue	6.66E-08-1.37E-03	CXCL3, REG3G, GDNF, HTR4, TRH, IL1RN, Pzp, S100A8, PRDM1, IL6, CSF3, AREG

Development and Function		
Skeletal and Muscular System Development and Function	6.66E-08-1.37E-03	CXCL3, HTR4, IL1RN, Pzp, S100A8, PRDM1, IL6, CSF3, AREG
Organismal Survival	7.64E-08-4.98E-04	GDNF, HTR4, IL6, CSF3, SRXN1, AREG, CXCL3, CAMP, IL1RN, MMP8, Pzp, S100A8, GSTA1, PRDM1
Cellular Function and Maintenance	8.11E-08-1.37E-03	PROK2, GDNF, HTR4, TRH, CCL20, IL6, CSF3, SRXN1, AREG, CXCL3, REG3G, CAMP, IL1RL2, IL1RN, PRDM1, S100A8
Connective Tissue Disorders	3.66E-07-5.99E-04	CXCL3, CAMP, IL1RN, MMP8, CCL20, S100A8, PRDM1, IL6, CSF3, SERPINB2, AREG
Inflammatory Disease	3.66E-07-1.37E-03	HTR4, CCL20, IL6, CSF3, SERPINB2, AREG, CXCL3, CAMP, IL1RN, MMP8, Pzp, PRDM1, S100A8
Skeletal and Muscular Disorders	3.66E-07-1.37E-03	GDNF, TRH, CCL20, IL6, CSF3, SERPINB2, AREG, CXCL3, CAMP, IL1RN, MMP8, GSTA1, S100A8, PRDM1
Cardiovascular System Development and Function	5.13E-07-1.11E-03	PROK2, HTR4, GDNF, IL6, CSF3, AREG, CXCL3, CAMP, IL1RN, MMP8, Pzp, PRDM1, S100A8

Dermatological Diseases and Conditions	7.31E-07-1.37E-03	GDNF, CCL20, IL6, CSF3, AREG, SERPINB2, CXCL3, CAMP, IL1RL2, IL1RN, MMP8, PRDM1, S100A8
Organismal Development	1.22E-06-1.37E-03	AFAP1L1, PROK2, HTR4, GDNF, TRH, CCL20, IL6, CSF3, AREG, REG3G, CAMP, IL1RN, MMP8, PRDM1, S100A8
Cancer	1.62E-06-1.37E-03	AFAP1L1, CXCL3, PROK2, ADCY2, GDNF, IL1RN, MMP8, S100A8, PRDM1, IL6, CSF3, SERPINB2, AREG
Tumor Morphology	1.62E-06-1.05E-03	CXCL3, GDNF, IL1RN, S100A8, IL6, CSF3, AREG
Cardiovascular Disease	1.72E-06-1.17E-03	GDNF, IL1RN, IL6, CSF3
Cellular Assembly and Organization	1.82E-06-1.37E-03	SHROOM3, CAMP, IL6, CSF3
Nervous System Development and Function	4.44E-06-1.37E-03	CXCL3, GDNF, TRH, IL1RN, PRDM1, IL6, CSF3, AREG
Digestive System Development and Function	5.13E-06-1.37E-03	CXCL3, GDNF, IL1RN, Pzp, CCL20, PRDM1, IL6, CSF3, AREG
Hepatic System Development and Function	5.13E-06-1.37E-03	CXCL3, IL1RN, Pzp, CCL20, PRDM1, IL6, CSF3, AREG

Organ Morphology	5.13E-06-6.72E-04	HTR4, IL1RL2, IL1RN, Pzp, PRDM1, IL6, CSF3, AREG
Drug Metabolism	5.45E-06-1.37E-03	CAMP, GDNF, TRH, IL1RN, GSTA1, IL6, AREG
Small Molecule Biochemistry	5.45E-06-1.37E-03	CXCL3, CAMP, HTR4, GDNF, TRH, IL1RN, MMP8, S100A8, GSTA1, IL6, CSF3, AREG
Embryonic Development	7.7E-06-1.37E-03	AFAP1L1, REG3G, CAMP, GDNF, HTR4, TRH, IL1RN, MMP8, CCL20, PRDM1, IL6, CSF3, AREG
Gastrointestinal Disease	1.09E-05-1.37E-03	CXCL3, CAMP, GDNF, HTR4, IL1RN, MMP8, Pzp, CCL20, PRDM1, S100A8, IL6, CSF3, AREG
Cell Signaling	1.13E-05-1.35E-03	PROK2, CXCL3, ADCY2, CAMP, HTR4, GDNF, Gucy2d, TRH, IL1RN, CCL20, S100A8, IL6
Molecular Transport	1.13E-05-1.37E-03	PROK2, GDNF, HTR4, TRH, Gucy2d, CCL20, IL6, CSF3, CXCL3, CAMP, IL1RN, MMP8, GSTA1, S100A8
Vitamin and Mineral Metabolism	1.13E-05-4.52E-04	PROK2, CXCL3, CAMP, GDNF, Gucy2d, TRH, CCL20, S100A8, GSTA1, IL6, AREG
Infectious Diseases	1.23E-05-1.37E-03	REG3G, CAMP, HTR4, IL1RN, MMP8, S100A8, IL6, CSF3, AREG
Respiratory Disease	1.23E-05-1.37E-03	CXCL3, CAMP, IL1RN, MMP8, IL6, AREG
Hepatic System Disease	2.62E-05-1.37E-03	CXCL3, IL1RN, Pzp, CCL20, PRDM1, IL6, CSF3, AREG
Organ Development	2.62E-05-1.37E-03	GDNF, HTR4, TRH, CCL20, IL6, CSF3, AREG, CXCL3, REG3G, CAMP, IL1RN, Pzp, PRDM1

Carbohydrate Metabolism	2.72E-05-9.64E-04	CXCL3, ADCY2, CAMP, IL1RN, TRH, IL6, CSF3
Cellular Compromise	2.72E-05-1.37E-03	CXCL3, CAMP, GDNF, IL1RN, GSTA1, IL6, AREG
Lipid Metabolism	2.72E-05-1.17E-03	CXCL3, CAMP, GDNF, IL1RN, TRH, MMP8, S100A8, GSTA1, IL6, CSF3, AREG
Hair and Skin Development and Function	3.75E-05-1.37E-03	CAMP, REG3G, TRH, MMP8, Pzp, PRDM1, IL6, AREG
Free Radical Scavenging	4.63E-05-4.63E-05	CXCL3, CAMP, CSF3
Cell Morphology	4.65E-05-1.37E-03	CAMP, GDNF, TRH, IL1RN, Pzp, PRDM1, IL6, CSF3, SRXN1, AREG
Developmental Disorder	5.06E-05-1.37E-03	HTR4, IL1RN, MMP8, IL6, ARHGEF9
Hereditary Disorder	5.06E-05-1.37E-03	IL1RN, MMP8, IL6, ARHGEF9
Metabolic Disease	5.06E-05-1.37E-03	REG3G, TRH, IL1RN, MMP8, IL6
Humoral Immune Response	6.5E-05-5.79E-04	PRDM1, IL6, CSF3
Nutritional Disease	6.74E-05-7.18E-05	CXCL3, GDNF, HTR4, IL1RN, IL6, AREG
Organismal Functions	7.18E-05-1.37E-03	CAMP, IL1RL2, IL6, CSF3

Psychological Disorders	7.18E-05-8.78E-04	HTR4, GDNF, IL1RN, IL6
DNA Replication, Recombination, and Repair	7.64E-05-2.52E-04	ADCY2, GDNF, IL1RN, IL6, CSF3, AREG
Cell Cycle	8.12E-05-1.37E-03	IL6, CSF3
Gene Expression	8.12E-05-8.12E-05	IL6, CSF3
Endocrine System Development and Function	1.09E-04-1.37E-03	IL1RN, TRH, GSTA1, IL6, AREG
Amino Acid Metabolism	1.17E-04-1.05E-03	GDNF, IL1RN, TRH, IL6, CSF3, AREG
Post-Translational Modification	1.17E-04-1.37E-03	SHROOM3, GDNF, IL6, CSF3, AREG
Neurological Disease	1.54E-04-1.37E-03	CXCL3, PROK2, GDNF, IL1RN, MMP8, PRDM1, IL6, CSF3, ARHGEF9
Cell-mediated Immune Response	1.85E-04-1.37E-03	CXCL3, IL1RN, CCL20, PRDM1, IL6, CSF3

Reproductive System Disease	2.03E-04-2.03E-04	PRDM1, IL6, CSF3, AREG
Nucleic Acid Metabolism	2.42E-04-8.78E-04	CXCL3, ADCY2, HTR4, GDNF, TRH, IL6, AREG
Behavior	3.89E-04-3.89E-04	HTR4, IL1RN, IL6, ARHGEF9
Ophthalmic Disease	6.3E-04-1.37E-03	CXCL3, CCL20, S100A8, IL6, CSF3, AREG
Visual System Development and Function	6.72E-04-6.72E-04	IL6, AREG
Renal and Urological System Development and Function	8.24E-04-8.24E-04	CAMP, GDNF
Hypersensitivity Response	1.05E-03-1.05E-03	IL1RN, CSF3
Endocrine System Disorders	1.37E-03-1.37E-03	IL6
Renal and Urological Disease	1.37E-03-1.37E-03	GDNF

6 hours		
Category	P value	Molecules
Hematological System Development and Function	2.58E-13-4.88E-04	CYP1A1, IL1A, SELL, MMP3, GDNF, CCL20, Pirb, IL6, CSF3, SERPINB2, CXCL3, PAK1, REG3G, CAMP, IL1RN, MMP8, CLEC4D, PRDM1, S100A8, MMP12, Kng1/Kng2
Inflammatory Response	2.58E-13-4.13E-04	CYP1A1, IL1A, SELL, MMP3, GDNF, CCL20, IL6, CSF3, UGT1A1, SERPINB2, AREG, CXCL3, PAK1, CAMP, IL1RL2, IL1RN, MMP8, CLEC4D, PRDM1, S100A8, MMP12, EREG
Tissue Morphology	2.58E-13-3.47E-04	IL1A, SELL, CYP1A1, GDNF, MMP3, TRH, CCL20, IL6, CSF3, AREG, SERPINB2, CXCL3, PAK1, CAMP, REG3G, IL1RL2, IL1RN, MMP8, CLEC4D, S100A8, PRDM1, MMP12, EREG
Organismal Injury and Abnormalities	6.47E-13-4.67E-04	SELL, IL1A, CYP24A1, GDNF, MMP3, TRH, CCL20, XIRP2, IL6, HGD, Nppb, SERPINB2, CXCL3, PAK1, IL1RL2, UGT2A1, MMP8, CLEC4D, S100A8, PRDM1, GCLM, MMP12, CYP1A1, UCN2, Pirb, CSF3, SRXN1, UGT1A1, AREG, CAMP, REG3G, IL1RN, TMEM212, EREG
Hematological Disease	9.95E-12-3.11E-04	CXCL3, PAK1, SELL, IL1A, CYP1A1, GDNF, IL1RN, PRDM1, IL6, CSF3, UGT1A1, SERPINB2
Immunological Disease	9.95E-12-1.84E-04	CYP1A1, IL1A, SELL, MMP3, CCL20, IL6, CSF3, UGT1A1, AREG, CXCL3, CAMP, IL1RN, MMP8, CLEC4D, TMEM212, PRDM1, S100A8
Cardiovascular System Development and Function	2.07E-11-3.4E-04	SELL, IL1A, UCN2, GDNF, MMP3, IL6, CSF3, Nppb, AREG, CXCL3, PAK1, CAMP, IL1RN, MMP8, S100A8, PRDM1, GCLM, MMP12, EREG, Kng1/Kng2

Organismal Development	2.07E-11-4.14E-04	CYP1A1, SELL, IL1A, UCN2, GDNF, MMP3, TRH, CCL20, XIRP2, IL6, CSF3, Nppb, AREG, CXCL3, PAK1, REG3G, CAMP, IL1RN, MMP8, CLEC4D, S100A8, PRDM1, GCLM, MMP12, EREG, Kng1/Kng2
Cellular Movement	4.58E-11-4.67E-04	CYP1A1, IL1A, SELL, GDNF, MMP3, TRH, CCL20, IL6, CSF3, SERPINB2, AREG, CXCL3, PAK1, CAMP, IL1RN, MMP8, PRDM1, S100A8, MMP12, EREG
Immune Cell Trafficking	4.58E-11-4.18E-04	CYP1A1, IL1A, SELL, GDNF, MMP3, CCL20, IL6, CSF3, CXCL3, PAK1, CAMP, IL1RN, MMP8, PRDM1, S100A8, MMP12
Dermatological Diseases and Conditions	9.27E-11-4.67E-04	CYP1A1, IL1A, SELL, MMP3, CCL20, IL6, CSF3, SERPINB2, AREG, CXCL3, CAMP, IL1RL2, IL1RN, MMP8, S100A8, PRDM1, MMP12, EREG
Inflammatory Disease	9.27E-11-2.37E-04	CYP1A1, SELL, IL1A, MMP3, CCL20, IL6, CSF3, UGT1A1, SERPINB2, AREG, CXCL3, CAMP, IL1RN, MMP8, CLEC4D, PRDM1, S100A8, MMP12, EREG
Cell-To-Cell Signaling and Interaction	1.15E-10-4.88E-04	CYP1A1, IL1A, SELL, MMP3, GDNF, UCN2, TRH, CCL20, Pirb, IL6, CSF3, AREG, SERPINB2, CXCL3, PAK1, CAMP, IL1RL2, IL1RN, PRDM1, S100A8, Stra6l, EREG
Cellular Development	1.2E-09-4.14E-04	SELL, IL1A, CYP1A1, CYP24A1, MMP3, GDNF, TRH, CCL20, Pirb, IL6, CSF3, Nppb, SERPINB2, AREG, CXCL3, PAK1, REG3G, CAMP, IL1RN, MMP8, CLEC4D, S100A8, PRDM1, MMP12, EREG, Kng1/Kng2
Cellular Growth and Proliferation	1.2E-09-4.88E-04	CYP1A1, IL1A, SELL, GDNF, MMP3, TRH, CCL20, Pirb, IL6, CSF3, Nppb, AREG, SERPINB2, CXCL3, PAK1, REG3G, CAMP, IL1RN, MMP8, CLEC4D, S100A8, PRDM1, MMP12, EREG, Kng1/Kng2
Connective Tissue Development and Function	1.2E-09-4.56E-04	SELL, IL1A, CYP1A1, CYP24A1, GDNF, MMP3, TRH, IL6, CSF3, AREG, CXCL3, PAK1, REG3G, IL1RN, PRDM1, S100A8, EREG, Kng1/Kng2

Hematopoiesis	1.2E-09- 4.67E-04	CXCL3, SELL, IL1A, CAMP, IL1RN, CCL20, PRDM1, IL6, CSF3
Lymphoid Tissue Structure and Development	1.2E-09- 3.72E-04	SELL, IL1A, CYP1A1, MMP3, GDNF, CCL20, Pirb, IL6, CSF3, SERPINB2, CXCL3, CAMP, REG3G, IL1RN, CLEC4D, PRDM1, Kng1/Kng2
Skeletal and Muscular System Development and Function	1.2E-09- 4.56E-04	CYP1A1, IL1A, MMP3, IL6, CSF3, Nppb, AREG, CXCL3, PAK1, IL1RN, MMP8, PRDM1, S100A8, EREG
Tissue Development	1.2E-09- 4.14E-04	SELL, CYP1A1, IL1A, CYP24A1, MMP3, GDNF, TRH, CCL20, IL6, CSF3, Nppb, AREG, CXCL3, PAK1, REG3G, CAMP, IL1RN, MMP8, S100A8, PRDM1, MMP12, EREG, Kng1/Kng2
Connective Tissue Disorders	5.56E-09- 2.5E-04	IL1A, SELL, MMP3, CCL20, IL6, CSF3, SERPINB2, AREG, CXCL3, PAK1, CAMP, IL1RN, MMP8, CLEC4D, PRDM1, S100A8, MMP12
Skeletal and Muscular Disorders	5.56E-09- 2.37E-04	SELL, IL1A, GDNF, MMP3, TRH, CCL20, IL6, CSF3, SERPINB2, AREG, CXCL3, CAMP, IL1RN, MMP8, CLEC4D, PRDM1, S100A8, MMP12
Lipid Metabolism	6.25E-09- 4.67E-04	IL1A, CYP1A1, CYP24A1, MMP3, GDNF, UCN2, TRH, IL6, CSF3, UGT1A1, Nppb, AREG, CXCL3, CAMP, UGT2A1, IL1RN, MMP8, S100A8, MMP12, Stra6l, EREG
Small Molecule Biochemistry	6.25E-09- 4.72E-04	CYP1A1, IL1A, CYP24A1, MMP3, GDNF, UCN2, TRH, IL6, CSF3, UGT1A1, Nppb, AREG, CXCL3, CAMP, UGT2A1, IL1RN, MMP8, S100A8, MMP12, Stra6l, EREG
Endocrine System	2.12E-08- 4.67E-04	CYP1A1, IL1A, UGT2A1, UCN2, IL1RN, TRH, IL6, UGT1A1, Nppb, AREG

Development and Function		
Infectious Diseases	3.01E-08-3.03E-04	IL1A, CYP1A1, SELL, MMP3, CCL20, IL6, CSF3, UGT1A1, AREG, CXCL3, PAK1, CAMP, REG3G, IL1RN, MMP8, CLEC4D, S100A8, MMP12
Vitamin and Mineral Metabolism	4.76E-08-4.67E-04	IL1A, CYP1A1, SELL, CYP24A1, GDNF, UCN2, TRH, CCL20, IL6, UGT1A1, Nppb, AREG, CXCL3, PAK1, CAMP, S100A8
Cancer	6.83E-08-3.73E-04	IL1A, SELL, CYP24A1, MMP3, GDNF, CCL20, XIRP2, IL6, HGD, SERPINB2, CXCL3, PAK1, UGT2A1, MMP8, CLEC4D, S100A8, PRDM1, MMP12, CYP1A1, Pirb, CSF3, UGT1A1, AREG, CAMP, REG3G, IL1RN, TMEM212, EREG
Tumor Morphology	6.83E-08-7.74E-05	CXCL3, IL1A, MMP3, GDNF, IL1RN, S100A8, IL6, CSF3, AREG
Cell Death and Survival	7.4E-08-3.67E-04	IL1A, SELL, UCN2, GDNF, MMP3, TRH, IL6, CSF3, Nppb, SRXN1, AREG, SERPINB2, CXCL3, PAK1, REG3G, CAMP, IL1RN, MMP8, S100A8, PRDM1, GCLM, MMP12, EREG
Cardiovascular Disease	7.4E-08-1.82E-04	IL1A, SELL, UCN2, GDNF, MMP3, IL6, CSF3, IL1RN, MMP8, S100A8, GCLM, MMP12, Kng1/Kng2
Organismal Functions	8E-08-1.36E-04	PAK1, SELL, IL1RL2, MMP3, IL1RN, IL6, CSF3, EREG, SERPINB2
Organismal Survival	9.44E-08-1.18E-04	CYP1A1, IL1A, CYP24A1, GDNF, IL6, CSF3, UGT1A1, SRXN1, AREG, CXCL3, CAMP, IL1RN, MMP8, CLEC4D, PRDM1, S100A8, GCLM, MMP12, EREG
Cellular Function and Maintenance	1.55E-07-3.72E-04	SELL, IL1A, MMP3, UCN2, GDNF, TRH, CCL20, Pirb, IL6, CSF3, SRXN1, CXCL3, PAK1, REG3G, CAMP, IL1RL2, IL1RN, PRDM1, S100A8, MMP12, Kng1/Kng2
Cell Signaling	1.99E-07-4.42E-04	IL1A, SELL, UCN2, GDNF, TRH, CCL20, IL6, Nppb, CXCL3, PAK1, CAMP, IL1RN, S100A8, EREG

Molecular Transport	1.99E-07-4.42E-04	CYP1A1, IL1A, SELL, CYP24A1, MMP3, GDNF, UCN2, TRH, CCL20, IL6, CSF3, UGT1A1, Nppb, CXCL3, PAK1, CAMP, IL1RN, MMP8, S100A8, MMP12, Stra6l
Developmental Disorder	2.48E-07-7.74E-05	IL1A, MMP3, IL1RN, MMP8, IL6
Hereditary Disorder	2.48E-07-2.88E-04	IL1A, IL1RN, MMP8, IL6
Metabolic Disease	2.48E-07-2.76E-04	IL1A, REG3G, TRH, IL1RN, MMP8, IL6
Drug Metabolism	2.99E-07-3.29E-04	IL1A, CAMP, UGT2A1, UCN2, TRH, IL1RN, IL6, UGT1A1, EREG, Nppb, AREG
Nutritional Disease	9.27E-07-1.36E-04	CXCL3, CYP1A1, GDNF, UCN2, IL1RN, IL6, EREG, AREG
Gastrointestinal Disease	1.16E-06-2.69E-04	IL1A, CCL20, IL6, CSF3, UGT1A1, AREG, CXCL3, CAMP, IL1RN, MMP8, PRDM1, S100A8, MMP12, EREG
Hair and Skin Development and Function	1.47E-06-2.74E-04	SELL, PAK1, IL1A, CAMP, REG3G, TRH, PRDM1, IL6, EREG, SERPINB2, AREG
Organ Development	1.47E-06-4.88E-04	IL1A, GDNF, TRH, CCL20, IL6, CSF3, UGT1A1, Nppb, AREG, CXCL3, PAK1, CAMP, REG3G, IL1RN, MMP8, PRDM1, EREG
Reproductive System Disease	1.51E-06-2.52E-05	IL1A, CYP1A1, PRDM1, IL6, CSF3, AREG
Protein Synthesis	1.81E-06-2.77E-05	CYP1A1, SELL, UCN2, MMP3, IL1RN, TRH, MMP8, CLEC4D, IL6, GCLM, SRXN1
Cell Cycle	2.04E-06-4.67E-04	IL1A, PAK1, CYP1A1, UCN2, IL1RN, TRH, PRDM1, IL6, CSF3, EREG, AREG

Gene Expression	2.04E-06-1.82E-04	IL1A, PAK1, CYP1A1, UCN2, IL1RN, TRH, PRDM1, IL6, CSF3
Respiratory Disease	2.22E-06-3.06E-04	SELL, IL1A, CYP1A1, CYP24A1, MMP3, XIRP2, HGD, IL6, UGT1A1, AREG, CXCL3, PAK1, REG3G, CAMP, IL1RN, MMP8, CLEC4D, TMEM212, MMP12
Nervous System Development and Function	2.45E-06-3.47E-04	CXCL3, PAK1, IL1A, GDNF, MMP3, TRH, IL1RN, PRDM1, IL6, CSF3, AREG
Cellular Assembly and Organization	2.78E-06-3.1E-04	IL1A, PAK1, CAMP, GDNF, IL6, CSF3
Cell Morphology	2.86E-06-3.72E-04	PAK1, IL1A, CAMP, GDNF, MMP3, IL1RN, IL6, MMP12, CSF3, AREG
Hepatic System Disease	3.34E-06-2.1E-04	CXCL3, IL1A, IL1RN, CCL20, PRDM1, IL6, CSF3, UGT1A1, AREG
Cellular Compromise	5.87E-06-4.16E-05	PAK1, IL1A, CAMP, GDNF, IL1RN, IL6, GCLM, AREG
Ophthalmic Disease	8.34E-06-5.44E-05	CXCL3, IL1A, MMP8, CCL20, IL6
Neurological Disease	8.63E-06-3.47E-04	IL1A, SELL, MMP3, GDNF, IL6, CSF3, CXCL3, PAK1, IL1RN, MMP8, CLEC4D, PRDM1, GCLM
Digestive System Development and Function	1.21E-05-4.89E-04	CXCL3, IL1A, UCN2, TRH, IL1RN, CCL20, PRDM1, IL6, CSF3, UGT1A1, AREG

Hepatic System Development and Function	1.21E-05-1.52E-04	CXCL3, IL1A, IL1RN, CCL20, PRDM1, IL6, CSF3, UGT1A1, AREG
Organ Morphology	1.21E-05-3.47E-04	IL1A, IL1RL2, GDNF, IL1RN, PRDM1, IL6, CSF3, EREG, AREG
Embryonic Development	1.46E-05-4.14E-04	SELL, IL1A, GDNF, MMP3, TRH, CCL20, XIRP2, IL6, CSF3, AREG, CXCL3, PAK1, CAMP, REG3G, IL1RN, MMP8, PRDM1, MMP12, EREG
Visual System Development and Function	1.67E-05-1.67E-05	IL1A, MMP3
Renal and Urological System Development and Function	1.94E-05-2.63E-04	PAK1, CAMP, GDNF, CCL20, EREG, AREG
Post-Translational Modification	2.77E-05-2.68E-04	GDNF, MMP3, MMP8, IL6, CSF3, AREG
Protein Degradation	2.77E-05-2.77E-05	MMP3, MMP8
DNA Replication, Recombination, and Repair	2.8E-05-4.72E-04	IL1A, GDNF, IL1RN, IL6, CSF3, EREG, AREG
Hypersensitivity Response	2.81E-05-2.81E-05	SELL, IL1RN, CSF3

Cell-mediated Immune Response	3.15E-05-3.72E-04	CXCL3, IL1A, IL1RN, CCL20, PRDM1, IL6, CSF3
Carbohydrate Metabolism	4.16E-05-4.04E-04	IL1A, CAMP, UCN2, IL1RN, IL6, MMP12, CSF3, UGT1A1
Nucleic Acid Metabolism	5.6E-05-4.72E-04	CXCL3, IL1A, GDNF, TRH, IL6, Nppb, AREG
Auditory Disease	7.74E-05-7.74E-05	CAMP, MMP3
Free Radical Scavenging	8.76E-05-4.88E-04	CXCL3, CYP1A1, CAMP, IL6, CSF3
Humoral Immune Response	9.94E-05-9.94E-05	PRDM1, IL6
Behavior	1.04E-04-4.89E-04	PAK1, IL1A, GDNF, UCN2, IL1RN, TRH, IL6
Reproductive System Development and Function	1.22E-04-4.88E-04	IL1A, GDNF, PRDM1, IL6, EREG, AREG
Psychological Disorders	1.36E-04-1.36E-04	UCN2, IL1RN, IL6
Antimicrobial Response	2.42E-04-2.42E-04	CAMP, CLEC4D, S100A8, IL6
Amino Acid Metabolism	2.68E-04-2.68E-04	GDNF, IL6, CSF3, AREG

Renal and Urological Disease	2.68E-04- 2.68E-04	CYP1A1, GDNF, IL6, CSF3
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9 hours		
Category	P value	Molecules
Hematological System Development and Function	3.49E-14- 6.76E-04	PROK2, SELL, IL1A, MMP3, GDNF, TRH, CCL20, IL6, SERPINB2, GLRB, CXCL3, MMP8, CLEC4D, S100A8, PRDM1, MMP12, ACTC1, Kng1/Kng2, CYP1A1, UCN2, Pirb, CSF3, LPAR3, Ccl9, REG3G, CAMP, IL1RN, PTH, VGF
Inflammatory Response	3.49E-14- 6.12E-04	PROK2, CYP1A1, SELL, IL1A, GDNF, MMP3, CCL20, IL6, CSF3, Ccl9, SERPINB2, AREG, GLRB, CXCL3, CAMP, IL1RL2, IL1RN, MMP8, CLEC4D, PRDM1, S100A8, PTH, MMP12, EREG
Tissue Morphology	3.49E-14- 5.47E-04	PROK2, SELL, IL1A, GDNF, MMP3, TRH, CCL20, IL6, Nppb, SERPINB2, CXCL3, IL1RL2, MMP8, CLEC4D, PRDM1, S100A8, MMP12, ACTC1, CYP1A1, UCN2, CSF3, AREG, Ccl9, REG3G, CAMP, IL1RN, PTH, VGF, EREG
Organismal Injury and Abnormalities	1.18E-11- 6.15E-04	PROK2, SELL, IL1A, CYP24A1, GDNF, MMP3, TRH, CCL20, XIRP2, IL6, Nppb, TMEM163, SERPINB2, GLRB, CXCL3, SHROOM3, HAL, IL1RL2, MMP8, CAPN13, CLEC4D, PRDM1, S100A8, GCLM, MMP12, ACTC1, CYP1A1, UCN2, Pirb, CSF3, SRXN1, LDB2, AREG, Ccl9, REG3G, CAMP, PYGM, IL1RN, SAAL1, TMEM212, PTH, VGF, EREG
Cellular Movement	1.5E-11- 6.76E-04	PROK2, SELL, IL1A, MMP3, GDNF, TRH, CCL20, IL6, SERPINB2, GLRB, CXCL3, MMP8, S100A8, PRDM1, MMP12, ACTC1, CYP1A1, CSF3, LPAR3, AREG, Ccl9, LDB2, CAMP, IL1RN, PTH, VGF, EREG

Cell-To-Cell Signaling and Interaction	1.53E-11-6.76E-04	CYP1A1, IL1A, SELL, GDNF, UCN2, TRH, CCL20, IL6, CSF3, LPAR3, AREG, Ccl9, CXCL3, CAMP, IL1RN, PRDM1, S100A8, PTH, VGF, EREG
Hematological Disease	5.95E-11-1.25E-04	CXCL3, SELL, IL1A, CYP24A1, GDNF, IL1RN, PRDM1, IL6, PTH, CSF3
Immunological Disease	5.95E-11-5.76E-04	IL1A, SELL, MMP3, CCL20, IL6, CSF3, AREG, Ccl9, CXCL3, CAMP, HAL, IL1RN, MMP8, CLEC4D, TMEM212, S100A8, PRDM1, PTH
Immune Cell Trafficking	6.07E-11-6.76E-04	PROK2, CYP1A1, IL1A, SELL, MMP3, GDNF, CCL20, IL6, CSF3, LPAR3, Ccl9, GLRB, CXCL3, CAMP, IL1RN, MMP8, PRDM1, S100A8, MMP12
Cardiovascular System Development and Function	2.15E-10-6.25E-04	PROK2, SELL, IL1A, UCN2, GDNF, MMP3, TRH, IL6, CSF3, Nppb, AREG, CXCL3, CAMP, IL1RN, MMP8, PRDM1, S100A8, GCLM, PTH, MMP12, VGF, EREG, ACTC1, Kng1/Kng2
Organismal Development	2.15E-10-6.31E-04	PROK2, SELL, IL1A, MMP3, GDNF, TRH, CCL20, XIRP2, IL6, Nppb, CXCL3, MMP8, CLEC4D, PRDM1, S100A8, GCLM, MMP12, ACTC1, Kng1/Kng2, CYP1A1, UCN2, CSF3, LDB2, AREG, REG3G, CAMP, IL1RN, PTH, VGF, EREG
Dermatological Diseases and Conditions	4.85E-10-5.76E-04	CYP1A1, IL1A, SELL, GDNF, MMP3, CCL20, IL6, CSF3, LDB2, SERPINB2, AREG, CXCL3, HAL, CAMP, IL1RL2, IL1RN, MMP8, S100A8, PRDM1, PTH, VGF, MMP12, EREG
Inflammatory Disease	2.06E-09-5.99E-04	CYP1A1, SELL, IL1A, MMP3, CCL20, IL6, CSF3, LDB2, Ccl9, SERPINB2, AREG, GLRB, CXCL3, CAMP, IL1RN, MMP8, CLEC4D, PRDM1, S100A8, PTH, MMP12, EREG
Cellular Development	3.96E-09-6.31E-04	PROK2, SELL, IL1A, CYP24A1, GDNF, MMP3, TRH, CCL20, IL6, Nppb, SERPINB2, CXCL3, MMP8, CAPN13, CLEC4D, PRDM1, S100A8, MMP12, Kng1/Kng2, CYP1A1, Pirb, CSF3, LPAR3, AREG, Ccl9, PYGM, CAMP, REG3G, IL1RN, PTH, VGF, EREG

Cellular Growth and Proliferation	3.96E-09-6.76E-04	PROK2, SELL, IL1A, GDNF, MMP3, TRH, CCL20, IL6, Nppb, SERPINB2, CXCL3, MMP8, CAPN13, CLEC4D, PRDM1, S100A8, MMP12, Kng1/Kng2, CYP1A1, Pirb, CSF3, LPAR3, AREG, PYGM, CAMP, REG3G, IL1RN, PTH, VGF, EREG
Connective Tissue Development and Function	3.96E-09-6.76E-04	SELL, CYP1A1, IL1A, CYP24A1, GDNF, MMP3, TRH, IL6, CSF3, AREG, Ccl9, CXCL3, REG3G, IL1RN, PRDM1, S100A8, PTH, VGF, EREG, Kng1/Kng2
Skeletal and Muscular System Development and Function	3.96E-09-6.02E-04	CYP1A1, IL1A, GDNF, MMP3, UCN2, IL6, CSF3, Nppb, AREG, Ccl9, CXCL3, IL1RN, MMP8, PRDM1, S100A8, PTH, ACTC1, EREG
Tissue Development	3.96E-09-6.31E-04	PROK2, IL1A, SELL, CYP24A1, GDNF, MMP3, TRH, CCL20, IL6, Nppb, CXCL3, MMP8, PRDM1, S100A8, MMP12, Kng1/Kng2, CYP1A1, CSF3, LDB2, AREG, Ccl9, CAMP, REG3G, IL1RN, PTH, VGF, EREG
Hematopoiesis	4.19E-09-6.02E-04	PROK2, CXCL3, SELL, IL1A, CAMP, IL1RN, CCL20, PRDM1, IL6, PTH, CSF3
Lymphoid Tissue Structure and Development	4.19E-09-6.02E-04	IL1A, SELL, CYP1A1, MMP3, GDNF, CCL20, Pirb, IL6, CSF3, SERPINB2, CXCL3, CAMP, REG3G, IL1RN, CLEC4D, PRDM1, Kng1/Kng2
Endocrine System Development and Function	4.89E-09-5.32E-04	CYP1A1, IL1A, UCN2, IL1RN, TRH, GSTA1, IL6, VGF, Nppb, AREG

Small Molecule Biochemistry	4.89E-09-6.76E-04	CYP1A1, IL1A, CYP24A1, MMP3, GDNF, UCN2, TRH, IL6, CSF3, LPAR3, Nppb, AREG, CXCL3, HAL, CAMP, IL1RN, MMP8, S100A8, GSTA1, GCLM, PTH, MMP12, VGF, EREG
Connective Tissue Disorders	6.48E-09-5.99E-04	IL1A, SELL, MMP3, CCL20, IL6, CSF3, SERPINB2, AREG, Ccl9, CXCL3, CAMP, IL1RN, MMP8, CLEC4D, PRDM1, S100A8, PTH, MMP12
Skeletal and Muscular Disorders	6.48E-09-5.99E-04	SELL, IL1A, GDNF, MMP3, TRH, CCL20, IL6, CSF3, SERPINB2, AREG, Ccl9, CXCL3, CAMP, IL1RN, MMP8, CLEC4D, GSTA1, PRDM1, S100A8, PTH, MMP12, ACTC1
Lipid Metabolism	1.31E-08-5.63E-04	CYP1A1, IL1A, CYP24A1, MMP3, UCN2, TRH, IL6, CSF3, LPAR3, Nppb, AREG, CXCL3, CAMP, IL1RN, MMP8, S100A8, GSTA1, PTH, MMP12, VGF, EREG
Molecular Transport	1.31E-08-5.32E-04	PROK2, IL1A, CYP1A1, SELL, CYP24A1, MMP3, GDNF, UCN2, TRH, CCL20, IL6, CSF3, LPAR3, Nppb, Ccl9, CXCL3, CAMP, IL1RN, MMP8, GSTA1, S100A8, PTH, MMP12, VGF
Vitamin and Mineral Metabolism	1.82E-08-5.63E-04	PROK2, SELL, IL1A, CYP1A1, CYP24A1, GDNF, UCN2, TRH, CCL20, IL6, LPAR3, Nppb, Ccl9, AREG, CXCL3, CAMP, S100A8, GSTA1, PTH, VGF, Kng1/Kng2
Cellular Function and Maintenance	3.3E-08-6.31E-04	PROK2, SELL, IL1A, GDNF, TRH, CCL20, IL6, GLRB, CXCL3, IL1RL2, S100A8, PRDM1, MMP12, Kng1/Kng2, UCN2, Pirb, CSF3, LPAR3, SRXN1, REG3G, CAMP, PYGM, IL1RN, PTH, VGF
Drug Metabolism	4.67E-08-5.32E-04	IL1A, CAMP, UCN2, TRH, IL1RN, GSTA1, PTH, IL6, VGF, EREG, Nppb, AREG
Cell Death and Survival	7.09E-08-6.15E-04	PROK2, SELL, IL1A, GDNF, MMP3, TRH, IL6, Nppb, SERPINB2, CXCL3, MMP8, GSTA1, PRDM1, S100A8, GCLM, MMP12, ACTC1, UCN2, CSF3, SRXN1, Ccl9, AREG, REG3G, CAMP, IL1RN, PTH, VGF, EREG

Developmental Disorder	1.18E-07-2.79E-04	IL1A, PYGM, MMP3, IL1RN, MMP8, PTH, IL6
Hereditary Disorder	1.18E-07-4.66E-04	IL1A, PYGM, IL1RN, MMP8, PTH, IL6
Metabolic Disease	1.18E-07-5.63E-04	IL1A, REG3G, PYGM, TRH, IL1RN, MMP8, PTH, IL6
Respiratory Disease	1.18E-07-2.86E-04	GLRB, CXCL3, IL1A, SELL, CAMP, IL1RN, MMP8, CLEC4D, PTH, IL6, MMP12, AREG
Organismal Survival	2.27E-07-8.47E-05	IL1A, CYP1A1, CYP24A1, GDNF, IL6, CSF3, SRXN1, AREG, CXCL3, CAMP, IL1RN, MMP8, CLEC4D, GSTA1, PRDM1, S100A8, PTH, GCLM, VGF, MMP12, EREG, ACTC1
Cancer	2.35E-07-6.02E-04	PROK2, SELL, IL1A, GDNF, MMP3, CCL20, XIRP2, IL6, SERPINB2, GLRB, CXCL3, SHROOM3, HAL, MMP8, CAPN13, CLEC4D, PRDM1, S100A8, MMP12, ACTC1, CYP1A1, Pirb, CSF3, Ccl9, LDB2, AREG, CAMP, PYGM, REG3G, IL1RN, SAAL1, TMEM212, PTH, VGF, EREG
Tumor Morphology	2.35E-07-1.25E-04	CXCL3, IL1A, MMP3, GDNF, IL1RN, S100A8, IL6, CSF3, AREG
Cardiovascular Disease	2.55E-07-5.13E-04	IL1A, SELL, UCN2, GDNF, MMP3, IL6, CSF3, TMEM163, IL1RN, MMP8, S100A8, GCLM, MMP12, Kng1/Kng2
Infectious Diseases	2.77E-07-4.04E-04	SELL, REG3G, CAMP, MMP3, IL1RN, MMP8, CLEC4D, IL6, MMP12, CSF3, AREG
Organismal Functions	4.48E-07-2.77E-04	SELL, IL1RL2, MMP3, IL1RN, PTH, IL6, CSF3, EREG, SERPINB2
Gastrointestinal Disease	4.63E-07-4.76E-04	IL1A, CCL20, IL6, CSF3, Ccl9, AREG, LDB2, GLRB, CXCL3, CAMP, IL1RN, MMP8, S100A8, MMP12, ACTC1, EREG

Cell Signaling	1.58E-06- 6.76E-04	PROK2, IL1A, SELL, GDNF, UCN2, TRH, CCL20, IL6, LPAR3, Nppb, Ccl9, CXCL3, CAMP, S100A8, PTH, VGF, EREG, Kng1/Kng2
Protein Synthesis	1.82E-06- 3.47E-04	CYP1A1, SELL, UCN2, MMP3, TRH, IL1RN, MMP8, CLEC4D, IL6, GCLM, VGF, SRXN1
Hair and Skin Development and Function	3.67E-06- 8.09E-06	IL1A, CAMP, REG3G, TRH, PRDM1, PTH, IL6, EREG, LDB2, AREG
Organ Development	3.67E-06- 6.02E-04	IL1A, GDNF, TRH, IL6, CSF3, Nppb, LDB2, AREG, CAMP, REG3G, IL1RN, MMP8, PRDM1, PTH, EREG
Cellular Assembly and Organization	4.52E-06- 6.31E-04	IL1A, CAMP, GDNF, IL6, VGF, CSF3
Nutritional Disease	5E-06- 2.77E-04	CXCL3, CYP1A1, GDNF, UCN2, IL1RN, IL6, EREG, AREG
Nervous System Development and Function	5.1E-06- 6.31E-04	CXCL3, IL1A, CYP1A1, GDNF, TRH, IL1RN, PRDM1, PTH, IL6, CSF3, VGF, AREG
Reproductive System Disease	6.44E-06- 8.2E-05	IL1A, CYP1A1, PRDM1, IL6, CSF3, AREG
Ophthalmic Disease	6.57E-06- 1.35E-05	CXCL3, IL1A, MMP8, CCL20, IL6, Ccl9
Embryonic Development	8.09E-06- 6.31E-04	PROK2, IL1A, SELL, GDNF, MMP3, TRH, CCL20, XIRP2, IL6, CSF3, LDB2, AREG, CXCL3, REG3G, CAMP, IL1RN, MMP8, PRDM1, PTH, VGF, MMP12, EREG, ACTC1

Nucleic Acid Metabolism	1.39E-05-6.76E-04	CXCL3, IL1A, UCN2, GDNF, TRH, PTH, Nppb
DNA Replication, Recombination, and Repair	1.69E-05-1.69E-05	IL1A, GDNF, IL1RN, PTH, IL6, CSF3, EREG, AREG
Cellular Compromise	2.44E-05-6.74E-05	IL1A, CAMP, GDNF, IL1RN, GSTA1, IL6, GCLM, AREG
Organ Morphology	2.62E-05-5.47E-04	IL1A, CYP1A1, IL1RL2, UCN2, IL1RN, PRDM1, IL6, PTH, CSF3, EREG, ACTC1, Nppb, AREG
Endocrine System Disorders	2.7E-05-5.3E-05	IL1A, CYP24A1, PTH
Visual System Development and Function	2.7E-05-2.7E-05	IL1A, MMP3
Carbohydrate Metabolism	3.18E-05-6.02E-04	CXCL3, IL1A, PYGM, CAMP, TRH, IL1RN, PTH, IL6, MMP12, CSF3
Digestive System Development and Function	3.18E-05-2.45E-04	IL1A, IL1RN, IL6, CSF3, AREG
Hepatic System Development and Function	3.18E-05-2.45E-04	IL1A, IL1RN, IL6, CSF3, AREG

Post-Translational Modification	4.5E-05-4.5E-05	MMP3, MMP8
Protein Degradation	4.5E-05-4.5E-05	MMP3, MMP8
Renal and Urological Disease	4.83E-05-4.83E-05	CYP1A1, GDNF, PTH, IL6, CSF3
Behavior	4.85E-05-4.85E-05	GLRB, IL1A, GDNF, UCN2, TRH, IL6, VGF
Hypersensitivity Response	5.79E-05-5.79E-05	SELL, IL1RN, CSF3
Neurological Disease	6.81E-05-6.02E-04	PROK2, IL1A, SELL, GDNF, MMP3, IL6, CSF3, CXCL3, IL1RN, MMP8, CLEC4D, PRDM1, PTH, GCLM, VGF
Cell-mediated Immune Response	8.2E-05-6.02E-04	IL1A, IL1RN, PRDM1, IL6
Cell Cycle	1.19E-04-6.51E-04	IL1A, CYP1A1, UCN2, IL1RN, TRH, PRDM1, PTH, IL6, CSF3, EREG, AREG
Gene Expression	1.19E-04-2.94E-04	IL1A, CYP1A1, UCN2, IL1RN, TRH, PRDM1, IL6, CSF3
Renal and Urological System Development and Function	1.24E-04-1.24E-04	GDNF, EREG, AREG

Auditory Disease	1.25E-04- 1.25E-04	CAMP, MMP3
Cell Morphology	1.25E-04- 6.31E-04	PROK2, IL1A, GDNF, UCN2, IL6, CSF3, Nppb, AREG, CAMP, IL1RN, MMP12, VGF, ACTC1
Humoral Immune Response	1.61E-04- 1.61E-04	PRDM1, IL6
Hepatic System Disease	1.71E-04- 2.45E-04	IL1A, IL1RN, CCL20, IL6, CSF3, AREG
Free Radical Scavenging	1.8E-04- 1.8E-04	CXCL3, CAMP, CSF3
Reproductive System Development and Function	2.45E-04- 2.5E-04	GDNF, EREG, AREG
Psychological Disorders	2.77E-04- 2.77E-04	UCN2, IL1RN, IL6
Amino Acid Metabolism	4.99E-04- 5.63E-04	IL1A, HAL, TRH, IL6, GCLM, VGF
Antimicrobial Response	6.12E-04- 6.12E-04	CAMP, CLEC4D, S100A8, IL6

1 day		
Category	P value	Molecules
Dermatological Diseases and Conditions	2.93E-07-3.55E-03	CYP1A1, GDNF, PDYN, GRIA2, CCL20, IL6, SERPINB2, AREG, HAL, IL1RL2, IL1RN, CRP, S100A8, PTH, MMP12, VGF, ACPP
Neurological Disease	2.93E-07-3.81E-03	PCLO, GDNF, PDYN, IL1RN, GRIA2, IL6, VGF, SIX3, ACPP, ATP2B2
Organismal Injury and Abnormalities	2.93E-07-3.87E-03	ABCG8, PCLO, CCL20, IL6, CD8A, TMEM163, TBX18, SERPINB2, SHROOM3, CYP1A2, HAL, IL1RL2, SLC5A1, GSTA1, GCLM, ACPP, PDYN, LIPF, GRIA2, OR2C1, AGXT, AREG, IL1RN, GALR1, GDNF, TRH, XIRP2, Nppb, SNX16, S100A8, MMP12, CYP1A1, Clca3a1/Clca3a2, SRXN1, Ccl9, ATP2B2, REG3G, ZMAT4, CRP, NLRP4, PLEKHA1, MEP1A, PTH, HYDIN, VGF, RHCG, SIX3, CSRP3, ZMYM4, IL11
Molecular Transport	3.08E-07-3.2E-03	ABCG8, GDNF, TRH, CCL20, IL6, CD8A, Nppb, SNX16, CYP1A2, SLC5A1, S100A8, GSTA1, MMP12, ACPP, CYP1A1, UCN2, Gucy2d, PDYN, Clca3a1/Clca3a2, GRIA2, AGXT, ATP2B2, IL1RN, CRP, Slc7a12, PTH, GALR1, Stra6l, VGF, RHCG, SIX3, IL11
Inflammatory Response	6.72E-07-3.61E-03	CYP1A1, GDNF, PDYN, LIPF, GRIA2, CCL20, IL6, CD8A, Ccl9, SERPINB2, AREG, CYP1A2, IL1RN, CRP, NLRP4, S100A8, MEP1A, PLEKHA1, MMP12, IL11
Lipid Metabolism	7.51E-07-3.61E-03	ABCG8, CYP1A1, UCN2, TRH, LIPF, IL6, Nppb, AREG, CYP1A2, IL1RN, CRP, S100A8, GSTA1, PLEKHA1, GALR1, PTH, MMP12, Stra6l, VGF, ACPP
Small Molecule Biochemistry	7.51E-07-3.87E-03	ABCG8, GDNF, TRH, IL6, Nppb, HAL, CYP1A2, GSTA1, S100A8, GCLM, MMP12, ACPP, CYP1A1, UCN2, LIPF, AGXT, AREG, ATP2B2, IL1RN, CRP, PLEKHA1, PTH, GALR1, VGF, Stra6l, IL11

Vitamin and Mineral Metabolism	7.51E-07-3.61E-03	ABCG8, CYP1A1, GDNF, UCN2, TRH, Gucy2d, CCL20, IL6, CD8A, Nppb, ATP2B2, AREG, CYP1A2, SLC5A1, GSTA1, S100A8, PLEKHA1, PTH, VGF
Cell Signaling	8.86E-07-3.2E-03	GDNF, UCN2, TRH, Gucy2d, CCL20, IL6, CD8A, Nppb, ATP2B2, SLC5A1, S100A8, PTH, VGF
Endocrine System Development and Function	1.04E-06-3.61E-03	CYP1A1, UCN2, GDNF, TRH, IL6, Nppb, AREG, CYP1A2, IL1RN, GSTA1, PLEKHA1, GALR1, VGF, IL11
Cellular Development	1.63E-06-3.31E-03	GDNF, TRH, CCL20, IL6, CD8A, TBX18, SERPINB2, CYP1A2, S100A8, MMP12, Krt10, Muc2, Kng1/Kng2, ACPP, CYP1A1, Pirb, ATP2B2, AREG, Ccl9, REG3G, IL1RN, CRP, GALR1, Otx2, PLEKHA1, PTH, HYDIN, VGF, CSRP3, SIX3, IL11
Cellular Growth and Proliferation	1.63E-06-3.62E-03	GDNF, TRH, CCL20, IL6, CD8A, TBX18, CYP1A2, S100A8, Krt10, Muc2, MMP12, Kng1/Kng2, ACPP, CYP1A1, Clca3a1/Clca3a2, Pirb, AREG, REG3G, IL1RN, CRP, PLEKHA1, PTH, GALR1, VGF, HYDIN, IL11
Connective Tissue Development and Function	1.63E-06-3.2E-03	CYP1A1, GDNF, TRH, IL6, TBX18, AREG, Ccl9, ATP2B2, REG3G, CYP1A2, IL1RN, S100A8, GALR1, PTH, IL11
Skeletal and Muscular System Development and Function	1.63E-06-3.2E-03	CYP1A1, CYP1A2, GDNF, PDYN, IL1RN, S100A8, IL6, PTH, AREG, IL11, Ccl9

Tissue Development	1.63E-06-3.61E-03	GDNF, TRH, IL6, CD8A, TBX18, CYP1A2, SLC5A1, S100A8, MMP12, Krt10, Muc2, Kng1/Kng2, CYP1A1, AREG, Ccl9, ATP2B2, REG3G, IL1RN, CRP, PLEKHA1, Otx2, GALR1, PTH, HYDIN, VGF, CSRP3, SIX3, IL11
Cell-To-Cell Signaling and Interaction	1.91E-06-3.87E-03	CYP1A1, UCN2, GDNF, PCLO, PDYN, Gucy2d, TRH, GRIA2, CCL20, XIRP2, IL6, CD8A, AREG, Ccl9, ATP2B2, CYP1A2, IL1RN, CRP, S100A8, PTH, VGF, IL11
Cellular Movement	8.11E-06-3.61E-03	CYP1A1, GDNF, ADGRL3, TRH, GRIA2, CCL20, IL6, CD8A, TBX18, AREG, Ccl9, SERPINB2, CYP1A2, IL1RN, CRP, S100A8, PTH, VGF, Muc2, MMP12, SIX3, IL11
Hematological System Development and Function	8.11E-06-3.61E-03	CYP1A1, GDNF, UCN2, TRH, CCL20, IL6, CD8A, Ccl9, SERPINB2, REG3G, CYP1A2, IL1RN, CRP, S100A8, PTH, VGF, MMP12, ACPP, IL11
Immune Cell Trafficking	8.11E-06-3.61E-03	CYP1A1, CYP1A2, GDNF, IL1RN, CRP, CCL20, S100A8, IL6, MMP12, CD8A, Ccl9, IL11
Cardiovascular System Development and Function	9.6E-06-3.2E-03	GDNF, UCN2, IL1RN, TRH, PTH, IL6, MMP12, VGF, IL11
Drug Metabolism	1.01E-05-3.2E-03	CYP1A1, UCN2, GDNF, TRH, IL6, Nppb, AREG, CYP1A2, IL1RN, GSTA1, GALR1, GCLM, PTH, VGF
Nervous System Development and Function	1.11E-05-3.81E-03	CYP1A1, GDNF, Gucy2d, PDYN, TRH, GRIA2, IL6, TBX18, ATP2B2, AREG, CYP1A2, IL1RN, PTH, Otx2, VGF, SIX3, ACPP, IL11
Organ Morphology	1.11E-05-3.61E-03	CYP1A1, CYP1A2, IL1RN, IL6, PTH, VGF, IL11, AREG

Organismal Development	1.11E-05-3.61E-03	CYP1A1, GDNF, UCN2, TRH, CCL20, IL6, CD8A, Nppb, ATP2B2, AREG, CYP1A2, IL1RN, SLC5A1, CRP, Otx2, PTH, VGF, MMP12, CSRP3, SIX3, ACPP, IL11
Protein Synthesis	1.26E-05-1.47E-03	CYP1A1, CYP1A2, UCN2, TRH, IL1RN, SLC5A1, CRP, MEP1A, IL6, GCLM, VGF, SRXN1
Behavior	2.31E-05-3.61E-03	UCN2, GDNF, PDYN, ADGRL3, TRH, GRIA2, IL6, ATP2B2, CYP1A2, IL1RN, GALR1, VGF, ACPP
Developmental Disorder	2.9E-05-3.2E-03	CYP1A1, PCLO, GDNF, IL6, AGXT, TBX18, CYP1A2, IL1RN, SLC5A1, CRP, PTH, HYDIN, SIX3
Hereditary Disorder	2.9E-05-3.2E-03	CYP1A1, GDNF, TRH, PDYN, IL6, AGXT, TBX18, CYP1A2, HAL, IL1RN, SLC5A1, CRP, PTH, HYDIN, CSRP3, SIX3
Metabolic Disease	2.9E-05-3.87E-03	ABCG8, REG3G, HAL, TRH, SLC5A1, IL1RN, CRP, PTH, IL6, AGXT
Respiratory Disease	2.9E-05-3.2E-03	CYP1A2, IL1RN, CRP, PTH, IL6, CD8A, MMP12, HYDIN, ZMYM4, IL11, AREG
Cancer	3.02E-05-3.79E-03	ABCG8, PCLO, GDNF, CCL20, XIRP2, IL6, TBX18, SERPINB2, SHROOM3, SNX16, IL1RL2, SLC5A1, S100A8, GSTA1, MMP12, CYP1A1, LIPF, OR2C1, Ccl9, ATP2B2, REG3G, ZMAT4, IL1RN, CRP, NLRP4, GALR1, HYDIN, RHCG, SIX3, IL11, ZMYM4
Connective Tissue Disorders	3.02E-05-3.84E-03	ABCG8, CYP1A2, IL1RN, CRP, S100A8, IL6, PTH, SIX3, SERPINB2
Immunological Disease	3.02E-05-3.47E-03	PDYN, IL1RN, CRP, GRIA2, CCL20, S100A8, IL6, IL11, Ccl9
Inflammatory Disease	3.02E-05-3.47E-03	GDNF, PDYN, GRIA2, CCL20, IL6, CD8A, SERPINB2, AREG, CYP1A2, IL1RN, CRP, S100A8, PLEKHA1, PTH, MMP12, IL11

Skeletal and Muscular Disorders	3.02E-05-3.84E-03	CYP1A2, GDNF, TRH, IL1RN, CRP, S100A8, IL6, PTH, SIX3, CSRP3, SERPINB2
Hair and Skin Development and Function	3.79E-05-3.2E-03	REG3G, CYP1A2, TRH, PTH, GALR1, IL6, AREG
Organ Development	3.79E-05-3.61E-03	GDNF, TRH, IL6, CD8A, AREG, REG3G, SLC5A1, IL1RN, CRP, Otx2, GALR1, PTH, SIX3, IL11
Nucleic Acid Metabolism	4E-05-3.2E-03	CYP1A1, GDNF, UCN2, TRH, IL6, Nppb, ATP2B2, AREG, CYP1A2, IL1RN, CRP, GALR1, PTH, ACPP
Cellular Function and Maintenance	4.48E-05-3.31E-03	UCN2, GDNF, TRH, GRIA2, CCL20, XIRP2, IL6, CD8A, SRXN1, TBX18, ATP2B2, AREG, REG3G, IL1RL2, IL1RN, CRP, NLRP4, S100A8, PTH, VGF, RHCG, Kng1/Kng2, HS1BP3, CSRP3, IL11
Gastrointestinal Disease	4.67E-05-3.87E-03	GDNF, IL1RN, CRP, CCL20, IL6, CSRP3, SIX3, IL11, Ccl9
Ophthalmic Disease	4.67E-05-3.87E-03	CYP1A1, CRP, CCL20, IL6, IL11, Ccl9, AREG
Cell Death and Survival	6E-05-3.81E-03	GDNF, TRH, IL6, CD8A, Nppb, SERPINB2, S100A8, GSTA1, GCLM, MMP12, Muc2, HS1BP3, UCN2, PDYN, Clca3a1/Clca3a2, GRIA2, SRXN1, ATP2B2, AREG, Ccl9, REG3G, IL1RN, CRP, NLRP4, MEP1A, PTH, VGF, SIX3, IL11
Hematopoiesis	6.03E-05-3.2E-03	GDNF, IL1RN, CRP, PTH, IL6, CD8A, IL11
Tissue Morphology	9.48E-05-3.84E-03	ABCG8, CYP1A1, PCLO, GDNF, PDYN, TRH, GRIA2, CCL20, IL6, CD8A, Nppb, SERPINB2, ATP2B2, Ccl9, REG3G, IL1RN, CRP, S100A8, PTH, MMP12, VGF, SIX3, IL11

Amino Acid Metabolism	9.83E-05-3.87E-03	HAL, GDNF, GCLM, IL6, AGXT, AREG, IL11
Endocrine System Disorders	1E-04-3.87E-03	CYP1A1, CYP1A2, TRH, IL1RN, CRP, PTH, IL6
Reproductive System Disease	1E-04-2.99E-04	CYP1A1, CYP1A2, PTH, IL6
Cellular Assembly and Organization	1.5E-04-3.31E-03	SHROOM3, GDNF, TRH, CRP, GRIA2, NLRP4, XIRP2, PTH, IL6, VGF, ATP2B2
Energy Production	1.5E-04-6.52E-04	CYP1A1, CYP1A2, IL1RN, AGXT
Digestive System Development and Function	1.53E-04-3.2E-03	REG3G, GDNF, TRH, SLC5A1, IL1RN, IL6, IL11, AREG
Hepatic System Development and Function	1.53E-04-3.2E-03	TRH, IL1RN, IL6, IL11, AREG
Cell Morphology	2.79E-04-3.81E-03	CYP1A2, GDNF, IL1RN, TRH, NLRP4, IL6, VGF, MMP12, CSRP3, ATP2B2, IL11
Lymphoid Tissue	2.79E-04-3.58E-03	REG3G, IL1RN, CRP, CCL20, Pirb, PLEKHA1, IL6, CD8A, Kng1/Kng2, IL11, ACPP

Structure and Development		
Renal and Urological Disease	3.25E-04-3.2E-03	CYP1A1, CYP1A2, GDNF, IL1RN, CRP, PLEKHA1, PTH, MEP1A, IL6, AGXT, CD8A, MMP12, TBX18
Embryonic Development	4.04E-04-3.61E-03	GDNF, TRH, CCL20, IL6, CD8A, Nppb, TBX18, AREG, IL1RN, SLC5A1, CRP, Otx2, VGF, SIX3, IL11
Renal and Urological System Development and Function	4.04E-04-3.2E-03	GDNF, SLC5A1, PTH, AREG, IL11
Psychological Disorders	4.83E-04-1.25E-03	CYP1A1, UCN2, GDNF, PDYN, IL1RN, CRP, GRIA2, IL6, GALR1, VGF
Organismal Survival	5.13E-04-5.13E-04	GDNF, PCLO, IL1RN, CRP, GRIA2, GSTA1, IL6, CD8A, AGXT, AREG, IL11
Carbohydrate Metabolism	6.52E-04-3.2E-03	CYP1A2, IL1RN, PTH, AGXT, IL11
Organismal Functions	7.28E-04-3.81E-03	CYP1A2, PDYN, TRH, IL1RN, CRP, MEP1A, PTH, IL6, SERPINB2
Cardiovascular Disease	8.1E-04-3.63E-03	ABCG8, CYP1A2, GDNF, IL1RN, CRP, S100A8, IL6, GCLM, MMP12, TMEM163, Kng1/Kng2, CSRP3
Infectious Diseases	8.95E-04-3.2E-03	IL1RN, CRP, IL6, CD8A, AREG
Nutritional Disease	8.96E-04-3.56E-03	CYP1A1, GDNF, UCN2, IL1RN, IL6, AREG

Hematological Disease	1.09E-03-3.21E-03	ABCG8, CYP1A1, GDNF, PCLO, CCL20, XIRP2, IL6, OR2C1, TBX18, ATP2B2, SERPINB2, Ccl9, SNX16, SHROOM3, IL1RL2, SLC5A1, IL1RN, CRP, GSTA1, GALR1, HYDIN, MMP12, ZMYM4
Tumor Morphology	1.09E-03-3.2E-03	GDNF, IL1RN, IL6
Cell Cycle	1.18E-03-3.2E-03	PTH, IL6, AREG, IL11
Cell-mediated Immune Response	1.33E-03-3.2E-03	CRP, CCL20, IL6, CD8A
Cellular Compromise	1.79E-03-3.2E-03	GDNF, PDYN, IL1RN, GRIA2, GSTA1, IL6, GCLM
Hepatic System Disease	2.24E-03-3.2E-03	IL6, IL11
Post-Translational Modification	2.99E-03-3.2E-03	SHROOM3, GDNF, IL6, AREG, IL11
DNA Replication, Recombination, and Repair	3.02E-03-3.02E-03	GDNF, IL6, AREG
Humoral Immune Response	3.12E-03-3.12E-03	IL6, IL11

Antigen Presentation	3.2E-03-3.2E-03	CD8A
Hypersensitivity Response	3.2E-03-3.2E-03	IL11
Reproductive System Development and Function	3.2E-03-3.2E-03	VGF
Visual System Development and Function	3.61E-03-3.61E-03	IL6, AREG

4 days		
Category	P value	Molecules
Cellular Function and Maintenance	4.23E-09-2.7E-03	MMP7, IL1A, IFNE, TRH, CSMD1, CCL20, DNNT, ATP6V0D2, MAPK13, IL6, CD8A, AQP4, ABCA1, SST, CHRNA3, Kng1/Kng2, TNFSF11, ATP1B1, TRDN, SLC18A2, SRXN1, AREG, TYRP1, PYGM, IL1RN, FOXA2, IGFBP3, CSRP3
Cell-To-Cell Signaling and Interaction	2.68E-08-2.7E-03	MMP7, CYP1A1, TNFSF11, IL1A, VAX1, IFNE, PCLO, TRH, CCL20, IL6, CD8A, AQP4, SLC18A2, ABCA1, Ccl9, AREG, IL1RN, FOXA2, IGFBP3, SST, Stra6l
Cellular Growth and Proliferation	2.68E-08-2.7E-03	MMP7, IL1A, IFNE, TRH, CCL20, DNNT, IL6, MAPK13, CD8A, AQP4, LMNB1, ABCA1, TNN, Hmga2, SST, MMP12, Kng1/Kng2, ACPP, TNFSF11, CYP1A1, Clca3a1/Clca3a2, Pirb, AREG, TYRP1, PYGM, Art2b, IL1RN, FOXA2, IGFBP3, CSRP3

Cellular Development	3.66E-08-2.7E-03	VAX1, IL1A, MMP7, IFNE, TRH, DNNT, CCL20, ATP6V0D2, IL6, MAPK13, CD8A, LMNB1, ABCA1, TNN, SST, Hmga2, MMP12, Kng1/Kng2, ACPP, TNFSF11, CYP1A1, Pirb, AREG, Ccl9, TYRP1, PYGM, Art2b, IL1RN, FOXA2, IGFBP3, CSRP3
Hematological System Development and Function	3.66E-08-2.7E-03	MMP7, IL1A, TNFSF11, CYP1A1, IFNE, DNNT, CCL20, Pirb, MAPK13, IL6, CD8A, LMNB1, ABCA1, Ccl9, TYRP1, Art2b, IL1RN, FOXA2, IGFBP3, Hmga2, SST, MMP12, Kng1/Kng2, ACPP
Hematopoiesis	3.66E-08-2.7E-03	TNFSF11, IL1A, IFNE, IL1RN, CCL20, SST, Hmga2, IL6, CD8A, ABCA1
Lymphoid Tissue Structure and Development	3.66E-08-2.7E-03	CYP1A1, IL1A, TNFSF11, IFNE, DNNT, CCL20, Pirb, IL6, CD8A, ABCA1, TYRP1, Art2b, IL1RN, IGFBP3, Hmga2, SST, Kng1/Kng2, ACPP
Tissue Development	3.66E-08-2.7E-03	IL1A, VAX1, MMP7, IFNE, TRH, CCL20, ATP6V0D2, MAPK13, IL6, CD8A, LMNB1, ABCA1, TNN, Hmga2, SST, MMP12, Kng1/Kng2, TNFSF11, CYP1A1, AREG, Ccl9, TYRP1, IL1RN, FOXA2, IGFBP3, CSRP3
Cellular Movement	1.53E-07-2.7E-03	VAX1, CYP1A1, TNFSF11, MMP7, IL1A, ADGRL3, TRH, CCL20, IL6, MAPK13, AQP4, CD8A, LMNB1, ABCA1, Ccl9, AREG, TNN, IL1RN, FOXA2, IGFBP3, SST, MMP12
Immune Cell Trafficking	1.59E-07-2.7E-03	CYP1A1, IL1A, TNFSF11, MMP7, IFNE, CCL20, IL6, MAPK13, CD8A, LMNB1, ABCA1, Ccl9, IL1RN, FOXA2, IGFBP3, SST, MMP12
Inflammatory Response	1.59E-07-2.7E-03	CYP1A1, TNFSF11, IL1A, MMP7, ATP1B1, IFNE, LIPF, CCL20, MAPK13, IL6, SLC18A2, CD8A, LMNB1, ABCA1, Ccl9, AREG, TYRP1, IL1RN, FOXA2, IGFBP3, SST, Hmga2, MMP12, CHRNA3
Tissue Morphology	6.78E-07-2.7E-03	IL1A, TNFSF11, VAX1, MMP7, CYP1A1, IFNE, PCLO, TRH, CCL20, ATP6V0D2, IL6, MAPK13, CD8A, LMNB1, ABCA1, Ccl9,

		TNN, IL1RN, FOXA2, IGFBP3, SST, Hmga2, MMP12
Connective Tissue Development and Function	8.09E-07-2.7E-03	IL1A, CYP1A1, TNFSF11, MMP7, IFNE, TRH, ATP6V0D2, IL6, LMNB1, ABCA1, Ccl9, AREG, TNN, IL1RN, FOXA2, IGFBP3, Hmga2, Kng1/Kng2
Skeletal and Muscular System Development and Function	8.09E-07-2.7E-03	CYP1A1, IL1A, TNFSF11, MMP7, VAX1, ATP1B1, TRDN, ATP6V0D2, IL6, AREG, Ccl9, TNN, MYOM1, IL1RN, IGFBP3, Hmga2, CHRNA3, CSRP3
Carbohydrate Metabolism	9.36E-07-2.7E-03	MMP7, IL1A, IFNE, TRH, CSMD1, IL6, MAPK13, SLC18A2, ABCA1, PYGM, Art2b, IL1RN, FOXA2, IGFBP3, SST, MMP12, ACPP
Developmental Disorder	1.03E-06-2.7E-03	VAX1, TNFSF11, IL1A, TRH, CD96, IL6, AQP4, SLC18A2, ABCA1, AREG, TYRP1, FAM111A, PYGM, IL1RN, FOXA2, IGFBP3, CHRNA3
Hereditary Disorder	1.03E-06-2.7E-03	IL1A, TNFSF11, TRDN, CD96, IL6, LMNB1, ABCA1, TYRP1, PYGM, FAM111A, MYOM1, IL1RN, FOXA2, CFI, CSRP3
Metabolic Disease	1.03E-06-2.7E-03	IL1A, TNFSF11, TRH, CD96, IL6, MAPK13, ABCA1, Ccl9, TYRP1, PYGM, FAM111A, Art2b, IL1RN, FOXA2, IGFBP3, GSTA1
Organismal Injury and Abnormalities	1.03E-06-2.7E-03	MMP7, IL1A, VAX1, IFNE, PCLO, TRH, CSMD1, CD96, CCL20, ATP6V0D2, MAPK13, IL6, CD8A, AQP4, LMNB1, TMEM163, ABCA1, NPL, TNN, MYOM1, CFI, SST, GCLM, MMP12, CHRNA3, ACPP, CYP1A1, TNFSF11, ATP1B1, LIPF, Clca3a1/Clca3a2, TRDN, Pirb, SLC18A2, SRXN1, AREG, Ccl9, TYRP1, FAM111A, PYGM, IL1RN, FOXA2, IGFBP3, CSRP3
Molecular Transport	4.94E-06-2.7E-03	MMP7, IL1A, IFNE, SLC27A2, PCLO, TRH, CCL20, ATP6V0D2, IL6, MAPK13, AQP4, CD8A, ABCA1, MYOM1, SST, GSTA1, GCLM, MMP12, CHRNA3, ACPP, TNFSF11, CYP1A1, ATP1B1, Clca3a1/Clca3a2, TRDN, SLC18A2, IL1RN, FOXA2, IGFBP3, Stra6l

Small Molecule Biochemistry	4.94E-06-2.7E-03	IL1A, MMP7, IFNE, SLC27A2, PCLO, TRH, CSMD1, IL6, MAPK13, AQP4, ABCA1, Akr1b10, SST, GSTA1, GCLM, MMP12, ACPP, CYP1A1, TNFSF11, ATP1B1, LIPF, TRDN, SLC18A2, AREG, TYRP1, PYGM, IL1RN, Art2b, FOXA2, IGFBP3, Stra6l, CSRP3
Cardiovascular System Development and Function	5.22E-06-2.4E-03	IL1A, TNFSF11, MMP7, IL6, ABCA1, AREG, TNN, IL1RN, FOXA2, IGFBP3, SST, GCLM, MMP12, Kng1/Kng2
Cell Morphology	5.22E-06-2.7E-03	MMP7, TNFSF11, IL1A, TRH, TRDN, ATP6V0D2, IL6, MAPK13, AQP4, LMNB1, SRXN1, TNN, MYOM1, IL1RN, IGFBP3, SST, MMP12, CHRNA3, CSRP3
Organismal Development	5.22E-06-2.7E-03	MMP7, IL1A, VAX1, IFNE, PCLO, TRH, CCL20, IL6, CD8A, LMNB1, ABCA1, TNN, MYOM1, Hmga2, SST, GCLM, MMP12, CHRNA3, Kng1/Kng2, ACPP, TNFSF11, CYP1A1, SLC18A2, AREG, TYRP1, IL1RN, FOXA2, IGFBP3, CSRP3
Lipid Metabolism	7.42E-06-2.7E-03	MMP7, IL1A, CYP1A1, IFNE, SLC27A2, TRH, LIPF, IL6, SLC18A2, ABCA1, AREG, TYRP1, Akr1b10, IL1RN, FOXA2, SST, GSTA1, Stra6l, MMP12, ACPP
Vitamin and Mineral Metabolism	7.42E-06-2.7E-03	IL1A, CYP1A1, TNFSF11, ATP1B1, SLC27A2, TRH, TRDN, CCL20, IL6, CD8A, AQP4, ABCA1, AREG, Akr1b10, PYGM, FOXA2, SST, GSTA1, CSRP3
Endocrine System Development and Function	9.83E-06-2.7E-03	CYP1A1, IL1A, IL1RN, TRH, IGFBP3, SST, GSTA1, MAPK13, IL6, SLC18A2, ABCA1, AREG
Cancer	1.02E-05-2.7E-03	MMP7, IL1A, VAX1, PCLO, CSMD1, MAPK13, IL6, CD8A, ABCA1, TNN, MYOM1, CFI, SST, MMP12, CHRNA3, ACPP, TNFSF11, CYP1A1, ATP1B1, Clca3a1/Clca3a2, LIPF, Pirb, AREG, Ccl9, FAM111A, IL1RN, FOXA2, IGFBP3, CSRP3

Connective Tissue Disorders	1.02E-05-2.7E-03	IL1A, TNFSF11, MMP7, ATP1B1, CD96, CCL20, IL6, SLC18A2, Ccl9, AREG, FAM111A, IL1RN, MMP12
Nervous System Development and Function	1.02E-05-2.7E-03	IL1A, VAX1, TRH, IL1RN, FOXA2, SST, IL6, AQP4, SLC18A2, LMNB1, AREG
Organ Development	1.02E-05-2.7E-03	VAX1, TNFSF11, IL1A, MMP7, IFNE, TRH, IL6, CD8A, LMNB1, ABCA1, AREG, IL1RN, FOXA2, IGFBP3, Hmga2, SST, MMP12, CSRP3
Protein Synthesis	1.57E-05-2.23E-03	MMP7, CYP1A1, IL1A, TRH, IL6, MAPK13, SRXN1, ABCA1, IL1RN, IGFBP3, SST, GSTA1, GCLM, MMP12
Infectious Diseases	1.89E-05-2.7E-03	MMP7, IFNE, IL1RN, IL6, CD8A, MMP12, AQP4, CHRNA3, AREG
Nutritional Disease	1.9E-05-1.68E-03	CYP1A1, MMP7, LIPF, IL6, MAPK13, SLC18A2, SRXN1, AREG, IL1RN, FOXA2, Hmga2, SST, CHRNA3
Drug Metabolism	2.14E-05-2.7E-03	IL1A, TRH, IL1RN, SST, GSTA1, GCLM, IL6, SLC18A2, AREG
Immunological Disease	2.14E-05-2.7E-03	CYP1A1, TNFSF11, IL1A, ATP1B1, IL1RN, CSMD1, IGFBP3, CCL20, IL6, CD8A, ABCA1, Ccl9
Inflammatory Disease	2.14E-05-2.7E-03	IL1A, MMP7, TNFSF11, ATP1B1, CCL20, IL6, CD8A, SLC18A2, ABCA1, AREG, Ccl9, IL1RN, FOXA2, IGFBP3, MMP12, CHRNA3
Skeletal and Muscular Disorders	2.14E-05-2.7E-03	IL1A, TNFSF11, MMP7, ATP1B1, TRH, CD96, CCL20, IL6, SLC18A2, Ccl9, AREG, FAM111A, MYOM1, IL1RN, MMP12, CSRP3
Psychological Disorders	2.16E-05-2.7E-03	IL1A, CYP1A1, ATP1B1, PCLO, MYOM1, IL1RN, CSMD1, TRDN, SST, IL6, SLC18A2, AQP4, CHRNA3, LMNB1

Cardiovascular Disease	2.68E-05-2.7E-03	MMP7, CYP1A1, IL1A, TNFSF11, ATP1B1, CSMD1, TRDN, CD96, IL6, AQP4, SLC18A2, TMEM163, ABCA1, NPL, MYOM1, IL1RN, CFI, GCLM, MMP12, CHRNA3, Kng1/Kng2, CSRP3
Behavior	2.83E-05-2.28E-04	IL1A, IL1RN, TRH, ADGRL3, FOXA2, IL6, SLC18A2, CHRNA3, ABCA1
Organismal Survival	3.15E-05-3.15E-05	VAX1, IL1A, TNFSF11, CYP1A1, MMP7, ATP1B1, PCLO, IL6, AQP4, SLC18A2, CD8A, SRXN1, LMNB1, ABCA1, AREG, MYOM1, IL1RN, FOXA2, IGFBP3, GCLM, MMP12, CHRNA3, CSRP3
Cellular Compromise	3.17E-05-2.7E-03	TYRP1, TNFSF11, IL1A, IL1RN, FOXA2, CD96, GSTA1, IL6, GCLM, SLC18A2, LMNB1, ABCA1
Embryonic Development	3.17E-05-2.7E-03	VAX1, TNFSF11, IL1A, IFNE, TRH, CCL20, IL6, CD8A, LMNB1, ABCA1, AREG, IL1RN, FOXA2, IGFBP3, Hmga2, SST, MMP12
Dermatological Diseases and Conditions	3.74E-05-2.7E-03	CYP1A1, IL1A, ATP1B1, IL1RN, IGFBP3, CCL20, IL6, MMP12, CHRNA3, ABCA1, AREG, ACPP
Respiratory Disease	3.84E-05-2.7E-03	MMP7, IL1A, ATP1B1, IL6, MAPK13, CD8A, LMNB1, ABCA1, AREG, IL1RN, FOXA2, IGFBP3, MMP12, CHRNA3
Protein Trafficking	4.14E-05-4.14E-05	TNFSF11, IL1A, Art2b, IGFBP3, IL6, CD8A, ACPP
Cell Death and Survival	4.27E-05-2.7E-03	MMP7, IL1A, IFNE, TRH, CD96, ATP6V0D2, MAPK13, IL6, CD8A, LMNB1, Muc4, ABCA1, CFI, Hmga2, SST, GSTA1, GCLM, MMP12, TNFSF11, Clca3a1/Clca3a2, SLC18A2, SRXN1, AREG, Ccl9, TYRP1, Art2b, IL1RN, FOXA2, IGFBP3
Neurological Disease	4.53E-05-2.7E-03	IL1A, TNFSF11, ATP1B1, PCLO, IL1RN, CSMD1, CD96, SST, IL6, SLC18A2, AQP4, LMNB1, CHRNA3, ABCA1, NPL, ACPP
Cell Signaling	4.69E-05-1.74E-03	IL1A, TNFSF11, IFNE, ATP1B1, TRH, TRDN, CCL20, IL6, CD8A, AQP4, PYGM, IL1RN, IGFBP3, SST, CSRP3

Cellular Assembly and Organization	7.11E-05-2.7E-03	MMP7, IL1A, TRH, IL6
Gastrointestinal Disease	7.93E-05-2.7E-03	CYP1A1, VAX1, IL1A, TNFSF11, MMP7, ATP1B1, PCLO, CSMD1, LIPF, CCL20, IL6, MAPK13, ABCA1, Ccl9, AREG, FAM111A, TNN, MYOM1, IL1RN, FOXA2, CFI, IGFBP3, SST, MMP12, CHRNA3, CSRP3
Hepatic System Disease	7.93E-05-2.7E-03	MMP7, TNFSF11, IL1A, IL1RN, FOXA2, CCL20, IL6, AREG
Cell Cycle	1.09E-04-2.7E-03	IL1A, TNFSF11, CYP1A1, VAX1, IL1RN, TRH, FOXA2, IGFBP3, IL6
Gene Expression	1.09E-04-4.64E-04	IL1A, TNFSF11, CYP1A1, VAX1, IL1RN, TRH, FOXA2, IGFBP3, IL6
Renal and Urological System Development and Function	1.48E-04-1.48E-04	IGFBP3, Stra6l, ABCA1, AREG
Cell-mediated Immune Response	2E-04-2.7E-03	IL1A, IFNE, IL1RN, SST, IL6, CD8A
Reproductive System Disease	2.44E-04-4.85E-04	TNFSF11, IL1A, CYP1A1, MMP7, CFI, IGFBP3, IL6, ABCA1, AREG, ACPP
Hair and Skin Development and Function	2.54E-04-2.7E-03	TYRP1, TRH, IL6

Post-Translational Modification	2.54E-04-2.7E-03	MMP7, Art2b, IL6, SLC18A2, MMP12
Amino Acid Metabolism	2.97E-04-2.7E-03	TYRP1, IL1A, IL1RN, Art2b, TRH, SST, IL6, GCLM, AQP4
Nucleic Acid Metabolism	3.17E-04-2.7E-03	CYP1A1, ATP1B1, TRH, Art2b, IL1RN, SST, IL6, ABCA1, ACPP, AREG
Ophthalmic Disease	3.41E-04-2.7E-03	TYRP1, CYP1A1, IL1A, VAX1, CCL20, IL6, CHRNA3, Ccl9, AREG
Digestive System Development and Function	3.87E-04-2.7E-03	IL1A, TNFSF11, CYP1A1, IL1RN, FOXA2, IGFBP3, SST, IL6, CHRNA3, AREG
Hepatic System Development and Function	3.87E-04-2.7E-03	IL1A, IL1RN, IL6, AREG
Organ Morphology	4.62E-04-2.58E-03	IL1A, TNFSF11, CYP1A1, IL6, CD8A, LMNB1, ABCA1, AREG, IL1RN, FOXA2, IGFBP3, SST, Hmga2, MMP12, ACPP
Respiratory System Development and Function	4.62E-04-2.23E-03	TNFSF11, FOXA2, IGFBP3, MMP12, LMNB1, ABCA1
Hypersensitivity Response	4.71E-04-4.71E-04	IGFBP3, IL6, CD8A, MMP12
Reproductive System	5.44E-04-2.04E-03	MMP7, IL1A, TNFSF11, IGFBP3, Hmga2, IL6, ABCA1, AREG

Development and Function		
Humoral Immune Response	5.54E-04-5.54E-04	TNFSF11, IFNE, IL1RN, DNNT, IL6, CD8A
DNA Replication, Recombination, and Repair	5.83E-04-1.85E-03	TNFSF11, IL1A, IL1RN, IGFBP3, SST, DNNT, IL6, AREG
Hematological Disease	6.29E-04-2.7E-03	MMP7, IL1A, TNFSF11, ATP1B1, FAM111A, IL1RN, CSMD1, IGFBP3, IL6, CD8A, AQP4, ABCA1, Ccl9
Tumor Morphology	6.59E-04-1.39E-03	IL1A, IL1RN, IGFBP3, SST, IL6, MAPK13, AREG
Antimicrobial Response	1.04E-03-1.57E-03	MMP7, IFNE, Hmga2, IL6, CD8A, MMP12
Endocrine System Disorders	1.74E-03-2.7E-03	TNFSF11, FAM111A, IL1RN, FOXA2, IL6
Free Radical Scavenging	1.91E-03-1.91E-03	CYP1A1, IL6, ABCA1
Protein Degradation	2.23E-03-2.23E-03	MMP7, MMP12
Visual System Development and Function	2.58E-03-2.58E-03	IL6, AREG

Antigen Presentation	2.7E-03- 2.7E-03	CD8A
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7 days		
Category	P value	Molecules
Cell Signaling	4.87E-09- 1.71E-03	IFNG, LPAR4, TNFSF11, CXCL11, IFNE, Gucy2d, TRH, GRP, IL6, AQP4, CD8A, Ccl9, ATP2B2, CAMK2A, SLC5A1, IL1RN, SST, CCR6, ADRA1A
Molecular Transport	4.87E-09- 1.87E-03	OSTN, MMP7, LPAR4, IFNE, UNC13C, SLC27A2, TRH, IL6, CD8A, AQP4, RASGRF1, CAMK2A, MYOM1, SLC5A1, CLIC3, SST, GSTA1, MMP12, CHRNA3, CCR6, SNAP91, IFNG, CYP1A1, TNFSF11, CXCL11, Gucy2d, GRP, SLC18A2, CNGA1, Ccl9, ATP2B2, GRM7, IL1RN, FOXA2, Stra6l, ADRA1A
Vitamin and Mineral Metabolism	4.87E-09- 2.06E-03	LPAR4, SLC27A2, TRH, IL6, AQP4, CD8A, Akr1b10, CAMK2A, SLC5A1, SST, GSTA1, Gnmt/LOC100911564, CCR6, IFNG, CXCL11, TNFSF11, CYP1A1, Gucy2d, GRP, IGFBP2, AREG, ATP2B2, Ccl9, FOXA2, ADRA1A
Infectious Diseases	3.74E-08- 1.65E-03	IFNG, MMP7, IFNE, Mcpt1, IL6, CD8A, AQP4, AREG, REG3G, IL1RN, MMP12, CHRNA3, ADRA1A, CCR6
Cell-To-Cell Signaling and Interaction	1.46E-07- 2.09E-03	OSTN, MMP7, LPAR4, IFNE, UNC13C, PCLO, TRH, Mcpt1, XIRP2, IL6, AQP4, CD8A, RASGRF1, CAMK2A, CLIC3, SST, CHRNA3, HS1BP3, SNAP91, CCR6, IFNG, TNFSF11, CXCL11, CYP1A1, Gucy2d, Pirb, GRP, CRISP1, SLC18A2, IGFBP2, Ccl9, ATP2B2, AREG, GRM7, IL1RN, FOXA2, ADRA1A, NRP1
Cellular Growth and Proliferation	1.46E-07- 2.06E-03	VAX1, MMP7, IFNE, TRH, IL6, CD8A, AQP4, LMNB1, RASGRF1, TNN, CAMK2A, SST, MMP12, CHRNA3, SNAP91, Kng1/Kng2, CCR6, IFNG, TNFSF11, CXCL11, CYP1A1, GRP, TSPAN33, Pirb, IGFBP2, AREG, REG3G, Art2b, IL1RN, FOXA2, CSRP3, ADRA1A, NRP1
Nervous System	3.55E-07- 2.09E-03	LPAR4, VAX1, UNC13C, PCLO, TRH, IL6, AQP4, LMNB1, RASGRF1, CAMK2A, TNN, SST, CHRNA3, SNAP91, CCR6, IFNG, Gucy2d, GRP, SLC18A2, AREG,

Development and Function		ATP2B2, GRM7, IL1RN, FOXA2, ADRA1A, NRP1
Hematological System Development and Function	4.33E-07-1.85E-03	MMP7, IFNE, Mcpt1, IL6, CD8A, LMNB1, SST, MMP12, CCR6, Kng1/Kng2, IFNG, CYP1A1, TNFSF11, CXCL11, GRP, Pirb, TSPAN33, IGFBP2, AREG, Ccl9, REG3G, IL1RN, Art2b, FOXA2, NRP1
Inflammatory Response	4.33E-07-2.07E-03	IFNG, CXCL11, CYP1A1, TNFSF11, MMP7, IFNE, Mcpt1, TSPAN33, GRP, IL6, CD8A, SLC18A2, LMNB1, Ccl9, AREG, RASGRF1, Ly49s3, IL1RN, FOXA2, NLRP4, SST, MMP12, ADRA1A, CCR6, NRP1
Cellular Movement	5E-07-1.93E-03	MMP7, LPAR4, VAX1, TRH, Mcpt1, IL6, AQP4, CD8A, LMNB1, RASGRF1, TNN, SST, MMP12, CCR6, IFNG, TNFSF11, CXCL11, CYP1A1, ADGRL3, GRP, IGFBP2, AREG, Ccl9, IL1RN, FOXA2, NRP1
Immune Cell Trafficking	5E-07-1.85E-03	IFNG, CYP1A1, CXCL11, TNFSF11, MMP7, IFNE, Mcpt1, GRP, IL6, CD8A, LMNB1, Ccl9, IL1RN, FOXA2, SST, MMP12, CCR6, NRP1
Cellular Development	7.68E-07-2.06E-03	OSTN, VAX1, MMP7, IFNE, TRH, IL6, CD8A, LMNB1, RASGRF1, TNN, CAMK2A, SST, MMP12, CHRNA3, SNAP91, Kng1/Kng2, CCR6, IFNG, TNFSF11, CXCL11, CYP1A1, GRP, Pirb, TSPAN33, IGFBP2, AREG, Ccl9, ATP2B2, REG3G, Art2b, IL1RN, FOXA2, FAM213A, ADRA1A, CSRP3, NRP1
Hematopoiesis	7.68E-07-1.46E-03	IFNG, CXCL11, TNFSF11, IFNE, IL1RN, IL6, CD8A, NRP1
Lymphoid Tissue Structure and Development	7.68E-07-2.02E-03	IFNG, CYP1A1, TNFSF11, CXCL11, IFNE, TSPAN33, Pirb, IL6, CD8A, IGFBP2, REG3G, IL1RN, Art2b, SST, Kng1/Kng2, CCR6, NRP1
Skeletal and Muscular	7.68E-07-2.02E-03	IFNG, OSTN, CXCL11, CYP1A1, MMP7, TNFSF11, IL6, IGFBP2, Ccl9, AREG, RASGRF1, CAMK2A, TNN, IL1RN, FAM213A, MMP12, CSRP3, NRP1

System Development and Function		
Tissue Development	7.68E-07-2.02E-03	OSTN, MMP7, VAX1, IFNE, TRH, IL6, CD8A, LMNB1, RASGRF1, TNN, CAMK2A, SST, MMP12, CHRNA3, Kng1/Kng2, CCR6, SNAP91, IFNG, TNFSF11, CXCL11, CYP1A1, IGFBP2, Ccl9, AREG, REG3G, IL1RN, FOXA2, FAM213A, CSRP3, NRP1
Tissue Morphology	8.63E-07-2.02E-03	VAX1, MMP7, IFNE, PCLO, TRH, Mcpt1, IL6, CD8A, LMNB1, RASGRF1, TNN, CAMK2A, SST, MMP12, CCR6, SNAP91, IFNG, CYP1A1, TNFSF11, Gucy2d, TSPAN33, SLC18A2, IGFBP2, ATP2B2, Ccl9, REG3G, IL1RN, FOXA2, NRP1
Organismal Development	9.27E-07-2.01E-03	MMP7, IFNE, PCLO, IL6, CD8A, LMNB1, RASGRF1, CAMK2A, TNN, MYOM1, SLC5A1, SST, MMP12, CHRNA3, SNAP91, CCR6, Kng1/Kng2, IFNG, TNFSF11, CYP1A1, TSPAN33, GRP, SLC18A2, IGFBP2, ATP2B2, AREG, IL1RN, FOXA2, CSRP3, ADRA1A, NRP1
Organismal Injury and Abnormalities	1.81E-06-2.04E-03	LPAR4, IFNE, UNC13C, SLC27A2, PCLO, SPTSSB, CD96, IL6, CD8A, AQP4, LMNB1, RASGRF1, CAMK2A, TNN, MYOM1, SLC5A1, CFI, GSTA1, FABP9, CHRNA3, SNAP91, HS1BP3, UPK1B, FMO2, GLYAT, GRP, TSPAN33, CNGA1, IGFBP2, AREG, GRM7, PYGM, IL1RN, FOXA2, NRP1, MMP7, GLCCI1, TRH, XIRP2, SST, MMP12, CCR6, IFNG, CXCL11, TNFSF11, CYP1A1, MOXD1, Pirb, CRISP1, SLC18A2, Ccl9, ATP2B2, FAM111A, REG3G, RMDN2, NLRP4, HYDIN, CSRP3, ADRA1A
Respiratory Disease	1.81E-06-1.47E-03	MMP7, UNC13C, PCLO, XIRP2, IL6, CD8A, LMNB1, TNN, CFI, MMP12, CHRNA3, CCR6, IFNG, CXCL11, CYP1A1, TNFSF11, GRP, CNGA1, IGFBP2, AREG, ATP2B2, GRM7, PYGM, REG3G, IL1RN, ADRA1A, NRP1

Neurological Disease	1.86E-06- 1.46E-03	IFNG, VAX1, MMP7, TNFSF11, UNC13C, PCLO, Gucy2d, IL6, AQP4, SLC18A2, LMNB1, CNGA1, IGFBP2, ATP2B2, GRM7, RASGRF1, CAMK2A, MYOM1, IL1RN, FOXA2, SST, HYDIN, CHRNA3, SNAP91, CCR6, ADRA1A, NRP1
Carbohydrate Metabolism	2.1E-06- 1.77E-03	IFNG, OSTN, MMP7, IFNE, TRH, GRP, IL6, ATP2B2, PYGM, CAMK2A, IL1RN, SLC5A1, FOXA2, SST, MMP12, ADRA1A
Small Molecule Biochemistry	2.1E-06- 2.06E-03	OSTN, LPAR4, MMP7, UNC13C, IFNE, SLC27A2, TRH, SPTSSB, IL6, CD8A, AQP4, Akr1b10, RASGRF1, CAMK2A, SST, GSTA1, Gnm1/LOC100911564, MMP12, CHRNA3, SNAP91, IFNG, TNFSF11, CYP1A1, FMO2, GLYAT, GRP, SLC18A2, IGFBP2, ATP2B2, AREG, GRM7, IL1RN, FOXA2, Stra6l, ADRA1A
Connective Tissue Development and Function	2.79E-06- 2.02E-03	IFNG, OSTN, MMP7, CYP1A1, CXCL11, TNFSF11, IFNE, TRH, GRP, IL6, LMNB1, IGFBP2, AREG, Ccl9, RASGRF1, REG3G, TNN, IL1RN, FAM213A, CCR6, Kng1/Kng2, ADRA1A, NRP1
Endocrine System Development and Function	4.08E-06- 2.06E-03	GRM7, IFNG, RASGRF1, CYP1A1, IL1RN, TRH, SST, GSTA1, IL6, SLC18A2, IGFBP2, AREG
Psychological Disorders	7.29E-06- 1.23E-03	IFNG, CYP1A1, UNC13C, PCLO, IL6, AQP4, SLC18A2, IGFBP2, ATP2B2, GRM7, RASGRF1, CAMK2A, MYOM1, IL1RN, SST, HYDIN, CHRNA3, ADRA1A
Cell Cycle	1.25E-05- 1.85E-03	IFNG, TNFSF11, CYP1A1, VAX1, CAMK2A, IL1RN, TRH, FOXA2, GRP, IL6
Cell Morphology	1.25E-05- 1.85E-03	MMP7, LPAR4, IFNE, TRH, Mcpt1, IL6, CD8A, LMNB1, RASGRF1, TNN, CAMK2A, SST, MMP12, CHRNA3, SNAP91, CCR6, IFNG, CXCL11, TNFSF11, Gucy2d, GRP, TSPAN33, SLC18A2, SRXN1,

		IGFBP2, AREG, ATP2B2, IL1RN, FOXA2, NLRP4, ADRA1A, CSRP3, NRP1
Gene Expression	1.25E-05-1.85E-03	IFNG, TNFSF11, CYP1A1, VAX1, IL1RN, TRH, FOXA2, GRP, IL6
Cellular Function and Maintenance	1.32E-05-1.71E-03	MMP7, UNC13C, IFNE, TRH, XIRP2, IL6, CD8A, AQP4, LMNB1, RASGRF1, TNN, CAMK2A, CLIC3, SST, MMP12, CHRNA3, SNAP91, CCR6, HS1BP3, Kng1/Kng2, IFNG, TNFSF11, Pirb, GRP, SLC18A2, SRXN1, AREG, ATP2B2, REG3G, PYGM, IL1RN, FOXA2, NLRP4, ADRA1A, CSRP3, NRP1
Cellular Assembly and Organization	1.75E-05-1.85E-03	IFNG, MMP7, LPAR4, PCLO, TRH, XIRP2, IL6, SLC18A2, LMNB1, AREG, ATP2B2, RASGRF1, TNN, CAMK2A, NLRP4, MMP12, CHRNA3, SNAP91, NRP1
Inflammatory Disease	1.95E-05-1.85E-03	IFNG, CXCL11, CYP1A1, TNFSF11, MMP7, GRP, IL6, CD8A, SLC18A2, AREG, Ccl9, RASGRF1, IL1RN, CFI, HYDIN, MMP12, CHRNA3, CCR6, ADRA1A, NRP1
Cancer	2.36E-05-1.81E-03	LPAR4, UNC13C, SLC27A2, PCLO, SPTSSB, CD96, IL6, CD8A, AQP4, RASGRF1, CAMK2A, TNN, MYOM1, SLC5A1, CFI, GSTA1, FABP9, CHRNA3, SNAP91, HS1BP3, UPK1B, FMO2, GLYAT, GRP, TSPAN33, CNGA1, IGFBP2, AREG, GRM7, PYGM, IL1RN, FOXA2, NRP1, MMP7, GLCCI1, TRH, XIRP2, SST, MMP12, CCR6, IFNG, CXCL11, TNFSF11, CYP1A1, MOXD1, Pirb, CRISP1, SLC18A2, Ccl9, ATP2B2, FAM111A, REG3G, RMDN2, NLRP4, HYDIN, CSRP3, ADRA1A
Connective Tissue Disorders	2.36E-05-1.59E-03	IFNG, TNFSF11, MMP7, GRP, IL6, SLC18A2, AREG, Ccl9, RASGRF1, RMDN2, IL1RN, MMP12, CCR6, ADRA1A, NRP1

Cell-mediated Immune Response	2.86E-05-1.28E-03	IFNG, CXCL11, IFNE, IL1RN, IL6, CD8A, CCR6
Embryonic Development	2.86E-05-1.65E-03	IFNG, TNFSF11, IFNE, IL1RN, FOXA2, IL6, MMP12, CD8A, LMNB1, CCR6, NRP1
Organ Development	2.86E-05-1.76E-03	IFNG, MMP7, TNFSF11, IFNE, TRH, IL6, CD8A, LMNB1, IGFBP2, AREG, RASGRF1, REG3G, CAMK2A, IL1RN, FOXA2, SST, MMP12, ADRA1A, CCR6, CSRP3
Cellular Compromise	3.06E-05-1.85E-03	IFNG, TNFSF11, LPAR4, RASGRF1, IL1RN, FOXA2, IL6, SLC18A2, LMNB1, NRP1
Nucleic Acid Metabolism	3.36E-05-1.87E-03	OSTN, IFNG, LPAR4, TNFSF11, CYP1A1, FMO2, TRH, GLYAT, IL6, AQP4, ATP2B2, GRM7, IL1RN, SST, Gnm1/LOC100911564
Behavior	3.38E-05-1.65E-03	IFNG, UNC13C, TRH, ADGRL3, GRP, IL6, AQP4, SLC18A2, ATP2B2, GRM7, RASGRF1, CAMK2A, IL1RN, FOXA2, SST, CHRNA3, SNAP91, ADRA1A
Cell Death and Survival	3.75E-05-1.55E-03	IFNG, MMP7, TNFSF11, REG3G, IL1RN, SST, CLIC3, GSTA1, IL6, MMP12, CD8A, NRP1
Drug Metabolism	3.75E-05-1.46E-03	CAMK2A, IL1RN, IL6, SLC18A2
Immunological Disease	3.75E-05-1.96E-03	IFNG, CYP1A1, TNFSF11, Mcpt1, CTSW, CD96, TSPAN33, GRP, IL6, CD8A, SLC18A2, IGFBP2, AREG, Ccl9, RASGRF1, IL1RN, Art2b, CFI, MMP12, CCR6, NRP1
Skeletal and Muscular Disorders	3.75E-05-1.59E-03	IFNG, TNFSF11, MMP7, UNC13C, GRP, IL6, AQP4, SLC18A2, AREG, Ccl9, RASGRF1, RMDN2, IL1RN, MMP12, CCR6, ADRA1A, NRP1
Tumor Morphology	4.05E-05-1.48E-03	IFNG, CXCL11, MMP7, IL1RN, SST, GRP, IL6, IGFBP2, AREG, NRP1

Dermatological Diseases and Conditions	4.13E-05-1.11E-03	LPAR4, IFNE, UNC13C, SLC27A2, PCLO, SPTSSB, CD96, IL6, AQP4, RASGRF1, TNN, MYOM1, SLC5A1, CFI, GSTA1, FABP9, CHRNA3, SNAP91, HS1BP3, UPK1B, FMO2, GLYAT, TSPAN33, CNGA1, IGFBP2, AREG, GRM7, PYGM, IL1RN, FOXA2, NRP1, MMP7, GLCCI1, TRH, XIRP2, SST, CCR6, IFNG, CXCL11, TNFSF11, CYP1A1, MOXD1, CRISP1, SLC18A2, ATP2B2, FAM111A, REG3G, RMDN2, NLRP4, HYDIN, CSRP3, ADRA1A
Digestive System Development and Function	4.51E-05-7.57E-04	IFNG, TNFSF11, CYP1A1, GRP, IL6, IGFBP2, AREG, RASGRF1, REG3G, SLC5A1, FOXA2, SST, CHRNA3, CCR6
Gastrointestinal Disease	5.95E-05-1.85E-03	IFNG, RASGRF1, CYP1A1, CXCL11, TNFSF11, SLC5A1, IL1RN, FOXA2, CFI, SST, IL6, MMP12, CHRNA3, CCR6, AREG
Organ Morphology	5.95E-05-2.02E-03	IFNG, TNFSF11, MMP7, CYP1A1, TSPAN33, IL6, CD8A, LMNB1, IGFBP2, AREG, SLC5A1, IL1RN, FOXA2, SST, MMP12, CSRP3, ADRA1A, CCR6
Antimicrobial Response	7.49E-05-8.09E-04	IFNG, IL6, CCR6
Cardiovascular System Development and Function	7.61E-05-2.01E-03	IFNG, CXCL11, TNFSF11, MMP7, Mcpt1, IL6, AREG, TNN, IL1RN, FOXA2, SST, MMP12, CSRP3, ADRA1A, Kng1/Kng2, CCR6, NRP1
Lipid Metabolism	8.49E-05-2.06E-03	IFNG, MMP7, CYP1A1, IFNE, SLC27A2, TRH, GLYAT, SPTSSB, GRP, IL6, SLC18A2, IGFBP2, AREG, GRM7, Akr1b10, IL1RN, FOXA2, SST, GSTA1, MMP12, Stra6l
Energy Production	9.46E-05-5.92E-04	OSTN, IFNG, TNFSF11, IL1RN, TRH, GRP, IL6, AQP4
Hypersensitivity Response	1.18E-04-1.18E-04	IFNG, IL6, CD8A, MMP12, CCR6

Cardiovascular Disease	1.25E-04-1.75E-03	IFNG, CYP1A1, MMP7, TNFSF11, CD96, IL6, AQP4, SLC18A2, RASGRF1, MYOM1, IL1RN, FOXA2, CFI, MMP12, CHRNA3, ADRA1A, CSRP3, NRP1
Developmental Disorder	1.25E-04-1.35E-03	IFNG, TNFSF11, TRH, IL6, AQP4, SLC18A2, AREG, RASGRF1, PYGM, IL1RN, FOXA2, ADRA1A, SNAP91, NRP1
Hair and Skin Development and Function	1.65E-04-6.66E-04	IFNG, REG3G, TRH, IL6, LMNB1, AREG
Protein Synthesis	1.82E-04-2.01E-03	IFNG, RASGRF1, CYP1A1, REG3G, FMO2, IL1RN, SLC5A1, TRH, Mcpt1, SST, IL6, SRXN1, CCR6
Hematological Disease	1.86E-04-1.85E-03	IFNG, TNFSF11, IL1RN, CFI, TSPAN33, IL6, CD8A, AQP4, MMP12, ADRA1A
Amino Acid Metabolism	2.12E-04-9.54E-04	GRM7, IFNG, IL1RN, TRH, GLYAT, SST, Gnmt/LOC100911564, IL6
Humoral Immune Response	2.66E-04-2.66E-04	IFNG, REG3G, IL6, CCR6
Hereditary Disorder	3.46E-04-1.75E-03	IFNG, PYGM, MYOM1, IL1RN, CFI, CD96, IL6, CSRP3, ADRA1A, NRP1
Metabolic Disease	3.46E-04-1.35E-03	IFNG, PYGM, IL1RN, IL6
Post-Translational Modification	4.44E-04-4.44E-04	IL6, SLC18A2
Hepatic System Disease	4.61E-04-1.11E-03	IFNG, CXCL11, TNFSF11, IL1RN, FOXA2, IL6, AREG

Endocrine System Disorders	6.46E-04-8.63E-04	IFNG, TNFSF11, PCLO, FMO2, TRH, XIRP2, GRP, IL6, IGFBP2, AREG, GRM7, CAMK2A, TNN, RMDN2, HYDIN, CHRNA3, ADRA1A
DNA Replication, Recombination, and Repair	6.49E-04-6.49E-04	IFNG, RASGRF1, TNFSF11, IL1RN, GRP, IL6, IGFBP2, AREG
Hepatic System Development and Function	6.76E-04-1.05E-03	IFNG, IL6, CCR6
Organismal Functions	7.17E-04-7.17E-04	IL1RN, GRP, IL6, SLC18A2
Auditory Disease	8.09E-04-8.09E-04	MMP7, ATP2B2
Nutritional Disease	9.75E-04-9.75E-04	IFNG, CXCL11, MMP7, CYP1A1, IL1RN, FOXA2, SST, IL6, SLC18A2, CHRNA3, SRXN1, ADRA1A, AREG
Free Radical Scavenging	1.28E-03-1.28E-03	IFNG, IL6
Organismal Survival	1.34E-03-1.34E-03	IFNG, VAX1, TNFSF11, CYP1A1, CXCL11, MMP7, PCLO, IL6, AQP4, SLC18A2, CD8A, SRXN1, LMNB1, AREG, MYOM1, IL1RN, SLC5A1, FOXA2, MMP12, CHRNA3, SNAP91, CSRP3, ADRA1A, NRP1
Protein Trafficking	1.54E-03-1.54E-03	IFNG, TNFSF11, Art2b, IL6, Gnmt/LOC100911564, CD8A
Respiratory System	1.65E-03-1.65E-03	IFNG, TNFSF11, FOXA2, MMP12, LMNB1

Development and Function		
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14 days		
Category	P value	Molecules
Cell-To-Cell Signaling and Interaction	3.51E-08-2.51E-03	VAX1, CHGA, UNC13C, TRH, Mcpt1, CD96, XIRP2, IL6, Muc4, CNTNAP2, TNN, SST, CCR6, IFNG, CYP1A1, TNFSF11, Gucy2d, ADGRL3, GRM8, PDYN, CRISP1, SLC18A2, Ccl9, ATP2B2, ALB, Stra6l, BMP6, CSRP3, NRP1
Cellular Growth and Proliferation	3.51E-08-2.51E-03	IFNG, CYP1A1, TNFSF11, VAX1, CHGA, TRH, PPL, IL6, LMNB1, ALB, REG3G, TNN, Art2b, SST, BMP6, MMP12, Kng1/Kng2, CCR6, NRP1
Hematological System Development and Function	1.5E-07-2.51E-03	IFNG, CHGA, TNFSF11, CYP1A1, Mcpt1, PPL, IL6, LMNB1, Ccl9, ALB, REG3G, Art2b, SST, MMP12, Kng1/Kng2, CCR6, NRP1
Inflammatory Response	1.5E-07-2.51E-03	IFNG, CHGA, TNFSF11, CYP1A1, Mcpt1, IL6, LMNB1, Ccl9, ALB, SST, MMP12, CCR6, NRP1
Cellular Function and Maintenance	7.04E-07-2.51E-03	IFNG, CHGA, TNFSF11, TRH, CSMD1, XIRP2, IL6, SLC18A2, LMNB1, SRXN1, ATP2B2, ALB, REG3G, CLIC3, SST, MMP12, BMP6, CSRP3, CCR6, Kng1/Kng2, NRP1
Cellular Development	1.61E-06-2.51E-03	IFNG, CHGA, CYP1A1, TNFSF11, VAX1, TRH, PPL, IL6, LMNB1, Ccl9, ATP2B2, ALB, TNN, REG3G, Art2b, SST, MMP12, BMP6, CCR6, Kng1/Kng2, CSRP3, NRP1

Hair and Skin Development and Function	1.61E-06-2.51E-03	IFNG, CHGA, REG3G, TRH, IL6, BMP6, LMNB1
Organ Development	1.61E-06-2.51E-03	IFNG, CHGA, TNFSF11, VAX1, REG3G, TRH, SST, IL6, BMP6, LMNB1, CCR6, CSRP3
Tissue Development	1.61E-06-2.51E-03	IFNG, CYP1A1, VAX1, TNFSF11, CHGA, TRH, CD96, IL6, LMNB1, Muc4, Ccl9, ALB, REG3G, TNN, SST, MMP12, BMP6, CCR6, CSRP3, Kng1/Kng2, NRP1
Cancer	3E-06-2.51E-03	CHGA, UNC13C, ZBBX, PCLO, TRH, CSMD1, XIRP2, IL6, TNN, CNTNAP2, CFI, SST, MMP12, CCR6, KLK10, IFNG, TNFSF11, CYP1A1, PDYN, GRM8, ATP2B2, Ccl9, ALB, REG3G, STMN3, BMP6, NRP1
Organismal Injury and Abnormalities	3E-06-2.51E-03	CHGA, AADAT, ZBBX, UNC13C, PCLO, TRH, CTSW, CSMD1, CD96, XIRP2, IL6, LMNB1, TNN, CNTNAP2, CFI, SST, GSTA1, MMP12, CCR6, KLK10, IFNG, CYP1A1, TNFSF11, PDYN, GRM8, SLC18A2, SRXN1, Ccl9, ATP2B2, ALB, REG3G, Art2b, STMN3, BMP6, CSRP3, NRP1
Respiratory Disease	3E-06-1.97E-03	IFNG, TNFSF11, CYP1A1, CHGA, ZBBX, UNC13C, PCLO, GRM8, PDYN, CSMD1, XIRP2, IL6, ATP2B2, ALB, REG3G, TNN, CNTNAP2, STMN3, CFI, MMP12, KLK10, CCR6, NRP1
Amino Acid Metabolism	3.25E-06-2.51E-03	IFNG, AADAT, ALB, Art2b, GLYAT, IL6
Small Molecule Biochemistry	3.25E-06-2.51E-03	IFNG, AADAT, CHGA, TNFSF11, CYP1A1, UNC13C, SLC27A2, PDYN, GRM8, TRH, GLYAT, IL6, SLC18A2, ATP2B2, ALB, Art2b, SST, GSTA1, MMP12, Stra6l, BMP6
Hematopoiesis	5.36E-06-2.51E-03	IFNG, TNFSF11, IL6, NRP1
Lymphoid Tissue	5.36E-06-2.51E-03	IFNG, ALB, TNFSF11, REG3G, Art2b, PPL, SST, IL6, Kng1/Kng2, CCR6, NRP1

Structure and Development		
Cellular Compromise	5.49E-06-2.51E-03	IFNG, TNFSF11, CHGA, SST, GSTA1, IL6, SLC18A2, LMNB1
Neurological Disease	5.49E-06-2.51E-03	IFNG, VAX1, AADAT, CHGA, UNC13C, Gucy2d, PDYN, CD96, IL6, SLC18A2, LMNB1, ATP2B2, ALB, CNTNAP2, SST, CCR6, NRP1
Cell Cycle	6.2E-06-2.51E-03	IFNG, ALB, TNFSF11, CYP1A1, VAX1, TRH, IL6, BMP6, NRP1
Cell Morphology	6.2E-06-2.51E-03	IFNG, AADAT, TNFSF11, Gucy2d, TRH, Mcpt1, IL6, SLC18A2, LMNB1, SRXN1, ATP2B2, ALB, CNTNAP2, TNN, SST, MMP12, CCR6, CSRP3, NRP1
Connective Tissue Development and Function	6.2E-06-2.51E-03	IFNG, CYP1A1, TNFSF11, CHGA, TRH, IL6, LMNB1, Ccl9, TNN, REG3G, BMP6, CCR6, Kng1/Kng2, NRP1
Gene Expression	6.2E-06-2.51E-03	IFNG, ALB, TNFSF11, CYP1A1, VAX1, TRH, IL6, BMP6
Skeletal and Muscular System Development and Function	6.2E-06-2.51E-03	IFNG, CYP1A1, TNFSF11, VAX1, ALB, TNN, PDYN, IL6, BMP6, CSRP3, NRP1, Ccl9
Tissue Morphology	6.2E-06-2.51E-03	IFNG, AADAT, CHGA, TNFSF11, VAX1, CYP1A1, PCLO, Gucy2d, PDYN, TRH, IL6, SLC18A2, LMNB1, Ccl9, ATP2B2, REG3G, TNN, CNTNAP2, SST, MMP12, BMP6, CCR6, NRP1
Endocrine System	6.5E-06-2.51E-03	IFNG, CHGA, CYP1A1, TRH, SST, GSTA1, IL6, SLC18A2, BMP6

Development and Function		
Connective Tissue Disorders	8.22E-06-2.51E-03	IFNG, TNFSF11, CD96, IL6, BMP6
Cellular Movement	9.97E-06-2.51E-03	IFNG, VAX1, CYP1A1, CHGA, TNFSF11, ADGRL3, TRH, Mcpt1, IL6, LMNB1, Ccl9, ALB, CNTNAP2, TNN, STMN3, SST, MMP12, BMP6, CCR6, NRP1
Immune Cell Trafficking	9.97E-06-2.51E-03	IFNG, CHGA, TNFSF11, CYP1A1, Mcpt1, IL6, LMNB1, Ccl9, ALB, SST, MMP12, CCR6, NRP1
Lipid Metabolism	1.55E-05-2.51E-03	IFNG, CYP1A1, CHGA, SLC27A2, TRH, GLYAT, IL6, SLC18A2, ALB, SST, GSTA1, MMP12, Stra6l, BMP6
Molecular Transport	1.55E-05-2.51E-03	IFNG, TNFSF11, CYP1A1, CHGA, UNC13C, SLC27A2, PDYN, GRM8, TRH, Gucy2d, IL6, SLC18A2, ATP2B2, ALB, CLIC3, SST, GSTA1, MMP12, Stra6l, BMP6
Endocrine System Disorders	1.59E-05-2.51E-03	IFNG, TNFSF11, CHGA, GRM8, PDYN, TRH, CTSW, CD96, IL6, Ccl9, ALB, TNN, CNTNAP2, Art2b, GSTA1, CCR6
Gastrointestinal Disease	1.59E-05-2.51E-03	IFNG, TNFSF11, CHGA, PDYN, CTSW, CD96, IL6, Ccl9, ALB, CNTNAP2, Art2b, CFI, GSTA1, MMP12, CCR6
Immunological Disease	1.59E-05-2.51E-03	IFNG, CYP1A1, TNFSF11, CHGA, PDYN, CTSW, CSMD1, CD96, IL6, SLC18A2, ATP2B2, Ccl9, ALB, Art2b, CFI, MMP12, CCR6, NRP1
Metabolic Disease	1.59E-05-2.51E-03	IFNG, CHGA, TNFSF11, GRM8, PDYN, TRH, CTSW, CD96, IL6, Ccl9, ALB, CNTNAP2, REG3G, Art2b, GSTA1, CCR6
Cell Signaling	3.39E-05-2.46E-03	IFNG, CHGA, TNFSF11, ALB, Gucy2d, TRH, PDYN, SST, IL6, ATP2B2
Vitamin and Mineral Metabolism	3.39E-05-1.66E-03	IFNG, CYP1A1, TNFSF11, CHGA, SLC27A2, TRH, Gucy2d, IL6, ATP2B2, ALB, SST, GSTA1, BMP6

Cell Death and Survival	3.61E-05-2.51E-03	IFNG, CHGA, TNFSF11, TRH, IL6, LMNB1, SRXN1, Ccl9, ATP2B2, ALB, REG3G, CLIC3, GSTA1, MMP12, BMP6, NRP1
Antimicrobial Response	3.71E-05-4.03E-04	IFNG, IL6, CCR6
Embryonic Development	3.71E-05-2.51E-03	IFNG, TNFSF11, ALB, VAX1, TRH, XIRP2, IL6, MMP12, LMNB1, CSRP3, CCR6, ATP2B2, NRP1
Organismal Development	3.71E-05-2.51E-03	IFNG, CYP1A1, CHGA, VAX1, TNFSF11, TRH, XIRP2, IL6, LMNB1, ATP2B2, ALB, TNN, SST, BMP6, MMP12, Kng1/Kng2, CCR6, CSRP3, NRP1
Skeletal and Muscular Disorders	3.71E-05-2.51E-03	IFNG, CHGA, ALB, TNFSF11, UNC13C, TRH, CD96, IL6, BMP6, SLC18A2, CSRP3
Nervous System Development and Function	4.51E-05-2.51E-03	IFNG, CHGA, AADAT, VAX1, Gucy2d, ADGRL3, PDYN, TRH, GRM8, IL6, SLC18A2, LMNB1, ATP2B2, ALB, TNN, CNTNAP2, SST, BMP6, CCR6, NRP1
Nucleic Acid Metabolism	5.25E-05-2.51E-03	IFNG, CYP1A1, CHGA, Art2b, TRH, GRM8, GLYAT, SST, IL6, BMP6, ATP2B2
Infectious Diseases	6.17E-05-2.41E-03	IFNG, ALB, REG3G, Mcpt1, IL6, MMP12, CCR6
Cardiovascular System Development and Function	6.26E-05-2.51E-03	IFNG, TNFSF11, CHGA, Mcpt1, IL6, ALB, TNN, SST, BMP6, MMP12, CSRP3, Kng1/Kng2, CCR6, NRP1
Humoral Immune Response	6.81E-05-1.94E-03	IFNG, REG3G, IL6, CCR6

Protein Synthesis	6.81E-05-1.82E-03	IFNG, CYP1A1, ALB, REG3G, TRH, Mcpt1, SST, IL6, SRXN1, CCR6
Psychological Disorders	7.08E-05-2.51E-03	IFNG, CYP1A1, AADAT, CHGA, UNC13C, PCLO, PDYN, CSMD1, IL6, SLC18A2, LMNB1, ATP2B2, ALB, CNTNAP2, SST
Cellular Assembly and Organization	7.77E-05-2.51E-03	IFNG, TNFSF11, CHGA, ADGRL3, TRH, CD96, XIRP2, IL6, CRISP1, LMNB1, Muc4, ATP2B2, TNN, CNTNAP2, CSRP3, NRP1
Inflammatory Disease	9.24E-05-2.51E-03	IFNG, ALB, CFI, IL6, MMP12, CCR6
Behavior	1.36E-04-2.41E-03	IFNG, AADAT, UNC13C, CNTNAP2, GRM8, TRH, ADGRL3, PDYN, CSMD1, SST, IL6, SLC18A2, ATP2B2
Free Radical Scavenging	1.69E-04-1.56E-03	IFNG, TNFSF11, CYP1A1, ALB, GSTA1, IL6
Cardiovascular Disease	1.85E-04-2.51E-03	CHGA, CD96, IL6, CSRP3
Organ Morphology	1.85E-04-2.51E-03	IFNG, CHGA, TNFSF11, SST, IL6, BMP6, CSRP3, CCR6
Post-Translational Modification	2.21E-04-2.51E-03	ALB, Art2b, IL6, SLC18A2
Digestive System Development and Function	2.71E-04-2.51E-03	IFNG, TNFSF11, VAX1, IL6, CCR6, NRP1
Hematological Disease	2.72E-04-2.51E-03	IFNG, ALB, CHGA, TNFSF11, CSMD1, CFI, IL6, MMP12, ATP2B2, Ccl9

Cell-mediated Immune Response	2.76E-04-2.51E-03	IFNG, IL6
Dermatological Diseases and Conditions	2.87E-04-2.87E-04	CHGA, PDYN, IL6
Hepatic System Development and Function	3.36E-04-3.79E-04	IFNG, IL6, CCR6
Hepatic System Disease	3.36E-04-2.51E-03	IFNG, ALB, CHGA, IL6
Developmental Disorder	3.59E-04-2.51E-03	IFNG, TNFSF11, ALB, CD96, IL6
Hereditary Disorder	3.59E-04-2.51E-03	IFNG, TNFSF11, ALB, IL6, LMNB1, CSRP3
Hypersensitivity Response	3.6E-04-1.39E-03	IFNG, Mcpt1, IL6, MMP12, CCR6
Tumor Morphology	4.75E-04-2.51E-03	IFNG, ALB, IL6
Drug Metabolism	7.28E-04-2.51E-03	IFNG, CHGA, ALB, TRH, SST, GSTA1, IL6, SLC18A2, BMP6
Renal and Urological Disease	1.08E-03-1.26E-03	IFNG, CHGA, CYP1A1, TNFSF11, ALB, GSTA1, IL6, SRXN1, ATP2B2

Carbohydrate Metabolism	1.39E-03-2.51E-03	IFNG, CHGA, ALB, Art2b, TRH, SST, IL6, ATP2B2
Protein Trafficking	1.82E-03-1.82E-03	IFNG, TNFSF11, ALB, Art2b, IL6
Respiratory System Development and Function	1.94E-03-2.51E-03	IFNG, IL6, MMP12, CCR6
Energy Production	2.51E-03-2.51E-03	ALB
Ophthalmic Disease	2.51E-03-2.51E-03	CYP1A1
Organismal Functions	2.51E-03-2.51E-03	PDYN
Organismal Survival	2.51E-03-2.51E-03	IFNG
Renal and Urological System Development and Function	2.51E-03-2.51E-03	NRP1