Analysis Name: DEGList3SeqStrainEffect - 2013-07-12 11:17 AM
Analysis Creation Date: 2013-07-12
Build version: 220217
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Analysis settings

View

Reference set: Ingenuity Knowledge Base (Genes Only)
Relationship to include: Direct and Indirect
Includes Endogenous Chemicals
Optional Analyses: My Pathways My List

Filter Summary:
Consider only relationships where
confidence = Experimentally Observed
Cutoff:

Top Networks

ID	Associated Network Functions	Score
1	Neurological Disease, Psychological Disorders, Hereditary Disorder	37
2	Energy Production, Lipid Metabolism, Small Molecule Biochemistry	36
3	Connective Tissue Disorders, Developmental Disorder, Hereditary Disorder	34

Top Bio Functions

Diseases and Disorders

Name	p-value	# Molecules
Infectious Disease	7.23E-05 - 2.02E-02	18
Nutritional Disease	1.01E-04 - 1.75E-02	13
Connective Tissue Disorders	1.02E-04 - 2.02E-02	30
Developmental Disorder	1.02E-04 - 2.02E-02	21
Hereditary Disorder	1.02E-04 - 2.02E-02	38

Molecular and Cellular Functions

Name	p-value	# Molecules
Antigen Presentation	1.28E-05 - 1.28E-05	4
Cell-To-Cell Signaling and Interaction	1.28E-05 - 2.02E-02	41
Cellular Development	1.28E-05 - 1.89E-02	29
Cellular Function and Maintenance	1.28E-05 - 1.73E-02	24
Cellular Compromise	1.02E-04 - 1.92E-02	6

Physiological System Development and Function

Name	p-value	# Molecules
Cell-mediated Immune Response	1.28E-05 - 1.01E-02	6
Hematological System Development and Function	1.28E-05 - 2.02E-02	43
Hematopoiesis	1.28E-05 - 1.89E-02	13
Lymphoid Tissue Structure and Development	1.28E-05 - 1.01E-02	9
Tissue Morphology	7.58E-05 - 1.92E-02	23

Top Canonical Pathways

Name	p-value	Ratio
Graft-versus-Host Disease Signaling	6.7E-06	6/50 (0.12)
Autoimmune Thyroid Disease Signaling	7.62E-06	6/61 (0.098)
B Cell Development	1.64E-05	5/33 (0.152)
Cytotoxic T Lymphocyte-mediated Apoptosis of Target Cells	1.82E-05	7/86 (0.081)
Allograft Rejection Signaling	2.13E-05	7/96 (0.073)

Top Molecules

This analysis has no expression values.

Top Upstream Regulators

Upstream Regulator	p-value of overlap	Predicted Activation State
TO-901317	3.33E-07	
CIITA	1.07E-06	
ACOX1	1.92E-06	
RORA	2.00E-06	
RORC	2.46E-06	

Top My Lists

Name	p-value	Ratio

Top My Pathways

Name	p-value	Ratio
Network 1 and 2	2.72E-02	3/68 (0.044)

Top Tox Lists

Name	p-value	Ratio
Cytochrome P450 Panel - Substrate is a Xenobiotic (Mouse)	2E-03	3/25 (0.12)
Cytochrome P450 Panel - Substrate is a Xenobiotic (Rat)	2.25E-03	3/26 (0.115)
Cytochrome P450 Panel - Substrate is a Fatty Acid (Rat)	5.3E-03	2/11 (0.182)
Cytochrome P450 Panel - Substrate is a Fatty Acid (Mouse)	8.6E-03	2/14 (0.143)
Cytochrome P450 Panel - Substrate is a Sterol (Human)	8.6E-03	2/14 (0.143)

Top Tox Functions

Assays: Clinical Chemistry and Hematology

Name	p-value	# Molecules
Decreased Levels of Albumin	4.00E-02 - 4.00E-02	1
Increased Levels of Red Blood Cells	4.00E-02 - 6.25E-01	1
Increased Levels of Blood Urea Nitrogen	1.33E-01 - 1.33E-01	1
Increased Levels of Potassium	1.42E-01 - 1.42E-01	1
Increased Levels of ALT	1.51E-01 - 1.51E-01	1

Cardiotoxicity

Name	p-value	# Molecules
Cardiac Output	6.19E-03 - 9.70E-02	4
Cardiac Dysfunction	8.25E-03 - 8.25E-03	3
Cardiac Infarction	9.45E-03 - 4.47E-01	6
Cardiac Arteriopathy	1.06E-02 - 1.06E-02	8
Cardiac Arrythmia	2.51E-02 - 2.71E-01	3

Hepatotoxicity

Name	p-value	# Molecules
Liver Steatosis	1.13E-02 - 2.25E-01	6
Liver Cirrhosis	1.22E-02 - 1.54E-02	5
Liver Fibrosis	1.56E-02 - 3.68E-01	3
Liver Necrosis/Cell Death	3.01E-02 - 4.93E-01	3
Liver Inflammation/Hepatitis	5.92E-02 - 3.75E-01	6

Nephrotoxicity

Name	p-value	# Molecules
Renal Proliferation	3.01E-02 - 5.07E-01	2
Renal Necrosis/Cell Death	4.67E-02 - 4.85E-01	7
Renal Inflammation	5.94E-02 - 1.00E00	3
Renal Nephritis	5.94E-02 - 1.00E00	3
Renal Damage	7.97E-02 - 6.14E-01	4