

Summary of Dictionaries				
Dictionary to genes		Number of entries		Number of genes
Variant ID		Human: 12911, Mouse: 11617		Human: 77648, Mouse: 68240
GWAS traits terms		Human: 958, Mouse: 958		Human: 14922, Mouse: 14922
MeSH/OMIM ID		Human: 171162, Mouse: 171162		Human: 83297, Mouse: 81418
MeSH/chem ID		Human: 69816, Mouse: 69816		Human: 152965, Mouse: 145284
PubMed Phrase		Human: 70858, Mouse: 67229		Human: 789896, Mouse: 750844
Best matches of the TM, FACS dataset from queries generated by sample variants from the index created from PubTator				
Variant	SNPedia		Tabula Muris, FACS	Comment
rs7079	Renal dysplasia		mesenchymal stem cell of the adipose	These cells can be involved in kidney repair
rs63751094	Lynch syndrome I		Colon, hematopoietic stem cell	Condition is associated with high risk of colon cancer
rs6446693	nonsyndromic cleft lip/palate		keratinocytes	Malformation of facial region, skin likely relevant
rs139643362	X-linked hereditary motor and sensory neuropathy		Oligodendrocytes	Dorsal root ganglion glia and Schwann cells identified in the mouse brain cell atlas.
rs13031237	Rheumatoid arthritis		T, NK cells	Autoimmune disease, so the results are relevant
Best matches of the TM, FACS dataset from queries generated by sample diseases names/MeSH/OMIM IDs				
Query	MeSH/OMIM ID	MeSH name	Tabula Muris, FACS	Comment
Ventricular ependymomas	MeSH:D018754	Ventricular dysfunction	Cardiac muscle cells, heart endothelial cells	Very good
Osteoporotic bone fracture	MeSH:D050723	Bone fractures	Stromal cells, mesenchymal stem cells	Good
Myodystrophies	MeSH:D009136	Muscular dystrophies	Muscle cells, stromal cells	Good
Legionella infection	MeSH:D007877	Legionnaires' Disease	Pneumocyte	Very good
Autoimmune demyelinating disease	MeSH:D003711	Demyelinating Diseases	Oligodendrocytes	Confirmed by mouse brain atlas
Best matches of the TM, FACS dataset from queries generated by sample chemical names and their corresponding IDs				
Query	MeSH/chem ID	Tabula Muris, FACS		Comment
Metformin	MESH:D008687	Pancreas cells		Very good, used for treatment of diabetes
Sevoflurane	MESH:C009250	Heart cells		Anesthetic, many studies on the effect on heart rate
Vascular endothelial growth factor A	MESH:D042461	Endothelial cells		Induces endothelial cell growth proliferation
Cyclophosphamide	MESH:D003520	T cells		Immunosuppressive agent
rizatriptan	MESH:C093622	Luminal cells in mammary gland		Taken against migraines. Mouse brain atlas picks out Drg neurons
Best matches of the TM, FACS dataset from queries generated by sample phrases from the dictionary from the PubMed				
Phrase	Optimized query	Tabula Muris, FACS	Comment	
Somatic cell gene therapy	Ada, Ifnb1	Thymus T cells	OK, many trials focus on immune disorders	
Dual anti platelet therapy	F2, P2ry12	Liver cell types	Therapy for prevention of liver infections	
Low calorie diet	Igf1, Ins2	Pancreas, hepatocytes	OK	
Ester hydrolase	Acat1, Ephx2	Liver cell types	Good	
Hiv-infection patient	Cd4,Cd8a	T cells	CD4/CD8 ratio is being used as preliminary indication of HIV infection	