



# RDFisation of existing brain databases

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### Objective:

Integration of existing databases among not only brain databases but also other life-science databases.

### Method:

Using RIKEN MetaDatabase platform, the existing databases are converted into RDF datasets.

### Work:

BrainTx (collabo. with Dr.Morii) and ViBrism databases are converted into RDF with commonly-used vocabularies and ontology terms such as MGI records and GeneOntology.

### Refs:

RIKEN MetaDatabase <http://metadb.riken.jp>



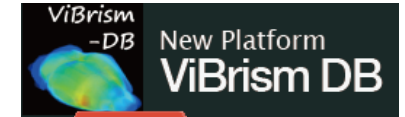
Tabular form  
RDF data



Convert into RDF



including both  
internal and  
external data links



Tabular form  
RDF data



Convert into RDF



including both  
internal and  
external data links



**RIKEN MetaDatabase**  
This database portal site is used to provide information on RIKEN's various life science databases to order to help researchers around the world make full use of RIKEN's research results.

### Transcriptome Data

Name	Q	MGI ID	Q	Gene Ontology	Q	MGI Gene	Q
Protein phosphatase enriched in astrocytes 15A		riken.gp.NM_011063		protein kinase C binding membrane fraction microtubule neuronal complex		phosphoprotein enriched in astrocytes 15A	
Stim1 cell adhesion molecule homolog 1 (Drosophila)		riken.gp.NM_001081203				adhesion molecule homolog 1 (Drosophila)	
Stt3b1 ST3 alpha-N-acetylneuraminic acid-2,6-sialyltransferase 2		riken.gp.NM_012656 riken.gp.NM_133134		alpha-N-acetylneuraminic acid-2,6-sialyltransferase activity sialyltransferase activity integral component of nucleus		ST3 alpha-N-acetylneuraminic acid-2,6-sialyltransferase 2	



### Expression Map

name	Q	MGI gene	Q	GenBank gene	Q
ExpressionMap(C57BL/6J,3day,male);Ce000		001		diazepam binding inhibitor-like 5	<a href="http://www.ncbi.nlm.nih/term=NM_021294">http://www.ncbi.nlm.nih/term=NM_021294</a>
ExpressionMap(C57BL/6J,3day,male);Ce000		002		neuronal growth regulator 1	<a href="http://www.ncbi.nlm.nih/term=NM_173274">http://www.ncbi.nlm.nih/term=NM_173274</a>
ExpressionMap(C57BL/6J,3day,male);Ce000		003		protein O-linked mannose beta 1,4-N-acetylglucosaminyltransferase 2	<a href="http://www.ncbi.nlm.nih/term=NM_153540">http://www.ncbi.nlm.nih/term=NM_153540</a>
ExpressionMap(C57BL/6J,3day,male);Ce000		004		cholinergic receptor, nicotinic, alpha polypeptide 7	<a href="http://www.ncbi.nlm.nih/term=NM_007290">http://www.ncbi.nlm.nih/term=NM_007290</a>



Integrated via MGI genes