


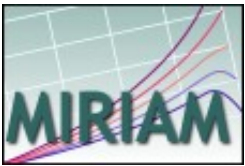




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- The Computational Modeling in Biology Network (COMBINE) is an initiative to coordinate the development of the various community standards and formats, initially in Systems Biology and related fields. It is expected that the federated projects will develop a set of interoperable and non-overlapping standards covering all the aspects of computational.  
→ “WorldWide Web consortium” of modelling in biology (<http://co.mbine.org/>)
- One of the initial activities of COMBINE is to coordinate the organisation of scientific and technical events common to several standards, forums (81 attendees in 2011) and hackathons (59 attendees in 2012).
- Current representation standards:    **BioPAX**
- Associated semantic efforts (BioModels.net project): MIRIAM URIs, KiSAO, SBO etc.
- Related efforts: CellML, FieldML, NeuroML, NineML etc.
- COMBINE recognises the need of raising the awareness of standardisation efforts. It will curate the information on standards in systems biology on the behalf of the BioSharing database



# MIRIAM identifiers and MIRIAM Registry

- MIRIAM identifiers: Perennial identification of data-sets, independent of the resources that serve them. MIRIAM URIs are made of two parts:
  - Identification of a datatype or namespace, e.g. urn:miriam:ec-code or urn:miriam:taxonomy, urn:miriam:doi
  - Identification of a data-set within the namespace, e.g. 1.1.1.1, 9606, 10.1038/nbt1156
- MIRIAM identifiers are now **resolvable!**
  - **urn:miriam:ec-code:1.1.1.1** = <http://identifiers.org/ec-code/1.1.1.1>
- MIRIAM Registry
  - A database of namespaces (root URIs), with documentation, identifier patterns, description of resources serving the datatype, including resource health check
  - A set of webservice to use the identifiers (generate, process and resolve them)
  - A library to implement webservice clients
  - A web application client of the webservice to browse the datatypes
  - A online configurable URI resolver allowing multiple targets
- We propose to use MIRIAM URIs to identify everything in **BioDbCore**

# MIRIAM Registry's entry and resolution

**Enzyme nomenclature database, ExPASy (Expert Protein Analysis System)**  
Swiss Institute of Bioinformatics  
*Switzerland*  
(Uptime: 99%)

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**IntEnZ (Integrated relational Enzyme databases)**  
European Bioinformatics Institute  
*United Kingdom*  
(Uptime: 100%)

**KEGG Ligand Database for Enzyme Nomenclature**  
Kyoto University Bioinformatics Center  
*Japan*  
(Uptime: 100%)

Namespace identifier in MIRIAM namespace

**Data type: Enzyme Nomenclature**

General | Tags | Example Usage | Web Services

General information about the data type

Name	
Identifier	MIR:00000004
Name	Enzyme Nomenclature
Synonyms	EC code Enzyme Classification EC
URIs	
MIRIAM URN	urn:miriam:ec-code
Deprecated	<a href="http://www.ebi.ac.uk/IntEnz/">http://www.ebi.ac.uk/IntEnz/</a> <a href="http://www.ec-code.org/">http://www.ec-code.org/</a> <a href="urn:lsid:ec-code.org">urn:lsid:ec-code.org</a>
Information	
Definition	The Enzyme Classification contains the recommendations of the Nomenclature Committee of the International Union of Biochemistry and Molecular Biology on the nomenclature and classification of enzyme-catalysed reactions.
Identifier Pattern	^[a-z]{1,4}-[a-z]{1,4}-[a-z]{1,4}-[a-z]{1,4}-[a-z]{1,4}-(n)?[a-z]{1,4}\$
Physical Locations	
Resource	Access URL: <a href="http://www.genome.jp/dbget-bin/www_bget?ec:\$id">http://www.genome.jp/dbget-bin/www_bget?ec:\$id</a> [Example: <a href="#">1.1.1.1</a> ]
MIR:00100002	Website: <a href="http://www.genome.jp/dbget-bin/www_bfind?enzyme">http://www.genome.jp/dbget-bin/www_bfind?enzyme</a> Description: KEGG Ligand Database for Enzyme Nomenclature Institution: Kyoto University Bioinformatics Center, Japan
Resource	Access URL: <a href="http://enzyme.expasy.org/EC/\$id">http://enzyme.expasy.org/EC/\$id</a> [Example: <a href="#">1.1.1.1</a> ]
MIR:00100003	Website: <a href="http://enzyme.expasy.org/">http://enzyme.expasy.org/</a> Description: Enzyme nomenclature database, ExPASy (Expert Protein Analysis System) Institution: Swiss Institute of Bioinformatics, Switzerland
Resource	Access URL: <a href="http://www.ebi.ac.uk/intenz/query?cmd=SearchEC&amp;ec=\$id">http://www.ebi.ac.uk/intenz/query?cmd=SearchEC&amp;ec=\$id</a> [Example: <a href="#">1.1.1.1</a> ]
MIR:00100001	Website: <a href="http://www.ebi.ac.uk/intenz/">http://www.ebi.ac.uk/intenz/</a> Description: IntEnZ (Integrated relational Enzyme database) Institution: European Bioinformatics Institute, United Kingdom
References	
	<a href="http://www.chem.qmul.ac.uk/iubmb/enzyme/">http://www.chem.qmul.ac.uk/iubmb/enzyme/</a> <a href="http://srs.ebi.ac.uk/srsbin/cgi-bin/wgetz?-view+MedlineFull+[medline-PMID:10812475]">http://srs.ebi.ac.uk/srsbin/cgi-bin/wgetz?-view+MedlineFull+[medline-PMID:10812475]</a>
Miscellaneous	
Date of creation	2006-08-14 19:38:06 GMT
Date of last modification	2011-06-27 11:40:01 GMT

Resource identifiers in MIRIAM namespace

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