

GO ChEBI Integration

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curators

The GO-ChEBI Integration is now in a Maintenance Phase

▼ editors	Yesterday, 10:49 AM
catalog-v001.xml	Jan 31, 2012 9:16 AM
gene_ontology_write.obo	Yesterday, 10:49 AM
go_xp_chebi.obo	Yesterday, 10:49 AM
goche.obo	Apr 18, 2012 2:52 PM
oboedit_allowedrepeats.dict	Aug 10, 2012 1:52 PM
oboedit_user.dict	Oct 3, 2012 8:46 AM
relations_goche.obo	Mar 16, 2012 8:33 AM
svn-commit.2.tmp	Apr 13, 2012 1:53 PM
svn-commit.3.tmp	Jul 20, 2012 8:33 AM
svn-commit.4.tmp	Aug 22, 2012 6:07 PM
svn-commit.tmp	Mar 22, 2012 1:10 PM
validated.obo	Yesterday, 10:49 AM
▼ extensions	Oct 3, 2012 8:46 AM

go_xp_chebi.obo

[Term]

id: GO:0000017 ! alpha-glucoside transport

intersection_of: GO:0006810 ! transport

intersection_of: transports_or_maintains_localization_of CHEBI:60979 ! alpha-glucoside

[Term]

id: GO:0000023 ! maltose metabolic process

intersection_of: GO:0008152 ! metabolic process

intersection_of: has_participant CHEBI:17306 ! maltose

[Term]

id: GO:0000024 ! maltose biosynthetic process

intersection_of: GO:0009058 ! biosynthetic process

intersection_of: has_output CHEBI:17306 ! Maltose

We Now Use Protégé to Check the Quality of the Ontology wrt Chemicals

Active Ontology | Entities | Classes | Object Properties | Data Properties | Individuals | OWLviz | DL Query | LEGO Annotations | OntoGraf

Ontology header:

Ontology IRI

Ontology Version IRI

Annotations +

creator [language: en]
Gene Ontology Consortium

homepage [type: anyURI]
http://wiki.geneontology.org/index.php/Ontology_extensions

description [language: en]
This ontology is an importer for the go/extensions/x-chemical.owl bridge importer

Ontology metrics:

Metrics	
Axiom	1004778
Logical axiom count	179182
Class count	73923
Object property count	22
Data property count	0
Individual count	0
DL expressivity	SR

Class axioms	
SubClassOf axioms count	152138
EquivalentClasses axioms count	27028

Ontology imports | OntoGraf Import View | Ontology Prefixes | General class axioms

Imported ontologies:

Direct Imports +

- go (<http://purl.obolibrary.org/obo/go.owl>)
- bio-chebi (<http://purl.obolibrary.org/obo/go/extensions/bio-chebi.owl>)
- x-chemical (<http://purl.obolibrary.org/obo/go/extensions/x-chemical.owl>)

Indirect Imports

- chebi (<http://purl.obolibrary.org/obo/chebi.owl>)

GO-ChEBI Cross Products are Expressed

The screenshot displays the 'x-chemical-gci-importer' web application. The browser address bar shows the URL: <http://purl.obolibrary.org/obo/go/extensions/x-chemical-gci-importer.owl>. The interface includes a search bar and navigation tabs for 'Active Ontology', 'Entities', 'Classes', 'Object Properties', 'Data Properties', 'Individuals', 'OWLviz', 'DL Query', 'LEGO Annotations', and 'OntoGraf'. The 'Classes' tab is active, showing a class hierarchy for '1,2,3-tribromopropane metabolic process'. The selected class is highlighted in blue. The right panel shows the 'Annotations' for this class, including 'label', 'database_cross_reference', and 'definition'. The 'Equivalent To' section shows the class is equivalent to 'metabolic process' and 'and ('has participant' some 1,2,3-tribromopropane)'. The 'SubClass Of' section shows it is a subclass of 'halogenated hydrocarbon metabolic process'. The 'SubClass Of (Anonymous Ancestor)' section shows it is a subclass of 'metabolic process' and 'part_of some 'cellular response to xenobiotic stimulus''. The 'Members' section is empty. The 'Target for Key' and 'Disjoint With' sections are also empty. A message at the bottom left states 'Couldn't load view plugin:'.

Class hierarchy: '1,2,3-tribromopropane metabolic process'

- 'metabolic process'
 - '(+)-camphor metabolic process'
 - '(+)-kotanin metabolic process'
 - '(-)-secologanin metabolic process'
 - '(1->3)-alpha-glucan metabolic process'
 - '(1->3)-beta-D-glucan metabolic process'
 - '(1->4)-alpha-glucan metabolic process'
 - '(1->6)-beta-D-glucan metabolic process'
 - '(17Z)-protosta-17(20),24-dien-3beta-ol metabolic process'
 - '(R)-4-hydroxymandelate metabolic process'
 - '(S)-reticuline metabolic process'
 - '(S)-scoulerine metabolic process'
 - '(Z)-nonadeca-1,14-diene metabolic process'
 - '1,1,1-trichloro-2,2-bis-(4-chlorophenyl)ethane metabolic process'
 - '1,2,3-tribromopropane metabolic process'**
 - '1,2,4-trichlorobenzene metabolic process'
 - '1,2-diacyl-sn-glycero-3-phosphocholine metabolic process'
 - '1,2-dichloroethane metabolic process'

Annotations: '1,2,3-tribromopropane metabolic process'

Annotations +

- label [type: string]
1,2,3-tribromopropane metabolic process
- database_cross_reference [type: string]
UM-BBD_pathwayID:tbp
- definition [type: string]
The metabolic process of the conversion of 1,2,3-tribromopropane to 1,2,3-tribromopropane.

Description: '1,2,3-tribromopropane metabolic process'

Equivalent To +

- 'metabolic process'
and ('has participant' some 1,2,3-tribromopropane)

SubClass Of +

- 'halogenated hydrocarbon metabolic process'

SubClass Of (Anonymous Ancestor)

- 'metabolic process'
and ('has participant' some halohydrocarbon)
- part_of some 'cellular response to xenobiotic stimulus'

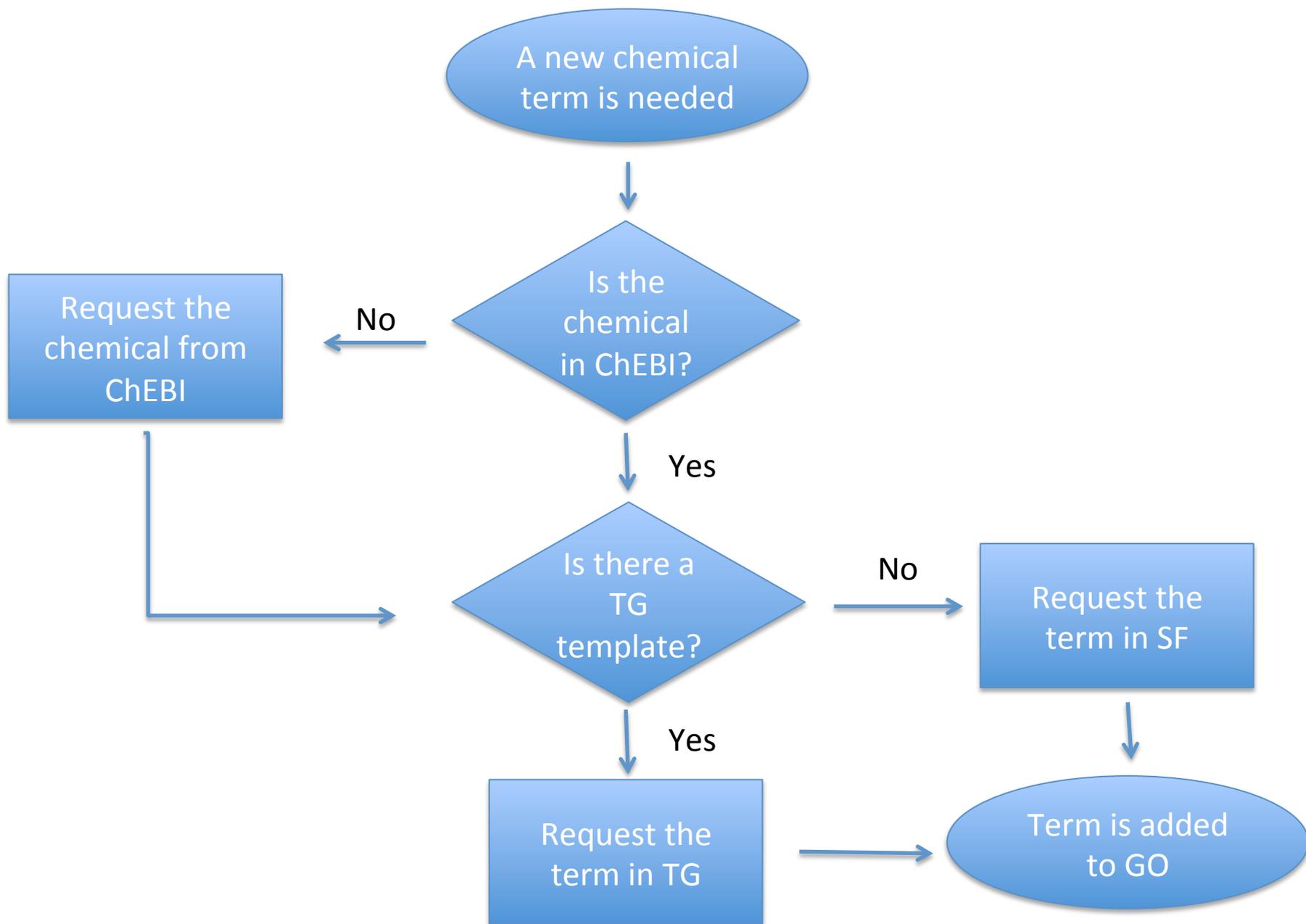
Members +

Target for Key +

Disjoint With +

Couldn't load view plugin:

Current Method for Adding New Chemical Terms



Dovetailing Biology and Chemistry: Integrating the Gene Ontology with the ChEBI Chemical Ontology

D.P. Hill^{1,2}, N. Adams^{3,8}, M. Bada⁴, C. Batchelor⁵, T.Z. Berardini^{2,6}, H. Dietze^{2,9}, H.J. Drabkin^{1,2}, M. Ennis⁸, R. Foulger^{2,8}, M.A. Harris⁷, J. Hastings⁸, N. Kale⁸, P. de Matos⁸, C.J. Mungall^{2,9}, J. Lomax^{2,8}, P. Roncaglia^{2,8}, C. Steinbeck⁸, S. Turner⁸, G. Owen⁸1.

Mouse Genome Informatics, The Jackson Laboratory, Bar Harbor, ME 04609

2. The Gene Ontology Consortium

3. Department of Genetics, University of Cambridge, Downing Street, Cambridge, CB2 3EH, United Kingdom

4. University of Colorado Denver, Aurora, CO, USA

5. Royal Society of Chemistry, Thomas Graham House, Cambridge UK, CB4 0WF

6. The Arabidopsis Information Resource, Carnegie Institution for Science, Stanford, CA 94305

7. Department of Biochemistry, University of Cambridge, Sanger Building, 80 Tennis Court Road, Cambridge CB2 1GA, UK

8. European Bioinformatics Institute, Wellcome Trust Genome Campus, Hinxton, Cambridge, CB10 1SD, United Kingdom

9. Genomics Division, Lawrence Berkeley National Laboratory, Berkeley, CA

Add ChEBI refs to MF Reaction Definitions.

Gene Ontology

Summary Files Reviews Support Develop Hosted Apps Tracker Mailing Lists Code

Add new **Browse**

Tracker: Ontology requests

Monitor

5 NTR: cardiolipin synthase 3 - ID: 3571974

Last Update: Comment added ([tairtb](#))

Details: It turns out that there is a third type of cardiolipin synthase; see PMID 22988102. Proposed definition: Catalysis of the reaction: phosphatidylglycerol + phosphatidylethanolamine = cardiolipin + ethanolamine. Should probably be a child of GO:0030572.

I'm actually a bit confused regarding the existing two terms for cardiolipin synthase, GO:0008808 and GO:0043788. To me, they look identical. On the other hand, there *is* a mostly eukaryotic version of the enzyme that catalyzes phosphatidylglycerol + CDP-diacylglycerol = CMP + cardiolipin, and I don't see a term for that at all.

Thanks,
Ingrid

Submitted: Ingrid ([imk07](#)) - 2012-09-26 09:56:38 PDT

Assigned: Tanya Berardini

Priority: 5

Category: New term request

Status: Closed

Group: None

Resolution: Accepted

Visibility: Public

Coordinate with the ChEBI Role Axis

