

Guide to IMMUNOPHARMACOLOGY

Immuno Cell Type Association Data

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<http://www.guidetopharmacology.org/immuno>

This document describes the immuno cell type association data that has been incorporated into the Guide to IMMUNOPHARMACOLOGY.

The Cell Ontology provides the formalised vocabulary against which we annotated target to cell type associations

Defining GtoImmuPdb Cell Type Categories

GtoImmuPdb has defined its own set of top-level immunological cell type categories against which targets in the database can be annotated and which form the basis of organising, navigating and searching for immunological cell types and associations.

These categories are:

- **B cells**
 - lymphocyte of B lineage CL:0000945
- **T cells**
 - alpha-beta T cell CL:0000789
 - effector T cell CL:0000911
 - regulatory T cell CL:0000815
- **Dendritic cells**
 - dendritic cell CL:0000451
- **Other T cells**
 - gamma-delta T cell CL:0000798
 - memory T cell CL:0000814
 - naive T cell CL:0000898
 - mucosal invariant T cell CL:0000940
- **Macrophages & monocytes**
 - monocyte CL:0000576
 - macrophage CL:0000235
- **Granulocytes**
 - granulocyte CL:0000094
- **Natural killer cells**
 - natural killer cell CL:0000623
- **Mast cells**
 - mast cell CL:0000097
- **Innate lymphoid cells**
 - innate lymphoid cell CL:0001065
- **Stromal cells**

- stromal cell CL:0000499

We have assigned one or more Cell Ontology terms (and IDs) to each of these categories (displayed above). The assigned CO terms represents the highest level parent term(s) within the ontology for that category. For the purposes of annotation, it is these CO terms and their children that can be used when annotating a target to a given category.

Annotating cell type associations

Curators can add/remove/edit cell type association to targets using the submission tool.

A target can be annotated to one or more of the top-level immuno cell type categories. A comment can be applied, as can any literature references.

Additionally, the association can have any CO terms added. This is a way to annotating the association with ontology terms, and making the annotation higher resolution. For each association a list of CO terms is therefore stored and these are surfaced to the user on the detailed target page.

Searches against CO terms will detect any cell type associations annotated with those terms (or their children).