



About ImmPort's Comprehensive List of Immune-Related Genes

ImmPort's Comprehensive List of Immune-Related Genes is a collection of human genes with immune system-related functions. This list was generated using automatic searches for immunology-related keywords in the National Center for Biotechnology Information, Entrez Gene database and the Gene Ontology (GO). Although the list is intended to be comprehensive, it is subject to changes and future version releases.

ImmPort's Comprehensive List of Immune-Related Genes is made available to researchers as an additional resource in the ImmPort system. For some, the list may serve as a useful starting point for further investigation. However, bias toward the ImmPort's Comprehensive List of Immune-Related Genes can be detrimental, and careful consideration should be exercised in determining whether the list should be used and how to best use it.

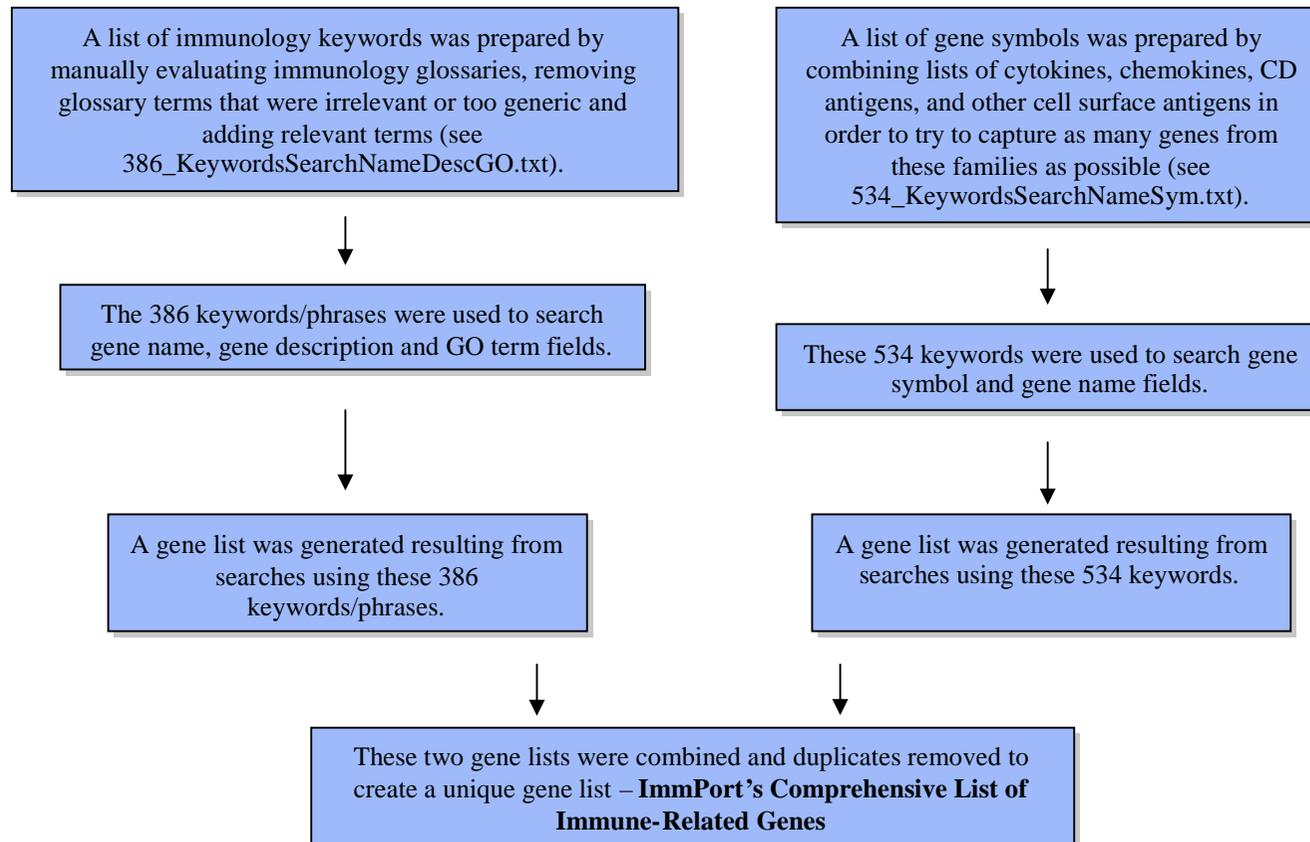
ImmPort's Comprehensive List of Immune-Related Genes was generated by compiling two lists of keywords:

- 1) a glossary of immunology-related terms (see "386_KeywordsSearchNameDescGO.txt" in the download package).
- 2) a list of gene symbols, including CD antigens, cytokines, chemokines, and other cell surface antigens. These keywords were then used to search gene name, gene description, GO terms, and gene symbol fields from the Entrez Gene database (see "534_KeywordsSearchNameSym.txt" in the download package).

The resulting lists of genes were combined and duplicates removed. The ImmPort Gene List was also used to perform tagSNP selection based on linkage disequilibrium analysis (see https://www.immport.org/help/tagSNP_Analysis.pdf).



Schematic describing the generation of ImmPort's Comprehensive List of Immune-Related Genes





Access to ImmPort's Comprehensive List of Immune-Related Genes

The screenshot shows the IMMPORT website interface. The navigation menu includes 'About ImmPort', 'Access Data', 'Tools', 'Resources', and 'News & Events'. The 'Access Data' dropdown menu is open, showing options like 'Submit Data', 'Submission History', 'Research Data', 'Reference Data', and 'Reference Advanced Search'. The 'Reference Data' option is selected, leading to a sub-menu where 'Comprehensive List of Immune-Related Genes' is highlighted. A blue callout box with an arrow points to this option, containing the text: 'From "Access Data" select "Reference Data" then click on "Comprehensive List of Immune-Related Genes"'. Below the navigation, the 'About ImmPort' section describes the portal as a one-stop shop for immunologists. The 'What You Can Do' section lists 'Genes', 'MHC Alleles', 'SNPs', and 'ImmPort Gene Lists'. A 'Research Spotlight' section features a graph showing 'cells per 10⁶ PBMCs' with data points for -FlapA and +FlapA (Day -1 to 30) and p-values of 0.0180 and 0.0106.



Access to ImmPort's Comprehensive List of Immune-Related Genes

About ImmPort
ImmPort, the Immunology Database and Analysis Portal, is a one stop shop to access reference and experiment data for immunologists. ImmPort provides advanced information technology support in the production, analysis, archiving, and exchange of scientific data for the diverse community of life scientists.

DATA SOURCE
 NIAID/DAIT Investigators
 Experimental Data
 Clinical Study Data
 Public Reference Databases

Reference Data / ImmPort Gene Lists

Home | Genes | Proteins | MHC Alleles | Pathways | Protein Networks | SNPs | ImmPort Gene Lists | Data History

ImmPort Gene Lists offer curated reports of immunologically important genes, including:

- ▶ Pathway Analysis
- ▶ Listings of Protein-Protein Interactions
- ▶ Gene Ontology Associations
- ▶ Links to Detailed Gene and Protein Information in the ImmPort Gene Detail Page

ImmPort Gene Lists are categorized by:

- ▶ Type (e.g. Interleukins) and/or Pathway (e.g. TCR Signaling Pathway)
- ▶ Differential Expression in Immune Processes

To browse or search ImmPort's Comprehensive List of Immune-Related Genes, click [here](#)

From "ImmPort Gene Lists" you will be directed to the page above. Click on the "here" link to navigate to the Comprehensive List of Immune-Related Genes.

Search Data | Visualize Data | Analyze Data

Genes
Access integrated information about genes and their protein products, including structural and functional attributes, biological pathway membership, protein-protein interactions and more.

SNPs
Search the ImmPort Single Nucleotide Polymorphism (SNP) database, a collection of NCBI dbSNP, Entrez Gene and HapMap data.

MHC Alleles
Find complete DNA and protein sequences, sequence features, and population frequencies of MHC, MIC and TAP alleles. Align MHC sequences to visualize extent of polymorphisms.

IL-2, IL-4, IL-5
ImmPort Gene Lists
View detailed information about immunologically-relevant genes by category. Examine differential gene expression information from immunologically-relevant

Research Spotlight

Day 36 post-infection



Search/Browse Interface for ImmPort's Comprehensive List of Immune-Related Genes

Reference Data / Comprehensive List of Immune-Related Genes

Home | Genes | Proteins | MHC Alleles | Pathways | Protein Networks | SNPs | ImmPort Gene Lists

Search: Like Search

Select up to 10 search results to view in a detailed report. ⓘ indicates that the gene is in the ImmPort Comprehensive List of Immune-Related Genes. [download](#)

0 item(s) selected.

5,355 items found, displaying 1 to 25. [First/Prev] 1, 2, 3, 4, 5, 6, 7, 8 [Next/Last]

Entrez Gene Id	Symbol & Alias	Gene Name	Location	Transcripts
<input type="checkbox"/> 29974 ⓘ	A1CF ACF, ACF64, ACF65, APOBEC1CF, ASP, MGC11521, RP11-564C4.2	APOBEC1 complementation factor	10q11.23	NM_138933 NM_138932 NM_014576
<input type="checkbox"/> 2 ⓘ	A2M CPAMD5, DKFZp771...		3-	NM_000014
<input type="checkbox"/> 404744 ⓘ	AAA1 -			NR_015356
<input type="checkbox"/> 65985 ⓘ	AACS ACSF1, FLJ12389, FLJ41251, SUR-5		31	NM_023928 GO:0001889 liver development ...
<input type="checkbox"/> 15 ⓘ	AANAT SNAT			NM_001166579 NM_001088 GO:0014070 response to organic cyclic substance ...
<input type="checkbox"/> 544217 ⓘ	AASTH1 -	Allergic/atopic asthma related OTI -		

Select from a variety of search criteria to find particular genes in the Comprehensive List of Immune-Related Genes

Click on this link to download the Comprehensive List of Immune-Related Genes

Check one or more of the boxes at left and click "View Detailed Report" to view the Gene Detail Page for the selected gene(s)



Searching ImmPort's Comprehensive List of Immune-Related Genes Using the Reference Data Advanced Search

Search / Reference Advanced Search

Selected Projects **Change Projects**

Using Advanced Search:

- ▶ Choose the type of data you want to find (e.g. genes, proteins) from the drop down list.
- ▶ Choose a folder to refine your search. It can be the same or different data type from the data you want to find.
- ▶ Click on the data feature(s) you want to search.
- ▶ Enter search terms for one or more features.

Hints:
When possible, do "exact match" searches or "starts with" instead of like or use saved lists for filtering, especially when returning SNPs.

Notes:
Advanced search uses Genes as the link to the other data types (SNPs, MHC Alleles, Proteins) based on public sources.

Advanced Search - Selected Return Data Type : Gene

Please Choose Data Type to Find Results per page

Advanced Search Attribute Tree

- Gene
 - Entrez Gene Id
 - Saved List
 - Symbol
 - Synonyms
 - Name
 - Species
 - Chromosome
 - Type
 - Immune-Related Gene
- OMIM
- GO
- Uniprot

Gene: Immune-Related Gene

Gene: Chromosome

Available after login, use the Reference Data Advanced Search to limit the Comprehensive List of Immune-Related Genes by an even larger range of criteria



ImmPort Gene Detail Page for Immune-Related Genes of Interest

[Back To Search Results](#)

ADIPOQ

Collapse All: Expand All:

Gene Summary

Entrez Gene ID	9370	UniGene ID	Hs_80485
Entrez Gene Symbol	ADIPOQ	Entrez Gene Name	adiponectin, C1Q and collagen domain containing
Also known as	ACDC; ACRP30; ADIPQTL1; ADPN; APM-1; APM1; GBP28; adiponectin	Organism (Taxon ID)	Homo sapiens (9606)
Chromosome Location	3q27	Genome Build	Build 36.1, hg18
Gene Expression	GEO		

Transcripts

chr3
188050k
RefSeq Genes
NM_004797
ADIPOQ
[\[Click Here to View Reference Sequence Details\]](#)

Protein

Gene Ontology [Ontology Browser]

Protein Interactions

Pathways

Phenotypes and Diseases

Polymorphism

Homologs

Related Sequences

References

Export

Expand the blocks to view detailed information

Export the file for further analysis