

# Current

## apoptotic process

### Term Information ⓘ

**Accession** GO:0006915

**Name** apoptotic process

**Ontology** biological\_process

**Synonyms** apoptotic cell death, apoptotic programmed cell death, programmed cell death by apoptosis, apopto... [more](#)

**Alternate IDs** GO:0006917, GO:0008632

**Definition** A programmed cell death process which begins when a cell receives an internal (e.g. DNA damage) or external signal (e.g. an extracellular death ligand), and proceeds through a series of bio phase. The execution phase is the last step of an apoptotic process, and is typically characterized by rounding-up of the cell, retraction of pseudopodes, reduction of cellular volume (pyknotic plasma membrane blebbing and fragmentation of the cell into apoptotic bodies. When the execution phase is completed, the cell has died. *Source:* GOC:tb, ISBN:0198506732, PMID:21494; PMID:18846107, GOC:dhl

**Comment** None

**History** See term [history for GO:0006915](#) at QuickGO

**Subset** None

**Related** [Link](#) to all **genes and gene products** annotated to apoptotic process.

[Link](#) to all direct and indirect **annotations** to apoptotic process.

[Link](#) to all direct and indirect **annotations download** (limited to first 10,000) for apoptotic process.

You are screen

Annotations

[Graph Views](#)

[Inferred Tree View](#)

[Neighborhood](#)

[Mappings](#)

### Filter results

Total annotations: 31777

No current user filters.

#### Your search is pinned to these filters

- document\_category: annotation
- regulates\_closure: GO:0006915

Total annotations: 31777; showing: 1-10

Results count

[«First](#) [<Prev](#) [Next>](#) [Last>](#) [Download](#)

<input type="checkbox"/>	Gene/product	Gene/product name	Annotation qualifier	GO class (direct)	Annotation extension	Contributor	Organism	Evidence	Evidence v
<input type="checkbox"/>	IL4	Interleukin-4		negative regulation of endothelial cell apoptotic process		GO_Central	Macaca mulatta	IBA	PANTHER:  UniProtKB:  UniProtKB:
<input type="checkbox"/>	IL4	Interleukin-4		negative regulation of extrinsic apoptotic signaling		GO_Central	Macaca mulatta	IBA	PANTHER:  MGI:MGI:9

# Desired: default facet = isa\_partof\_closure

← → ↻ | Not Secure | amigo.geneontology.org/amigo/term/GO:0006915

Apps | Bookmarks | GDocs | GH | My WPs | Proposals | Ppts | Funded | Prjs | NMDC | GO-PrjDocs | GO GH Proj | Gh | LBL | Manuscripts | NMDC De

## apoptotic process

---

**Term Information** ⓘ

**Accession** GO:0006915  
**Name** apoptotic process  
**Ontology** biological\_process  
**Synonyms** apoptotic cell death, apoptotic programmed cell death, programmed cell death by apoptosis, apopto... [more](#)  
**Alternate IDs** GO:0006917, GO:0008632  
**Definition** A programmed cell death process which begins when a cell receives an internal (e.g. DNA damage) or external signal (e.g. an extracellular death ligand), and proceeds through a series of bio phase. The execution phase is the last step of an apoptotic process, and is typically characterized by rounding-up of the cell, retraction of pseudopodes, reduction of cellular volume (pyknosis), plasma membrane blebbing and fragmentation of the cell into apoptotic bodies. When the execution phase is completed, the cell has died. *Source:* GOC:tb, ISBN:0198506732, PMID:21494, PMID:18846107, GOC:dhl  
**Comment** None  
**History** See term [history for GO:0006915](#) at QuickGO  
**Subset** None  
**Related** [Link](#) to all **genes and gene products** annotated to apoptotic process.  
[Link](#) to all direct and indirect **annotations** to apoptotic process.  
[Link](#) to all direct and indirect **annotations download** (limited to first 10,000) for apoptotic process.

🔍 You are screen

---

Annotations | [Graph Views](#) | [Inferred Tree View](#) | [Neighborhood](#) | [Mappings](#)

**Filter results**

Total annotations: **31777**

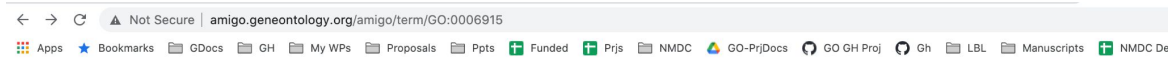
Total annotations: 31777; showing: 1-10  
 Results count

«First» «Prev» **Next»** «Last» [Download](#)

<input type="checkbox"/>	Gene/product name	Annotation qualifier	GO class (direct)	Annotation extension	Contributor	Organism	Evidence	Evidence v
<input type="checkbox"/>	IL4		Interleukin-4	negative regulation of endothelial cell apoptotic process	GO_Central	Macaca mulatta	IBA	PANTHER:  UniProtKB:  UniProtKB:
<input type="checkbox"/>			-4	negative regulation of extrinsic apoptotic signaling	GO_Central	Macaca mulatta	IBA	PANTHER:  MGI:MGI:9

- document\_category: annotation
- isa\_partof\_closure: GO:0006915

# Desired: default facet = isa\_partof\_closure



## apoptotic process

**Term Information**

**Accession** GO:0006915  
**Name** apoptotic process  
**Ontology** biological\_process  
**Synonyms** apoptotic cell death, apoptotic programmed cell death, programmed cell death by apoptosis, apopto... [more](#)  
**Alternate IDs** GO:0006917, GO:0008632  
**Definition** A programmed cell death process which begins when a cell receives an internal (e.g. DNA damage) or external signal (e.g. an extracellular death ligand), and proceeds through a series of bio phase. The execution phase is the last step of an apoptotic process, and is typically characterized by rounding-up of the cell, retraction of pseudopodes, reduction of cellular volume (pyknotic plasma membrane blebbing and fragmentation of the cell into apoptotic bodies. When the execution phase is completed, the cell has died. *Source:* GOC:tb, ISBN:0198506732, PMID:21494; PMID:18846107, GOC:dhl  
**Comment** None  
**History** See term [history for GO:0006915](#) at QuickGO  
**Subset** None  
**Related** [Link](#) to all **genes and gene products** annotated to apoptotic process.  
[Link](#) to all direct and indirect **annotations** to apoptotic process.  
[Link](#) to all direct and indirect **annotations download** (limited to first 10,000) for apoptotic process.

Label links with informative text

(excluding regulates)  
(excluding regulates)

Switch to regulates view

<link to docs to learn more>

Annotations

Filter results

Total annotations: 31777

Total annotations: 31777; showing: 1-10  
Results count 10

<First <Prev Next> Last> Download

<input type="checkbox"/>	Gene/product name	Annotation qualifier	GO class (direct)	Annotation extension	Contributor	Organism	Evidence	Evidence v
<input type="checkbox"/>	IL4		Interleukin-4	negative regulation of endothelial cell apoptotic process	GO_Central	Macaca mulatta	IBA	PANTHER: UniProtKB: UniProtKB:
<input type="checkbox"/>			-4	negative regulation of extrinsic apoptotic signaling	GO_Central	Macaca mulatta	IBA	PANTHER: MGI:MGI:9

- document\_category: annotation

- isa\_partof\_closure: GO:0006915

# Clicking on button

**apoptotic process**

**Term Information**

**Accession** GO:0006915  
**Name** apoptotic process  
**Ontology** biological\_process  
**Synonyms** apoptotic cell death, apoptotic programmed cell death, programmed cell death by apoptosis, apopto... [more](#)  
**Alternate IDs** GO:0006917, GO:0008632  
**Definition** A programmed cell death process which begins when a cell receives an internal (e.g. DNA damage) or external signal (e.g. an extracellular death ligand), and proceeds through a series of bio phase. The execution phase is the last step of an apoptotic process, and is typically characterized by rounding-up of the cell, retraction of pseudopodes, reduction of cellular volume (pyknotic plasma membrane blebbing and fragmentation of the cell into apoptotic bodies. When the execution phase is completed, the cell has died. *Source:* GOC:tb, ISBN:0198506732, PMID:21494; PMID:18846107, GOC:dhl  
**Comment** None  
**History** See term [history for GO:0006915](#) at QuickGO  
**Subset** None  
**Related** [Link](#) to all **genes and gene products** annotated to apoptotic process.  
[Link](#) to all direct and indirect **annotations** to apoptotic process.  
[Link](#) to all direct and indirect **annotations download** (limited to first 10,000) for apoptotic process

**Annotations**

**Filter results**

Total annotations: **31777**

No current user filters.

**Your search is pinned to these filters**

- document\_category: annotation
- regulates\_closure: GO:0006915

Total annotations: 31777; showing: 1-10  
Results count

[«First](#) [<Prev](#) [Next>](#) [Last»](#) [Download](#)

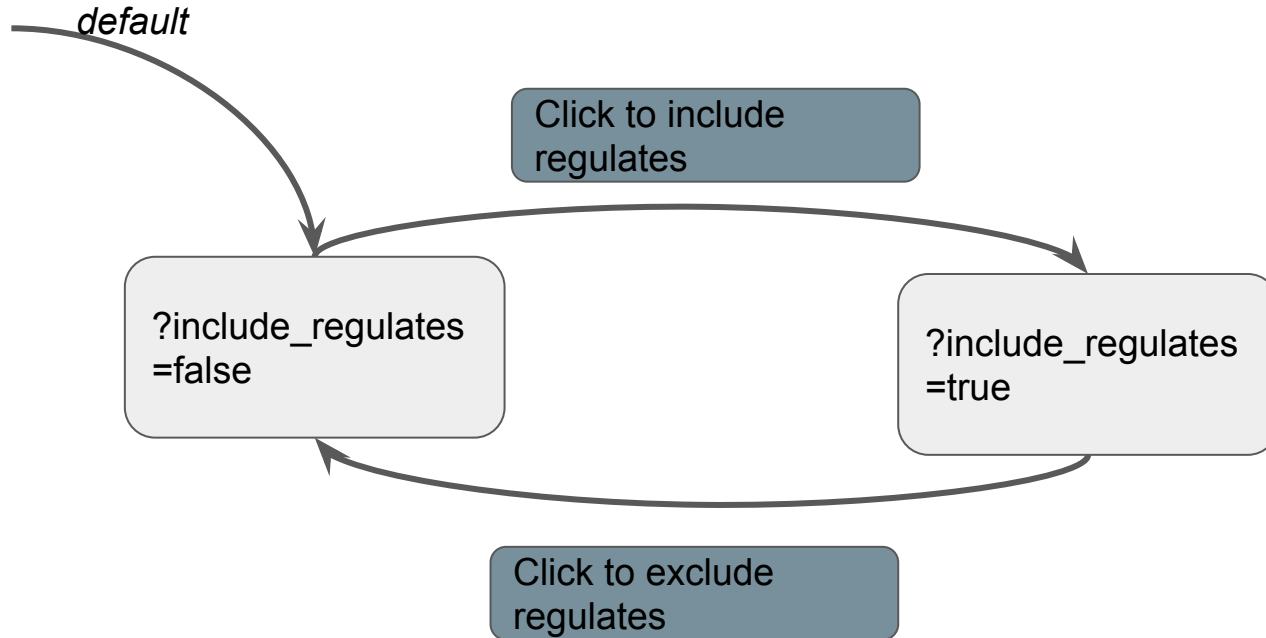
<input type="checkbox"/>	Gene/product	Gene/product name	Annotation qualifier	GO class (direct)	Annotation extension	Contributor	Organism	Evidence	Evidence v
<input type="checkbox"/>	IL4	Interleukin-4		negative regulation of endothelial cell apoptotic process		GO_Central	Macaca mulatta	IBA	PANTHER:  UniProtKB:  UniProtKB:
<input type="checkbox"/>	IL4	Interleukin-4		negative regulation of extrinsic apoptotic signaling		GO_Central	Macaca mulatta	IBA	PANTHER:  MGI:MGI:9

**Click to exclude regulates**

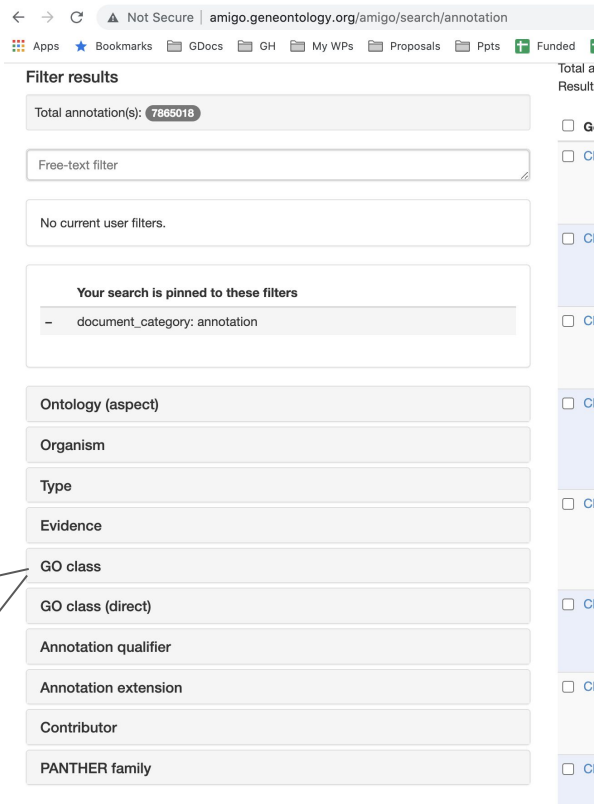
**(including regulates)**

**(including regulates)**

# State transitions



# On annotation search: split GO class into two facets



The screenshot shows the Amigo search interface at [amigo.geneontology.org/amigo/search/annotation](http://amigo.geneontology.org/amigo/search/annotation). The browser address bar shows "Not Secure | amigo.geneontology.org/amigo/search/annotation". The page title is "Filter results".

The "Filter results" section includes:

- Total annotation(s): 7865018
- Free-text filter
- No current user filters.
- Your search is pinned to these filters
  - document\_category: annotation
- Ontology (aspect)
- Organism
- Type
- Evidence
- GO class
- GO class (direct)
- Annotation qualifier
- Annotation extension
- Contributor
- PANTHER family

On the right side, there is a vertical column labeled "Total a Result" with checkboxes next to each filter category. The checkboxes for "GO class", "GO class (direct)", "Annotation extension", and "PANTHER family" are checked.

GO term (including regulates)

GO term (excluding regulates)