

**Bioinformática**

**Ontocancro**

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**Ontocancro**

- Ontocancro é uma ontologia extensível e possui uma arquitetura projetada para facilitar a integração de dados originários de diferentes bancos de dados públicos.
- A Ontocancro está armazenada em uma base de dados de conhecimento projetada para ser uma fonte de informação sobre a integração de dados de transcriptoma e interatoma envolvidos em vias metabólicas (*gene pathways*) de relacionadas a câncer.

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**Ontocancro - conceitos**

- Interatoma: Interações proteína-proteína.
- Transcriptoma: Conjunto de todos os genes expressos em uma célula.
- Ontologia: Especificação explícita de uma conceitualização, ou seja, especificação formal de termos e seus relacionamentos.

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**NCI - <http://pid.nci.nih.gov/>**

Home > Browse pathways > Pathway

**Caspase cascade in apoptosis**

Revision Date: 13-Apr-2009  
Source: NCBI Nature curated  
Curated by: Shira Knips  
Reviewed by: Christine Hawkins, Giaccone, Yufang Cai  
Pathway ID: caspase\_pathway

Submit feedback for this pathway

Molecule list References

View graphic as: [JPG](#) [SVG](#) [PDF](#) [HTML](#)

Save code as: [XML](#) [BioPAX](#) [JSON](#) [HTML](#)

A key to the image icons appears below the pathway

Click on a biomolecule or interaction for additional information.

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**NCI - Pathway**

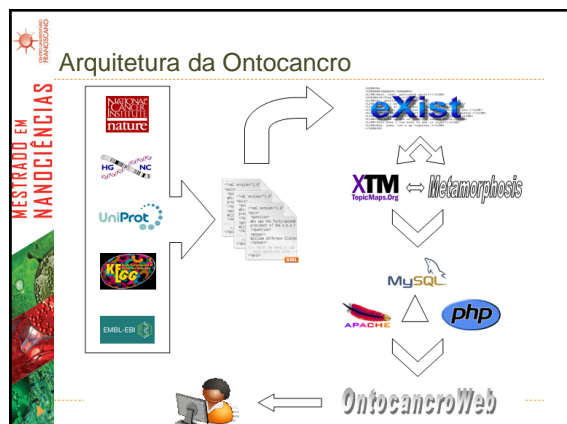
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**KEGG - <http://www.genome.jp/kegg/>**

Apoptosis - Human (hsa05100)

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### Ontocancro

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**Ontocancro®**

Disruption of the mechanisms that regulate cell cycle checkpoints, DNA repair, and apoptosis results in genomic instability and the development of cancer. The description of the complex genetic networks entangling these pathways requires new tools to integrate large quantities of biological information that are disseminated in several databases in order to design biological information systems. An ontology is an adequate tool to perform such task. Ontocancro is stored in a knowledge database that complex and integrative transcriptomics and proteomics data involved in gene pathways of genome stability obtained from several curated databases as NCBI, KEGG, Reactome, Prosite, GO, and STING.

Ontocancro also deals with the lack of consensus in the definition of gene pathways in the scientific literature and in the databases providing the Ontocancro pathways that are comprehensive gene lists for some reference pathways.

Ontocancro project is a collaboration among Universidade Federal de Santa Maria, Centro Universitário Franciscano and Universidade Federal do Rio Grande do Sul from Brazil. Ontocancro is an open source and free on-line resource.

[Contact](#)

**Quick Links**

- [Ontocancro pathways](#)
- [KEGG pathway](#)
- [KEGG pathways](#)
- [BioCarta pathways](#)
- [Gene Ontology pathways](#)
- [Reactome pathways](#)
- [Prosite protein domains](#)

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**CASP9**

Approved Symbol provided by **HGNC** CASP9

EntrezGene 842

String Symbol CASP9

Chromosome 1p36.21

Aliases MCH6, ICE-LAP6, APAF-3

EHSG ENSG00000132906

EHSP ENSP00000330237

UniGene Hs.329502

Affymetrix platform GPL570 203984\_x\_at

210775\_x\_at

RefSeq NM\_001229 NM\_032996

Status Approved

Organism Homo sapiens

**Ontocancro pathways**

- Apoptosis
- Expanded Apoptosis
- NCI pathways
- Caspases cascade in apoptosis
- BioCarta pathways
- KEGG Signaling Pathways
- Caspases Cascade in Apoptosis
- Apoptosis Signaling in Response to DNA Damage
- ICE-LAP6 Signaling Pathway
- Induction of apoptosis through DNA and Mitochondria Death Receptor
- Receptor Induction of ICE Receptor
- Role of Mitochondria in Apoptosis Signaling
- Apoptosis Signaling

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**Interacting partners:**

Gene Symbol	ENSP
GZMB	ENSP00000371982
BCL2L1	ENSP00000365230
CYP2A4	ENSP00000337915
PDPK1	ENSP00000344220
APAF1	ENSP00000353059
XIAP	ENSP00000360242
AKT1	ENSP00000270202
CASP6	ENSP00000265164
CASP2	ENSP00000298700
CASP3	ENSP00000311032
CYC3	ENSP00000307786
NOD1	ENSP00000222823
VIM	ENSP00000224237
BIRC2	ENSP00000227758
AKT2	ENSP00000309428
BIRC7	ENSP00000217169
DIABLO	ENSP00000267169
BIRC5	ENSP00000301633
AKT3	ENSP00000263826
BIRC3	ENSP00000263464
NLRP1	ENSP00000269280

**Interacting partners:**

- [See Interacting Pathways](#)
- [The KEGG Pathways include the same tooling](#)
- [West Nile Virus](#)
- [KEGG pathways](#)
- [Apoptosis - Homo sapiens \(human\)](#)
- [Reactome pathways](#)
- [Prosite protein domains](#)
- [Cell Domain Proteins](#)

### Resultados Obtidos até agora...

- Vias:
  - mais de 120
- Genes:
  - 1428
- Bancos:
  - 9
- Interações entre genes:
  - mais de 9000

