

Product datasheet for TA336327

OriGene Technologies, Inc.

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Caspase 9 (CASP9) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ICC/IF, IHC, IP, Simple Western, WB

Recommended Dilution: Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation:

1:50-1:200, Western Blot: 1:1000-1:2000, Immunohistochemistry-Paraffin: 1:1000-1:5000,

Immunohistochemistry-Frozen, Simple Western: 1:200

Reactivity: Human, Mouse, Rat, Canine, Gerbil

Host: Rabbit

Clonality: Polyclonal

Immunogen: Recombinant full-length human Caspase-9 protein (pro-form) was used as an immunogen

(NP_001220).

Formulation: Store at -20C. Avoid freeze-thaw cycles.

Concentration: lot specific

Purification: Whole antisera
Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 46.3 kDa

Gene Name: caspase 9

Database Link: NP 001220

Entrez Gene 12371 MouseEntrez Gene 58918 RatEntrez Gene 842 Human

P55211





Background:

Apoptosis, or programmed cell death, is a common property of all multicellular organisms. The current dogma of apoptosis suggests that the components of the core cell-death machinery are integral to cells and widely conserved across species. Caspases, a family of cysteinyl aspartate-specific proteases, are integral components of the cell death machinery (reviewed in Siegal, 2006; and Lavrik et al, 2005). They play a central role in the initiation and execution of apoptotic cell death and in inflammation. Caspases are typically divided into 3 major groups, depending on the structure of their prodomain and their function. Group 1: inflammatory caspases (caspases 1, 4, 5, 11, 12, 14). Group II: initiator of apoptosis caspases (caspases 2, 8, 9). Group II: effector caspases (caspases 3, 6, 7). Caspases are synthesized as zymogens (inactive pro enzyme precursors which require a biochemical change to become active enzymes) with an N-terminal prodomain of variable length followed by a large subunit (p20) and a small subunit (p10). Caspases are activated through proteolytic cleavage at specific asparagine residues that are located within the prodomain, the p10, and p20 subunits. Activation results in the generation of mature active caspases that consist of the heterotetramer p202-p102. Active caspases mediate cell death and inflammation through cleavage of particular cellular substrates that are involved in these processes. The Caspase-9 polyclonal antisera recognizes the proform of caspase-9 (approx. 50 kDa), and the large (approx. 35 kDa) and small (approx. 15 kDa) subunits of active/cleaved Caspase-9.

Synonyms: APAF-3; APAF3; ICE-LAP6; MCH6; PPP1R56

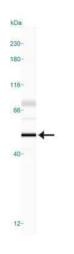
Protein Families: Druggable Genome, Protease, Stem cell - Pluripotency

Protein Pathways: Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Colorectal cancer,

Endometrial cancer, Huntington's disease, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Parkinson's disease, Pathways in cancer, Prostate cancer, Small cell lung

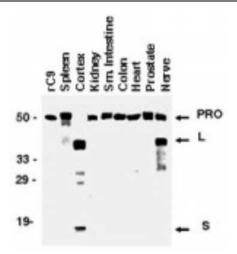
cancer, VEGF signaling pathway, Viral myocarditis

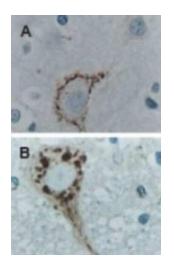
Product images:



Simple Western: Caspase-9 Antibody TA336327 - Lane view shows a specific band for Caspase 9 in 1.0 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230kDa separation system.







Western Blot: Caspase-9 Antibody TA336327 - Analysis of Caspase-9. Various tissue lysates were prepared from human autospsy material and normalized for total protein. Most tissues contained the ~50 kDa pro-Caspase-9 protein. Cleaved Caspase-9 was identified in brain cortex and peripheral nerve tissue samples. Pro-C9: recombinant human pro-Caspase-9 (full-length) protein. PRO: pro-Caspase-9. L: large subunit of cleaved Caspase-9. S: small subunit of cleaved Caspase-9.

Immunohistochemistry-Paraffin: Caspase-9 Antibody TA336327 - Mouse brain tissue sections at 1:2000. Hematoxylin-eosin counterstain. A) Brain striatum, B) Brain stem motor neuron.