

# Phospho-Caspase 9(S196) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3044a

## **Product Information**

| Application       | WB, IHC-P, E  |
|-------------------|---------------|
| Primary Accession | <u>P55211</u> |
| Reactivity        | Human         |
| Host              | Rabbit        |
| Clonality         | Polyclonal    |
| Isotype           | Rabbit IgG    |
| Clone Names       | RB6898        |
| Calculated MW     | 46281         |

# **Additional Information**

| Gene ID            | 842   |
|--------------------|---|
| Other Names        | Caspase-9, CASP-9, Apoptotic protease Mch-6, Apoptotic protease-activating<br>factor 3, APAF-3, ICE-like apoptotic protease 6, ICE-LAP6, Caspase-9 subunit<br>p35, Caspase-9 subunit p10, CASP9, MCH6 |
| Target/Specificity | This Phospho-Caspase 9-S196 antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S196 of human caspase 9.     |
| Dilution           | WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.   |
| Format             | Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.                           |
| Storage            | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.   |
| Precautions        | Phospho-Caspase 9(S196) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.  |

## **Protein Information**

| Name     | CASP9  |
|----------|--|
| Synonyms | MCH6   |
| Function | Involved in the activation cascade of caspases responsible for apoptosis execution. Binding of caspase-9 to Apaf-1 leads to activation of the protease |

|                 | which then cleaves and activates effector caspases caspase-3 (CASP3) or<br>caspase-7 (CASP7). Promotes DNA damage- induced apoptosis in a<br>ABL1/c-Abl-dependent manner. Proteolytically cleaves poly(ADP-ribose)<br>polymerase (PARP). Cleaves BIRC6 following inhibition of BIRC6-caspase<br>binding by DIABLO/SMAC (PubMed: <u>36758105</u> , PubMed: <u>36758106</u> ). |
|-----------------|--|
| Tissue Location | Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.  |

# Background

Caspase 9 is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme. This protein is processed by caspase APAF1; this step is thought to be one of the earliest in the caspase activation cascade.

### References

Martin, M.C., et al., J. Biol. Chem. 280(15):15449-15455 (2005). Raina, D., et al., J. Biol. Chem. 280(12):11147-11151 (2005). Cornelis, S., et al., Oncogene 24(9):1552-1562 (2005). Mohammad, R.M., et al., Mol. Cancer Ther. 4(1):13-21 (2005). Tacconi, S., et al., Exp. Neurol. 190(1):254-262 (2004).

#### Images



## Citations

• Microenvironment mesenchymal cells protect ovarian cancer cell lines from apoptosis by inhibiting XIAP inactivation.

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