

Datasheet for ABIN3044458

**anti-Caspase 9 antibody (Middle Region)****2** Images**18** Publications[Go to Product page](#)

## Overview

|                      |                                                   |
|----------------------|---------------------------------------------------|
| Quantity:            | 100 µg                                            |
| Target:              | Caspase 9 (CASP9)                                 |
| Binding Specificity: | AA 183-198, Middle Region                         |
| Reactivity:          | Human                                             |
| Host:                | Rabbit                                            |
| Clonality:           | Polyclonal                                        |
| Conjugate:           | This Caspase 9 antibody is un-conjugated          |
| Application:         | Western Blotting (WB), Immunohistochemistry (IHC) |

## Product Details

|                             |                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose:                    | Anti-Caspase 9/CASP9 Antibody Picoband®                                                                                                                                                                                                                                                                                                                                                         |
| Immunogen:                  | A synthetic peptide corresponding to a sequence in the middle region of human Caspase-9.                                                                                                                                                                                                                                                                                                        |
| Sequence:                   | SNIDCEKLRR RFSSLH                                                                                                                                                                                                                                                                                                                                                                               |
| Isotype:                    | IgG                                                                                                                                                                                                                                                                                                                                                                                             |
| Cross-Reactivity (Details): | No cross-reactivity with other proteins                                                                                                                                                                                                                                                                                                                                                         |
| Characteristics:            | Anti-Caspase 9/CASP9 Antibody (ABIN3044458). Tested in IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance. |

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: Caspase 9 (CASP9)

Alternative Name: CASP9 ([CASP9 Products](#))

Background: Synonyms: Caspase-9, CASP-9, 3.4.22.62, Apoptotic protease Mch-6, Apoptotic protease-activating factor 3, APAF-3, ICE-like apoptotic protease 6, ICE-LAP6, Caspase-9 subunit p35, Caspase-9 subunit p10, CASP9, MCH6,

Tissue Specificity: 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: CASP9 (CASPASE9), also called APAF3, is an initiator caspase, encoded by the CASP9 gene. The CASP9 gene is mapped to chromosome 1p36.3-p36.1 by FISH. CASP9 is identified as a member of the caspase family that participates in caspase-3 activation in vitro. And it also regarded as the most upstream member of the apoptotic protease cascade that is triggered by cytochrome c and dATP. Its genomic coordinates (GRCh37) is 1:15,818,768-15,851,284. The crystal structure of CASP9 is complex with the BIR3 in an inhibitory domain of XIAP at 2.4-angstrom resolution and the CASP9 gene contains 9 exons and spans approximately 35 kb of genomic DNA. Caspase-9 and APAF1 bind to each other via their respective NH2-terminal CED-3 homologous domains in the presence of cytochrome c and dATP, an event that leads to caspase-9 activation. CASP9 activity increases dramatically upon association with the apoptosome complex. And the majority of Casp9 knockout mice died perinatally with a markedly enlarged and malformed cerebrum caused by reduced apoptosis during brain development.

Sequence Similarities: Belongs to the peptidase C14A family.

Molecular Weight: 35 kDa

UniProt: [P55211](#)

Pathways: [MAPK Signaling](#), [RTK Signaling](#), [Apoptosis](#), [Caspase Cascade in Apoptosis](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Positive Regulation of Endopeptidase Activity](#)

## Application Details

Application Notes: Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Human

## Application Details

Western blot, 0.1-0.5 µg/mL, Human

1. Chew, S. K., Chen, P., Link, N., Galindo, K. A., Pogue, K., Abrams, J. M. Genome-wide silencing in *Drosophila* captures conserved apoptotic effectors. *Nature* 460: 123-127, 2009. 2. Hadano, S., Nasir, J., Nichol, K., Rasper, D. M., Vaillancourt, J. P., Sherer, S. W., Beatty, B. G., Ikeda, J.-E., Nicholson, D. W., Hayden, M. R. Genomic organization of the human caspase-9 gene on chromosome 1p36.1-p36.3. *Mammalian Genome* 10: 757-760, 1999. 3. Kuida, K., Haydar, T. F., Kuan, C.-Y., Gu, Y., Taya, C., Karasuyama, H., Su, M. S.-S., Rakic, P., Flavell, R. A. Reduced apoptosis and cytochrome c-mediated caspase activation in mice lacking caspase 9. *Cell* 94: 325-327, 1998.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Thimerosal, 0.05 mg Sodium azide.

Preservative: Thimerosal (Merthiolate), Sodium azide

Precaution of Use: This product contains Thimerosal (Merthiolate) and Sodium azide: POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C, -20 °C

Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Expiry Date: 12 months

## Publications

Product cited in: Bai, Yang, Luo: "Effects of 5-hydroxy-4'-nitro-7-propionyloxy-genistein on inhibiting proliferation

and invasion via activating reactive oxygen species in human ovarian cancer A2780/DDP cells." in: **Oncology letters**, Vol. 15, Issue 4, pp. 5227-5235, (2018) ([PubMed](#)).

Shi, Ma, Ren, Liang, Yu, Luo: "Antitumor pharmacological mechanism of the oral liquid of Poria cocos polysaccharide." in: **Journal of ethnopharmacology**, Vol. 209, pp. 24-31, (2017) ([PubMed](#)).

Ji, Geng, Zhou, Wei, Chen: "Chinese herbal medicine Yougui Pill reduces exogenous glucocorticoid-induced apoptosis in anterior pituitary cells." in: **Neural regeneration research**, Vol. 11, Issue 12, pp. 1962-1968, (2016) ([PubMed](#)).

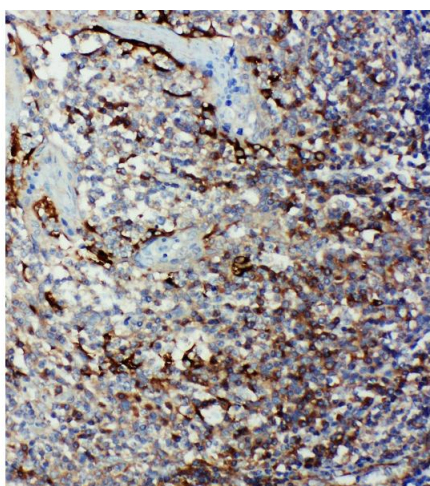
Ding, Wang, Zhao, Sun, Zhai: "Protective Effects of Baicalin on A $\beta$ -Induced Learning and Memory Deficit, Oxidative Stress, and Apoptosis in Rat." in: **Cellular and molecular neurobiology**, Vol. 35, Issue 5, pp. 623-32, (2015) ([PubMed](#)).

Yang, Li, Liu, Shi, Zhang: "Inhibitory effect of tetramethylpyrazine preconditioning on overload training-induced myocardial apoptosis in rats." in: **Chinese journal of integrative medicine**, Vol. 21, Issue 6, pp. 423-30, (2015) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

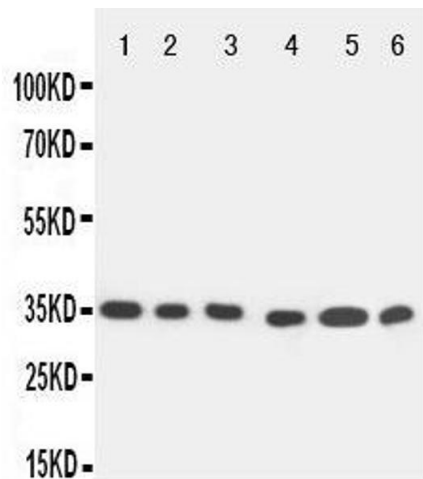
## Images

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### Immunohistochemistry

**Image 1.** Anti-Caspase 9 antibody, IHC(P) IHC(P): Human Tonsil Tissue



Western Blotting

**Image 2.** Anti-Caspase 9 antibody, Western blotting All lanes: Anti Caspase 9 at 0.5ug/ml Lane 1: SMMC Whole Cell Lysate at 40ug Lane 2: MCF-7 Whole Cell Lysate at 40ug Lane 3: CEM Whole Cell Lysate at 40ug Lane 4: JURKAT Whole Cell Lysate at 40ug Lane 5: RAJI Whole Cell Lysate at 40ug Lane 6: HELA Whole Cell Lysate at 40ug Predicted bind size: 35KD Observed bind size: 35KD