

Caspase-5 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10021**Specification**

Caspase-5 Antibody - Product Information

Application	WB
Primary Accession	P51878
Other Accession	NP_004338
Reactivity	Human, Mouse, Rat, Hamster, Monkey, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	49736

Caspase-5 Antibody - Additional Information**Gene ID 838**

Application & Usage	Western blotting (0.5-4ag/ml). However, the optimal conditions should be determined individually. The affinity purified antibody preferentially detects the intermediate (32 kDa) and the fully (20 kDa) cleaved caspase-5.
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Other Names

CASP-5, ICH-3 protease, TY protease, ICH3

Target/Specificity

Caspase-5

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.2 mg/ml) affinity purified rabbit anti-caspase-5 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Caspase-5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Caspase-5 Antibody - Protein Information

Name CASP5 {ECO:0000303|PubMed:16893518, ECO:0000312|HGNC:HGNC:1506}

Function

Thiol protease that acts as a mediator of programmed cell death (PubMed:28314590, PubMed:29898893). Initiates pyroptosis, a programmed lytic cell death pathway through cleavage of Gasdermin-D (GSDMD): cleavage releases the N-terminal gasdermin moiety (Gasdermin- D, N-terminal) that binds to membranes and forms pores, triggering pyroptosis (PubMed:29898893). Also mediates cleavage and maturation of IL18 (PubMed:37993714). Cleavage of GSDMD and IL18 is not strictly dependent on the consensus cleavage site but depends on an exosite interface on CASP4 (PubMed:37993714). During non-canonical inflammasome activation, cuts CGAS and may play a role in the regulation of antiviral innate immune activation (PubMed:28314590).

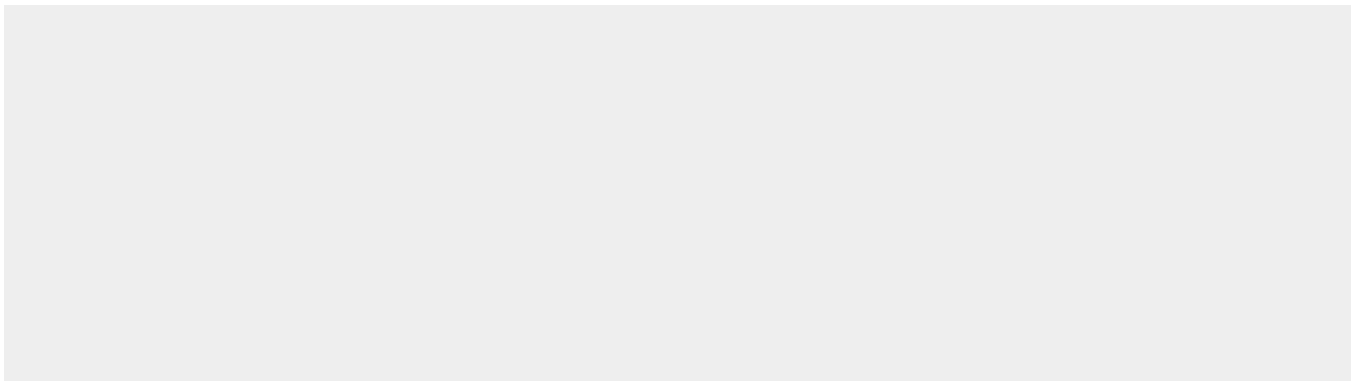
Tissue Location

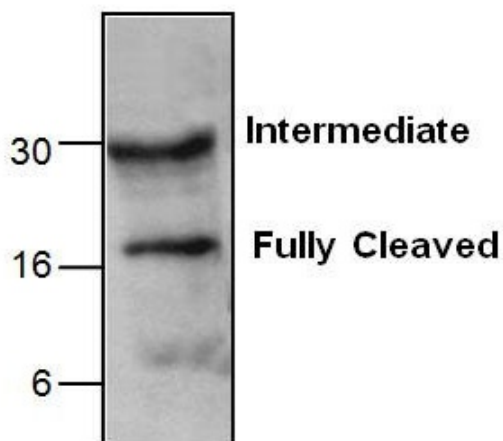
Expressed in barely detectable amounts in most tissues except brain, highest levels being found in lung, liver and skeletal muscle.

Caspase-5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Caspase-5 Antibody - Images



Western blot analysis of Caspase-5 in rat kidney tissue lysate. Caspase-5 intermediate (30 kDa) and full cleaved (20 kDa) fragments were detected.

Caspase-5 Antibody - Background

Caspase family of cysteine proteases has been shown to play a key role in apoptosis. Caspase-5 is also known as Ich-3 and ICERel-III and can proteolytically processed by granzyme B. Over expression of caspase-5 induces apoptosis in Rat-1 and HeLa cells, which can be inhibited by CrmA and Bcl-2.