# Caspase-1 Rabbit mAb [B2P4]

Cat NO. :A27773

## Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB IHC	Human Rat	P29466	45kDa	Rabbit	lgG	50ul,100ul,200ul

## **Applications detail:**

Application	Dilution		
WB	1:1000-2000		
ІНС	1:100		
The optimal dilutions should be	optimal dilutions should be determined by the end user		

## Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

## **Purification**:

Affinity-chromatography

#### Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human Caspase-1

#### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

## **Tissue specificity:**

Expressed in larger amounts in spleen and lung. Detected in liver, heart, small intestine, colon, thymus, prostate,

skeletal muscle, peripheral blood leukocytes, kidney and testis. No expression in

### Subcellular location:

Cytoplasm. Cell membrane.

Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/ Immunofluorescence F: Flow Cytometry

Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse

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Thiol protease involved in a variety of inflammatory processes by proteolytically cleaving other proteins, such as the precursors of the inflammatory cytokines interleukin-1 beta (IL1B) and interleukin 18 (IL18) as well as the pyroptosis inducer Gasdermin-D (GSDMD), into active mature peptides (PubMed:15326478, PubMed:1574116, PubMed:7876192, PubMed:15498465, PubMed:26375003, PubMed:32051255). Plays a key role in cell immunity as an inflammatory response initiator: once activated through formation of an inflammasome complex, it initiates a pro-inflammatory response through the cleavage of the two inflammatory cytokines IL1B and IL18, releasing the mature cytokines which are involved in a variety of inflammatory processes (PubMed:1574116, PubMed:7876192, PubMed:15498465, PubMed:15326478, PubMed:32051255). Cleaves a tetrapeptide after an Asp residue at position P1 (PubMed:1574116, PubMed:7876192, PubMed:15498465). Also initiates pyroptosis, a programmed lytic cell death pathway, through cleavage of GSDMD (PubMed:26375003). In contrast to cleavage of interleukins IL1B and IL1B, recognition and cleavage of GSDMD is not strictly dependent on the consensus cleavage site but depends on an exosite interface on CASP1 that recognizes and binds the Gasdermin-D, C-terminal (GSDMD-CT) part (PubMed:32051255, PubMed:32109412, PubMed:32553275). Upon inflammasome activation, during DNA virus infection but not RNA virus challenge, controls antiviral immunity through the cleavage of CGAS, rendering it inactive (PubMed:28314590). In apoptotic cells, cleaves SPHK2 which is released from cells and remains enzymatically active extracellularly (PubMed:20197547).., [Isoform Delta]: Apoptosis inactive.., [Isoform Epsilon]: Apoptosis inactive..

## Validation Data:

## Caspase-1 Rabbit mAb [B2P4] Images



Western blot (SDS PAGE) analysis of extracts from HeLa cell lysate. Using Caspase-1 Rabbit mAb [B2P4]at dilution of 1:1000 incubated at 4 $^{\circ}$ C over night.

View more information on http://naturebios.com



Immunohistochemical analysis of paraffin-embedded human liver, .Using Caspase-1 Rabbit mAb [B2P4] at dilution of 1:100 incubated at 4°C over night.Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.

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