CASP1 Polyclonal Antibody

catalog number: E-AB-93260

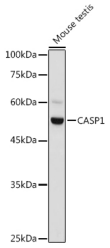
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Mouse;Rat
Immunogen	A synthetic peptide of mouse CASP1
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.

Applications	Recommended Dilution
WB	1:500-1:2000
IF	1:50-1:200

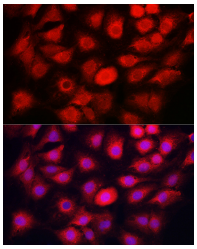
Data



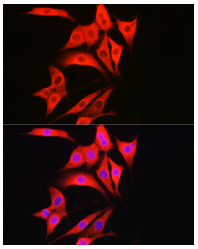
Western blot analysis of extracts of Mouse testis using CASP1 Polyclonal Antibody at 1:1000 dilution.

Observed-MW:48 kDa

Calculated-MW:45 kDa



Immunofluorescence analysis of C6 cells using CASP1 Polyclonal Antibody at dilution of 1:50 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using CASP1 Polyclonal Antibody at dilution of 1:50 (40x lens). Blue: DAPI for nuclear staining.

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack,upon receipt,store it immediately at the temperature recommended.

Background

Toll-free: 1-888-852-8623
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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. Plays a key role in cell immunity as an inflammatory response initiator: once activated through formation of an inflammasome complex, it initiates a proinflammatory 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. Cleaves a tetrapeptide after an Asp residue at position P1. Also initiates pyroptosis, a programmed lytic cell death pathway, through cleavage of GSDMD. 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. Upon inflammasome activation, during DNA virus infection but not RNA virus challenge, controls antiviral immunity through the cleavage of CGAS, rendering it inactive. In apoptotic cells, cleaves SPHK2 which is released from cells and remains enzymatically active extracellularly (By similarity.

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