

Product datasheet for **TA374277**

Casp1 Rabbit Polyclonal Antibody

Product data:

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|-------------------------|---|
| Product Type: | Primary Antibodies |
| Applications: | ICC/IF, WB |
| Recommended Dilution: | WB,1:500 - 1:2000 IF,1:50 - 1:200 |
| Reactivity: | Mouse, Rat |
| Modifications: | Unmodified |
| Host: | Rabbit |
| Isotype: | IgG |
| Clonality: | Polyclonal |
| Immunogen: | Recombinant protein of Mouse CASP1. |
| Formulation: | Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3. |
| Concentration: | lot specific |
| Purification: | Affinity purification |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C. Avoid freeze / thaw cycles. |
| Stability: | Shelf life: one year from despatch. |
| Predicted Protein Size: | 45kDa |
| Gene Name: | caspase 1 |
| Database Link: | Entrez Gene 12362 Mouse P29452 |



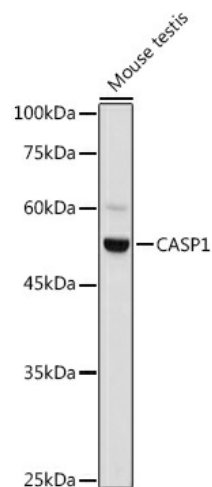
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Background:

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 IL18, 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).

Synonyms:

CASP-1; caspase-1; ICE; IL-1BC; IL1B-convertase; IL1BC; IL1BCE; p45

Product images:

Western blot analysis of extracts of Mouse testis, using CASP1 antibody (TA374277) at 1:1000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit . | Exposure time: 1s.