bsm-52441R **[Primary Antibody]**

Caspase-1 Recombinant Rabbit mAb

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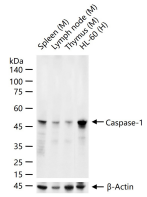
DATASHEET

Host: Rabbit
Isotype: IgG
Clonality: Recombinant
CloneNo.: 5F17
GeneID: 834
SWISS: P29466
Target: Caspase-1
Immunogen: A synthesized peptide derived from human Caspase 1: 298-404/404.
Purification: affinity purified by Protein A
Concentration: 1mg/ml
Storage: 0.01M TBS(pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Background: This gene encodes a protein which is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme. This gene was identified by its ability to proteolytically cleave and activate the inactive precursor of interleukin-1, a cytokine involved in the processes such as inflammation, septic shock, and wound healing. This gene has been shown to induce cell apoptosis and may function in various developmental stages. Studies of a similar gene in mouse suggest a role in the pathogenesis of Huntington disease. Alternative splicing of this gene results in five transcript variants encoding distinct isoforms. [provided by RefSeq].

Applications: **WB** (1:1000-5000)
Reactivity: Human, Mouse (predicted: Rat)
Predicted MW.: 46 kDa
Subcellular Location: Cytoplasm

VALIDATION IMAGES



25 ug total protein per lane of various lysates (see on figure) probed with Caspase-1 monoclonal antibody, unconjugated (bsm-52441R) at 1:500 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.

SELECTED CITATIONS

- **[IF=3.9]** Zhang Yingying. et al. Association between endogenous lactate accumulation and dysregulated activation of the NLRP3 inflammasome pathway in schizophrenia. SCI REP-UK. 2025 Jun;15(1):1-19 IF ;Rat. 40467771
- **[IF=2.1]** Jinle Lin. et al.Club cell secretory protein 16 promotes cell proliferation and inhibits inflammation and pyroptosis in response to particulate matter 2.5-induced epithelial damage in asthmatic mice..Journal of Thoracic Disease.2025 Feb 28;17(2):753-773. IHC ;Mouse. 40083529