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Caspase-1 Rabbit pAb

Catalog No.: A0964SP **279 Publications**

Basic Information

Observed MW
35-48 kDa(pro),20-22 kDa(cleavad)

Calculated MW
10-45 kDa

Category
Primary antibody

Applications
WB,IP,ELISA

Cross-Reactivity
Human, Mouse, Rat

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 results in transcript variants encoding distinct isoforms.

Recommended Dilutions

WB	1:5000 - 1:40000
IP	0.5 μg - 4 μg antibody for 200 μg - 400 μg extracts of whole cells
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.For high-ratio antibody dilutions (≥1:10000)a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID
834/12362

Swiss Prot
P29466/P29452

Immunogen
This information is considered to be commercially sensitive.

Synonyms
ICE; P45; IL1BC; Caspase-1

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS, pH 7.3, containing 50% glycerol. Preserved with Proclin300 or sodium azide.
May contain 0.05% BSA as specified on the Certificate of Analysis.

Contact

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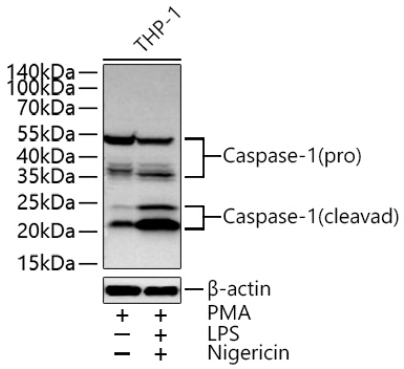
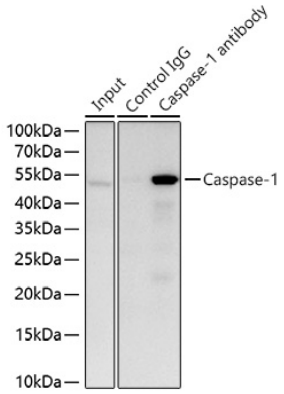
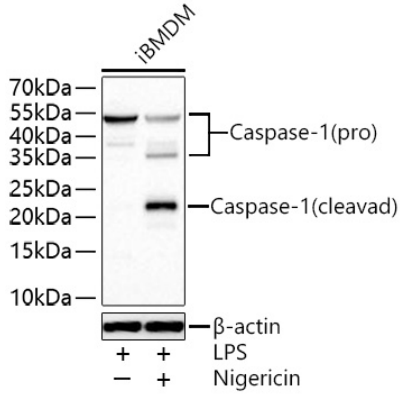
Validation Data



Western blot analysis of various lysates using Caspase-1 Rabbit pAb (A0964SP) at 1:5000 dilution incubated overnight at 4℃. THP-1 cells were treated with PMA (80 nM) at 37℃ for 52 hours, THP-1 cells were treated with PMA (80 nM) at 37℃ for 48 hours,LPS (50 ng/mL) at 37℃ for 4 hours and Nigericin (15 μM) at 37℃ for 45 minutes.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 45 s.



Immunoprecipitation of Caspase-1 from 300 μg extracts of iBMDM cells treated with LPS (30 μM,4h) and LPS (30 μM,1h) was performed using 1 μg of Caspase-1 Rabbit pAb (A0964SP). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Caspase-1 Rabbit pAb (A0964SP) at a dilution of 1:5000.



Western blot analysis of various lysates using Caspase-1 Rabbit pAb (A0964SP) at 1:20000 dilution incubated overnight at 4℃. iBMDM cells were treated with LPS (30 μM) at 37℃ for 5 hours, iBMDM cells were treated with LPS (30 μM) at 37℃ for 4 hours and Nigericin (20 μM) at 37℃ for 1 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 20 s.