

Anti-Caspase 1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

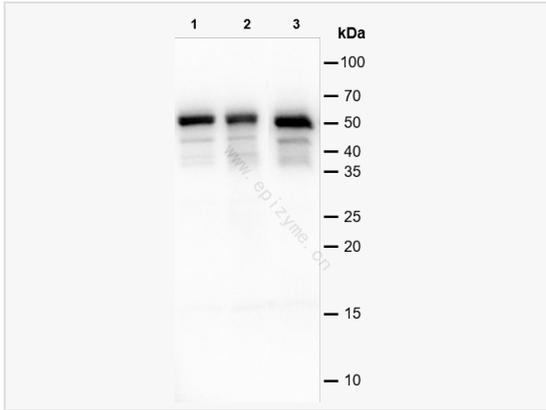
Catalog # R013792

Product Information

| | |
|-------------|---|
| Application | WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA |
| Reactivity | Human, Mouse, Rat |
| Dilution | WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200 |
| Host | Rabbit |
| Clonality | Monoclonal |
| Clone No. | 83H99E42 |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | Recombinant protein of human Caspase-1 |
| Format | Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-Caspase 1 Rabbit mAb [83H99E42] is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

| | |
|-------------------|--|
| Synonyms | CASP-1; CASP1; CASP1_HUMAN; Caspase 1; Caspase-1 subunit p10; ICE; IL-1 beta-converting enzyme; IL-1BC; IL1 beta converting enzyme; IL1B convertase; Interleukin 1 beta convertase; Interleukin 1B converting enzyme; Interleukin-1 beta convertase; Interleukin-1 beta-converting enzyme; p45. |
| Calculated MW | Calculated MW: 45, 42, 35, 12 kDa; Observed MW: 45,42,35 kDa |
| Uniprot ID | P29466, P29452, P43527 |
| Gene ID | 834, 12362, 25166 |
| 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. [provided by RefSeq, Mar 2012] |
| Cellular Location | Cytoplasm. |
| Tissue Location | 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 the brain. |



Western Blot - Anti-Caspase 1 Rabbit mAb [83H99E42]

All lanes: R013792 at 1:1,000 dilution

Lane 1: HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysates

Lane 3: T24 (human bladder cancer epithelial cell) whole cell lysates

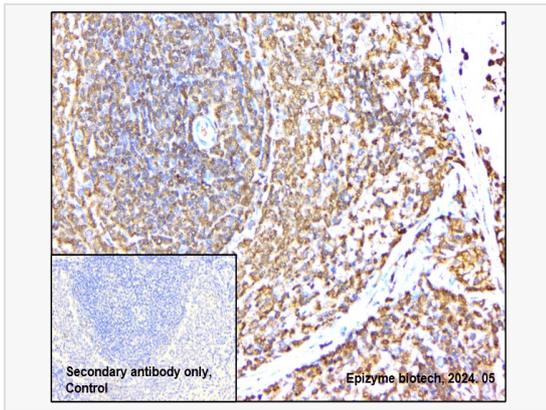
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 45 kDa, 42 kDa, 35 kDa, 12 kDa

Observed band size: 53 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-Caspase 1 Rabbit mAb [83H99E42]

Sample: Paraformaldehyde-fixed, paraffin embedded rat spleen tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R013792 at 1:200 dilution

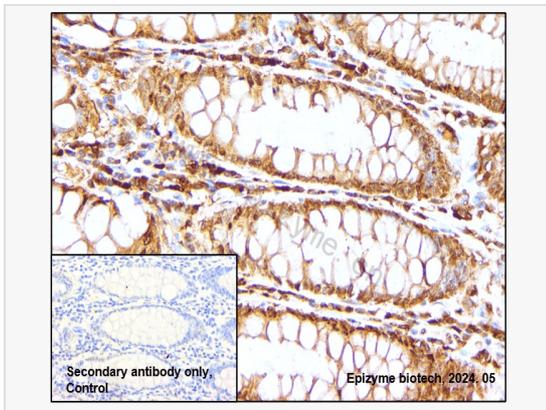
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Caspase 1 Rabbit mAb [83H99E42]

Sample: Paraformaldehyde-fixed, paraffin embedded human colorectal carcinoma tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R013792 at 1:200 dilution

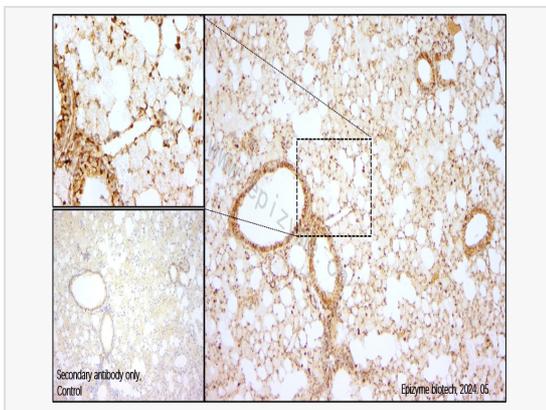
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Caspase 1 Rabbit mAb [83H99E42]

Sample: Paraformaldehyde-fixed, paraffin embedded mouse lung tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R013792 at 1:200 dilution

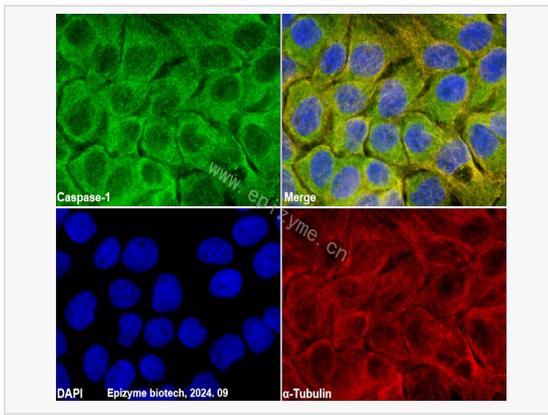
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-Caspase 1 Rabbit mAb [83H99E42]

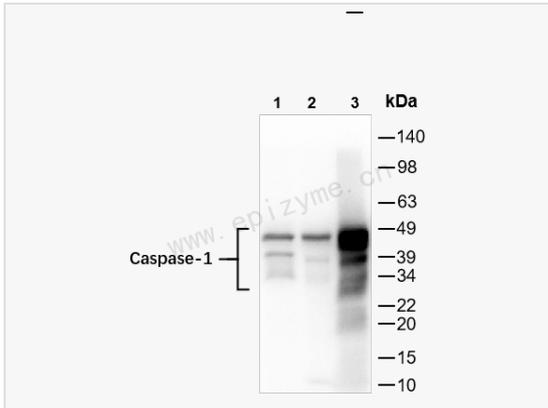
Sample: A431 cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R013792 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Western Blot - Anti-Caspase 1 Rabbit mAb [83H99E42]

All lanes: R013792 at 1:1,000 dilution

Lane 1: Mouse liver whole tissue lysates

Lane 2: Rat liver whole tissue lysates

Lane 3: Rat spleen whole tissue lysates

Lysates/proteins at 10 μ g per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 45, 42, 35, 12 kDa

Observed band size: 45,42,35 kDa

Developed using the ECL technique (Cat. No. SQ201).