Anti-Caspase 1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R013792

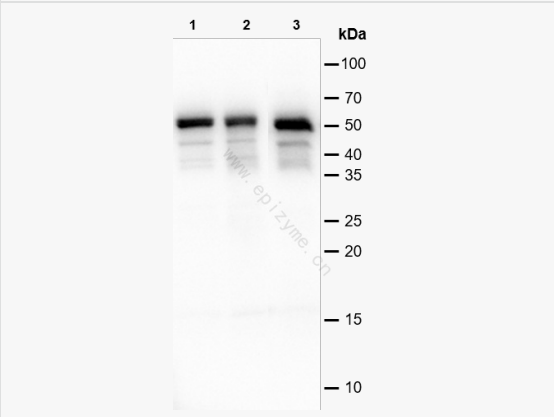
Product Information

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℃. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20℃ storage.
Precautions	Anti-Caspase 1 Rabbit mAb [83H99E42] is for research use only and not for use in diagnostic or therapeutic procedures.

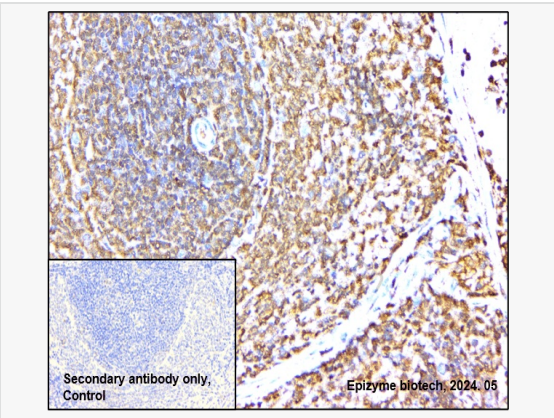
Protein Information

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.

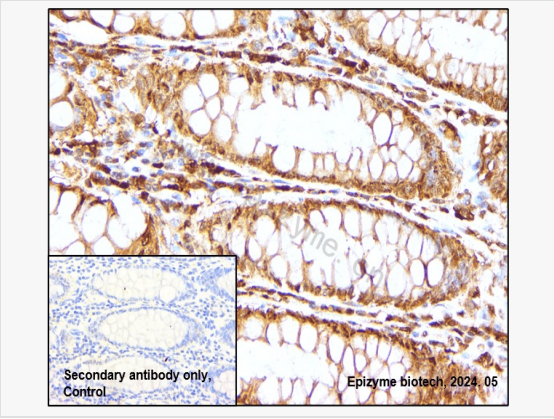
Validation Images



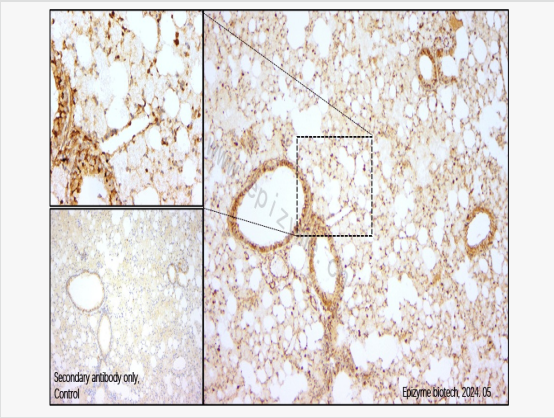
Western Blot - Anti-Caspase 1 Rabbit mAb [83H99E42]
All lanes: R013792 at 1:1,000 dilution
Lane 1: HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysates
Lane 3: T24 (human bladder cancer epithelial cell) whole 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).



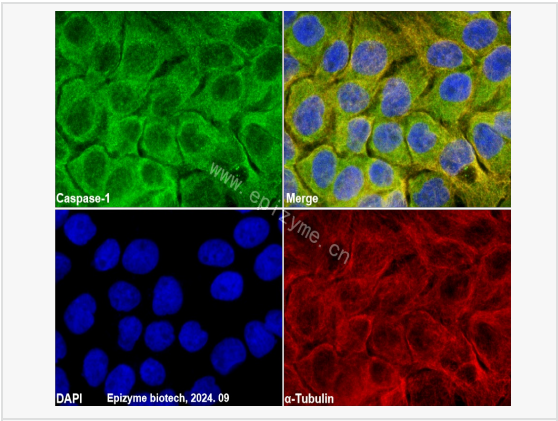
Immunohistochemistry - Anti-Caspase 1 Rabbit mAb [83H99E42]
Sample: Paraformaldehyde-fixed, paraffin embedded rat spleen tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R013792 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated 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.



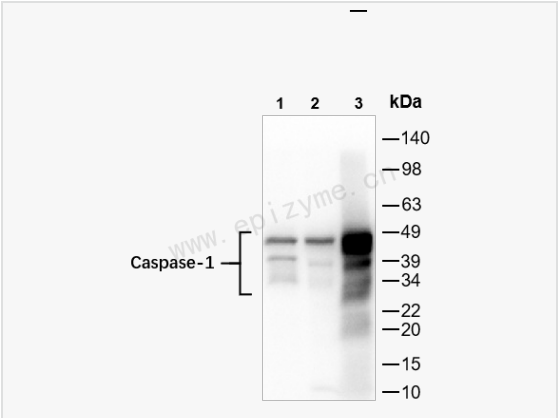
Immunohistochemistry - Anti-Caspase 1 Rabbit mAb [83H99E42]
Sample: Paraformaldehyde-fixed, paraffin embedded human colorectal carcinoma tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R013792 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit 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 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, 42, 35, 12 kDa
Observed band size: 45,42,35 kDa
Developed using the ECL technique (Cat. No. SQ201).