

[KD Validated] Anti-CASP3 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

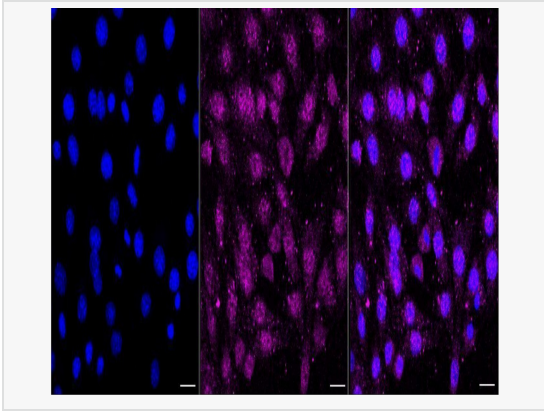
Catalog # R020370

Product Information

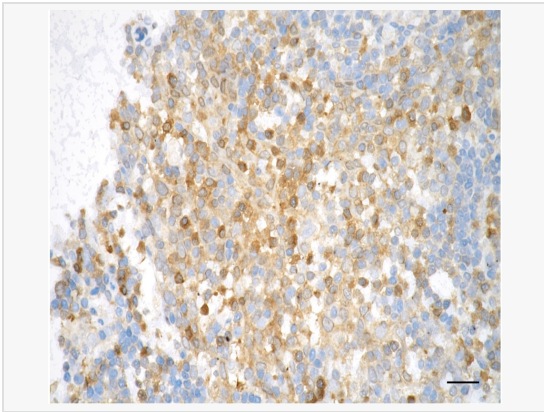
Application	WB, FC, IF (Cell)/ICC, IHC-P/IF (Tissue-P)
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000; IHC-P 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	70F92B28
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human active + pro Caspase 3
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-CASP3 Rabbit mAb [70F92B28] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

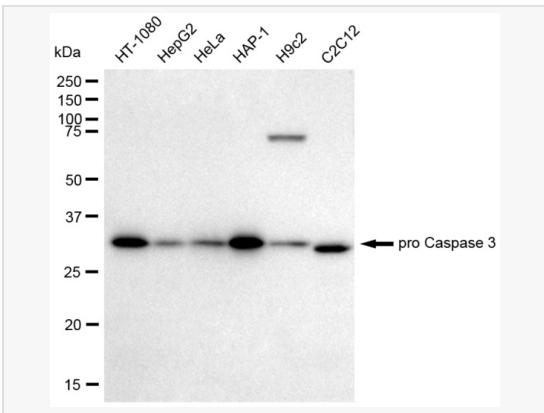
Synonyms	CASP3; Caspase 3; Apopain; CPP32; CPP32B; Caspase 3, Apoptosis-Related Cysteine Peptidase; Caspase 3, Apoptosis-Related Cysteine Protease; SREBP Cleavage Activity 1; Cysteine Protease CPP32; Protein Yama; EC 3.4.22.56; Caspase-3; CASP-3; CPP-32; SCA-1; Yama; PARP Cleavage Protease; Procaspase3; EC 3.4.22.
Calculated MW	Calculated MW: 32 kDa, Observed MW: 35 kDa
Uniprot ID	P42574
Gene ID	836
Background	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.



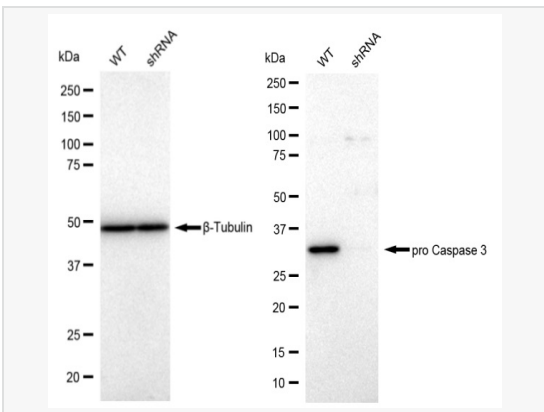
Immunocytochemical staining of C2C12 cells with active + pro Caspase 3 antibody (R020370, 1:1,000) . Nuclei were stained blue with DAPI; active + pro Caspase 3 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.



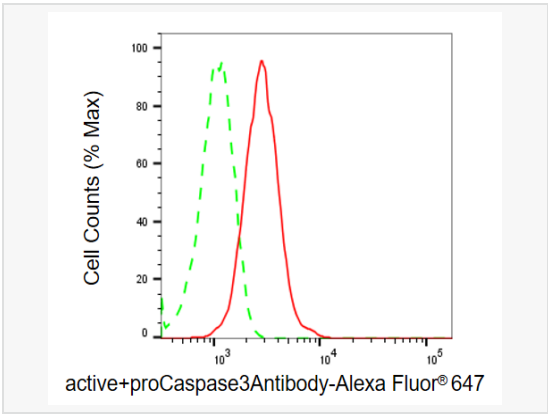
Immunohistochemistry was performed on paraffin-embedded human tonsillitis using active + pro caspase 3 antibody (R020370, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40 \times objective). Scale bar: 25 μ m.



Western blotting analysis using pro Caspase 3 antibody (R020370). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with pro Caspase 3 antibody (R020370, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using pro Caspase 3 antibody (R020370). pro Caspase 3 expression in wild type (WT) and pro Caspase 3 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with pro Caspase 3 antibody (R020370, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:50,000) respectively. Image was developed using ECL Substrate Kit.



Flow cytometric analysis of active+pro Caspase3 expression in HT-1080 cells using active+pro Caspase3 antibody (R020370, 1:2,000). Green, isotype control; red, active+pro Caspase3.