

[KD Validated] Anti-CASP3 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

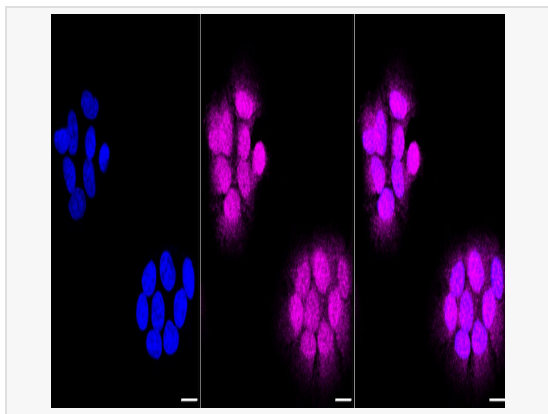
Catalog # R020323

Product Information

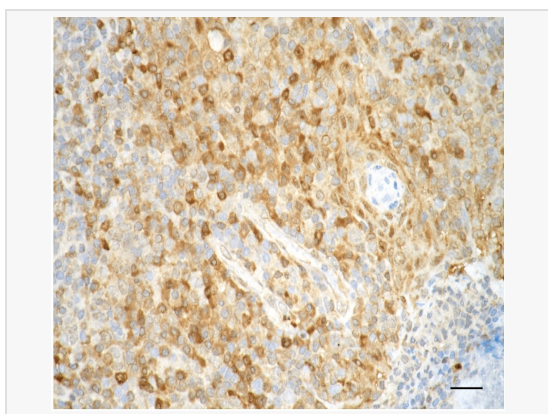
Application	WB, FC, IF (Cell)/ICC, IHC-P/IF (Tissue-P)
Reactivity	Human
Dilution	WB 1:2,000~1:10,000; FC 1:200~1:2,000; IF 1:100~1:1,000; IHC-P 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	44L99K32
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human pro Caspase 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 [44L99K32] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

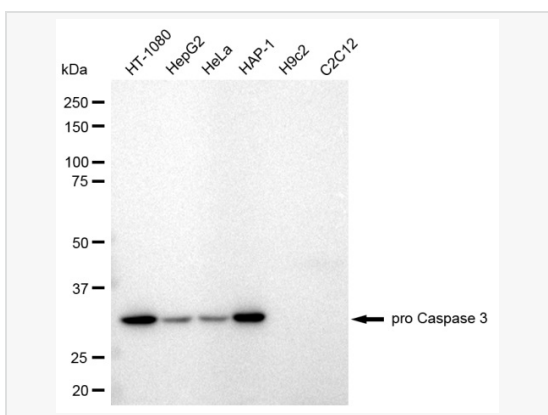
Synonyms	CASP3; Caspase 3; Apopain; CPP32; CPP32B; Caspase 3, Apoptosis-Related Cysteine Peptidase; Caspase 3, Apoptosis-Related Cysteine Protease; SREBP Cleavage Activity 1; Cysteine Protease CPP32; Protein Yama; EC 3.4.22.56; Caspase-3; CASP-3; CPP-32; SCA-1; Yama; PARP Cleavage Protease; Procaspase3; 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.



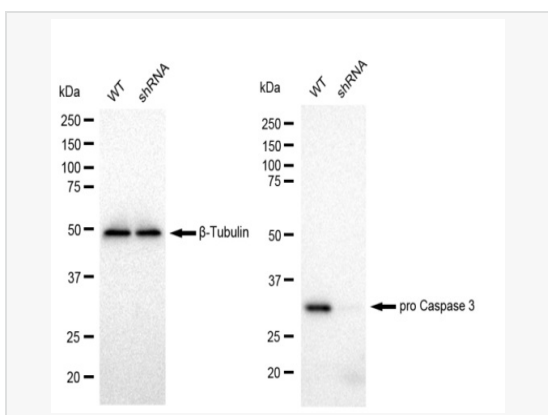
Immunocytochemical staining of C2C12 cells with pro Caspase 3 antibody (R020323, 1:1,000). Nuclei were stained blue with DAPI; Pro Caspase 3 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μm.



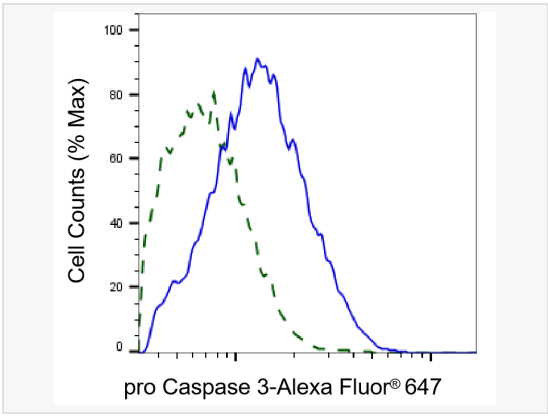
Immunohistochemistry was performed on paraffin-embedded human tonsillitis using pro caspase 3 antibody (R020323, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.



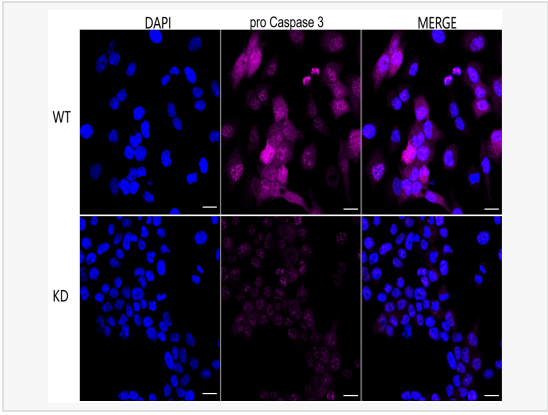
Western blotting analysis using pro Caspase 3 antibody (R020323). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with pro Caspase 3 antibody (R020323, 1:10,000) and HRP-conjugated goat anti rabbit secondary antibody (1:50,000) respectively. Image was developed using ECL Substrate Kit.



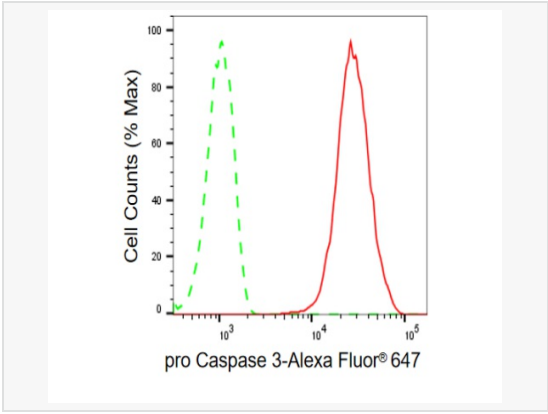
Western blotting analysis using pro Caspase 3 antibody (R020323). pro Caspase 3 expression in wild type (WT) and pro Caspase 3 shRNA knockdown (KD) HeLa cells with 30 μg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with pro Caspase 3 antibody (R020323, 1:10,000) and HRP-conjugated goat anti rabbit secondary antibody (1:50,000) respectively. Image was developed using ECL Substrate Kit.



Validation of pro Caspase 3 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with pro Caspase 3 antibody (R020323, 1:2,000) and analyzed using CytoFLEX.



Immunocytochemical staining of HeLa cells using pro Caspase 3 antibody (R020323, 1:1,000), Top panel: wild-type (WT); Bottom panel: pro Caspase 3 shRNA knockdown (KD). Nuclei were stained blue with DAPI; pro Caspase 3 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m. Permeabilization: Triton.



Flow cytometric analysis of pro Caspase 3 expression in HT-1080 cells using pro Caspase 3 antibody (R020323,1:2,000). Green, isotype control; red, pro Caspase 3.