

Product datasheet for **TA300422**

Caspase 3 (CASP3) Rabbit Monoclonal Antibody [Clone ID: E83-103]

Product data:

Product Type:	Primary Antibodies
Clone Name:	E83-103
Applications:	FC, IF, IHC, WB
Recommended Dilution:	ICC/IF: Use a concentration of 5 ug/ml; WB: 1:10000; IHC-P: Use at an assay dependent dilution; IP: 1:100; FC: 1:50; ICC: 1:250
Reactivity:	Mouse, Human (Does not react with: Rat)
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide corresponding to residues following Ser29 of human caspase-3 (N-terminus of p17 subunit) was used as immunogen. This antibody only detects pro-form (35kD) of caspase-3, and does not recognize any cleaved caspases.
Formulation:	PBS 49%,Sodium azide 0.01%,Glycerol 50%,BSA 0.05%
Purification:	Protein A purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	31 kDa
Gene Name:	caspase 3
Database Link:	NP_116786 Entrez Gene 12367 Mouse Entrez Gene 25402 Rat Entrez Gene 836 Human P42574



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Background:

Caspases are a family of cytosolic aspartate-specific cysteine proteases involved in the initiation and execution of apoptosis. Caspase-3 (apopain, SCA-1, Yama and CPP32) is a member of the apoptosis execution functional group of caspases, and is either partially or totally responsible for the proteolytic cleavage of many key proteins during apoptosis, such as poly (ADP-ribose) polymerase (PARP) (1,2,3). Caspase-3 is a cytosolic protein found in cells as an inactive 32 kDa proenzyme. It is activated by proteolytic cleavage into two active subunits only when cells undergo apoptosis (3).

Synonyms:

CPP32; CPP32B; SCA-1

Note:

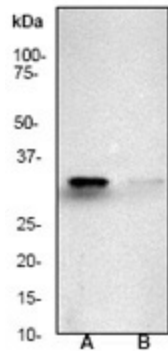
Does not react with Rat

Protein Families:

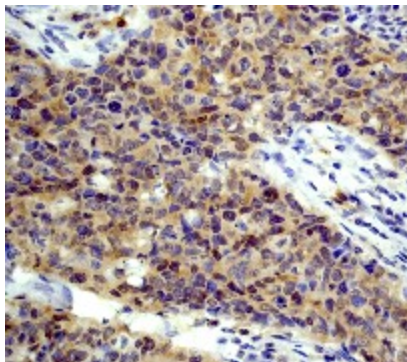
Druggable Genome, ES Cell Differentiation/IPS, Protease

Protein Pathways:

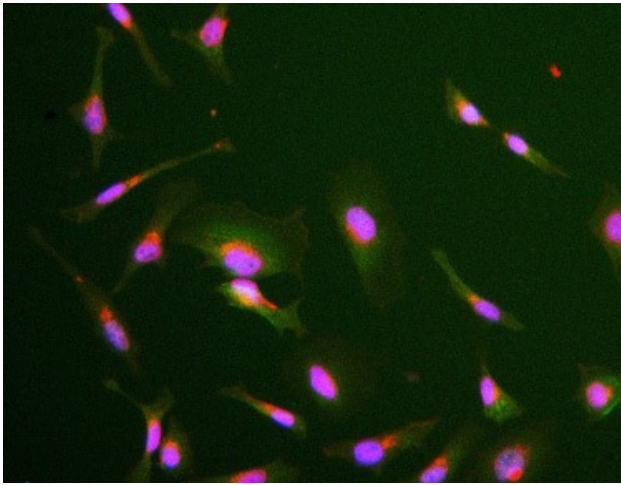
Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Colorectal cancer, Epithelial cell signaling in Helicobacter pylori infection, Huntington's disease, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, p53 signaling pathway, Parkinson's disease, Pathways in cancer, Viral myocarditis

Product images:


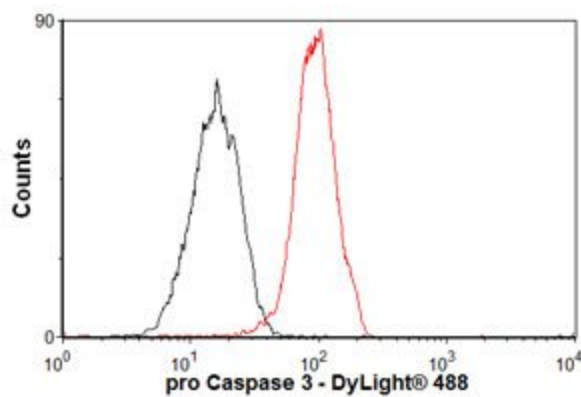
Western blot - pro Caspase 3 antibody [Y83-103]; All lanes : Anti-pro Caspase 3 antibody [E83-103] at 1/10000 dilution. Lane 1 : Jurkat cell lysate. Lane 2 : Jurkat cell lysate + Camptothecin. Predicted band size : 31 kDa. Observed band size : 35 kDa.



Immunohistochemistry (Paraffin-embedded sections) - pro Caspase 3 antibody [Y83-103]; Immunohistochemical analysis of paraffin-embedded human colon adenocarcinoma TA300422 at 1/250 dilution.



ICC/IF image of TA300422 stained HeLa cells. The cells were incubated with the antibody overnight at 4. The secondary antibody (green) was, DyLight 488 goat anti-rabbit IgG (H+L) used at 1:250. for 1h. Alexa Fluor 594 WGA was used to label plasma membranes (red) at 1:200 for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43uM.



Flow Cytometry-Anti-pro Caspase 3 antibody (TA300422); Overlay histogram showing Jurkat cells stained with TA300422 (red line). The secondary antibody used was DyLight 488 goat anti-rabbit IgG (H+L) at 1:500. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1ug/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.