



Anti-CASP3 monoclonal antibody, clone F94-214 (DCABH-8571)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Rabbit monoclonal to pro Caspase 3
Antigen Description	Caspases are a family of cysteine proteases that are key mediators of programmed cell death or apoptosis. The precursor form of all caspases is composed of a prodomain, and large and small catalytic subunits. The active forms of caspases are generated by several stimuli including ligand-receptor interactions, growth factor deprivation and inhibitors of cellular functions. All known caspases require cleavage adjacent to aspartates to liberate one large and one small subunit, which associate into a2b2 tetramer to form the active enzyme. Gene for Caspase 3 also known as Yama, CPP32, and apopain codes for a 32-kDa protein. Caspase 3 cleaves the death substrate poly(ADP-ribose) polymerase (PARP) to a specific 85 kDa form observed during apoptosis and is inhibitable by the CrmA protein. Other Caspase 3 substrates include DNA-PK, actin, GAS2, and procaspase-6, etc. Caspase 3 is activated by cleavage events at Asp-28/Ser-29 (between N-terminal pro-domain) and Asp-175/Ser-176 (between large and small subunits) to generate a large subunit of 17-kDa and a small subunit of 12-kDa.
Specificity	This antibody only detects pro-form (35kD) of caspase 3, and does not recognize any cleaved caspases.
Immunogen	A synthetic peptide corresponding to residues following Ser29 of human caspase-3 (N-terminus of p17 subunit).
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Mouse, Human
Clone	F94-214
Conjugate	Unconjugated

Applications	ICC/IF, WB, IHC-P, IP, Flow Cyt, ICC
Positive Control	Jurkat cell lysate and human colon adenocarcinoma.
Format	Liquid
Size	100 µl
Buffer	PBS 49%,Sodium azide 0.01%,Glycerol 50%,BSA 0.05%
Storage	store at -20°C. Avoid freeze / thaw cycles.
Ship	Shipped at 4°C.

GENE INFORMATION

Gene Name	CASP3 caspase 3, apoptosis-related cysteine peptidase [Homo sapiens]
Official Symbol	CASP3
Synonyms	CASP3; caspase 3, apoptosis-related cysteine peptidase; caspase 3, apoptosis related cysteine protease; caspase-3; apopain; CPP32; CPP32B; Yama; CASP-3; CPP-32; procaspase3; protein Yama; PARP cleavage protease; cysteine protease CPP32; SREBP cleavage act
Entrez Gene ID	836
Protein Refseq	NP_004337
UniProt ID	P42574
Chromosome Location	4q34
Pathway	Activation of DNA fragmentation factor, organism-specific biosystem; Activation of caspases through apoptosome-mediated cleavage, organism-specific biosystem; Alpha6-Beta4 Integrin Signaling Pathway, organism-specific biosystem; Alzheimers disease, organism-specific biosystem; Alzheimers disease, conserved biosystem; Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem;
Function	aspartic-type endopeptidase activity; cyclin-dependent protein kinase inhibitor activity; cysteine-type endopeptidase activity; cysteine-type endopeptidase activity; peptidase activity; protein binding;