



Anti-CASP3 (aa 150-250) polyclonal antibody (DPABH-01435)

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

PRODUCT INFORMATION

Antigen Description	The caspase family of cysteine proteases play a key role in apoptosis. Caspase 3 is the most extensively studied apoptotic protein among caspase family members. Caspase 3 is synthesized as inactive pro enzyme that is processed in cells undergoing apoptosis by self proteolysis and/or cleavage by other upstream proteases (e.g. Caspases 8, 9 and 10). The processed form of Caspase 3 consists of large (17kDa) and small (12kDa) subunits which associate to form an active enzyme. Caspase 3 is cleaved at Asp28 Ser29 and Asp175 Ser176. The active Caspase 3 proteolytically cleaves and activates other caspases (e.g. Caspases 6, 7 and 9), as well as relevant targets in the cells (e.g. PARP and DFF). Alternative splicing of this gene results in two transcript variants which encode the same protein. In immunohistochemical studies Caspase 3 expression has been shown to be widespread but not present in all cell types (e.g. commonly reported in epithelial cells of skin, renal proximal tubules and collecting ducts). Differences in the level of Caspase 3 have been reported in cells of short lived nature (eg germinal centre B cells) and those that are long lived (eg mantle zone B cells). Caspase 3 is the predominant caspase involved in the cleavage of amyloid beta 4A precursor protein, which is associated with neuronal death in Alzheimers disease.
Specificity	DPABH-01435 has been batch tested in WB using recombinant active Caspase 3 only. Not all batches may detect endogenous active caspase 3 in WB. However, some customers have successfully used DPABH-01435 on endogenous lysates.
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 150 - 250 of Human active Caspase 3.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Mouse, Rat, Human, Pig, Xenopus laevis, Fruit fly, Indian Muntjac, Zebrafish, Rhesus monkey, Marmoset, Schmidtea mediterranea, Salvelinus alpinus

Purification	Immunogen affinity purified
Conjugate	Unconjugated
Applications	ICC/IF, IHC-P, IHC-Fr, Flow Cyt, ICC, IHC (PFA fixed), IHC-FoFr, WB, IHC - Wholemout
Format	Liquid
Size	100 µg
Buffer	pH: 7.40; Constituent: PBS
Preservative	Preservative: 0.02% Sodium azide
Storage	Store at 4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

GENE INFORMATION

Gene Name	CASP3 caspase 4, apoptosis-related cysteine peptidase [Homo sapiens]
Official Symbol	CASP3
Synonyms	CASP3; caspase 3, apoptosis-related cysteine peptidase; CPP32; SCA-1; CPP32B; caspase-3; CASP-3; CPP-32; apopain; procaspase3; protein Yama; PARP cleavage protease; cysteine protease CPP32; SREBP cleavage activity 1; caspase 3, apoptosis-related cysteine protease;
Entrez Gene ID	836
Protein Refseq	NP_004337.2
UniProt ID	P42574
Pathway	AGE/RAGE pathway; Activation of caspases through apoptosome-mediated cleavage; Alzheimers disease; Alzheimers Disease
Function	aspartic-type endopeptidase activity; cyclin-dependent protein serine/threonine kinase inhibitor activity; cysteine-type endopeptidase activity; cysteine-type endopeptidase activity