Revision 1

Store at -20C

#9752

Caspase-10 Antibody

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	63 to 66	Rabbit	#Q92851	843

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Caspase-10 Antibody detects endogenous levels of full length caspase-10 and its various isoforms. The antibody does not cross-react with other caspases.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding aspartic acid 219 of human caspase-10. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Caspase-10 is a DED (death effector domain)-containing caspase and functions as an initiator caspase in Fas/TNF induced apoptosis (1). Four isoforms of caspase-10 have been identified: caspase-10a (Mch4), caspase-10b (FLICE2), caspase-10c and caspase-10d. They have the same prodomain but different mature large and small subdomains (2-4). Upon death ligand-receptor binding, caspase-10 is coupled to the multimeric Fas/TNF receptor complex via DED/FADD adaptor interaction (1-4). This complex processes procaspase-10 into a large active fragment and a small fragment. Cleaved caspase-10 further processes other caspase members, including caspase-3 and caspase-7, to initiate a caspase cascade, leading to apoptosis (3-6).

Background References

1. Nunez, G. et al. (1998) *Oncogene* 17, 3237-3245.
2. Ng, P. W. et al. (1999) *J. Biol. Chem.* 274, 10301-10308.
3. Vincenz, C. and Dixit, V.M. (1997) *J. Biol. Chem.* 272, 6578-6583.
4. Fernandez-Alnemri, T. et al. (1996) *Proc. Natl. Acad. Sci. USA* 93, 7464-7469.
5. Srinivasula, S. M. et al. (1996) *Proc. Natl. Acad. Sci. USA* 93, 14486-14491.
6. Wang, J. et al. (1999) *Cell* 98, 47-58.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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Limited Uses

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