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Caspase-10 Antibody

Catalog # ASC10015

Product Information

Application	WB, E
Primary Accession	Q92851
Other Accession	AAD28402, 4731237
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	58951
Conjugate	Unconjugated
Application Notes	Caspase-10 antibody can be used for detection of caspase-10 by Western blot 1 □g/mL. A 59 kDa band can be detected.

Additional Information

Gene ID	843
Other Names	Caspase-10 Antibody: MCH4, Caspase-10, Apoptotic protease Mch-4, CASP-10, caspase 10, apoptosis-related cysteine peptidase
Target/Specificity	CASP10; Antibody only recognizes FLICE2 form of caspase-10.
Reconstitution & Storage	Caspase-10 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Caspase-10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CASP10
Synonyms	MCH4
Function	Involved in the activation cascade of caspases responsible for apoptosis execution. Recruited to both Fas- and TNFR-1 receptors in a FADD dependent manner. May participate in the granzyme B apoptotic pathways. Cleaves and activates effector caspases CASP3, CASP4, CASP6, CASP7, CASP8 and CASP9. Hydrolyzes the small- molecule substrates, Tyr- Val-Ala-Asp-|-AMC and Asp-Glu-Val-Asp-|-AMC.
Tissue Location	Detectable in most tissues. Lowest expression is seen in brain, kidney, prostate, testis and colon

Background

Caspase-10 Antibody: Apoptosis is related to many diseases and induced by a family of cell death receptors and their ligands. Cell death signals are transduced by death domain (DD)- containing adapter molecules and members of the ICE/CED-3 protease family. A novel ICE/CED-3 protease was identified recently, designated FLICE2 and Mch4 and renamed as caspase-10. Caspase-10 has two death effector domains (DEDs) that bind to the DED in the adapter molecule FADD and recruits both TNFR1 and CD95 to form complexes with these receptors. Caspase-10 is therefore involved in the CD95 and TNFR1 induced apoptosis. Caspase-10 cleaves and activates caspase-3, -4, -6, -7, -8 and -9, which causes the proteolytic cleavage of many key proteins such as PARP. Cleavage of PARP occurs in many different systems during apoptosis and is the hallmark of programmed cell death. Caspase-10 is expressed in many tissues and cell lines.

References

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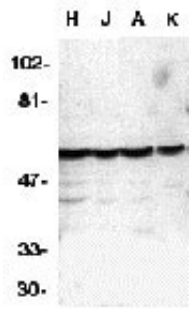
Fernandes-Alnemri T, Armstrong RC, Krebs J, Srinivasula SM, Wang L Bullrich F, Fritz LC, Trapani JA, Tomaselli KJ, Litwack G, Alnemri ES. In vitro activation of CPP32 and Mch3 by Mch4, a novel human apoptotic cysteine protease containing two FADD-like domains. Proc. Natl. Acad. Sci. USA. 1996;93:7464-7469
Cohen GM. Caspases: the executioners of apoptosis. Biochem J 1997;326:1-16 (RD1299)

Images



Western blot analysis of caspase-10 in HeLa (H), Jurkat (J), A431 (A), K562 (K) whole cell lysates with Caspase-10 antibody at 1 µg/mL.