Technical Data Sheet

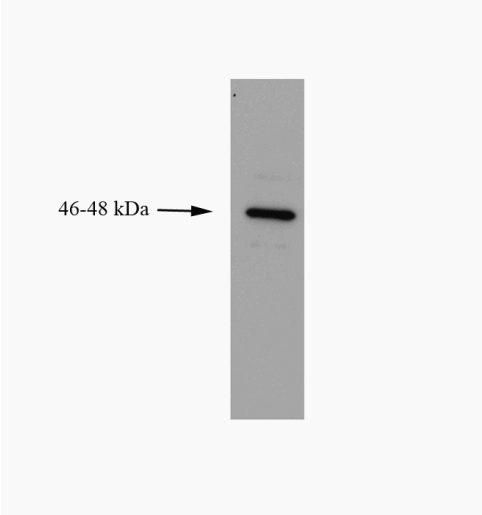
Purified Mouse Anti-Human Caspase-9

Product Information

Material Number:	**556510**
Alternate Name:	ICE-LAP-6, Mch6, Apaf-3
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	B40
Immunogen:	Human Caspase-9 aa. 364-405 Recombinant Protein
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Target MW:	46-48 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Caspase 9 (ICE-LAP6, Mch-6, Apaf-3) is a member of a family of cysteine proteases which play a critical role in the induction of programmed cell death. Members of this family have been grouped according to sequence homology as being either ICE-like proteases (caspases 1, 4 and 5) or Ced-3- like proteases (caspases 3, 6, 7, 9 and 10a). Caspase-9 is produced as a 48 kD precursor (procaspase-9) which contains an N-terminal prodomain with high homology to caspase-2. Procaspase-9 may be processed into subunits which heterodimerize to form the active enzyme. Activation of caspase-9 occurs in the presence of cytochrome c (Apaf-2), following an interaction between caspase-9 and Apaf-1. Activation may also be triggered directly by the cytotoxic T-cell protease, granzyme B. Active caspase-9 cleaves and thus activates caspase-3 and is also a relevant target of active caspase-3. Caspase- 9 can also cleave the nuclear protein PARP. Northern blot analysis suggests that high expression of caspase-9 is found in the heart, testis and ovary.



Western blot analysis for caspase-9. *A K-562 cell lysate (Human bone marrow myelogenous leukemia; ATCC CCL-243) was probed with 2 µg/mL of the Mouse Anti-Human Caspase-9 antibody. Caspase-9 may be identified at ~ 46-48 kDa.*

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Western blot	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
611550	K-562 Cell Lysate	500 µg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.

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2. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Cohen GM. Caspases: the executioners of apoptosis. *Biochem J.* 1997; 326(1):1-16. (Biology)

Duan H, Chinnaiyan AM, Hudson PL, Wing JP, He WW, Dixit VM. ICE-LAP3, a novel mammalian homologue of the Caenorhabditis elegans cell death protein Ced-3 is activated during Fas- and tumor necrosis factor-induced apoptosis. *J Biol Chem.* 1996; 271(3):1621-1625. (Biology: Activation)

Li P, Nijhawan D, Budihardjo I, et al. Cytochrome c and dATP-dependent formation of Apaf-1/caspase-9 complex initiates an apoptotic protease cascade. *Cell.* 1997; 91(4):479-489. (Biology: Activation)

Srinivasula SM, Fernandes-Alnemri T, et al. The Ced-3/interleukin 1beta converting enzyme-like homolog Mch6 and the lamin-cleaving enzyme Mch2alpha are substrates for the apoptotic mediator CPP32. *J Biol Chem.* 1996; 271(43):27099-27106. (Biology)