

Caspase 9 / LAP6 Ab-4

Rabbit Polyclonal Antibody

Cat. #RB-1205-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 1.0mg/ml) (Purified Ab with BSA and Azide)

Cat. #RB-1205-P1ABX or -PABX (0.5ml or 1.0ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #RB-1205-B0, -B1, or -B (0.1ml, 0.5ml, or 1.0ml at 1.0mg/ml) (Biotin-labeled Ab with BSA and Azide)

Cat. #RB-1205-PCS (5 Slides) (Positive Control for Histology)

Cat. #RB-1205-PCL (0.1ml) (Positive Control for Western Blot)

Description: Activation of procaspase-9 by Apaf-1 in the cytochrome c/dATP-dependent pathway requires proteolytic cleavage to generate the mature caspase molecule. Deletion of the Apaf-1 WD-40 repeats makes Apaf-1 constitutively active and capable of processing procaspase-9 independent of cytochrome c and dATP. Apaf-1-mediated processing of procaspase-9 occurs at Asp-315 by an intrinsic autocatalytic activity of procaspase-9 itself. Apaf-1 can form oligomers and may facilitate procaspase-9 autoactivation by oligomerizing its precursor molecules. Once activated, caspase-9 can initiate a caspase cascade involving the downstream executioners caspase-3, -6, and -7.

Mol. Wt. of Antigen: 46-48kDa

Epitope: aa 1-134

Species Reactivity: Human, Mouse, Rat, Cow, Sheep. Others-not tested.

Immunogen: Recombinant protein encoding aa 1-134 of human caspase 9.

Applications and Suggested Dilutions:

- Western Blotting (Ab 2.5-5µg/ml for 2hrs at RT)
- Immunoprecipitation (Denatured verified) (Use Protein A) (Ab 10µg/mg protein lysate)
- Immunohistology (Formalin/paraffin) (Ab 5-10µg/ml for 30 min at RT; Ab-2 is better)
- * [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 10mM citrate buffer, pH 6.0, (**NEOMARKERS'** Cat. #AP-9003), for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Jurkat cells. Tonsil.

Cellular Localization: Cytoplasmic

Supplied As:

Total IgG purified from rabbit anti-serum by Protein A chromatography. Prepared at 1mg/ml in 10mM

PBS, pH 7.4, with 0.2% BSA & 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Suggested References:

1. Li P, et al. Cell 1997, 91(4):479-89.
2. Hakem R, et al. Cell 1998, 94(3):339-52.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only



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Additional Suggested References:

1. Proc Natl Acad Sci U S A 1998 Apr 14;95(8):4386-91 Bcl-XL interacts with Apaf-1 and inhibits Apaf-1-dependent caspase-9 activation. Hu Y, Benedict MA, Wu D, Inohara N, Nunez G
2. Cell 1998 Aug 7;94(3):325-37. Reduced apoptosis and cytochrome c-mediated caspase activation in mice lacking caspase 9. Kuida K, Haydar TF, Kuan CY, Gu Y, Taya C, Karasuyama H, Su MS, Rakic P, Flavell RA
3. FEBS Lett 1998 Apr 10;426(1):151-4. Activation of caspases triggered by cytochrome c in vitro. Pan G, Humke EW, Dixit VM
4. J Biol Chem 1998 Mar 6;273(10):5841-5. Caspase-9, Bcl-XL, and Apaf-1 form a ternary complex. Pan G, O'Rourke K, Dixit VM
5. FEBS Lett 1998 Feb 27;423(3):275-80. Cytochrome c in the apoptotic and antioxidant cascades. Skulachev VP
6. Mol Cell 1998 Jun;1(7):949-57. Autoactivation of procaspase-9 by Apaf-1-mediated oligomerization. Srinivasula SM, Ahmad M, Fernandes-Alnemri T, Alnemri ES
7. Toxicol Lett 1998 Dec 28;102-103:121-9. Release of mitochondrial cytochrome c is upstream of caspase activation in chemical-induced apoptosis in human monocytic tumour cells. Zhuang J, Cohen GM
8. Cancer Res 1999 Mar 1;59(5):999-1002. Identification of an endogenous dominant-negative short isoform of caspase-9 that can regulate apoptosis. Srinivasula SM, Ahmad M, Guo Y, Zhan Y, Lazebnik Y, Fernandes-Alnemri T, Alnemri ES
9. J Biol Chem 1999 Mar 26;274(13):8359-62. Caspase-9 can be activated without proteolytic processing. Stennicke HR, Deveraux QL, Humke EW, Reed JC, Dixit VM, Salvesen GS

