

Polyclonal Antibody to Smac/DIABLO



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Polyclonal Antibody to Smac/DIABLO

Catalog No : IMG-248A
Formulation : 100 µg in 200 µl PBS containing 0.02% sodium azide. Sodium azide is highly toxic.
Isotype : Rabbit Ig
Clone : N/A
Purification : Protein G Chromatography
Species React : Human
Host : Rabbit

Application
Western blot analysis: 0.5-2 µg/ml
IHC (paraffin): please Ren et al., 2006 for details.
Confocal Microscopy:
Storage
Store at 4°C for six months. For long term storage, store at -20°C.

Recommended Positive Control: HeLa

Background

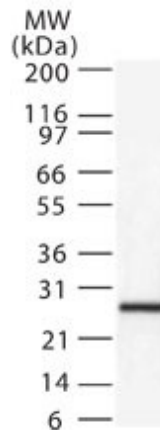
Recently, three different laboratories have identified a molecule, Smac/DIABLO, which binds with inhibitor of apoptosis proteins (IAPs) and neutralizes IAP inhibition of effector caspases. Multiple IAP molecules, including c-IAP1, c-IAP2, XIAP, and survivin are able to bind Smac. Smac/DIABLO is a mitochondrial protein, which is released into cytosol during apoptosis. The function of Smac is similar to that of *Drosophila* apoptosis activating proteins Reaper, Hid and Grim, which have been proposed to function by neutralizing the activity of IAPs. Smac promotes caspase-3 and caspase-9 activation by removing inhibitors rather than directly acting on Apaf-1, procaspases, and cytochrome c. The full-length cDNA of Smac encodes an open reading frame of 239 amino acids, predicting a protein with a molecular weight of 27 kDa. However, the mature protein purified from HeLa cells is only about 25 kDa (3).

Antigen

This rabbit polyclonal antibody was developed against two synthetic peptides corresponding to amino acids 199 to 212 and amino acids 226 to 239 of human Smac (Genbank accession no. AAF87716).

Genebank Info (Protein)

NP_620308



Western blot analysis of Smac/DIABLO in HeLa cell lysate.

Related Products

- 20301 [Goat Anti-Rabbit HRP Conjugate]
- IMG-5142A [Polyclonal Antibody to beta Actin]
- IMG-5143A [Polyclonal Antibody to GAPDH]
- 40161 [HeLa cell line lysate (cervical carcinoma)]

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- Srinivasula SM, et al. Molecular determinants of the Caspase-promoting activity of Smac/DIABLO and its role in the death receptor pathway. *J. Biol. Chem.* Aug 18 [epub ahead of print] (2000).

Product Citations

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- 3. Immunohistochemical analysis of Smac/DIABLO expression in human carcinomas and sarcomas.** Nam Jin Yoo, et al. *Apmis (Acta Pathologica, Microbiologica et Immunologica Scandinavica)* Volume 111 (3): 382 (2003).
- 4. SMAC Negatively Regulates the Anti-apoptotic Activity of Melanoma Inhibitor of Apoptosis (ML-IAP).** Domagoj Vucic, Kurt Deshayes, Heidi Ackerly, Maria Teresa Pisabarro, Saloumeh Kadkhodayan, Wayne J. Fairbrother, and Vishva M. Dixit. *J. Biol. Chem.*, 277: 12275-12279 (2002).
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