

Catalog # ALS14547

DIABLO / SMAC Antibody (aa199-212) Rabbit Polyclonal Antibody

Specification

DIABLO / SMAC Antibody (aa199-212) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB <u>O9NR28</u> Human Rabbit Polyclonal 27kDa KDa

DIABLO / SMAC Antibody (aa199-212) - Additional Information

Gene ID 56616

Other Names Diablo homolog, mitochondrial, Direct IAP-binding protein with low pl, Second mitochondria-derived activator of caspase, Smac, DIABLO, SMAC

Target/Specificity

Two synthetic peptides corresponding to amino acids 199 to 212 and amino acids 226 to 239 of human Smac (Genbank accession no. AAF87716).

Reconstitution & Storage

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

Precautions DIABLO / SMAC Antibody (aa199-212) is for research use only and not for use in diagnostic or therapeutic procedures.

DIABLO / SMAC Antibody (aa199-212) - Protein Information

Name DIABLO (<u>HGNC:21528</u>)

Function

Promotes apoptosis by activating caspases in the cytochrome c/Apaf-1/caspase-9 pathway. Acts by opposing the inhibitory activity of inhibitor of apoptosis proteins (IAP). Inhibits the activity of BIRC6/bruce by inhibiting its binding to caspases.

Cellular Location

Mitochondrion. Cytoplasm, cytosol Note=Released into the cytosol in a PARL-dependent manner when cells undergo apoptosis.

Tissue Location

Ubiquitously expressed with highest expression in testis. Expression is also high in heart, liver, kidney, spleen, prostate and ovary. Low in brain, lung, thymus and peripheral blood leukocytes.



Isoform 3 is ubiquitously expressed

DIABLO / SMAC Antibody (aa199-212) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

DIABLO / SMAC Antibody (aa199-212) - Images

MW (kDa) 200 — 116 — 97 — 66 — 55 — 36 — 31 — 21 — 14 — 6 —

Western blot of Smac/DIABLO in HeLa cell lysate.

DIABLO / SMAC Antibody (aa199-212) - Background

Promotes apoptosis by activating caspases in the cytochrome c/Apaf-1/caspase-9 pathway. Acts by opposing the inhibitory activity of inhibitor of apoptosis proteins (IAP). Inhibits the activity of BIRC6/bruce by inhibiting its binding to caspases. Isoform 3 attenuates the stability and apoptosis-inhibiting activity of XIAP/BIRC4 by promoting XIAP/BIRC4 ubiquitination and degradation through the ubiquitin-proteasome pathway. Isoform 3 also disrupts XIAP/BIRC4 interacting with processed caspase-9 and promotes caspase-3 activation. Isoform 1 is defective in the capacity to down-regulate the XIAP/BIRC4 abundance.

DIABLO / SMAC Antibody (aa199-212) - References

Du C.,et al.Cell 102:33-42(2000). Srinivasula S.M.,et al.J. Biol. Chem. 275:36152-36157(2000). Fu J.,et al.J. Biol. Chem. 278:52660-52672(2003). Ota T.,et al.Nat. Genet. 36:40-45(2004). Scherer S.E.,et al.Nature 440:346-351(2006).