

# **DIABLO / SMAC Antibody (clone 79-1-83)**

Mouse Monoclonal Antibody Catalog # ALS12892

# **Specification**

## DIABLO / SMAC Antibody (clone 79-1-83) - Product Information

Application IHC
Primary Accession O9NR28

Reactivity Human, Monkey

Host Mouse
Clonality Monoclonal
Calculated MW 27kDa KDa

# DIABLO / SMAC Antibody (clone 79-1-83) - 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

Human and monkey Smac/DIABLO.

## **Reconstitution & Storage**

Store at -20°C.

### **Precautions**

DIABLO / SMAC Antibody (clone 79-1-83) is for research use only and not for use in diagnostic or therapeutic procedures.

# DIABLO / SMAC Antibody (clone 79-1-83) - Protein Information

# Name DIABLO (HGNC:21528)

### **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

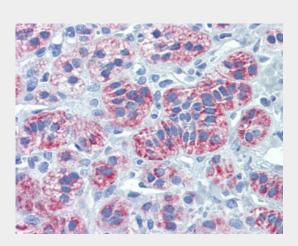


# DIABLO / SMAC Antibody (clone 79-1-83) - Protocols

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

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

# DIABLO / SMAC Antibody (clone 79-1-83) - Images



Anti-DIABLO / SMAC antibody IHC of human adrenal.

# DIABLO / SMAC Antibody (clone 79-1-83) - 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 (clone 79-1-83) - 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).