



PRODUCT DATA SHEET

Product: Anti-Smac/DIABLO, clone 10G7

Cat. No.: MC-279 (100 µg)

Background:

A novel protein, Smac/DIABLO has been identified, which promotes apoptosis by removing MIHA/XIAP from processed caspase-9 in the cytochrome c/Apaf-1/caspase-9 pathway. Smac/DIABLO promotes caspase-9 activation by binding to inhibitor of apoptosis proteins (IAPs), and removing their inhibitory activity. Smac/DIABLO is normally a mitochondrial protein but is released into the cytosol when cells undergo apoptosis. Mitochondrial import and cleavage of its signal peptide are required for Smac/DIABLO to gain its apoptotic activity, which is supported by structural evidence. Overexpression of Smac/DIABLO increases the sensitivity of cells to apoptotic stimuli. Smac/DIABLO is the second mitochondrial protein described, along with cytochrome c, that promotes apoptosis by activating caspases. Smac/DIABLO is the first mammalian protein to be identified that directly inhibits IAP function.

Specificity:

This antibody detects a 29 kDa band (full length) and 23 kDa band (mature form) by Western blotting.

Species Reactivity:

Human and mouse (weakly). Others not tested.

Ig Isotype:

Rat IgG_{2a}

Format:

100 µg of Protein G purified antibody in PBS containing 0.02% sodium azide. Purity >95% by SDS-PAGE. Concentration: 1 mg/mL.

Storage:

Store at 4°C short term. For long term, store at -20°C. Avoid multiple freeze/thaws.

Applications:

- Immunocytochemistry
- Immunoprecipitation
- Western blot
- ELISA
- Flow cytometry

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

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.