

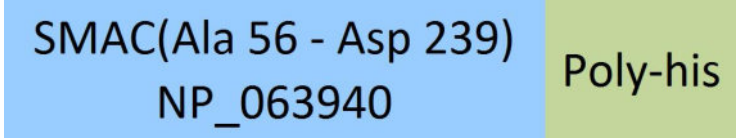
Synonym

DIABLO,SMAC

Source

Human SMAC, His Tag (DIO-H5129) is expressed from E.coli cells. It contains AA Ala 56 - Asp 239 (Accession # NP_063940).

Predicted N-terminus: Met

Molecular Characterization


This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 21.7 kDa. The protein migrates as 22 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 20 mM HEPES, 150 mM NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

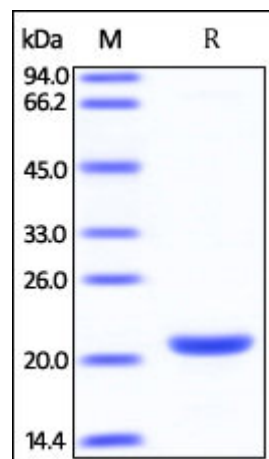
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human SMAC, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Diablo homolog, mitochondrial (DIABLO) is also known as direct IAP-binding protein with low pI and second mitochondria-derived activator of caspase (SMAC), which can interact with BIRC2/c-IAP1, BIRC3/c-IAP2, XIAP/BIRC4, BIRC6/bruce and BIRC7/livin. Acting by opposing the inhibitory activity of inhibitor of apoptosis proteins (IAP),DIABLO can also promote apoptosis by activating caspases in the cytochrome c/Apaf-1/caspase-9 pathway. Also, DIABLO inhibits the activity of BIRC6/bruce by inhibiting its binding to caspases. Furthermore, DIABLO is defective in the capacity to down-regulate the XIAP/BIRC4 abundance.

References

- (1) [Du C., et al., 2000, Cell 102:33-42.](#)
- (2) [Fu J., et al., 2003, J. Biol. Chem. 278:52660-52672.](#)
- (3) [Ma L., et al., 2006, Cell Death Differ. 13:2079-2088.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.