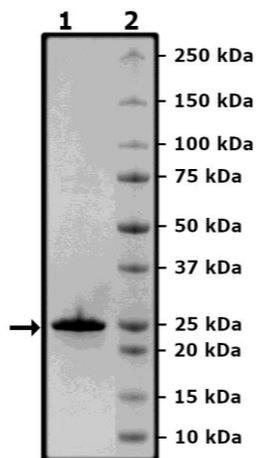


Product Information

| | |
|------------------------------|---|
| Description: | Recombinant human Diablo (direct IAP binding protein with low pI), transcript 1, encompassing amino acids 56-239(end). This construct contains a C-terminal His-tag (6xHis). This protein was affinity purified. |
| Background: | Diablo (direct IAP binding protein with low pI), also named SMAC (second mitochondria-derived activator of caspases), is a ubiquitously expressed mitochondrial protein involved in apoptosis. Under normal conditions this protein is found in the intermembrane space of the mitochondria. However, when a cell undergoes apoptosis, the mitochondrial membrane becomes porous and Diablo moves the cytosol. Once in the cytosol it can bind and inhibit IAPs (inhibitor of apoptosis protein) proteins, allowing caspase activation. This protein has been linked to cancer, and overexpression of Diablo may sensitize cancer cells to apoptosis. The use of Diablo mimetics, alone or in combination with other therapeutical approaches, is a promising cancer therapy. |
| Species: | Human |
| Construct: | Diablo (56-239(end)-His) |
| Concentration: | 2.14 mg/ml |
| Expression System: | <i>E. coli</i> |
| Purity: | ≥90% |
| Format: | Aqueous buffer solution. |
| Formulated In: | 40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 20% glycerol, and 300 mM Imidazole |
| MW: | 22 kDa |
| Genbank Accession: | NM_019887.6 |
| Stability: | At least 6 months at -80°C. |
| Storage: | -80°C |
| Instructions for Use: | Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles. |
| Assay Conditions: | A neutravidin coated plate was coated with 7 ng/well of SMAC/Diablo Peptide [AVPIAQKSE], Biotin-Labeled (InnoPep #1261-010) overnight. After washing and blocking, 25 ng/well of 8.75 nM XIAP, FLAG-Tag Recombinant (BPS Bioscience #80401) and varying concentrations of Diablo were added to the wells and incubated for 1 hour. Binding between XIAP and SMAC Peptide in the presence of increasing concentrations of Diablo was detected by incubation with 1:1000 dilution of DYKDDDDK Epitope Tag Antibody (FG4R) (Novus Biologicals #NBP2-37823) for 45 minutes, followed by 1:5000 dilution of HRP-Secondary Antibody 1 (Mouse) for 30 minutes. |
| Applications: | Useful for binding assays with XIAP. |

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



XIAP:SMAC Peptide Binding Assay

