

**Description**

The Smac/Diablo Peptide (56-64), Biotin is a biotin-labeled peptide corresponding to Smac/Diablo, amino acids 56-64.

**Background**

The XIAP (X-linked inhibitor of apoptosis protein), also known as IAP3 or BIRCA4) protein is a RING-containing E3 Ub ligase which can directly regulate caspases and suppress apoptotic cell death pathways. It is considered the most potent member of the IAP family of proteins. It is composed of three BIR (baculovirus IAP Repeat) domains, a UBA and RING domain. It inhibits caspases 3, 7, and 9 by binding them to them and targeting them for proteasome degradation via ubiquitination. XIAP can be inhibited by the mitochondrial protein Diablo, also known as Smac (second mitochondrial derived activator of caspases). Diablo is released from the mitochondrial inner membrane space in a caspase-dependent mode, hours after an apoptotic stimulus. An increased expression level of XIAP has been observed in many cancer types and is associated with cancer cell migration by evasion of apoptosis, while mutations in this protein can result in inflammatory bowel disease or X-linked lymphoproliferative disease type 2. The development of Diablo mimetics has been an active area of research, and the use of these molecules alone or in combinatory therapy may prove beneficial in cancer therapy.

**Sequence**

AVPIAQKSE-(Biotin)

**Species**

Human

**Supplied As**

10 µg peptide, lyophilized

**Stability**

At least one year at -80°C.

**Storage**

Upon first thaw, aliquot and store at -80°C. Avoid repeated freeze-thaw cycles.

**Application**

Competition studies of binding of full-length Diablo to XIAP

**Related Products**

<i>Products</i>	<i>Catalog #</i>	<i>Size</i>
Diablo:XIAP Inhibitor Screening Assay Kit	82516	96 reactions
Diablo, His-Tag Recombinant	101118	100 µg

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