**Catalog No. LF-PA0045**

POLYCLONAL ANTIBODY

# Anti-Smac/Diablo
## (Anti-Second mitochondria–derived activator )

**Background :** The mitochondrial protein Smac/DIABLO(second mitochondria-derived activator) performs a critical function in apoptosis by eliminating the inhibitory effect of IAPs (inhibitor of apoptosis proteins) on caspases. The newly synthesized Smac protein contains 239 amino acids. Its N-terminal 55 residues encode the mitochondrial-targeting sequence and are proteolytically removed in the mature Smac protein. In the intrinsic cell death pathway, the key event leading to the activation of caspases is the release of several pro-apoptotic proteins such as Smac/DIABLO from the intermembrane space of mitochondria into the cytosol. During apoptosis, Smac is released from mitochondria and re-activates the processed initiator and effector caspases by relieving IAP-mediated inhibition. Furthermore, Smac/DIABLO plays an important regulatory role in the sensitization of cancer cells to both immune-and drug-induced apoptosis.

**Immunogen :** Synthetic peptide

**Host :** Rabbit

**Type :** Purified

**Isotype :** IgG

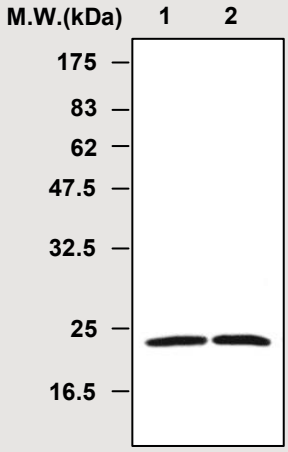
**Size :** 100μℓ

**Compositon :** PBS containing 50% glycerol

**Positive control :** HeLa cell lysate

**Storage :** Store for 1 year at –20℃ from date of shipment

| Species cross reactivity | | |
|---|---|---|
| **Human** | **Mouse** | **Rat** |
| + | - | - |




**Immunoblot Analysis** of cell lysates
Lane 1 : HeLa cell lysate
Lane 2 : K562 cell lysate

**Applications :**
Western blotting (1:1,000~2,000)
Immunoprecipitation was not tested

**Background Reference :**
1) Noma K. et al, (2006) Am J Physiol Cell Physiol. vol.290(3): pp.C661-8
2) Sakabe M. et al, (2006) Dev Dyn. vol.235(1): pp.94-104



**Gentaur Molecular Products**
**Voortstraat 49**
**1910 Kampenhout, Belgium**
**http://www.gentaur-worldwide.com**