

Omi Antibody

Omi (CT): HtrA2, High temperature requirement protein A2

CATALOG No.: 3319

BACKGROUND:

Inhibitor of apoptosis proteins (IAPs) were initially identified in baculoviruses as proteins that inhibit apoptosis of the host cells to allow time for viral replication (1). Cellular homologues containing at least one baculoviral IAP repeat (BIR) motif essential for their anti-apoptosis activity have been identified in yeasts and higher organisms and often act by binding and inhibiting processed caspases (reviewed in 2). The activity of these proteins can be modulated by the expression of proteins such as Smac/DIABLO and XAF-1 which displace or prevent the binding of caspases by IAPs (reviewed in 3). Recently, a mitochondrial serine protease termed Omi/HtrA2 has been found to bind IAPs (4). Similar to Smac, Omi possesses a conserved IAP-binding motif, but acts to cleave IAPs to irreversibly inactivate IAPs and promote apoptosis (5).

SOURCE:

Rabbit polyclonal Omi antibody was raised against a peptide corresponding to 15 amino acids near the C-terminus of human Omi (GenBank accession no. AAB94569).

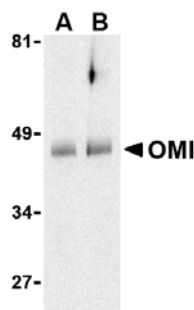
APPLICATION:

Omi antibody can be used for detection of Omi by Western blot at 0.5 to 1 µg/ml. (Optimal dilution should be determined by user.) Omi antibody is human specific.

For research use only.

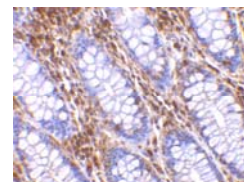
STORAGE:

Omi antibody is supplied as ion exchange chromatography purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year. Azide free antibody is available.



Western blot analysis of Omi in human colon tissue lysate with Omi antibody at (A) 0.5 and (B) 1 µg/ml.

Immunohistochemistry of Omi in human colon tissue with Omi antibody at 10 µg/ml.



RELATED PRODUCTS:

Blocking peptide, Catalog No. **3319P**.
Human Colon Lysate, Catalog No. **1320**.
Omi Antibody (C2), Catalog No. **3051**.
Smac Antibody (CT), Catalog No. **2409**.
XIAP Antibody (CT), Catalog No. **3331**.
XAF-1 Antibody (CT), Catalog No. **3207**.

REFERENCES:

1. Crook NE, Clem RJ, and Miller LK. An apoptosis inhibiting baculovirus gene with a zinc finger like motif. *J. Virol.* 1993; 67:2168-2174.
2. Liston P, Fong WG, and Korneluk RG. The inhibitors of apoptosis: there is more to life than Bcl2. *Oncogene* 2003; 22:8568-80.
3. Vaux DL and Silke J. Mammalian mitochondrial IAP binding proteins. *Biochem. Biophys. Res. Comm.* 2003; 304:499-504.
4. Suzuki Y, Imai Y, Nakayama H, et al. A serine protease, HtrA2, is released from the mitochondria and interacts with XIAP, inducing cell death. *Mol. Cell* 2001; 8:613-21.
5. Yang QH, Church-Hajduk R, Ren J, et al. Omi/HtrA2 catalytic cleavage of inhibitor of apoptosis (IAP) irreversibly inactivates IAPs and facilitates caspase activity in apoptosis. *Genes Dev.* 2003; 17:1487-96. (06-01D)