

Caspase-8 Monoclonal Antibody (5F7)

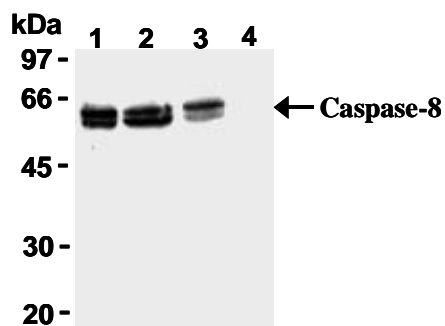
Product Specifications	
Catalog Number:	AAM-118
Host:	Mouse
Isotype:	IgG _{2b}
Species Reactivity:	Human
Applications:	WB⁶⁻⁸: 1 µg/mL (ECL) <i>The optimal dilution for a specific application must be determined by the investigator</i>
Predicted m.w.:	55-57 kDa
Concentration:	See product label
Purification:	Protein A Affinity
Format:	PBS, pH 7.2, 50% glycerol
Storage:	Store at -20°C <i>Shipping conditions may differ from the recommended storage temperature</i>
Immunogen:	Recombinant human Caspase-8 protein (carboxy-terminal fragment)
Related Products:	
LYC-HL100	HeLa Cell Lysate
905-686-100	Caspase-9 Monoclonal Antibody (10-1-87)
905-685-100	Caspase-2 Monoclonal Antibody (4-1-5)
AAP-149	Caspase-9 Polyclonal Antibody
AAP-113	Caspase-3 Polyclonal Antibody
AAM-149	Caspase-9 Monoclonal Antibody (2-22)
AAM-114	Caspase-4 Monoclonal Antibody (4B9)

Background:

Caspase-8/FADD-like ICE (FLICE), is an ~55 kDa cytosolic protein belonging to the Fas/APO-1/CD95 death-inducing signaling complex¹. Although researchers have defined eight different isoforms of caspase-8 at the mRNA level (8/a-h)², significant expression of only Caspase-8/a and /b occurs at the protein level in a variety of cell lines². Caspase-8 contains two death effector domains (DEDs) and exhibits sequence homology to both FADD, a signal transducer of Fas-induced apoptosis, and to the ICE/CED-3 family of cysteine proteases³. Caspase-8 binds to FADD through its amino terminal DEDs and induces apoptosis when overexpressed⁴. Activation of Caspase-8 involves a two-step proteolysis whereby the cleavage of Caspase-8 generates a 43 kDa fragment (p43) and a 12 kDa fragment further processed to 10 kDa⁴, then the cleavage of receptor-associated p43 yields p26 and the release of the active site containing p18⁴. A number of cytosolic factors inhibit the FADD-Caspase-8 containing signaling complex, including the ICE/CED-3 family inhibitor CrmA which inhibits Caspase-8 protease activity, and the short and long forms of FLIP that bind to the FADD-Caspase-8 complex⁵.

References:

1. Boldin, M.P., *et al.* (1996) *Cell* **85**, 803-815.
2. Scaffidi, C. *et al.* (1997) *Amer Soc Biochem Molec Biol.* **272**, 26953-26958.
3. Muzio, M., *et al.* (1996) *Cell* **85**, 817-827.
4. Medema, *et al.* (1997) *EMBO J.* **16**, 2794-2804.
5. Enari, M., Hug, H. and Nagata, S. (1995) *Nature* **375**, 78-81.
6. Eguchi, Y., *et al.* (1999) *Cancer Research* **59**, 2174-2181.
7. Imai, Y., *et al.* (1999) *Nature* **398**, 777-785.
8. Xerri, L., *et al.* (1999) *Brit J Haema.* **106**, 652-661.



Western blot analysis of Jurkat (1), Raji (2), HeLa (3) and WR19L (4) probed with Caspase-8 Monoclonal Antibody (5F7)