

Human Caspase-8 Antibody

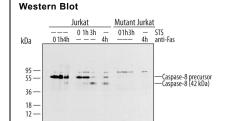
Monoclonal Mouse IgG_{2A} Clone # 84131 Catalog Number: MAB704

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human Caspase-8 precursor in Western blots and a 42 kDa doublet generated during apoptosis.
Source	Monoclonal Mouse IgG _{2A} Clone # 84131
Purification	Protein A or G purified from ascites
Immunogen	E. coli-derived recombinant human Caspase-8 aa 234-391
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below



Detection of Human Caspase-8 by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line untreated (-) or treated (+) with Human FAS Antigen Affinitypurified Polyclonal Antibody (Catalog # AF126) for indicated times. PVDF membrane was probed with 1 µg/mL of Human Caspase-8 Monoclonal Antibody (Catalog # MAB704), followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Specific bands were detected for Caspase-8 at approximately 55 and 42 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 4.

PREPARATION AND STORAGE		
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.	
	*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.	

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
 - 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution

 - 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Caspase-8 (Cysteine-aspartic acid protease 8/Casp8; also MCH5 and FLICA) is a 28 kDa member of the peptidase C14A family of enzymes. It is known as the initiating caspase for the apoptotic cascade. Caspase-8 acts on procaspases-3, 4, 6, 7, 9 and 10, in addition to c-FLIPL and procaspase-8 itself. Human procaspase-8α4 is a 58 kDa (predicted), 496 amino acid (aa) protein and contains two N-terminal death domains plus a catalytic site that utilizes His334Gly335 plus Cys377. Following death domain-containing receptor activation, proteolysis generates a 28 kDa heterodimer. This includes a p18 subunit (aa 234-391; or 217-374 of the 8a/standard form) noncovalently linked to a p10 subunit (aa 402-496; or 385-479 of the 8a/standard form). Association with another p18/p10 heterodimer generates active caspase-8. There are two common procaspase-8 isoform variants. One 53 kDa isoform (8b) shows a deletion of aa 103-134, while a second 55 kDa (8a) isoform shows a deletion of aa 103-134 with a 15 aa insertion after Lys183. The p18 and p10 subunits are 68% and 82% aa identical, human to mouse, respectively.

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