

DESCRIPTION

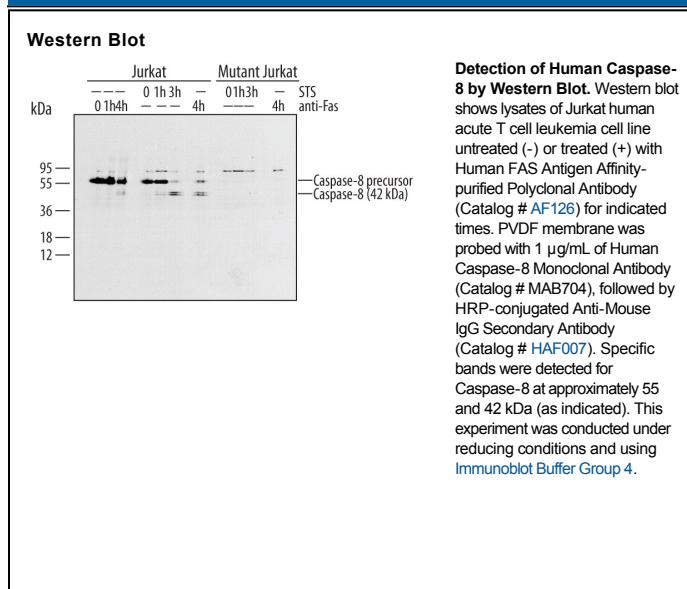
Species Reactivity	Human
Specificity	Detects human Caspase-8 precursor in Western blots and a 42 kDa doublet generated during apoptosis.
Source	Monoclonal Mouse IgG _{2A} Clone # 84131
Purification	Protein A or G purified from ascites
Immunogen	<i>E. coli</i> -derived recombinant human Caspase-8 aa 234-391
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 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

DATA



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. <ul style="list-style-type: none"> ● 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.