

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
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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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