



Rabbit polyclonal antibody to Human Caspase 6 (CASP-6;Mch-2), Affinity Purified

Catalogue No.: R-1705-100

Description: Caspases play several key roles in cellular growth and development, extracellular matrix remodeling, wound healing, homeostasis, and are implicated in a wide range of diseases from auto immune dysfunction to cancer metastases as well. Caspases are Cysteine Aspartate Proteases which form a family of metalloproteinases of which there are more than a dozen members. Caspases are all normally expressed in cells as inactive precursor zymogens that then get activated via proteolytic cleavage to form active enzyme complexes. Activation can occur by several means and programmed cell death, or apoptosis, is among the most studied, but there are several others since caspases are involved in so many critical and disease states. Among the 14 or so members, Caspase-6 is particularly interesting because it has been implicated in playing a role in some neurodegenerative diseases including Alzheimer's and Huntington's disease. Caspase-6 has been shown to cut amyloid precursor protein (APP), at position 720 leading to the toxic fragment Jcasp, which is one of the fragments found in amyloid plaques which are believed to be an indicator of the disease, and in Huntington's disease, the specific amino acid sequence (IVLD586G) is recognized by Caspase-6 on the Huntington protein (htt) in mice with Huntington's disease. The proteolytic cleavage of htt liberates toxic fragments containing the expanded polyglutamine tract that are neurotoxic and that stimulates additional proteolytic activity leading to apoptosis and neurodegeneration. Mutation of the Caspase-6 site in mice model with Alzheimer's and Huntington's disease provides protection from the neural dysfunction, suggesting a causal relationship between Caspase-6 cleavage and neurodegeneration. Biosensis is pleased to offer a rabbit polyclonal antibody to human Caspase 6 that reacts in paraffin embedded immunohistochemistry and western blotting for your continued research into Caspase 6 and its potential roles in both normal and pathological conditions.

Unit size: 100 ug

Antigen: A synthetic peptide corresponding to an amino acid sequence at the N-terminal of human Caspase 6 comprising amino acids 24-44 of human Caspase 6

Sequence: AFYKREMFDPAEKYKMDHRRR

Antigen Location: N-terminal p18 large subunit

Antigen Length: 21 amino acids

Antibody Type: rabbit polyclonal

Isotype: IgG

Other Names: caspase6; CASP6; CASP-6; Mch2; Apoptotic protease Mch-2

Accession: P55212 (CASP6_HUMAN)

Produced in: Rabbit

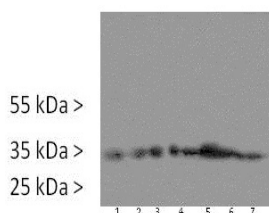
Molecular Weight: Multiple large subunit fragments recognized depending upon degree of activation. Fully cleaved large subunit is ~ 18-20kDa reduced, pre-cleaved proprotein is ~29kDa, full length uncleaved

FOR RESEARCH USE ONLY



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	parent is ~35kDa
Compound Name:	Caspase 6
Purity:	Affinity purified polyclonal IgG
Applications:	Western Blot: 0.1ug-0.5ug/mL cell lysates, ECL detection Immunohistochemistry, paraffin embedded: 0.8-2.0ug/mL with HEIR antigen recovery Immunohistochemistry, frozen sections: 0.5-1.0ug/mL PLP fixation recommended.
Specificity:	Human Caspase 6 protein, no reactivity to other human caspases
Species Against:	Human, other species not yet tested
Cross-reactivity:	Potential reactivity to mouse Caspase 6 based upon sequence homology but as yet untested.
Form:	Freeze-dried powder from liquid containing PBS, 5 mg BSA, 0.05mg Thimerosal and 0.05mg sodium azide.
Appearance:	dry powder
Reconstitution:	Reconstitute vial in 0.2 mL of sterile distilled water. This will produce a final concentration of 500 ug/mL of antibody.
Storage:	Store dry, unopened vial at -20C for one year; after reconstitution aliquot in to single use sizes and store at 2-8C for up to one month; store aliquots frozen at -70C for up to six months, protected from light and prevent multiple freeze thaw cycles.
Expiry Date:	1 year from date of purchase for unopened vial only.



Whole cell lysates of healthy cells probed with R-1705-100, anti-Caspase 6 polyclonal antibody. Lane 1-7; HEK231 ;A549; SMMC; MCF7; HeLa; JK; CEM cell lysates. Detecting full length pro-form of Caspase 6.

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