

Caspase-8/CASP8 subunit p18 Protein, Human (His)

Cat. No.:	HY-P71708
Synonyms:	ALPS2B; CASP-8; ICE-like apoptotic protease 5
Species:	Human
Source:	E. coli
Accession:	Q14790 (S217-D374)
Gene ID:	841
Molecular Weight:	Approximately 21.9 kDa

PROPERTIES

AA Sequence	<p>S E S Q T L D K V Y Q M K S K P R G Y C L I I N N H N F A K A R E K V P K L H S</p> <p>I R D R N G T H L D A G A L T T T F E E L H F E I K P H D D C T V E Q I Y E I L</p> <p>K I Y Q L M D H S N M D C F I C C I L S H G D K G I I Y G T D G Q E A P I Y E L</p> <p>T S Q F T G L K C P S L A G K P K V F F I Q A C Q G D N Y Q K G I P V E T D</p>
Biological Activity	Caspase-8/CASP8 subunit p18 Protein, Human (His) lacks of Caspase-8 enzyme activity because it contains only one subunit.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>Caspase-8/CASP8 subunit p18 Protein, a pivotal thiol protease, serves as a molecular switch orchestrating programmed cell death processes such as apoptosis, necroptosis, and pyroptosis. Essential for preventing tissue damage during embryonic development and adulthood, this initiator protease induces extrinsic apoptosis by cleaving and activating effector caspases, including CASP3, CASP4, CASP6, CASP7, CASP9, and CASP10. Acting as the initiator in death-inducing signaling complexes (DISC) formed in response to TNFRSF6/FAS or TNFRSF1A signals, it liberates the active dimeric enzyme, enabling downstream apoptotic protease activation. Additionally, Caspase-8 negatively regulates necroptosis by cleaving RIPK1 and functions as a regulator of pyroptosis, initiating the cleavage and activation of gasdermin-C and -D. This multifaceted</p>
-------------------	--

protease plays a role in innate immunity by cleaving and inactivating N4BP1 downstream of TLR3 or TLR4, promoting cytokine production. While lacking a catalytic site, Caspase-8 may interfere with the pro-apoptotic activity of the complex.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA