

Recombinant Protein Technical Manual Recombinant Human CASP7/caspase 7 Protein (His Tag) RPES2637

Product Data:

Product SKU: RPES2637

**Size:** 10µg

Species: Human

Expression host: E. coli

**Uniprot:** P55210

Protein Information:	
Molecular Mass:	35 kDa
AP Molecular Mass:	20 & 11 kDa
Tag:	C-His
Bio-activity:	
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin:	Please contact us for more information.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile 20mM HEPES, 100mM NaCl, 1mM EDTA, 0.10% Sucrose, 0.1% chaps, pH 7.5
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	CASP-7;CMH;ICE-LAP3;LICE2;MCH3

## Sequence: Met 1-Gln 303

## Background:

Caspase 7, also known as caspase-7 and MCH3, belongs to the cysteine-aspartic acid protease (caspase) family. Caspases play a role in the signal transduction pathways of apoptosis, necrosis and inflammation. There are two major classes of caspases: initiators and effectors. The initiator isoforms (caspases,-4,-5,-8,-9,0,1,2) are activated by, and interact with, upstream adaptor molecules through protein-protein interaction domains known as CARD and DED. Effector caspases (-3,-6,-7) are responsible for cleaving downstream substrates and are sometimes referred to as the executioner caspases. Caspase 7 exists in lung, skeletal muscle, liver, kidney, spleen and heart, and moderately in testis. Caspase 7 cannot be detected in the brain. Caspase 7 functions in the activation cascade of caspases responsible for apoptosis execution. It cleaves and activates sterol regulatory element binding proteins (SREBPs). It proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp- -Gly-217' bond. Overexpression promotes programmed cell death.