Recombinant CASP6 protein (His tag)

Catalog Number	547089
Synonyms	CASP-6; CSP-6; Apoptotic protease Mch-2; Caspase-6 subunit p20; Caspase-6 subunit p10
Species	Human
Expression System	E. coli
Accession	P55212
Molecular Weight	Predictes a molecular mass of 19.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	24-179
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 24-179 aa (P55212) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Caspase-6 Fragment (residues 24-179) is a high-purity protein product designed for structural and biochemical studies. This fragment encompasses a stable and soluble region of Caspase-6, an essential cysteine protease involved in apoptosis, innate immunity, and programmed cell death pathways. Ideal for researchers investigating caspase mechanisms, protein interactions, and viral-host interactions. Caspase-6 (CASP6) is a cysteine protease critical for multiple cellular processes, including programmed cell death (apoptosis, pyroptosis, and necroptosis), axonal degeneration, development, and innate immunity. It functions as a non-canonical executioner caspase in apoptosis by cleaving nuclear structural proteins like NUMA1 and lamin A, leading to nuclear fragmentation. Caspase-6 also regulates liver damage via BID cleavage, mediates defense against viruses by facilitating ZBP1-dependent PANoptosis, and processes transcription factors such as NF-kappa-B. Additionally, it plays a role in coronavirus replication by cleaving viral N proteins (e.g., MERS-CoV, SARS-CoV), modulating interferon signaling. The protein localizes to both the cytoplasm and nucleus, underscoring its diverse functional roles in cellular homeostasis and disease.