Recombinant CASPA protein (His tag)

Catalog Number	543319
Synonyms	CASP-10; Apoptotic protease Mch-4; FAS-associated death domain protein interleukin-1B-converting enzyme 2; FLICE2; ICE-like apoptotic protease 4
Species	Human
Expression System	E. coli
Accession	Q92851
Molecular Weight	Predictes a molecular mass of 16.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	276-400
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 276-400 aa (Q92851) 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 Caspase-10 (CASP-10) Fragment (residues 276-400) is a 125-amino acid protein derived from human Caspase-10, an essential apoptotic protease. This fragment is engineered for stability and solubility, making it ideal for structural studies, biochemical assays, and apoptosis-related research. Caspase-10 is a key initiator caspase in apoptosis, participating in activation cascades triggered by Fas and TNFR-1 receptors through FADD-dependent recruitment. It plays a role in granzyme B-mediated apoptotic pathways and cleaves effector caspases (CASP3, CASP4, CASP6, CASP7, CASP8, and CASP9) to execute cell death. The enzyme hydrolyzes substrates such as Tyr-Val-Ala-Asp-|-AMC and Asp-Glu-Val-Asp-|-AMC. Isoforms exhibit functional diversity, with isoform 7 enhancing NF-kappaB activity and isoform C being proteolytically inactive. The selected fragment (276-400) was computationally designed to provide a stable, soluble unit for detailed analysis, supporting investigations into caspase mechanisms and apoptosis regulation.