Recombinant UBB protein (His tag)

Catalog Number	539747
Species	Human
Expression System	E. coli
Accession	P0CG47
Molecular Weight	Predictes a molecular mass of 10.22 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	1-76
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-76 aa (P0CG47) 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 Polyubiquitin-B Fragment (residues 1-76) - a high-purity preparation containing the complete ubiquitin domain, ideal for investigating ubiquitin-mediated cellular processes including protein degradation, DNA repair, and cell signaling pathways. Ubiquitin functions as a critical post-translational modifier that exists either covalently attached to target proteins or in free form. When covalently bound, it can be conjugated as a monomer (monoubiquitin) or as various polyubiquitin chains with distinct biological consequences depending on the linkage type: Lys-6-linked chains participate in DNA repair; Lys-11-linked chains regulate ERAD and cell cycle; Lys-29-linked chains respond to proteotoxic stress; Lys-33-linked chains modify kinases; Lys-48-linked chains target proteins for proteasomal degradation; Lys-63-linked chains mediate endocytosis, DNA damage responses, and NF-kappa-B signaling. Linear polyubiquitin chains initiate cell signaling pathways. Ubiquitin is primarily localized in the cytoplasm and nucleus, with additional presence on the mitochondrial outer membrane as a peripheral membrane protein. This recombinant fragment encompasses the complete ubiquitin domain, making it valuable for studying these diverse regulatory mechanisms.