Recombinant RL40 protein (His tag)

Catalog Number	542480
Synonyms	CEP52; Ubiquitin A-52 residue ribosomal protein fusion product 1; 60S ribosomal protein L40; rpL40
Species	Human
Expression System	E. coli
Accession	P62987
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	>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 1-76 aa (P62987) 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 Ubiquitin-ribosomal protein eL40 fusion protein (CEP52) fragment (residues 1-76) is a high-purity protein designed for studying ubiquitin-related functions and ribosomal processes. This fragment encompasses the complete Ubiquitin-like domains, providing an essential tool for investigating protein degradation, signaling pathways, and translation regulation in cellular systems. The full-length UBA52 gene product is cleaved into two functional components: Ubiquitin and the large ribosomal subunit protein eL40. Ubiquitin plays critical roles in post-translational modifications, forming isopeptide bonds with target proteins to regulate diverse processes including proteasomal degradation (via Lys-48 linkages), DNA repair (Lys-6), ERAD (Lys-11), and NF-kappa-B signaling (Lys-63). The ribosomal eL40 component is essential for 60S ribosomal subunit assembly and specifically supports cap-dependent translation of certain cellular and viral mRNAs. Both components localize primarily to the cytoplasm, with ubiquitin also present in the nucleus, reflecting their involvement in fundamental cellular processes from protein turnover to translational control.