Recombinant CRNN protein (His tag)

Catalog Number	548440
Synonyms	53 kDa putative calcium-binding protein; 53 kDa squamous epithelial-induced stress protein; 58 kDa heat shock protein; Squamous epithelial heat shock protein 53; Tumor-related protein
Species	Human
Expression System	E. coli
Accession	Q9UBG3
Molecular Weight	Predictes a molecular mass of 12.04 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	1-91
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-91 aa (Q9UBG3) 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	Introducing the recombinant Cornulin (CRNN) fragment (1-91), a 91-amino acid protein derived from human Cornulin. This fragment is engineered to encompass the EF-hand domain (residues 49-84), making it an ideal tool for studying calcium-binding properties and domain-specific functions in cell proliferation and signaling pathways. Cornulin, also known as the 53 kDa putative calcium-binding protein or squamous epithelial-induced stress protein, is a multifunctional human protein encoded by the CRNN gene. It promotes cell proliferation and G1/S cell cycle progression by inducing expression of the cell cycle regulator CCND1. Additionally, Cornulin regulates proliferation induced by pro-inflammatory cytokine responses through activation of NFKB1 and PI3K/AKT signaling pathways. The protein is localized in the cytoplasm and does not colocalize with TGM1, suggesting distinct functional roles in cellular processes. The full-length protein's involvement in stress response and tumor-related contexts underscores its significance in cellular regulation and disease research.