Recombinant LST2 protein (His tag)

Catalog Number	548298
Synonyms	hLst2; Zinc finger FYVE domain-containing protein 28
Species	Human
Expression System	E. coli
Accession	Q9HCC9
Molecular Weight	Predictes a molecular mass of 35.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	1-288
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 1-288 aa (Q9HCC9) 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 Lateral signaling target protein 2 homolog (hLst2), also known as Zinc finger FYVE domain-containing protein 28, is a high-purity protein fragment (residues 1-288) designed for structural and biochemical studies. This fragment represents a stable, soluble unit of the protein, ideal for investigating its role as a negative regulator of epidermal growth factor receptor (EGFR) signaling. The full-length hLst2 protein, encoded by the ZFYVE28 gene, functions as a negative regulator of epidermal growth factor receptor (EGFR) signaling by promoting EGFR degradation in endosomes when not monoubiquitinated. It localizes to the cytoplasm and cytosol when monoubiquitinated, but in the absence of Lys-87 monoubiquitination, it resides on early endosome membranes. This protein plays a critical role in modulating EGFR pathway activity, which is essential for understanding cellular growth and signaling mechanisms in research contexts.