Recombinant CAPSL protein (His tag)

Catalog Number	551578
Species	Human
Expression System	E. coli
Accession	Q8WWF8
Molecular Weight	Predictes a molecular mass of 25.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	1-208
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-208 aa (Q8WWF8) 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	This high-purity recombinant protein is a 208-amino acid fragment (residues 1-208) of the human Calcyphosin-like protein (CAPSL). It is designed as a comprehensive research tool, containing all four EF-hand calcium-binding domains, enabling detailed functional studies of this calcium-modulated protein's specific domain interactions and signaling mechanisms. The full-length Calcyphosin-like protein (UniProt ID: Q8WWF8) is a human protein primarily localized to the cytoplasm. Proteins containing EF-hand domains, like CAPSL, are typically involved in calcium sensing and signal transduction, playing crucial roles in various cellular processes regulated by calcium ions. This cytoplasmic localization suggests its function is associated with intracellular calcium signaling pathways. The provided fragment encompasses the complete series of EF-hand domains (1-4), which are critical for calcium ion binding and subsequent conformational changes that mediate protein-protein interactions and downstream signaling events.