Recombinant COBL protein (His tag)

Catalog Number	541847
Species	Human
Expression System	E. coli
Accession	O75128
Molecular Weight	Predictes a molecular mass of 9.80 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	1107-1183
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1107-1183 aa (O75128) 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 Protein cordon-bleu (COBL) Fragment (aa 1107-1183) is a highly specific research tool designed to study the functional WH2 domains that regulate actin cytoskeleton dynamics. This 77-amino acid fragment is ideal for investigating actin nucleation, polymerization, and neuronal morphogenesis mechanisms in controlled experimental settings. Protein cordon-bleu, encoded by the COBL gene in humans, plays a critical role in reorganizing the actin cytoskeleton and regulating neuron morphogenesis by promoting branching of axons and dendrites. It functions by binding and sequestering actin monomers, nucleating actin polymerization through cross-filament assembly, and mediating both actin depolymerization and filament severing. The protein localizes to the cell membrane (as a peripheral membrane protein on the cytoplasmic side), cytoskeleton, cytoplasm, and cell ruffles, where it is recruited via interaction with PACSIN1. Its involvement in actin dynamics makes it essential for cellular processes such as ruffle formation and neuronal development.