Recombinant CC141 protein (His tag)

Catalog Number	540560
Synonyms	Coiled-coil protein associated with myosin II and DISC1
Species	Human
Expression System	E. coli
Accession	Q6ZP82
Molecular Weight	Predictes a molecular mass of 15.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	1407-1530
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 1407-1530 aa (Q6ZP82) 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 CCDC141 Protein Fragment (aa 1407-1530) - A high-purity recombinant protein fragment encompassing the Ig-like domain of Coiled-coil domain-containing protein 141, designed for functional studies of neuronal migration and synaptic regulation mechanisms. CCDC141 (Coiled-coil domain-containing protein 141) plays a critical role in brain development by regulating cortical radial and GnRH neuron migration. It functions by negatively controlling histone deacetylase 6 (HDAC6) activity and promoting centrosome maturation, with CAMDI being essential for dilation formation during cortical neuron migration. Additionally, CCDC141 contributes to learning and memory performance through regulation of AMPA-selective glutamate receptors cell surface expression. The protein localizes to the cytoplasm and centrosome, where it co-localizes with DISC1 and accumulates at neuronal dilations during migration, with protein levels stabilized during G1 phase and destabilized during G2/M phase.