Recombinant STMN2 protein (His tag)

Catalog Number	538651
Synonyms	Superior cervical ganglion-10 protein; Protein SCG10
Species	Human
Expression System	E. coli
Accession	Q93045
Molecular Weight	Predictes a molecular mass of 22.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	1-179
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-179 aa (Q93045) 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 Stathmin-2 (STMN2) Fragment (residues 1-179) is a high-purity protein designed for studying microtubule dynamics and neuronal development. This fragment fully encompasses the SLD functional domain, making it an ideal tool for investigating neurite outgrowth, cell migration, and microtubule stability in research applications. Stathmin-2 (also known as SCG10) is a key regulator of microtubule stability in neuronal cells. It functions to stabilize microtubules when phosphorylated by MAPK8, directly controlling neurite length in cortical neurons. During brain development, Stathmin-2 negatively regulates the exit rate from the multipolar stage and slows radial migration from the ventricular zone. The protein localizes to multiple cellular compartments including the cytoplasm, perinuclear region, growth cones, axons, Golgi apparatus, endosomes, and lamellipodia. It exists in both soluble and membrane-bound forms and associates with punctate structures in developing neurons, playing critical roles in neuronal differentiation and migration processes.