Recombinant VSTM5 protein (His tag)

Catalog Number	549696
Species	Human
Expression System	E. coli
Accession	A8MXK1
Molecular Weight	Predictes a molecular mass of 14.94 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	29-147
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 29-147 aa (A8MXK1) 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 V-set and transmembrane domain-containing protein 5 (VSTM5) fragment (amino acids 29-147), encompassing the Ig-like C2-type domain, is designed for studying neuronal morphogenesis, synapse formation, and membrane dynamics in central nervous system research. VSTM5 is a cell adhesion-like membrane protein critical for neuronal development in the central nervous system. It modulates neuronal positioning and complexity by altering membrane morphology and dynamics, directly influencing dendrite formation, dendritic filopodia, and protrusion development. During synaptogenesis, VSTM5 regulates synapse formation by modifying dendritic spine morphology and actin distribution, promoting unstable spine types (e.g., thin and branched). It also guides neuronal morphogenesis and migration in cortical brain development. The protein localizes to the cell membrane as a single-pass type I membrane protein and is present in dendrites and axons, underscoring its role in neuronal structure and connectivity.