Recombinant LAMP5 protein (His tag)

Catalog Number	548487
Synonyms	Brain and dendritic cell-associated LAMP; Brain-associated LAMP-like protein; BAD-LAMP; Lysosome-associated membrane protein 5; LAMP-5
Species	Human
Expression System	E. coli
Accession	Q9UJQ1
Molecular Weight	Predictes a molecular mass of 24.73 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	30-235
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 30-235 aa (Q9UJQ1) 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 LAMP5 Protein Fragment (aa 30-235) is a high-quality, soluble protein fragment derived from Lysosome-associated membrane glycoprotein 5, designed for studying its role in synaptic plasticity and vesicular trafficking in GABAergic neurons. Lysosome-associated membrane glycoprotein 5 (LAMP5), also known as BAD-LAMP, plays a critical role in short-term synaptic plasticity within a subset of GABAergic neurons in the brain. This protein is a single-pass type I membrane protein localized to various cellular compartments, including the cell membrane, synaptic vesicles, endoplasmic reticulum-Golgi intermediate compartment, endosomes, and dendritic projections. It recycles from endocytic recycling compartments to the plasma membrane and associates with cortical membranes, accumulating in the ERGIC before activation. Its presence in synaptic vesicles and growth cones underscores its importance in neuronal communication and vesicle dynamics, making it a key target for neuroscience and cell biology research.