Recombinant AGRL2 protein (His tag)

Catalog Number	546608
Synonyms	Calcium-independent alpha-latrotoxin receptor 2; CIRL-2; Latrophilin homolog 1; Latrophilin-2; Lectomedin-1
Species	Human
Expression System	E. coli
Accession	O95490
Molecular Weight	Predictes a molecular mass of 43.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	37-394
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 37-394 aa (O95490) 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 Adhesion G protein-coupled receptor L2 (ADGRL2) Fragment (residues 37-394) is a high-purity protein designed for studying synapse specificity and G-protein coupled receptor signaling. This fragment includes the SUEL-type lectin and Olfactomedin-like domains, making it an ideal tool for investigating domain-specific functions in neuronal connectivity and adhesion. Adhesion G protein-coupled receptor L2 (ADGRL2) is an orphan adhesion GPCR that plays a critical role in mediating synapse specificity in the nervous system. Upon ligand binding, it undergoes conformational changes to activate G-protein signaling and downstream effectors. It associates with presynaptic cell adhesion molecules, such as teneurins, to direct the formation of specific synaptic connections, particularly in establishing perforant-path synapses on CA1-region pyramidal neurons in the hippocampus. The protein localizes to the postsynaptic cell membrane as a multi-pass membrane protein, where it contributes to excitatory synapse organization in the S.lacunosum-moleculare layer, underscoring its importance in neural circuit development and function.