

Recombinant Human DLG4 Protein (His Tag)

Catalog Number: PKSH032358

Note: Centrifuge before opening to ensure complete recovery of vial contents.

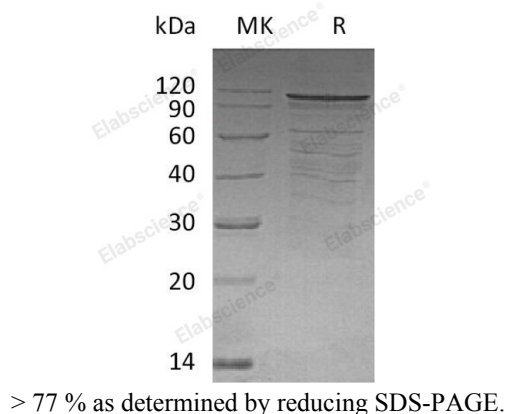
Description

Species	Human
Source	E.coli-derived Human DLG4 protein Met 1-Leu724, with an N-terminal His
Calculated MW	81.9 kDa
Observed MW	110 kDa
Accession	NP_062567
Bio-activity	Not validated for activity

Properties

Purity	> 77 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 50mM Tris-HCl, 100mM NaCl, 1mM EDTA, 1mM DTT, pH7.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Background

Disks large homolog 4(DLG4) is a cell membrane protein and it is a member of the membrane-associated guanylate kinase (MAGUK) family. The protein contains 1 guanylate kinase-like domain,3 PDZ (DHR) domains and 1 SH3 domain. With PSD-93 it is recruited into the same NMDA receptor and potassium channel clusters. These two MAGUK proteins may interact at postsynaptic sites to form a multimeric scaffold for the clustering of receptors, ion channels, and associated signaling proteins. DLG4 is the best studied member of the MAGUK-family of PDZ domain-containing proteins. Like all MAGUK-family proteins, its basic structure includes three PDZ domains, an SH3 domain, and a guanylate kinase-like domain (GK) connected by disordered linker regions. It is almost exclusively located in the post synaptic density of neurons, and is involved in anchoring synaptic proteins. Its direct and indirect binding partners include neuroligin, NMDA receptors, AMPA receptors, and potassium channels.