



Recombinant Protein Technical Manual

Recombinant Human DLG4 Protein (His Tag)

RPES2419

Product Data:

Product SKU: RPES2419

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P78352

Protein Information:

Molecular Mass: 81.9 kDa

AP Molecular Mass: 110 kDa

Tag: N-6His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Disks large homolog 4; Postsynaptic density protein 95; PSD-95; Synapse-associated protein 90; SAP-90; SAP90; PSD95; DLG4

Immunogen Information:

Sequence: Met 1-Leu724

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.