

Product datasheet for TP724832

OriGene Technologies, Inc.

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PSD95 (DLG4) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant Human PSD95/Disks large homolog 4/DLG4(N-His)

Species: Human

Expression cDNA Clone

or AA Sequence:

Met1-Leu724

Tag: N-6His

Buffer: Lyophilized from a 0.2 um filtered solution of PBS, pH7.4

Note: Recombinant Human PSD95 is produced by our E.coli expression system and the target gene

encoding Met1-Leu724 is expressed with a 6His tag at the N-terminus.

Stability: 12 months from date of despatch

Locus ID: 1742
UniProt ID: <u>P78352</u>

Summary: Postsynaptic density protein 95 (PSD-95), also known as disks large homolog 4(DLG4) is a cell

membrane protein that is a member of the membrane-associated guanylate kinase (MAGUK) family. DLG4 is recruited into the same NMDA receptor and potassium channel clusters as PSD-93. 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. It is nearly exclusively located in the post-synaptic density of neurons and plays a role in

anchoring synaptic proteins. Its direct and indirect binding partners include neuroligin, NMDA receptors, AMPA receptors, and potassium channels. DLG4 is also involved in synaptic plasticity and the stabilization of synaptic changes during long-term potentiation. A recent study showed that clinical manifestations associated with DLG4 overlapping with those found

in other neurodevelopmental disorders of synaptic dysfunction.