

Datasheet for ABIN7563943 **DLG4 Protein (AA 1-724) (His tag)**



Overview

Quantity:	1 mg
Target:	DLG4
Protein Characteristics:	AA 1-724
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DLG4 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Dlg4 Protein expressed in mammalian cells.
Sequence:	MDCLCIVTTK KYRYQDEDTP PLEHSPAHLP NQANSPPVIV NTDTLEAPGY ELQVNGTEGE
	MEYEEITLER GNSGLGFSIA GGTDNPHIGD DPSIFITKII PGGAAAQDGR LRVNDSILFV
	NEVDVREVTH SAAVEALKEA GSIVRLYVMR RKPPAEKIIE IKLIKGPKGL GFSIAGGVGN
	QHIPGDNSIY VTKIIEGGAA HKDGRLQIGD KILAVNSVGL EDVMHEDAVA ALKNTYDVVY
	LKVAKPSNAY LSDSYAPPDI TTSYSQHLDN EISHSSYLGT DYPTAMTPTS PRRYSPVAKD
	LLGEEDIPRE PRRIVIHRGS TGLGFNIVGG EDGEGIFISF ILAGGPADLS GELRKGDQIL
	SVNGVDLRNA SHEQAAIALK NAGQTVTIIA QYKPEEYSRF EAKIHDLREQ LMNSSLGSGT
	ASLRSNPKRG FYIRALFDYD KTKDCGFLSQ ALSFHFGDVL HVIDASDEEW WQARRVHSDS
	ETDDIGFIPS KRRVERREWS RLKAKDWGSS SGSQGREDSV LSYETVTQME VHYARPIIIL
	GPTKDRANDD LLSEFPDKFG SCVPHTTRPK REYEIDGRDY HFVSSREKME KDIQAHKFIE
	AGQYNSHLYG TSVQSVREVA EQGKHCILDV SANAVRRLQA AHLHPIAIFI RPRSLENVLE
	INKRITEEQA RKAFDRATKL EQEFTECFSA IVEGDSFEEI YHKVKRVIED LSGPYIWVPA RERL

	Sequence without tag. The proposed Purification-Tag is based on experiences with the
	expression system, a different complexity of the protein could make another tag necessary
	In case you have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	 Made to order protein - from design to production - by highly experienced protein experts. Protein expressed in mammalian cells and purified in one-step affinity chromatography The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. State-of-the-art algorithm used for plasmid design (Gene synthesis).
	This protein is a made-to-order protein and will be made for the first time for your order. Our
	experts in the lab try to ensure that you receive soluble protein.
	If you are not interested in a full length protein, please contact us for individual protein fragments.
	The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC
Grade:	custom-made
Target Details	
Target:	DLG4
Alternative Name:	Dlg4 (DLG4 Products)
Background:	Disks large homolog 4 (Postsynaptic density protein 95) (PSD-95) (Synapse-associated protein 90) (SAP-90) (SAP-90), FUNCTION: Postsynaptic scaffolding protein that plays a critical role in synaptogenesis and synaptic plasticity by providing a platform for the postsynaptic clustering of crucial synaptic proteins (PubMed:15358775, PubMed:9853749). Interacts with the cytoplasmic tail of NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May

reduce the amplitude of ASIC3 acid-evoked currents by retaining the channel intracellularly.

May regulate the intracellular trafficking of ADR1B. Also regulates AMPA-type glutamate receptor (AMPAR) immobilization at postsynaptic density keeping the channels in an activated state in the presence of glutamate and preventing synaptic depression (Probable). Under basal conditions, cooperates with FYN to stabilize palmitoyltransferase ZDHHC5 at the synaptic membrane through FYN-mediated phosphorylation of ZDHHC5 and its subsequent inhibition of association with endocytic proteins (By similarity). {ECO:0000250|UniProtKB:P78352, ECO:0000269|PubMed:15358775, ECO:0000269|PubMed:9853749, ECO:0000305|PubMed:26931375, ECO:0000305|PubMed:29199957}.

Molecular Weight:

UniProt:

Q62108

Pathways:

Regulation of Muscle Cell Differentiation, Synaptic Membrane, Skeletal Muscle Fiber

Development, Asymmetric Protein Localization, Regulation of long-term Neuronal Synaptic

Plasticity

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for
	functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months