

## Product datasheet for PH319368

### NMDAR1 (GRIN1) (NM\_000832) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	GRIN1 MS Standard C13 and N15-labeled recombinant protein (NP_000823)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC219368
Predicted MW:	99.31 kDa
Protein Sequence:	>RC219368 representing NM_000832 Red=Cloning site Green=Tags(s)

MSTMRLTLALLFSCSVARAACDPKIVNIGAVLSTRKHEQMFREAVNQANKRHGSWKIQLNATSVTHKPN  
AIQMALSVCEDLISSQVYAILVSHPTPNDFHTPTPVSYTAGFYRIPVGLTTRMSIYSDKSIHLSFLRT  
VPPYSHQSSVWFEMMRVYSWNHIILLVSDDEGAAQKRETLLEERESKAQKVLQFDPGKTNVALLME  
AKELEARVILSASEDDAATVYRAAAMLNMTGSGYVWL VGEREISGNALRYAPDGILGLQLINGKNESA  
ISDAVGVAQAVHELLEKENITDPPRGCVGNTNIWKTGPLFKRVLMSKYADGVTGRVEFNEDGDRKFAN  
YSIMNLQNRKLVQVGIYNGTHVIPNDRKIIWPGGETEKPRGYQMSTRKIVTIHQEPFVYVKPTLSDGTC  
KEEFTVNGDPVKKVICTGPNDTSPGSPRHTVPQCCYGFCDLLIKLARTMNFYEVHLVADGKFGTQERV  
NNSNKKKEWNGMMGELL SGQADMIVAPL TINNERAQYIEFSKPFKYQGLTILVKKEIPRSTLDSFMQPFQS  
TLWLLVGLSVHVAVMLYLLDRFSPFGRFKVNSEEEEDALTLSSAMWFSWGVLNLSGIGEGAPRSFSAR  
ILGMVWAGFAMIIVASYTANLAFLVLDPEERITGINDPRLRNPSDKFIYATVKQSSVDIYFRQVELS  
TMYRHMEKHNYESAEEAIQAVRDNKLHAFIWDASVLEFEASQKCDLVTTGELFFRSGFGIGMRKDSPWKQ  
NVSLSILKSHENGFMEDLTKTWVRYQECDSRSNAPATLTFENMAGVFMVAGGIVAGIFLIFIEIAYKRH  
KDARRKQMLAF AAVNVWRKNLQQYHPTDITGPLNLSDPSVSTVV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.



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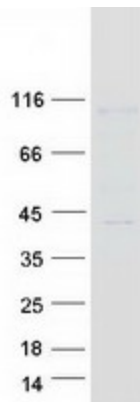
RefSeq:	<a href="#">NP_000823</a>
RefSeq Size:	3902
RefSeq ORF:	2655
Synonyms:	GluN1; MRD8; NDHMSD; NDHMSR; NMD-R1; NMDA1; NMDAR1; NR1
Locus ID:	2902
UniProt ID:	<a href="#">Q05586</a>
Cytogenetics:	9q34.3

**Summary:** The protein encoded by this gene is a critical subunit of N-methyl-D-aspartate receptors, members of the glutamate receptor channel superfamily which are heteromeric protein complexes with multiple subunits arranged to form a ligand-gated ion channel. These subunits play a key role in the plasticity of synapses, which is believed to underlie memory and learning. Cell-specific factors are thought to control expression of different isoforms, possibly contributing to the functional diversity of the subunits. Alternatively spliced transcript variants have been described. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane

**Protein Pathways:** Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Calcium signaling pathway, Huntington's disease, Long-term potentiation, Neuroactive ligand-receptor interaction

### Product images:



Coomassie blue staining of purified GRIN1 protein (Cat# [TP319368]). The protein was produced from HEK293T cells transfected with GRIN1 cDNA clone (Cat# [RC219368]) using MegaTran 2.0 (Cat# [TT210002]).