

## Product datasheet for PH316458

### NMDAR1 (GRIN1) (NM\_007327) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	GRIN1 MS Standard C13 and N15-labeled recombinant protein (NP_015566)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC216458
Predicted MW:	105.37 kDa
Protein Sequence:	>RC216458 representing NM_007327 Red=Cloning site Green=Tags(s)

MSTMRLTLALLFSCSVARAACDPKIVNIGAVLSTRKHEQMFREAVNQANKRHGSKIQLNATSVTHKPN  
AIQMALSVCEDLISSQVYAILVSHPTPNDFHTPTPVSYTAGFYRIPVGLTTRMSIYSDKSIHLSFLRT  
VPPYSHQSSVWFEMMRVYSWNHIILLVSDDEGAAQKRETLLEERESKAEKVLQFDPGKTNVTALLME  
AKELEARVILSASEDDAATVYRAAAMLNMTGSGYVWL VGEREISGNALRYAPDGILGLQLINGKNESA  
ISDAVGVAQAVHELLEKENITDPPRGCVGNTNIWKTGPLFKRVLMSKYADGVTGRVEFNEDGDRKFAN  
YSIMNLQNRKLVQVGIYNGTHVIPNDRKIIWPGGETEKPRGYQMSTRLKIVTIHQEPFVYVKPTLSDGTC  
KEEFTVNGDPVKKVICTGPNDTSPGSPRHTVPQCCYGFCDLLIKLARTMNFYEVHLVADGKFGTQERV  
NNSNKKKEWNGMGMGELLSGQADMIVAPLTINNERAQYIEFSKPFKYQGLTILVKKEIPRSTLDSFMQPFQS  
TLWLLVGLSVHVAVMLYLLDRFSPFGRFKVNSEEEEDALTLSSAMWFSWVLLNSGIGEGAPRSFSAR  
ILGMVWAGFAMIIVASYTANLAFLVLDLDRPEERITGINDPRLRNPSDKFIYATVKQSSVDIYFRQVELS  
TMYRHEKHNYESAAEAIQAVRDNKLHAFIWDASVLEFEASQKCDLVTTGELFFRSFGFIMRKDSPWKQ  
NVLSILKSHENGFMEDLTKTWVRYQECDSRSNAPATLTFENMAGVFMLVAGGIVAGIFLIFIEIAYKRH  
KDARRKQMLAFAAVNVWRKNLQDRKSGRAEPDPKKKATFRAITSTLASSFKRRRSSKDTSTGGGRGALQ  
NQKDTVLPRAIEREEGQLQLCSRHRES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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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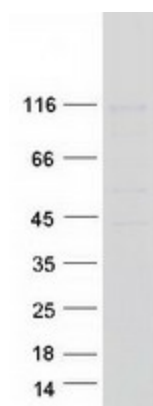
RefSeq:	<a href="#">NP_015566</a>
RefSeq Size:	5137
RefSeq ORF:	2814
Synonyms:	GluN1; MRD8; NDHMSD; NDHMSR; NMD-R1; NMDA1; NMDAR1; NR1
Locus ID:	2902
UniProt ID:	<a href="#">Q05586</a>
Cytogenetics:	9q34.3

**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# [TP316458]). The protein was produced from HEK293T cells transfected with GRIN1 cDNA clone (Cat# [RC216458]) using MegaTran 2.0 (Cat# [TT210002]).