

## Product datasheet for PH320994

### CHRNA2 (NM\_000742) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	CHRNA2 MS Standard C13 and N15-labeled recombinant protein (NP_000733)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC220994
Predicted MW:	59.75 kDa
Protein Sequence:	>RC220994 representing NM_000742 Red=Cloning site Green=Tags(s)

MGPSCPVFLSFTKLSLWVLLIPAGGEEAKRPPPRAPGDPLSSPSPTALPQGSHTETEDRLFKHLFRGY  
NRWARPVPNTSDVIVRFGLSIAQLIDVDEKNQMMTTNVWLKQWSDYKLRWNPADFGNITSLRVPSEMI  
WIPDIVLYNNADGEFAVTHMTKAHLFSTGTVHWVPPAIYKSSCSIDVTFPFDDQQNCKMKFGSWTYDKAK  
IDLEQMEQTVDLKDYWESGEWAIVNATGTYNKKYDCCAEIYPDVTYAFVIRRLPLFYITINLIIPCLLIS  
CLTVLVFYLPSCGKITLCISVLLSLTVFLLITEIIPSTSLVIPLIGEYLLFTMIFVTLISIVITVFVL  
NVHHRSPSTHTMPHWVRGALLGCVPRWLLMNRPPPPVELCHPLRLKLSPSYHWLESNVDAEEREVVVEE  
DRWACAGHVAPSVGTLCSHGHLHSGASGPKAEALLQEGELLLSPHMQKALEGVHYIADHLRSEDADSSVK  
EDWKYVAMVIDRIFLWLFIIVCFLGTIGLFLPPFLAGMI

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- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-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.
RefSeq:	<u>NP_000733</u>
RefSeq Size:	2664
RefSeq ORF:	1587



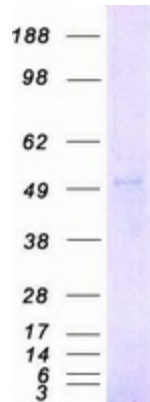
[View online »](#)

Locus ID: 1135  
UniProt ID: [Q15822](#)  
Cytogenetics: 8p21.2

**Summary:** Nicotinic acetylcholine receptors (nAChRs) are ligand-gated ion channels formed by a pentameric arrangement of alpha and beta subunits to create distinct muscle and neuronal receptors. Neuronal receptors are found throughout the peripheral and central nervous system where they are involved in fast synaptic transmission. This gene encodes an alpha subunit that is widely expressed in the brain. The proposed structure for nAChR subunits is a conserved N-terminal extracellular domain followed by three conserved transmembrane domains, a variable cytoplasmic loop, a fourth conserved transmembrane domain, and a short C-terminal extracellular region. Mutations in this gene cause autosomal dominant nocturnal frontal lobe epilepsy type 4. Single nucleotide polymorphisms (SNPs) in this gene have been associated with nicotine dependence. [provided by RefSeq, Nov 2009]

**Protein Families:** Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane

### Product images:



Coomassie blue staining of purified CHRNA2 protein (Cat# [TP320994]). The protein was produced from HEK293T cells transfected with CHRNA2 cDNA clone (Cat# [RC220994]) using MegaTran 2.0 (Cat# [TT210002]).