

Product Information

MemDX™ Membrane Protein Human CHRNA2 (Cholinergic receptor nicotinic alpha 2 subunit) for Antibody Discovery

Cat. No.: **MP1275J**

This product is for research use only and is not intended for diagnostic use.

This product is a 56.9 kDa Human CHRNA2 membrane protein expressed in HEK293T. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

CHRNA2

Protein Length

Full-length

Protein Class

Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane

Molecular Weight

56.9 kDa

TMD

4

Sequence

MGPSCPVLFSFTKLSLWVLLIPAGGEEAKRPPPRAPGDPLSSPSPTALPQGGSHTEDETDLFKHLFRGY
NRWARPVPNTSDVVIVRFGLSIAQLIDVDEKNQMMTTNVWLKQEWSDYKLRWNPADFGNITSLRVPSEMI
WIPDIVLYNNADGEFAVTHMTKAHLFSTGTVHWVPPAIYKSSCSIDVTFFPFDQQNCKMKFGSWTYDKAK
IDLEQMEQTVDLKDYWESGEWAIVNATGTYNSSKKYDCCAIEYDPVYAFVIRRLPLFYTINLIIPCLLIS
CLTVLVFYLPSCDCGEKITLCISVLLSLTVFLLITEIIPSTSLVIPLIGEYLLFTMIFVTLISIVITVFVL
NVHHRSPSTHTMPHWVRGALLGCVPRWLLMNRPPPPVELCHPLRLKLSPSYHWLESNVDAAEEREVVVEEE
DRWACAGHVAPSVGTLCSHGHLHSGASGPKAEALLQEGELLSPHMQKALEGVHYIADHLRSEDADSSVK
EDWKYVAMVIDRIFLWLFIIVCFLGTIGLFLPPFLAGMI

Product Description

Expression Systems

HEK293T

Tag

C-Myc/DDK

Form

Liquid

Purification

Anti-DDK affinity column followed by conventional chromatography steps

Purity

> 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

Storage

Store at +4°C for up to one week or several months at -80°C

Target

Target Protein

CHRNA2

Full Name

Cholinergic receptor nicotinic alpha 2 subunit

Introduction

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.

Alternative Names

cholinergic receptor, nicotinic, alpha 2 (neuronal); cholinergic receptor, nicotinic, alpha polypeptide 2 (neuronal); OTTHUMP00000128276; cholinergic receptor, nicotinic alpha 2

Gene ID

[1135](#)

UniProt ID

[Q15822](#)