# **Nanodisc Human ACHA4-Strep Protein**



### **HDFP1410**

# **Product Information**

Product SKU: HDFP1410 Expression Host: HEK293 Size: 10μg

**Target**: ACHA4 **Tag**: C-Flag&Strep Tag

## **Additional Information**

Conjugate: Unconjugated Uniprot ID: P43681

Molecular Weight: The human full length ACHA4-Strep protein has a MW of 70 kDa

#### **Protein Information**

**Background**: This gene encodes a nicotinic acetylcholine receptor, which belongs to a superfamily

of ligand-gated ion channels that play a role in fast signal transmission at synapses.

These pentameric receptors can bind acetylcholine, which causes an extensive

change in conformation that leads to the opening of an ion-conducting channel

across the plasma membrane. This protein is an integral membrane receptor subunit

that can interact with either nAChR beta-2 or nAChR beta-4 to form a functional

receptor. Mutations in this gene cause nocturnal frontal lobe epilepsy type 1.

Polymorphisms in this gene that provide protection against nicotine addiction have

been described. Alternative splicing results in multiple transcript variants. [provided

by RefSeq, Feb 2012]

**Synonyms**: BFNC, EBN, EBN1, NACHR, NACHRA4, NACRA4

**Protein Description**: Human ACHA4-Strep full length protein-synthetic nanodisc

Formulation: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH

8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization. Please

see Certificate of Analysis for specific instructions. Do not use solvents with a pH

below 6.5 or those containing high concentrations of divalent metal ions (greater

than 5 mM) in subsequent experiments.

**Protein Pathways**:

**Protein Families:** Ion Channels: Cys-loop Receptors.

**Usage**: Research use only

**Storage & Shipping**: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not

intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing

and thawing). Lyophilized proteins are shipped at ambient temperature.