

## PRODUCT INFORMATION

<b>Target</b>	ACHB3
<b>Synonyms</b>	N/A
<b>Description</b>	Human ACHB3 full length protein-synthetic nanodisc
<b>Delivery</b>	6~8weeks
<b>Uniprot ID</b>	Q05901
<b>Expression Host</b>	HEK293
<b>Protein Families</b>	Ion Channels: Cys-loop Receptors
<b>Protein Pathways</b>	N/A
<b>Molecular Weight</b>	The human full length ACHB3 protein has a MW of 52.7kDa
<b>Formulation &amp; Reconstitution</b>	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 pH lower than 6.5 in subsequent experiments.
<b>Storage &amp; Shipping</b>	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.
<b>Background</b>	The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are (hetero)pentamers composed of homologous subunits. The subunits that make up the muscle and neuronal forms of nAChRs are encoded by separate genes and have different primary structure. There are several subtypes of neuronal nAChRs that vary based on which homologous subunits are arranged around the central channel. They are classified as alpha-subunits if, like muscle alpha-1 (MIM 100690), they have a pair of adjacent cysteines as part of the presumed acetylcholine binding site. Subunits lacking these cysteine residues are classified as beta-subunits (Groot Kormelink and Luyten, 1997 [PubMed 9009220]). Elliott et al. (1996) [PubMed 8906617] stated that the proposed structure for each subunit is a conserved N-terminal extracellular domain followed by 3 conserved transmembrane domains, a variable cytoplasmic loop, a fourth conserved transmembrane domain, and a short C-terminal extracellular region.[supplied by OMIM, Apr 2010]
<b>Usage</b>	Research use only

