PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	ACHB3
Synonyms	N/A
Description	Human ACHB3-Strep full length protein-synthetic nanodisc
Delivery	6~8weeks
Uniprot ID	Q05901
Expression Host	HEK293
Protein Families	Ion Channels: Cys-loop Receptors
Protein Pathways	N/A
Molecular Weight	The human full length ACHB3-Strep protein has a MW of 52.7 kDa
Formulation & Reconstitution	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.
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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
Background	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]
Usage	Research use only
Conjugate	Unconjugated