Datasheet for ABIN7597025

CACNA2D2 Protein (DYKDDDDK Tag,Strep Tag)

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Overview

Quantity:	10 µg
Target:	CACNA2D2
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc
Purification tag / Conjugate:	This CACNA2D2 protein is labelled with DYKDDDDK Tag,Strep Tag.
Application:	Cryogenic electron microscopy (cryo-EM), ELISA, Immunogen (Imm), Phage Display (PhD), Surface Plasmon Resonance (SPR)

Product Details

Purpose:	Human CA2D2-Strep full length protein-synthetic nanodisc

Target Details

Target:	CACNA2D2
Alternative Name:	CA2D2 (CACNA2D2 Products)
Background:	CACNA2D, CASVDD Calcium channels mediate the entry of calcium ions into the cell upon membrane polarization. This gene encodes the alpha-2/delta subunit of the voltage-dependent calcium channel complex. The complex consists of the main channel-forming subunit alpha-1, and auxiliary subunits alpha-2/delta, beta, and gamma. The auxiliary subunits function in the assembly and membrane localization of the complex, and modulate calcium currents and channel activation/inactivation kinetics. The subunit encoded by this gene undergoes post-translational

Target Details

	cleavage to yield the extracellular alpha2 peptide and a membrane-anchored delta polypeptide. This subunit is a receptor for the antiepileptic drug, gabapentin. Mutations in this gene are associated with early infantile epileptic encephalopathy. Single nucleotide polymorphisms in this gene are correlated with increased sensitivity to opioid drugs. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2014]
Molecular Weight:	The human full length CA2D2-Strep protein has a MW of 129.8 kDa
UniProt:	Q9NY47
Pathways:	Skeletal Muscle Fiber Development

Application Details

Comment:	Advantages: • Highly purified membrane proteins • High solubility in aqueous solutions • High stability • Proteins are in a native membrane environment and remain biologically active • No detergent and can be used for cell-based assays • No MSP backbone proteins • Mammalian cell expression system ensures post- translational modifications
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	Solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.
Storage:	-20 °C,-80 °C
Storage Comment:	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.
Expiry Date:	12 months