Datasheet for ABIN7538137

AVPR1A Protein

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Overview

Quantity:	50 µg
Target:	AVPR1A
Origin:	Human
Source:	Mammalian Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human V1AR full length protein-synthetic nanodisc
Characteristics:	Unlike other membrane scaffold protein (MSP) Nanodisc on the market, our synthetic Nanodisc can be prepared directly from the cells. The polymers used during this process have a dual function. It dissolves the cell membranes, like the detergent, and uses cellular phospholipids to form Nanodisc around the membrane proteins. The target protein embedded Nanodiscs can then be purified.

Target Details

Target:	AVPR1A
Alternative Name:	V1AR (AVPR1A Products)
Background:	The protein encoded by this gene acts as receptor for arginine vasopressin. This receptor belongs to the subfamily of G-protein coupled receptors which includes AVPR1B, V2R and OXT receptors. Its activity is mediated by G proteins which stimulate a phosphatidylinositol-calcium second messenger system. The receptor mediates cell contraction and proliferation, platelet aggregation, release of coagulation factor and glycogenolysis. [provided by RefSeq, Jul 2008]

Target Details

Molecular Weight:	The human full length V1AR protein has a MW of 46.8kDa
UniProt:	P37288
Pathways:	Regulation of Systemic Arterial Blood Pressure by Hormones, Response to Water Deprivation, Regulation of Carbohydrate Metabolic Process

Application Details

Comment:	Advantages of Synthetic Nanodiscs: • 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 Limitations of Synthetic Nanodiscs: • Intolerant to acids and high concentrations of divalent metal ions
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	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.
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