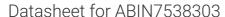
antibodies -online.com







Metabotropic Glutamate Receptor 4 Protein



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Quantity:	50 μg			
Target:	Metabotropic Glutamate Receptor 4 (GRM4)			
Origin:	Human			
Source:	Mammalian Cells			
Protein Type:	Synthetic Nanodisc			

Product Details

Purpose:	Human GRM4 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:	Metabotropic Glutamate Receptor 4 (GRM4)		
Alternative Name:	GRM4 (GRM4 Products)		
Background:	L-glutamate is the major excitatory neurotransmitter in the central nervous system and activates both ionotropic and metabotropic glutamate receptors. Glutamatergic		
	neurotransmission is involved in most aspects of normal brain function and can be perturbed in		
	many neuropathologic conditions. The metabotropic glutamate receptors are a family of G		
	protein-coupled receptors, that have been divided into 3 groups on the basis of sequence		

homology, putative signal transduction mechanisms, and pharmacologic properties. Group I				
includes GRM1 and GRM5 and these receptors have been shown to activate phospholipase C.				
Group II includes GRM2 and GRM3 while Group III includes GRM4, GRM6, GRM7 and GRM8.				
Group II and III receptors are linked to the inhibition of the cyclic AMP cascade but differ in their				
agonist selectivities. Several transcript variants encoding different isoforms have been found				
for this gene. [provided by RefSeq, Feb 2012]				

Molecular Weight:

The human full length GRM4 protein has a MW of 101.9kDa

UniProt:

Q14833

Application Details

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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				