

# Datasheet for ABIN7538315

#### **GHSR Protein**



#### Overview

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

### **Product Details**

Purpose:	Human GHSR 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:	GHSR
Alternative Name:	GHSR (GHSR Products)
Background:	This gene encodes a member of the G-protein coupled receptor family. The encoded protein
	may play a role in energy homeostasis and regulation of body weight. Two identified transcript
	variants are expressed in several tissues and are evolutionary conserved in fish and swine. One
	transcript, 1a, excises an intron and encodes the functional protein, this protein is the receptor
	for the Ghrelin ligand and defines a neuroendocrine pathway for growth hormone release. The

#### **Target Details**

	second transcript (1b) retains the intron and does not function as a receptor for Ghrelin, however, it may function to attenuate activity of isoform 1a. Mutations in this gene are associated with autosomal idiopathic short stature.[provided by RefSeq, Apr 2010]
Molecular Weight:	The human full length GHSR protein has a MW of 41.3kDa
UniProt:	Q92847
Pathways:	Hormone Transport, Negative Regulation of Hormone Secretion, Feeding Behaviour

## **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