Nanodisc Human GP149-Strep Protein



HDFP996

Product Information

Product SKU: HDFP996 Expression Host: HEK293 Size: 10μg

Target: GP149 **Tag**: C-Flag&Strep Tag

Additional Information

Conjugate: Unconjugated Uniprot ID: Q86SP6

Molecular Weight: The human full length GP149-Strep protein has a MW of 81 kDa

Protein Information

Background: This gene encodes a seven-transmembrane G protein coupled receptor (GPCR) class

A family member. Although categorized as a class A GPCR, the encoded protein lacks

the first two charged amino acids of the highly conserved Asp-Arg-Tyr (DRY) motif

found in the third transmembrane helix of class A receptors which is important for

efficient G protein-coupled signal transduction. Mice with a knockout of the

orthologous gene are viable and have normal maturation of the ovarian follicle, but

show enhanced fertility and ovulation. All GPCRs have a common structural

architecture consisting of seven transmembrane alpha-helices interconnected by

three extracellular and three intracellular loops. A general feature of GPCR signaling

is agonist-induced conformational changes in the receptor, leading to activation of

the heterotrimeric G proteins, which consist of the guanine nucleotide-binding G-

alpha subunit and the dimeric G-beta-gamma subunits. The activated G proteins then

bind to and activate numerous downstream effector proteins, which generate second

messengers that mediate a broad range of cellular and physiological processes.

[provided by RefSeq, Jul 2017]

Synonyms: IEDA, PGR10, R35

Protein Description: Human GP149-Strep full length protein-synthetic nanodisc

Formulation: 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.

Protein Pathways: -

Protein Families: GPCR, Transmembrane, Druggable Genome.

Usage: Research use only

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.