

## PRODUCT INFORMATION

<b>Tag</b>	C-Flag&Strep Tag
<b>Target</b>	GP149
<b>Synonyms</b>	IEDA, PGR10, R35
<b>Description</b>	Human GP149-Strep full length protein-synthetic nanodisc
<b>Delivery</b>	6~8weeks
<b>Uniprot ID</b>	Q86SP6
<b>Expression Host</b>	HEK293
<b>Protein Families</b>	GPCR,Transmembrane,Druggable Genome,
<b>Protein Pathways</b>	N/A
<b>Molecular Weight</b>	The human full length GP149-Strep protein has a MW of 81 kDa
<b>Formulation &amp; Reconstitution</b>	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.
<b>Storage &amp; Shipping</b>	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.
<b>Background</b>	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]
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated

