PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	GPR151
Synonyms	GALR4; GALRL; GPCR; GPCR-2037; PGR7
Description	Human GPR151-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	Q8TDV0
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	N/A
Molecular Weight	The human full length GPR151-Strep protein has a MW of 46.6 kDa
Formulation & Reconstitution	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.
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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 μm) prior to use.
Background	This protein is an orphan member of the class A rhodopsin-like family of G-protein-coupled receptors (GPCRs). Within the rhodopsin-like family, this protein is a member of the SOG subfamily that includes somatostatin, opioid, galanin, and kisspeptin receptors. The orthologous mouse gene has a restricted pattern of neuronal expression which is induced following nerve injury. All GPCRs have a transmembrane domain that includes seven transmembrane alpha-helices. A general feature of GPCR signaling is the agonist-induced conformational change in the receptor, leading to activation of the heterotrimeric G protein. The activated G protein then binds to and activates numerous downstream effector proteins, which generate second messengers that mediate a broad range of cellular and physiological processes.
Usage	Research use only
Conjugate	Unconjugated

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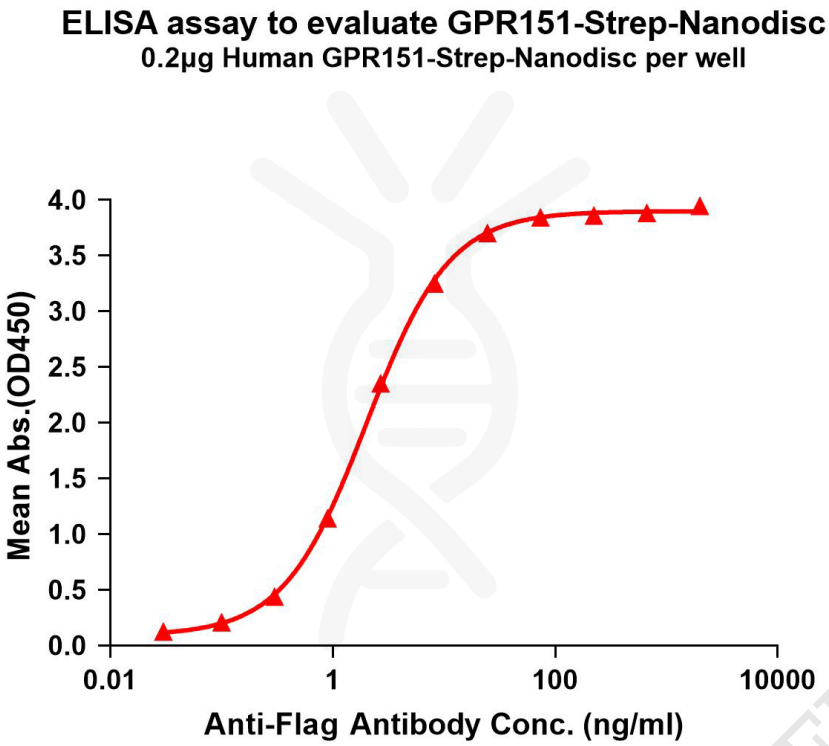

Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag GPR151-Strep-Nanodisc (0.2μg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with GPR151-Strep-nanodisc is 2.016ng/ml.

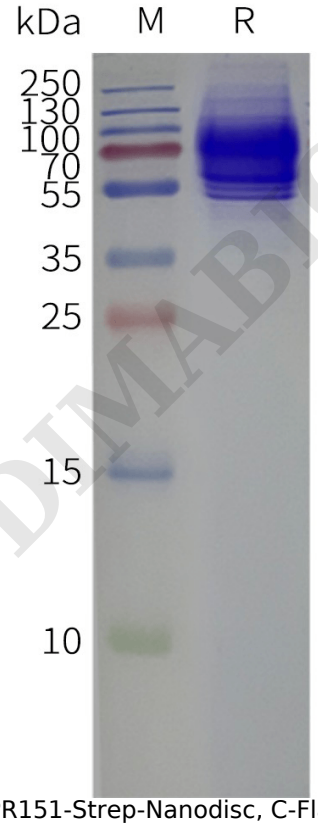

Figure 2. Human GPR151-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

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