

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Expression Host	HEK293
Target	PTGER4
Synonyms	EP4; EP4R
Description	Human PTGER4-Strep full length protein-synthetic nanodisc
Uniprot ID	P35408
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction
Molecular Weight	The human full length PTGER4-Strep protein has a MW of 53.1 kDa
Delivery	In Stock
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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
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.
Background	The protein is a member of the G-protein coupled receptor family. This protein is one of four receptors identified for prostaglandin E2 (PGE2). This receptor can activate T-cell factor signaling. It has been shown to mediate PGE2 induced expression of early growth response 1 (EGR1), regulate the level and stability of cyclooxygenase-2 mRNA, and lead to the phosphorylation of glycogen synthase kinase-3. Knockout studies in mice suggest that this receptor may be involved in the neonatal adaptation of circulatory system, osteoporosis, as well as initiation of skin immune responses.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate PTGER4-Strep-Nanodisc 0.2 μ g Human PTGER4-Strep-Nanodisc per well

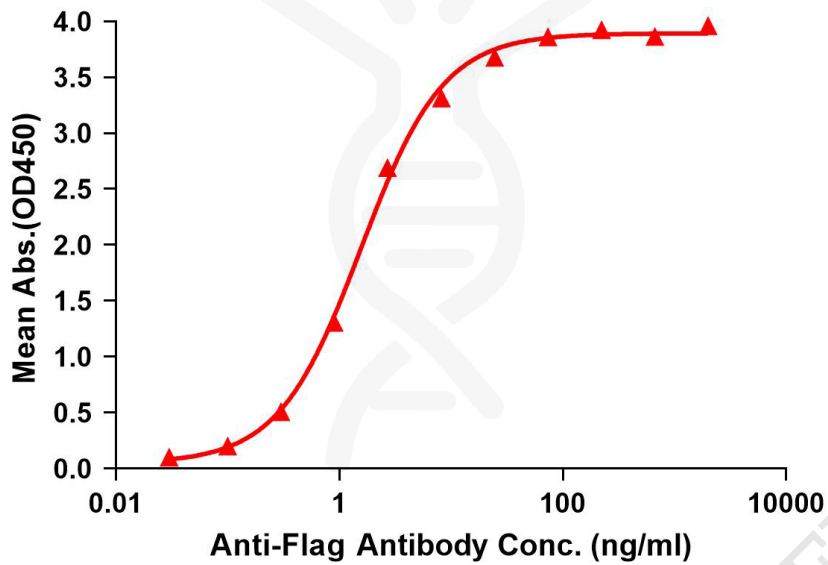


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag PTGER4-Strep-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with PTGER4-Strep-nanodisc is 1.566ng/ml.

kDa M R

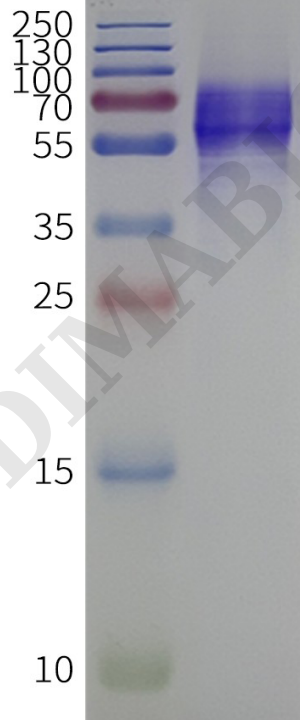


Figure 2. Human PTGER4-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

