

## PRODUCT INFORMATION

<b>Tag</b>	C-Flag Tag
<b>Expression Host</b>	HEK293
<b>Target</b>	PTGER4
<b>Synonyms</b>	EP4; EP4R
<b>Description</b>	Human PTGER4 full length protein-synthetic nanodisc
<b>Uniprot ID</b>	P35408
<b>Protein Families</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways</b>	Neuroactive ligand-receptor interaction
<b>Molecular Weight</b>	The human full length PTGER4 protein has a MW of 53.1 kDa
<b>Delivery</b>	In Stock
<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>Sterility</b>	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
<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>	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.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate PTGER4-Nanodisc 0.2 $\mu$ g Human PTGER4-Nanodisc per well

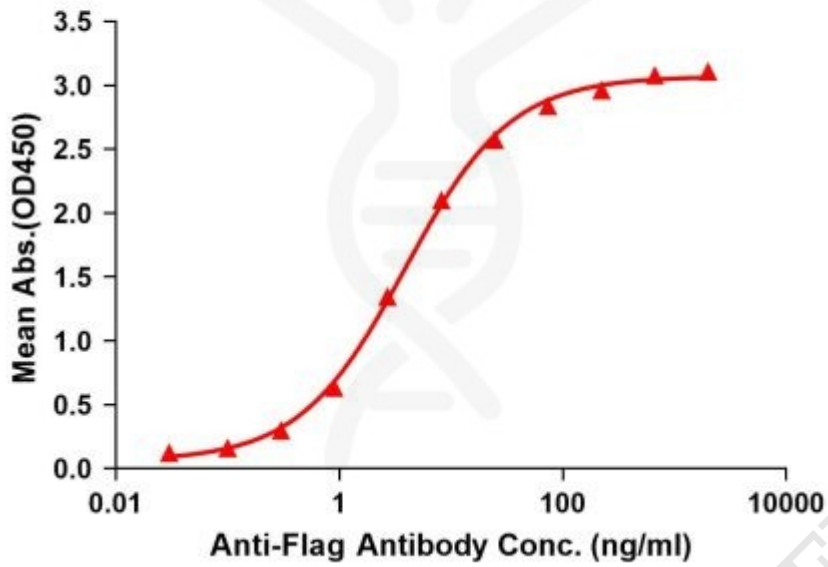


Figure1. Elisa plates were pre-coated with Flag Tag PTGER4-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with PTGER4-Nanodisc is 3.882ng/ml.



Figure2. Human PTGER4-Nanodisc, Flag Tag on SDS-PAGE

