# **Nanodisc Human OPRD-Strep Protein**



## **HDFP1106**

### **Product Information**

Product SKU: HDFP1106 Expression Host: HEK293 Size: 10μg

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

#### **Additional Information**

**Conjugate**: Unconjugated **Uniprot ID**: P41143

**Molecular Weight:** The human full length OPRD-Strep protein has a MW of 40.4 kDa

#### **Protein Information**

**Background**: G-protein coupled receptor that functions as receptor for endogenous enkephalins

and for a subset of other opioids. Ligand binding causes a conformation change that

triggers signaling via guanine nucleotide-binding proteins (G proteins) and

modulates the activity of down-stream effectors, such as adenylate cyclase. Signaling

leads to the inhibition of adenylate cyclase activity. Inhibits neurotransmitter release

by reducing calcium ion currents and increasing potassium ion conductance. Plays a

role in the perception of pain and in opiate-mediated analgesia. Plays a role in

developing analgesic tolerance to morphine.[UniProtKB/Swiss-Prot Function]

**Synonyms**: DOP, DOR, DOR1, OPRD

**Protein Description**: Human OPRD-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**: GPCRDB Class A Rhodopsin-like, Peptide GPCRs, Autoimmune & Inflammatory

Response, G-Protein Coupled Receptors Signaling Pathway, Na2 /NF-AT Signaling

Pathways.

**Protein Families:** 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.