

PRODUCT INFORMATION

Target	OPRD
Synonyms	DOP, DOR, DOR1, OPRD
Description	Human OPRD full length protein-synthetic nanodisc
Delivery	6~8weeks
Uniprot ID	P41143
Expression Host	HEK293
Protein Families	Transmembrane,Druggable Genome,
Protein Pathways	GPCRDB Class A Rhodopsin-like,Peptide GPCRs,Autoimmune & Inflammatory Response,G-Protein Coupled Receptors Signaling Pathway,Na ²⁺ /NF-AT Signaling Pathways,
Molecular Weight	The human full length OPRD protein has a MW of 40.4kDa
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 pH lower than 6.5 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.
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]
Usage	Research use only

