Nanodisc Human OPRK Protein



HDFP374

Product Information

Product SKU: HDFP374 Expression Host: HEK293 Size: 10μg

Target: OPRK **Tag**: C-Flag Tag

Additional Information

Conjugate: Unconjugated Uniprot ID: P41145

Molecular Weight: The human full length OPRK protein has a MW of 42.6kDa

Protein Information

Background: This gene encodes an opioid receptor, which is a member of the 7 transmembrane-

spanning G protein-coupled receptor family. It functions as a receptor for

endogenous ligands, as well as a receptor for various synthetic opioids. Ligand

binding results in inhibition of adenylate cyclase activity and neurotransmitter

release. This opioid receptor plays a role in the perception of pain and mediating the

hypolocomotor, analgesic and aversive actions of synthetic opioids. Variations in this

gene have also been associated with alcohol dependence and opiate addiction.

Alternatively spliced transcript variants encoding different isoforms have been found

for this gene. A recent study provided evidence for translational readthrough in this

gene, and expression of an additional C-terminally extended isoform via the use of

an alternative in-frame translation termination codon. [provided by RefSeq, Dec 2017]

Synonyms: K-OR-1, KOP, KOR, KOR-1, KOR1, OPRK

Protein Description: Human OPRK 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, G-Protein Coupled Receptors

Signaling Pathway.

Protein Families: GPCR, 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.