

HDFP1052

## Product Information

**Product SKU:** HDFP1052      **Expression Host:** HEK293      **Size:** 10µg  
**Target:** HCAR2      **Tag:** C-Flag&Strep Tag

## Additional Information

**Conjugate:** Unconjugated      **Uniprot ID:** Q8TDS4  
**Molecular Weight:** The human full length HCAR2-Strep protein has a MW of 41.9 kDa

## Protein Information

**Background:** Acts as a high affinity receptor for both nicotinic acid (also known as niacin) and (D)-beta-hydroxybutyrate and mediates increased adiponectin secretion and decreased lipolysis through G(i)-protein-mediated inhibition of adenylyl cyclase. This pharmacological effect requires nicotinic acid doses that are much higher than those provided by a normal diet. Mediates nicotinic acid-induced apoptosis in mature neutrophils. Receptor activation by nicotinic acid results in reduced cAMP levels which may affect activity of cAMP-dependent protein kinase A and phosphorylation of target proteins, leading to neutrophil apoptosis. The rank order of potency for the displacement of nicotinic acid binding is 5-methyl pyrazole-3-carboxylic acid = pyridine-3-acetic acid > acifran > 5-methyl nicotinic acid = acipimox >> nicotinuric acid = nicotinamide.[UniProtKB/Swiss-Prot Function]

**Synonyms:** GPR109A, HCA2, HM74a, HM74b, NIACR1, PUMAG, Puma-g

**Protein Description:** Human HCAR2-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:** -

**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.