

HDFP345

Product Information

Product SKU:	HDFP345	Expression Host:	HEK293	Size:	10µg
Target:	MSHR	Tag:	C-Flag Tag		

Additional Information

Conjugate:	Unconjugated	Uniprot ID:	Q01726
Molecular Weight:	The human full length MSHR protein has a MW of 34.7kDa		

Protein Information

Background: This intronless gene encodes the receptor protein for melanocyte-stimulating hormone (MSH). The encoded protein, a seven pass transmembrane G protein coupled receptor, controls melanogenesis. Two types of melanin exist: red pheomelanin and black eumelanin. Gene mutations that lead to a loss in function are associated with increased pheomelanin production, which leads to lighter skin and hair color. Eumelanin is photoprotective but pheomelanin may contribute to UV-induced skin damage by generating free radicals upon UV radiation. Binding of MSH to its receptor activates the receptor and stimulates eumelanin synthesis. This receptor is a major determining factor in sun sensitivity and is a genetic risk factor for melanoma and non-melanoma skin cancer. Over 30 variant alleles have been identified which correlate with skin and hair color, providing evidence that this gene is an important component in determining normal human pigment variation. [provided by RefSeq, Jul 2008]

Synonyms: CMM5, MSH-R, SHEP2

Protein Description: Human MSHR 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, Cancer.

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.