

PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	MSHR
Synonyms	CMM5, MSH-R, SHEP2
Description	Human MSHR full length protein-synthetic nanodisc
Uniprot ID	Q01726
Protein Families	GPCR, Transmembrane, Druggable Genome,
Protein Pathways	GPCRDB Class A Rhodopsin-like, Peptide GPCRs, Cancer,
Molecular Weight	The human full length MSHR protein has a MW of 34.7kDa
Delivery	6~8weeks
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 of reconstitution
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
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	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]
Usage	Research use only
Conjugate	Unconjugated

