

Product Information

MemDX™ Membrane Protein Human MC1R (Melanocortin 1 receptor) Full Length

Cat. No.: **MPC0288K**

This product is for research use only and is not intended for diagnostic use.

This product is a 34.7 kDa Human MC1R membrane protein expressed in Baculovirus/Insect expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

MC1R

Protein Length

Full length

Protein Class

GPCR

Molecular Weight

34.7 kDa

TMD

7

Sequence

MAVQGSQRRLGSLNSTPTAIPQLGLAANQTGARCLEVSISDGLFLSLGL
VSLVENALVVATIAKRNRLHSPMYCFICCLALSDLLVSGSNVLETAVILL
LEAGALVARAAVLQQLDNVIDVITCSSMLSSLCFLGAIAVDRIYISIFYAL
RYHSIVTLPRARRAVAAIWWASVVFSTLFIAYYDHVAVLLCLVVFFLAML
VLMAVLYVHMLARACQHAQGIARLHKRQRPVHQGFGLKGAVTLTILLGIF
FLCWGPFLLHLTLIVLCPEHPTCGCIFKNFNLFLALIICNAIIDPLIYAF
HSQELRRTLKEVLTCSW

Product Description

Expression Systems

Baculovirus/Insect expression system

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target**Target Protein**

MC1R

Full Name

Melanocortin 1 receptor

Introduction

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.

Alternative Names

CMM5; MSH-R; SHEP2; melanocyte-stimulating hormone receptor; MC1-R; alpha melanocyte stimulating hormone receptor; melanotropin receptor; MC1R; Melanocortin 1 receptor

Gene ID

[4157](#)

UniProt ID

[Q01726](#)