

Product datasheet for **RC203218L4V**

MC1 Receptor (MC1R) (NM_002386) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	MC1 Receptor (MC1R) (NM_002386) Human Tagged ORF Clone Lentiviral Particle
Symbol:	MC1 Receptor
Synonyms:	CMM5; MSH-R; SHEP2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_002386
ORF Size:	951 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC203218).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_002386.2 , NP_002377.3
RefSeq Size:	3115 bp
RefSeq ORF:	954 bp
Locus ID:	4157
UniProt ID:	Q01726
Cytogenetics:	16q24.3
Domains:	7tm_1
Protein Families:	Druggable Genome, GPCR, Transmembrane



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Protein Pathways: Melanogenesis, Neuroactive ligand-receptor interaction

MW: 34.7 kDa

Gene Summary: 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]