

**MC1R Antibody (Center)**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2107a****Specification**

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**MC1R Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q01726</a>
Other Accession	<a href="#">NP_002377.4</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgM
Calculated MW	34706
Antigen Region	205-232

**MC1R Antibody (Center) - Additional Information****Gene ID** 4157**Other Names**

Melanocyte-stimulating hormone receptor, MSH-R, Melanocortin receptor 1, MC1-R, MC1R, MSHR

**Target/Specificity**

This MC1R antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 205-232 amino acids from the Central region of human MC1R.

**Dilution**

WB~~1:500~1000

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MC1R Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**MC1R Antibody (Center) - Protein Information****Name** MC1R**Synonyms** MSHR

**Function** Receptor for MSH (alpha, beta and gamma) and ACTH (PubMed:[11442765](#), PubMed:[11707265](#), PubMed:[1325670](#), PubMed:[1516719](#), PubMed:[8463333](#)). The activity of this receptor is mediated by G proteins which activate adenylate cyclase (PubMed:[11707265](#), PubMed:[1325670](#), PubMed:[16463023](#), PubMed:[19737927](#)). Mediates melanogenesis, the production of eumelanin (black/brown) and pheomelanin (red/yellow), via regulation of cAMP signaling in melanocytes (PubMed:[31097585](#)).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein

#### **Tissue Location**

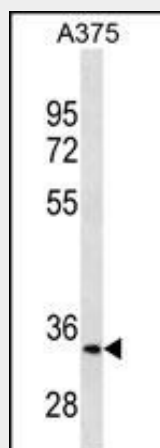
Expressed in melanocytes (PubMed:1325670, PubMed:31097585). Expressed in corticoadrenal tissue (PubMed:1325670)

### **MC1R Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **MC1R Antibody (Center) - Images**



MC1R Antibody (Center)(Cat. #AM2107a) western blot analysis in A375 cell line lysates (35µg/lane). This demonstrates the MC1R antibody detected the MC1R protein (arrow).

### **MC1R Antibody (Center) - 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].

#### **MC1R Antibody (Center) - References**

Demenaïs, F., et al. J. Natl. Cancer Inst. 102(20):1568-1583(2010)  
Strange, R.C., et al. Mult. Scler. 16(9):1109-1116(2010)  
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Smith, G., et al. Pharmacogenet. Genomics (2010) In press :  
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