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

Specification

MC1R Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q01726
Other Accession	NP_002377.4
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

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 phaeomelanin (red/yellow), via regulation of cAMP signaling in melanocytes (PubMed:31097585).

Cellular Location
Cell membrane; Multi-pass membrane protein

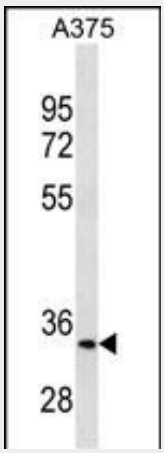
Tissue Location
Expressed in melanocytes (PubMed:1325670, PubMed:31097585). Expressed in corticoadrenal tissue (PubMed:1325670)

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 Cytomety
- 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

Demenais, F., et al. J. Natl. Cancer Inst. 102(20):1568-1583(2010)
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Ibarrola-Villava, M., et al. Exp. Dermatol. 19(9):836-844(2010)
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Kricker, A., et al. Cancer Causes Control (2010) In press :