10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MC1R Antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14941

Product Information

Application	WB
Primary Accession	Q01726
Other Accession	NM_002386, NP_002377
Reactivity	Human, Mouse, Rat, Rabbit, Pig
Predicted	Human, Mouse, Rat, Rabbit, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34706

Additional Information

Gene ID	4157
Alias Symbol	CMM5, MGC14337, MSH-R, SHEP2
Other Names	Melanocyte-stimulating hormone receptor, MSH-R, Melanocortin receptor 1, MC1-R, MC1R, MSHR
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-MC1R antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	MC1R Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MC1R (HGNC:6929)
Synonyms	MSHR
Function	G protein-coupled receptor that binds melanocyte-stimulating hormones (alpha, beta, and gamma-MSH) and adrenocorticotropic hormone/ACTH, which are peptide products of the POMC precursor protein (PubMed:11442765, PubMed:11707265, PubMed:1325670, PubMed:1516719, PubMed:8463333). Upon activation, MC1R couples with the G(s) protein, stimulating adenylate cyclase and activating the cAMP-dependent signaling pathway. This activation promotes melanogenesis, resulting in the production of eumelanin (black/brown) and pheomelanin (red/yellow) in melanocytes

(PubMed:11707265, PubMed:1325670, PubMed:16463023, PubMed:19737927, PubMed:31097585, PubMed:34453129). MC1R interacts with G protein-coupled receptor opsin 3/OPN3, which couples to G(i) proteins and inhibits the alpha-MSH-induced cAMP response, thereby reducing melanin synthesis (PubMed:31097585). Binding to Agouti/ASP precludes alpha-MSH-induced signaling, thereby down-regulating melanogenesis (By similarity). Additionally, interaction with MGRN1 displaces the G(s) protein, further suppressing MC1R signaling (PubMed:19737927).

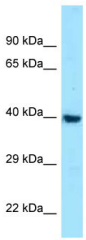
Cellular Location Cell membrane; Multi-pass membrane protein

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

References

Mountjoy K.G.,et al.Science 257:1248-1251(1992).
Gantz I.,et al.J. Biol. Chem. 268:8246-8250(1993).
Chhajlani V.,et al.FEBS Lett. 309:417-420(1992).
Chhajlani V.,et al.FEBS Lett. 390:238-238(1996).
Rana B.K.,et al.Genetics 151:1547-1557(1999).

Images



WB Suggested Anti-MC1R Antibody Titration: 1.0 µg/ml
Positive Control: HepG2 Whole Cell

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.