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Anti-MC1 Receptor Rabbit Monoclonal Antibody

Catalog # ABO15431

Product Information

Application	WB, IHC
Primary Accession	Q01726
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-MC1 Receptor Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human.

Additional Information

Gene ID	4157
Other Names	Melanocyte-stimulating hormone receptor, MSH-R, Melanocortin receptor 1, MC1-R, MC1R, MSHR
Calculated MW	34706
Application Details	WB 1:500-1:2000 IHC 1:100-1:500
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 20M07
Immunogen	A synthesized peptide derived from human MC1 Receptor
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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).

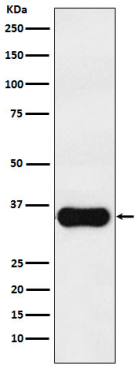
Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

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

Images



Western blot analysis of MC1 Receptor expression in A375 cell lysate.

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