

**Anti-MC1 Receptor Picoband Antibody**  
Catalog # ABO10117

**Specification**

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**Anti-MC1 Receptor Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q01726</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Melanocyte-stimulating hormone receptor(MC1R) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-MC1 Receptor Picoband Antibody - Additional Information**

**Gene ID** 4157

**Other Names**

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

**Calculated MW**

34706 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Cell membrane; Multi-pass membrane protein.

**Tissue Specificity**

Melanocytes and corticoadrenal tissue.

**Protein Name**

Melanocyte-stimulating hormone receptor

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human MC1 Receptor (290-317aa NAIIDPLIYAFHSQELRRTLKEVLTC<sub>SW</sub>).

**Purification**

Immunogen affinity purified.

### Cross Reactivity

No cross reactivity with other proteins.

### Storage

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

## Anti-MC1 Receptor Picoband Antibody - Protein Information

**Name** MC1R

**Synonyms** MSHR

### Function

Receptor for MSH (alpha, beta and gamma) and ACTH (PubMed:<a href="http://www.uniprot.org/citations/11442765" target="\_blank">11442765</a>, PubMed:<a href="http://www.uniprot.org/citations/11707265" target="\_blank">11707265</a>, PubMed:<a href="http://www.uniprot.org/citations/1325670" target="\_blank">1325670</a>, PubMed:<a href="http://www.uniprot.org/citations/1516719" target="\_blank">1516719</a>, PubMed:<a href="http://www.uniprot.org/citations/8463333" target="\_blank">8463333</a>). The activity of this receptor is mediated by G proteins which activate adenylate cyclase (PubMed:<a href="http://www.uniprot.org/citations/11707265" target="\_blank">11707265</a>, PubMed:<a href="http://www.uniprot.org/citations/1325670" target="\_blank">1325670</a>, PubMed:<a href="http://www.uniprot.org/citations/16463023" target="\_blank">16463023</a>, PubMed:<a href="http://www.uniprot.org/citations/19737927" target="\_blank">19737927</a>). Mediates melanogenesis, the production of eumelanin (black/brown) and phaeomelanin (red/yellow), via regulation of cAMP signaling in melanocytes (PubMed:<a href="http://www.uniprot.org/citations/31097585" target="\_blank">31097585</a>).

### Cellular Location

Cell membrane; Multi-pass membrane protein

### Tissue Location

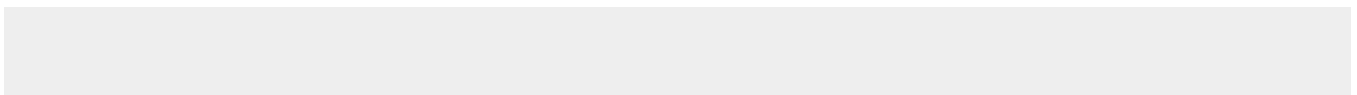
Expressed in melanocytes (PubMed:1325670, PubMed:31097585). Expressed in corticoadrenal tissue (PubMed:1325670)

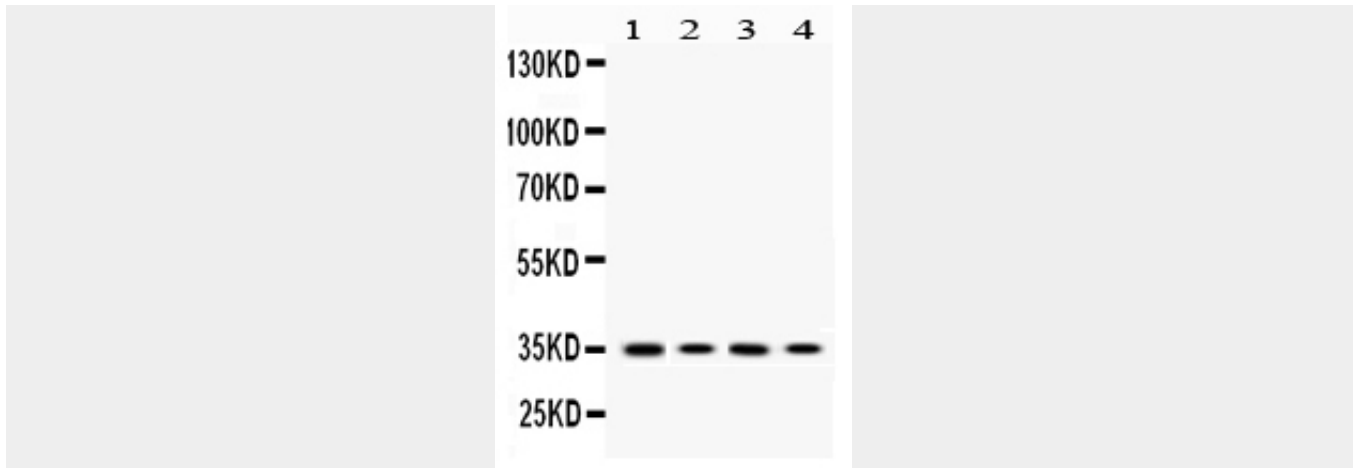
## Anti-MC1 Receptor Picoband Antibody - Protocols

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](#)

## Anti-MC1 Receptor Picoband Antibody - Images





Western blot analysis of MC1 Receptor expression in PC12 whole cell lysates (lane 1), HEPA1-6 whole cell lysates (lane 2), HELA whole cell lysates (lane 3) and A375 whole cell lysates (lane 4). MC1 Receptor at 35KD was detected using rabbit anti- MC1 Receptor Antigen Affinity purified polyclonal antibody (Catalog #ABO10117) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .

#### **Anti-MC1 Receptor Picoband Antibody - Background**

The melanocortin 1 receptor (MC1R), mapped to 16q24.3, is also known as MSHR. 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.