**Product Name: MC1-R Rabbit Polyclonal Antibody**
**Catalog #: APRab13696**

## Summary

| | |
|---|---|
| **Production Name** | MC1-R Rabbit Polyclonal Antibody |
| **Description** | Rabbit Polyclonal Antibody |
| **Host** | Rabbit |
| **Application** | IF,WB, |
| **Reactivity** | Human,Rat,Mouse |

## Performance

| | |
|---|---|
| **Conjugation** | Unconjugated |
| **Modification** | Unmodified |
| **Isotype** | IgG |
| **Clonality** | Polyclonal |
| **Form** | Liquid |
| **Storage** | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |
| **Buffer** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N. |
| **Purification** | Affinity purification |

## Immunogen

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|---|---|
| **Gene Name** | MC1R |
| **Alternative Names** | MC1R; MSHR; Melanocyte-stimulating hormone receptor; MSH-R; Melanocortin receptor 1; MC1-R |
| **Gene ID** | 4157.0 |
| **SwissProt ID** | Q01726.The antiserum was produced against synthesized peptide derived from human MSHR. AA range:268-317 |

## Application

| | |
|---|---|
| **Dilution Ratio** | WB 1:500-2000;IF ICC 1:100-500; ELISA 2000-20000 |
| **Molecular Weight** | 35kD |

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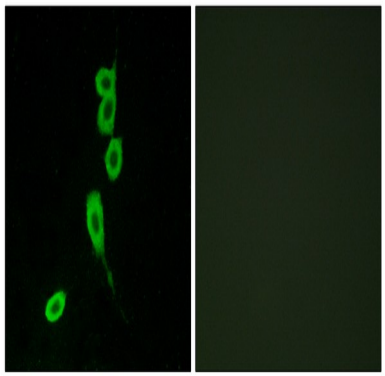
## Background

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 dedomain:The highly acidic C-terminal region may bind cations such as calcium.,function:Receptor for MSH (alpha, beta and gamma) and ACTH. The activity of this receptor is mediated by G proteins which activate adenylate cyclase.,function:Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha-chain.,polymorphism:Genetic variations in MC1R are associated with variation in skin/hair/eye pigmentation type 2 (SHEP2) [MIM:266300]. Hair, eye and skin pigmentation are among the most visible examples of human phenotypic variation, with a broad normal range that is subject to substantial geographic stratification. In the case of skin, individuals tend to have lighter pigmentation with increasing distance from the equator. By contrast, the majority of variation in human eye and hair color is found among individuals of European ancestry, with most other human populations fixed for brown eyes and black hair.,polymorphism:Variations in MC1R are linked to the degree of skin pigmentation (Types I-IV). Type I skin the most lightly pigmented and type IV the most dark pigmented. Partial loss-of-function mutations are associated with fair skin, poor tanning and increased skin cancer risk.,similarity:Belongs to the G-protein coupled receptor 1 family.,similarity:Belongs to the tubulin family.,subunit:Dimer of alpha and beta chains.,tissue specificity:Melanocytes and corticoadrenal tissue.,

## Research Area

## Image Data



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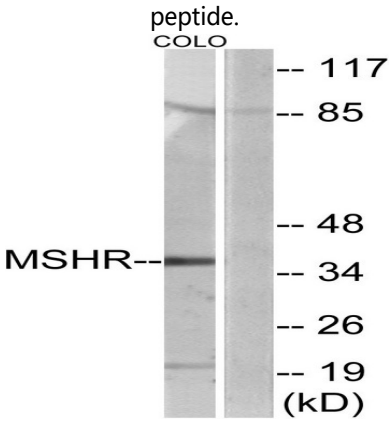
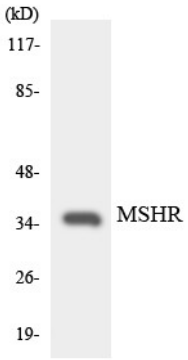
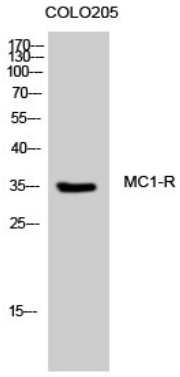
Immunofluorescence analysis of LOVO cells, using MSHR Antibody. The picture on the right is blocked with the synthesized peptide.




Western blot analysis of lysates from COLO205 cells, using MSHR Antibody. The lane on the right is blocked with the synthesized peptide.




Western blot analysis of the lysates from HepG2 cells using MSHR antibody.




Western Blot analysis of COLO205 cells using MC1-R Polyclonal Antibody

## Note

For research use only.