

# **Product datasheet for AP01319PU-N**

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OriGene Technologies, Inc.

## MC4 Receptor (MC4R) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IHC, WB

Recommended Dilution: Western Blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Specificity:** MC4-R antibody detects endogenous levels of MC4-R protein. (region surrounding Glu315)

**Formulation:** Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2.

State: Aff - Purified

State: Liquid purified Ig fraction

**Concentration:** 1.0 mg/ml

**Purification:** Affinity chromatography

Conjugation: Unconjugated

**Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~ 37 kDa

Gene Name: melanocortin 4 receptor

Database Link: Entrez Gene 4160 Human

P32245





#### Background:

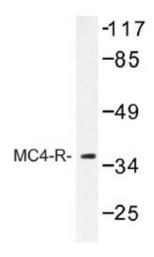
MC4 receptor is the fourth member of the five known melanocortin receptors (MCRs) belonging to the rhodopsin-like family of G protein-coupled receptors (GPCRs). These five MCRs form a unique family of GPCRs, marked by their unusually short coding sequence and the absence of highly conserved amino acid residues or motifs common to most GPCRs. All MCRs signal through the cyclic adenosine 3', 5'-monophosphate (cAMP) pathway. With the exception of MC2R, all MCRs are activated by both adrenocorticotropin (ACTH) and melanocyte-stimulating hormones (MSHs and mainly alpha-MSH). The MC4R receptor is expressed primarily in the brain, and unlike the other melanocortin receptors, MC4R is not expressed in

adrenal cortex or in melanocytes. Genetic studies of mice and humans have established a critical role of MC4 Receptor in appetite regulation. Heterozygous mutations in MC4 Receptor account for 1-6% of severe cases of human obesity.

Synonyms:

MC4R, Melanocortin receptor 4

### **Product images:**



Western blot (WB) analysis of MC4-R antibody (Cat.-No.: AP01319PU-N) in extracts from MCF-7 cells.