

MC4 Receptor Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51334**Specification**

MC4 Receptor Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, IHC-P, E |
| Primary Accession | P32245 |
| Reactivity | Human, Mouse, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 37 KDa |

MC4 Receptor Antibody - Additional Information**Gene ID** 4160**Other Names**

Melanocortin receptor 4, MC4-R, MC4R

Dilution

WB~~1:1000

IHC-P~~N/A

E~~N/A

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

MC4 Receptor Antibody - Protein Information**Name** MC4R**Function**

Hormone receptor that acts as a key component of the leptin- melanocortin pathway at the intersection of homeostatic maintenance of energetic state (PubMed:32327598, PubMed:33858992). Plays a role in regulating food intake: activation by a stimulating hormone such as anorexigenic alpha-melanocyte stimulating hormone (alpha-MSH) inhibits appetite, whereas binding to a natural antagonist like Agouti-related protein/AGRP promotes appetite. G-protein-coupled receptor that activates conventional G α signaling leading to induction of anorexigenic signaling in the hypothalamus to result in negative energy balance (PubMed:33858992). Regulates the firing activity of neurons from the hypothalamus by alpha-MSH and AGRP independently of G α signaling by ligand-induced coupling of closure of inwardly rectifying potassium channel

KCNJ13 (By similarity). In intestinal epithelial cells, plays a role in the inhibition of hepatic glucose production via nesfatin-1/NUCB2 leading to increased cyclic adenosine monophosphate (cAMP) levels and glucagon-like peptide 1 (GLP-1) secretion in the intestinal epithelium (PubMed:39562740).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Brain, placental, and gut tissues.

MC4 Receptor 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](#)

MC4 Receptor Antibody - Images**MC4 Receptor Antibody - Background**

Receptor specific to the heptapeptide core common to adrenocorticotrophic hormone and alpha-, beta-, and gamma-MSH. Plays a central role in energy homeostasis and somatic growth. This receptor is mediated by G proteins that stimulate adenylate cyclase (cAMP).

MC4 Receptor Antibody - References

Gantz I.,et al.J. Biol. Chem. 268:15174-15179(1993).
Mountjoy K.G.,et al.Mol. Endocrinol. 8:1298-1308(1994).
Kopatz S.A.,et al.Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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