

Anti-MC4 Receptor Rabbit Monoclonal Antibody

Catalog # ABO15432

Anti-MC4 Receptor Rabbit Monoclonal Antibody - Product Information

Application WB **Primary Accession** P32245 Rabbit Host Isotype laG Reactivity Rat, Human, Mouse Clonality Monoclonal Format Liquid Description Anti-MC4 Receptor Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

Anti-MC4 Receptor Rabbit Monoclonal Antibody - Additional Information

Gene ID 4160

Other Names Melanocortin receptor 4, MC4-R, MC4R

Application Details WB 1:500-1:2000

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.

Immunogen A synthesized peptide derived from human MC4 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.

Anti-MC4 Receptor Rabbit Monoclonal 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:<a



href="http://www.uniprot.org/citations/32327598" target="_blank">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 Galphas signaling leading to induction of anorexogenic 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 Galphas 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.

Anti-MC4 Receptor Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

Anti-MC4 Receptor Rabbit Monoclonal Antibody - Images



Western blot analysis of MC4 Receptor expression in (1) MCF7 cell lysate; (2) RAW264.7 cell



lysate.