

MC4R Rabbit mAb

Catalog # AP77904

Product Information

Application WB Primary Accession P32245

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human MC4 Receptor

Purification Affinity Chromatography

Calculated MW 36943

Additional Information

Gene ID 4160

Other Names MC4R

Dilution WB~~1/500-1/1000

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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 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

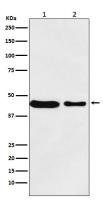
glucagon-like peptide 1 (GLP-1) secretion in the intestinal epithelium $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}$

(PubMed:<u>39562740</u>).

Cellular Location Cell membrane; Multi-pass membrane protein

Tissue Location Brain, placental, and gut tissues.

Images



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