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MC4R / Melanocortin 4 Receptor Antibody (N-Terminus)

Rabbit Polyclonal Antibody

Catalog # ALS10743

Specification

MC4R / Melanocortin 4 Receptor Antibody (N-Terminus) - Product Information

Application	**IHC-P**
Primary Accession	P32245
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**37kDa KDa**
Dilution	**IHC-P~~N/A**

MC4R / Melanocortin 4 Receptor Antibody (N-Terminus) - Additional Information

Gene ID 4160

Other Names
Melanocortin receptor 4, MC4-R, MC4R

Target/Specificity
Human MC4 Receptor. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
MC4R / Melanocortin 4 Receptor Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

MC4R / Melanocortin 4 Receptor Antibody (N-Terminus) - 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 (PubMed:39562740).

Cellular Location
Cell membrane; Multi-pass membrane protein

Tissue Location
Brain, placental, and gut tissues.

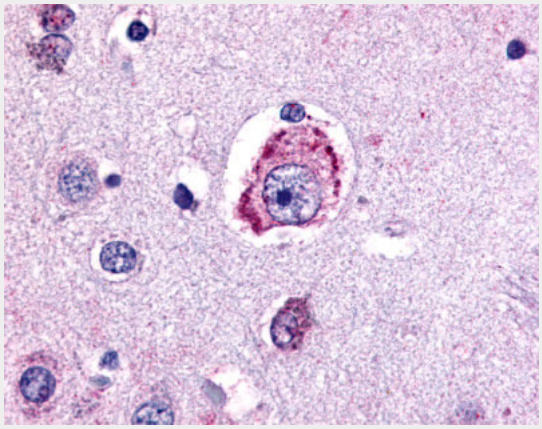
Volume
50 µl

MC4R / Melanocortin 4 Receptor Antibody (N-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MC4R / Melanocortin 4 Receptor Antibody (N-Terminus) - Images



Anti-MC4 Receptor antibody ALS10743 IHC of human brain, neurons and glia.

MC4R / Melanocortin 4 Receptor Antibody (N-Terminus) - Background

Receptor specific to the heptapeptide core common to adrenocorticotropic 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).

MC4R / Melanocortin 4 Receptor Antibody (N-Terminus) - References

Gantz I.,et al.J. Biol. Chem. 268:15174-15179(1993).

Mountjoy K.G.,et al.Mol. Endocrinol. 8:1298-1308(1994).
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