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Anti-MC3 Receptor Picoband Antibody

Catalog # ABO10263

Product Information

Application	WB
Primary Accession	P41968
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Melanocortin receptor 3(MC3R) detection. Tested with WB in Human;Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4159
Other Names	Melanocortin receptor 3, MC3-R, MC3R
Calculated MW	36043
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse
Subcellular Localization	Cell membrane; Multi-pass membrane protein.
Tissue Specificity	Brain, placental, and gut tissues.
Source	Eukaryota
Protein Name	Melanocortin receptor 3
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human MC3 Receptor (91-121aa NALETIMIAIVHSDYLTFEDQFIQHMDNIFD), different from the related mouse sequence by six amino acids, and from the related rat sequence by seven amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

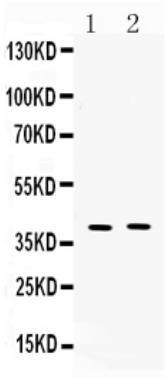
Protein Information

Name	MC3R (HGNC:6931)
Function	G protein-coupled receptor for melanocyte-stimulating hormones (alpha, beta, and gamma-MSH) and corticotropin/ACTH, which are peptide products of the POMC precursor (PubMed:37524700, PubMed:8463333). Upon activation, couples to G(s) protein, stimulating adenylate cyclase and the cAMP-dependent signaling pathway, which contributes to the regulation of energy homeostasis (PubMed:18231126, PubMed:37524700, PubMed:8463333). Required for expression of anticipatory patterns of activity and wakefulness during periods of limited nutrient availability and for the normal regulation of circadian clock activity in the brain (By similarity). Binding of the Agouti-related protein/AGPR antagonist precludes alpha-MSH-induced signaling, blocking cAMP production (PubMed:9311920).
Cellular Location	Cell membrane; Multi-pass membrane protein.
Tissue Location	Brain, placental, and gut tissues.

Background

Melanocortin receptor 3 is a protein that in humans is encoded by the MC3R gene. It is mapped to 20q13.2. This gene encodes a G-protein-coupled receptor for melanocyte-stimulating hormone and adrenocorticotropic hormone that is expressed in tissues other than the adrenal cortex and melanocytes. This gene maps to the same region as the locus for benign neonatal epilepsy. Mice deficient for this gene have increased fat mass despite decreased food intake, suggesting a role for this gene product in the regulation of energy homeostasis. Mutations in this gene are associated with a susceptibility to obesity in humans.

Images



Western blot analysis of MC3 Receptor expression in mouse kidney extract (lane 1), and COLO320 whole cell lysates (lane 2). MC3 Receptor at 40KD was detected using rabbit anti- MC3 Receptor Antigen Affinity purified polyclonal antibody (Catalog # ABO10263) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.