

Product datasheet for **TA328876**

Mchr1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	WB: 1:200-1:2000; FC: 1:50-1:600
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide CMDLQTSLSTGPNASN, corresponding to amino acid residues 7-20 of rat Melanin-concentrating hormone receptor 1. Extracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	melanin-concentrating hormone receptor 1
Database Link:	NP_113946 Entrez Gene 2847 Human Entrez Gene 207911 Mouse Entrez Gene 83567 Rat P97639



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Background:

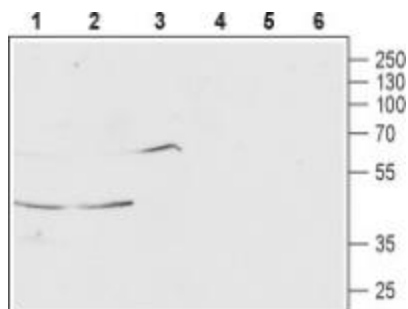
Melanin-concentrating hormone (MCH) is a 19 amino acid peptide originally isolated from the salmon pituitary gland (in fish the length of the peptide is 17 amino acids). In rodents and humans the peptide is synthesized in the brain and is involved in a number of physiological effects, although it is best known for its central role in the control of appetite control. For example, central administration of MCH in mice leads to obesity and conversely, knockout of the MCH gene in mice yields lean animals with an increased metabolic rate and reduced body fat. MCH exerts its effects by binding MCHR1 and MCHR2, two receptors belonging to the superfamily of G-protein coupled receptors (GPCRs). Like all members of the family, MCHR1 and MCHR2 have seven transmembrane domains, an extracellular N-terminal and intracellular C-terminal tails. MCHR1 and MCHR2 activation both lead to an increase in intracellular Ca²⁺ concentration. In rat, MCHR1 expression is quite broad, and is strongly detected in the brain. Expression of the receptor is also seen in the eye, skeletal muscle, tongue, pituitary, intestine and lymphocytes. MCHR1 is also expressed in adipose tissue where it regulates leptin secretion. In human, MCHR1 is mostly localized to the brain and pituitary. MCHR2 displays similar localization to that of MCHR1 in the brain. As MCHR2 is a pseudogene in rodents, studying its function is quite challenging. In the brain, MCHR1 is localized in many areas that are known to be involved in various psychological disorders. Indeed, MCHR1^{-/-} animals display antianxiety- and antidepressant-like behavior. Therefore, antagonizing the activity of MCHR1 could indeed serve as a means to treat depression and obesity.

Synonyms:

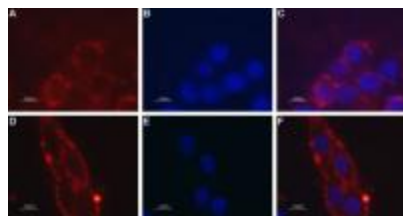
GPR24; MCH-1R; MCH-R1; MCH1R; MCHR; MCHR-1; MGC32129; SLC-1; SLC1

Note:

This antibody was tested in live cell imaging. Please see IF/ICC data for detail.

Product images:

Western blot analysis of rat brain (lanes 1 and 4), mouse brain (lanes 2 and 5) and human SH-SY5Y (lanes 3 and 6) lysates: 1-3. Anti-Melanin-Concentrating Hormone Receptor 1 (extracellular) antibody, (1:200). 4-6. Anti-Melanin-Concentrating Hormone Receptor 1 (extracellular) antibody, preincubated with the control peptide antigen.



Expression of Melanin-Concentrating Hormone Receptor 1 in mouse brain glioma. Immunocytochemical staining of mouse brain glioma (C6) intact living cells. A. Extracellular staining of cells with Anti-Melanin-Concentrating Hormone Receptor 1 (extracellular) antibody followed by goat anti-rabbit-AlexaFluor-594 secondary antibody. B. Nuclear staining using DAPI as the counterstain. C. Merged images of A and B.