

Product datasheet for **TA328873**

Mc5r Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)RYNSVRQRTSMKG, corresponding to amino acid residues 224-236 of mouse Melanocortin Receptor 5. 3rd intracellular loop.
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:	melanocortin 5 receptor
Database Link:	NP_038624 Entrez Gene 25726 Rat Entrez Gene 17203 Mouse P41149



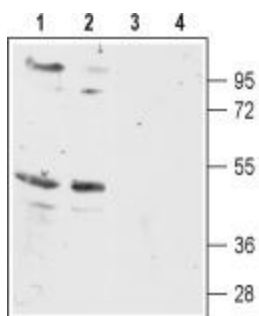
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Background:

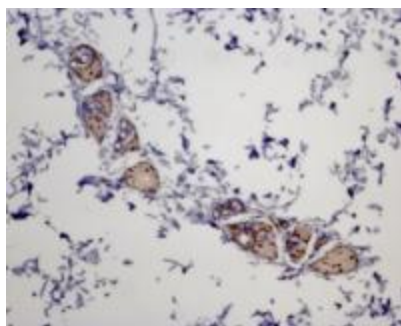
Melanocortin Receptor 5 (MC5R) is one of five members of the melanocortin receptor family, which belongs to the 7-transmembrane domain, G-Protein Coupled Receptor (GPCR) superfamily. The ligands of these receptors, the melanocortins, are a group of structurally-related peptides comprising the α -, β -, and γ -melanocyte-stimulating hormone (α -, β -, γ -MSH) and the adrenocorticotrophic hormone (ACTH), all of which are derived from post-translational processing of a common precursor peptide, proopiomelanocortin (POMC) 1,2,3. One of the salient features of the melanocortin signaling system is the existence of two endogenous antagonists, proteins that bind specifically to the receptor and have an inhibitory effect. These antagonist proteins are termed agouti (or agouti signaling protein, ASP) and agouti-related protein (AGRP) 1. All five melanocortin receptors bind their agonists (the melanocortins) and their endogenous antagonists (agouti/ASP and AGRP) with differing affinities. The order of potency for MC5R activation is α -MSH > ACTH = β -MSH >> γ -MSH while AGRP works as an endogenous antagonists of MC5R. MC5R is mostly expressed in peripheral tissues such as skeletal muscle, bone marrow, skin tissues particularly in sebaceous glands and exocrine glands such as salivary glands. The best understood function of Melanocortin Receptor 5 is in the regulation of exocrine glands since MC5R-deficient mice exhibit severely defective water repulsion and thermoregulation due to decreased production of sebaceous lipids.

Synonyms:

MC-2; MC5-R

Product images:

Western blot analysis of rat (lanes 1 and 3) and mouse (lanes 2 and 4) brain membranes: 1, 2. Anti-Melanocortin Receptor 5 antibody, (1:200). 3, 4. Anti-Melanocortin Receptor 5 antibody, preincubated with the control peptide antigen.



Expression of MC5R in rat skin. Immunohistochemical staining of paraffin embedded rat skin section using Anti-Melanocortin Receptor 5 antibody, (1:100). MC5R staining is present in sebaceous glands. Hematoxylin is used as the counterstain.