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MC2R Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5540b

Specification

MC2R Antibody (C-term) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	Q01718
Other Accession	Q8HYN8, Q64326, NP_000520.1
Reactivity	**Human**
Predicted	**Mouse, Pig**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**261-288**

MC2R Antibody (C-term) - Additional Information

Gene ID 4158

Other Names
Adrenocorticotropic hormone receptor, ACTH receptor, ACTH-R, Adrenocorticotropin receptor, Melanocortin receptor 2, MC2-R, MC2R, ACTHR

Target/Specificity
This MC2R antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 261-288 amino acids of human MC2R.

Dilution
FC~~1:10~50
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MC2R Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MC2R Antibody (C-term) - Protein Information

Name MC2R (HGNC:6930)

Synonyms ACTHR

Function G protein-coupled receptor for corticotropin/ACTH, primarily expressed in adrenal cortex where it plays a key role in the regulation of adrenocortical function (PubMed:1325670, PubMed:17596328, PubMed:36588120). Upon activation, couples to G(s) protein, stimulating adenylate cyclase and activating the cAMP-dependent signaling pathway, the MAPK cascade as well as the PKA pathway, leading to steroidogenic factor 1/NR5A1-mediated transcriptional activation (PubMed:1325670). Activation by ACTH facilitates the release of adrenal glucocorticoids, including cortisol and corticosterone (PubMed:12213892, PubMed:8636348). In addition, MC2R is required for fetal and neonatal adrenal gland development (By similarity).

Cellular Location
Cell membrane; Multi-pass membrane protein

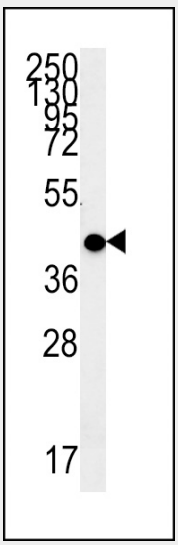
Tissue Location
Melanocytes and corticoadrenal tissue.

MC2R Antibody (C-term) - 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

MC2R Antibody (C-term) - Images



MC2R Antibody (C-term) (Cat. #AP5540b) western blot analysis in WiDr cell line lysates (15ug/lane).This demonstrates the MC2R antibody detected the MC2R protein (arrow).

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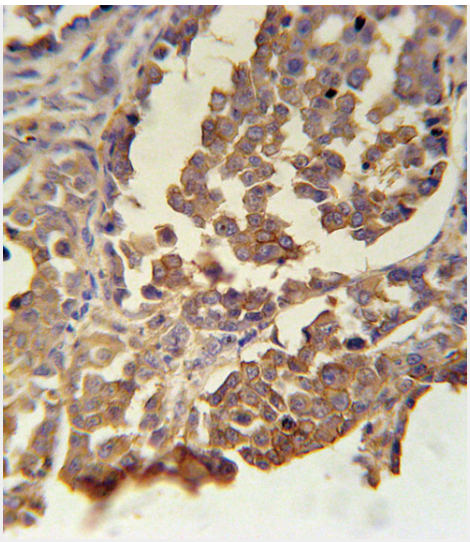
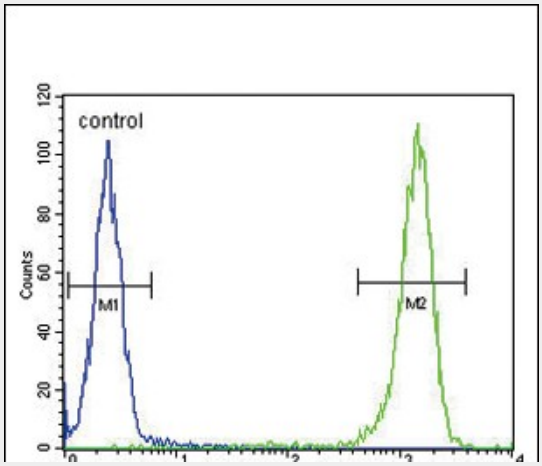


MC2R Antibody (C-term) (Cat. #AP5540b) immunohistochemistry analysis in formalin fixed and paraffin embedded human skin carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the MC2R Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



MC2R Antibody (C-term) (Cat. #AP5540b) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MC2R Antibody (C-term) - Background

MC2R encodes one member of the five-member G-protein associated melanocortin receptor family. Melanocortins (melanocyte-stimulating hormones and adrenocorticotropic hormone) are peptides derived from pro-opiomelanocortin (POMC). MC2R is selectively activated by adrenocorticotropic hormone, whereas the other four melanocortin receptors recognize a variety of melanocortin ligands.

MC2R Antibody (C-term) - References

Holliday, K.L., et al. Ann. Rheum. Dis. 69(3):556-560(2010)
Ding, Y.X., et al. Pharmacogenet. Genomics 20(2):71-76(2010)
Roy, S., et al. Endocrinology 151(2):660-670(2010)

MC2R Antibody (C-term) - Citations

- Colocalization of Wnt/β-Catenin and ACTH Signaling Pathways and Paracrine Regulation in Aldosterone-producing Adenoma
- Steroidogenic enzyme profile in an androgen-secreting adrenocortical oncocytoma associated with hirsutism.