

Goat Anti-MC2R / ACTHR Antibody
Peptide-affinity purified goat antibody
Catalog # AF1658a**Specification**

Goat Anti-MC2R / ACTHR Antibody - Product Information

Application	WB, E
Primary Accession	Q01718
Other Accession	NP_000520 , 4158
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	33927

Goat Anti-MC2R / ACTHR Antibody - Additional Information**Gene ID** 4158**Other Names**

Adrenocorticotrophic hormone receptor, ACTH receptor, ACTH-R, Adrenocorticotropin receptor, Melanocortin receptor 2, MC2-R, MC2R, ACTHR

Dilution

WB~~1:1000

E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-MC2R / ACTHR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-MC2R / ACTHR Antibody - Protein Information**Name** MC2R**Synonyms** ACTHR**Function**

Hormone receptor primarily expressed in adrenal cortex that plays a key role in regulating adrenocortical function (PubMed:36588120). Upon corticotropin (ACTH) binding, facilitates the release of adrenal glucocorticoids, including cortisol and corticosterone. In addition, MC2R is required for fetal and neonatal adrenal gland development (By similarity). Mechanistically, activates adenylate cyclase (cAMP), the MAPK cascade as well as the cAMP- dependent protein kinase A pathway leading to steroidogenic factor 1/NR5A1-mediated transcriptional activation (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Melanocytes and corticoadrenal tissue.

Goat Anti-MC2R / ACTHR Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-MC2R / ACTHR Antibody - Images

AF1658a (1 µg/ml) staining of Human Skin lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-MC2R / ACTHR Antibody - Background

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

Goat Anti-MC2R / ACTHR Antibody - References

Comprehensive analysis of common genetic variation in 61 genes related to steroid hormone and insulin-like growth factor-I metabolism and breast cancer risk in the NCI breast and prostate cancer cohort consortium. Canzian F, et al. Hum Mol Genet, 2010 Oct 1. PMID 20634197.

Genetic variation in neuroendocrine genes associates with somatic symptoms in the general population: results from the EPIFUND study. Holliday KL, et al. J Psychosom Res, 2010 May. PMID 20403506.

ACTH receptor (MC2R) promoter variants associated with infantile spasms modulate MC2R expression and responsiveness to ACTH. Ding YX, et al. Pharmacogenet Genomics, 2010 Feb. PMID 20042918.

Role of asparagine-linked glycosylation in cell surface expression and function of the human adrenocorticotropin receptor (melanocortin 2 receptor) in 293/FRT cells. Roy S, et al. Endocrinology, 2010 Feb. PMID 20022931.

Isolated Addison's disease is unlikely to be caused by mutations in MC2R, MRAP or STAR, three genes responsible for familial glucocorticoid deficiency. Dias RP, et al. Eur J Endocrinol, 2010 Feb. PMID 19903795.