

MC4-R (C-19): sc-6879

BACKGROUND

The melanocortin family comprises the alpha-, beta- and gamma-melanocyte stimulating hormones (MSH) and adrenocorticotrophin. The receptors for these hormones are seven-transmembrane G protein-coupled proteins that activate adenyl cyclase. Five melanocortin receptors have been cloned and shown to exhibit different affinities and patterns of expression. MC1-R (MSH-R) is expressed in melanocytes and corticoadrenal tissue. MC2-R is the ACTH receptor and is expressed primarily in the adrenal cortex. MC3-R has been found in specific regions of the brain and is also expressed in placenta and gut. MC4-R is expressed primarily in brain, while MC5-R is expressed at low levels in most tissues examined.

REFERENCES

1. Mountjoy, K.G., et al. 1992. The cloning of a family of genes that encode the melanocortin receptors. *Science* 257: 1248-1251.
2. Chhajlani, V., et al. 1992. Molecular cloning and expression of the human melanocyte stimulating hormone receptor cDNA. *FEBS Letts.* 309: 417-420.

CHROMOSOMAL LOCATION

Genetic locus: MC4R (human) mapping to 18q22; Mc4r (mouse) mapping to 18 E1.

SOURCE

MC4-R (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MC4-R of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6879 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MC4-R (C-19) is recommended for detection of MC4-R of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MC4-R (C-19) is also recommended for detection of MC4-R in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MC4-R siRNA (h): sc-35873, MC4-R siRNA (m): sc-35874, MC4-R shRNA Plasmid (h): sc-35873-SH, MC4-R shRNA Plasmid (m): sc-35874-SH, MC4-R shRNA (h) Lentiviral Particles: sc-35873-V and MC4-R shRNA (m) Lentiviral Particles: sc-35874-V.

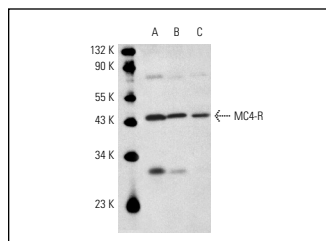
Molecular Weight of MC4-R: 40 kDa.

Positive Controls: mouse cerebellum extract: sc-2403, rat cerebellum extract: sc-2398 or mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MC4-R (C-19): sc-6879. Western blot analysis of MC4-R expression in mouse cerebellum (A), rat cerebellum (B) and mouse brain (C) extracts.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **MC4-R (C-10): sc-55567**, our highly recommended monoclonal alternative to MC4-R (C-19).