
Alternate Names	MC2
Isotype	IgG2a
Conjugate	Unconjugated
Background	Human melanocortin 5 receptor (MC5R) is a 7-transmembrane G protein-coupled receptor (GPCR). MC5R is a class A GPCR. MC5R is highly expressed in several cell types including sebocytes and epithelial cells. MC5R has been shown to be important in the regulation of sebum production. Stimulation of MC5R promotes fatty acid oxidation in skeletal muscle and lipolysis in adipocytes. It is essential for erythrocyte differentiation and involved in inflammation. Due to its involvement in sebogenesis, MC5R has become an emerging therapeutic target for sebum-suppressive therapies for seborrhoea and acne vulgaris. Human MC5R protein has >80% sequence homology with mouse MC5R.

Product Details

Specificity	Detects human melanocortin 5 receptor / MC5R transfectants but not irrelevant transfectants in flow cytometry.
Antibody Type	Monoclonal antibody
Host Species	Mouse
Immunogen	MC5R N-terminus, the exact sequence of the immunogen is proprietary.; UniProt # P33032
Formulation / Storage buffer	Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4 with 10% trehalose as protectant



Anti-Human MC5R Monoclonal Antibody

Product Code: CABh-25407

Clone: 1F2-B12

For Research Use Only (RUO)

Reconstitution

For best performance, we strongly recommend you reconstitute the lyophilized product with deionized water to a stock solution of 500 µg/mL. Solubilize for 20 minutes at room temperature with occasional gentle mixing. Avoid shaking or vortexing.

For 25µg product size:

Reconstitute with 50 µL sterile deionized water.

For 100µg product size:

Reconstitute with 200 µL sterile deionized water.

Shipping

Frozen Ice Packs

Purification

Affinity Enrichment

Stability & Storage

-20°C

Verified Application

ELISA, Flow cytometry

Recommended Usage

ELISA: starting concentration 1 µg/mL

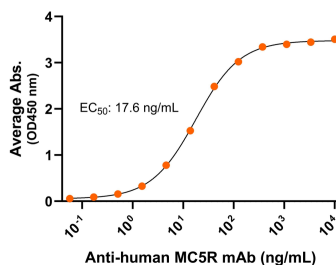
Flow cytometry: 0.8 µg/1E6 cells

Bioactive Data, Detection of Antigen by:

ELISA

Anti-human MC5R Monoclonal Antibody, ELISA

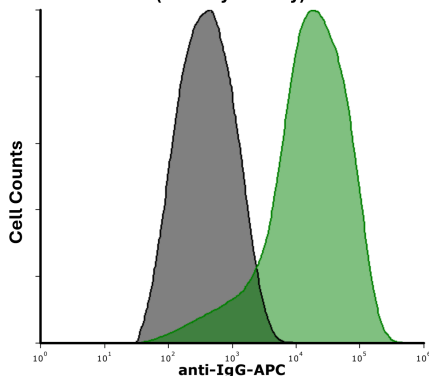
0.2 µg of MC5R protein per well



Immobilized human MC5R fragment at 2 µg/mL (100 µL/well) can bind Mouse Anti-Human MC5R Monoclonal Antibody (Cat. No. CABh-25407) with half maximal effective concentration (EC50) range of 8.8-35.2 ng/mL (QC tested).

Flow Cytometry

mAb binding MC5R expressing live cells (Flow Cytometry)



Detection of MC5R expressed on HEK293 cell surface transiently transfected with full-length human MC5R by Flow Cytometry. HEK293 cell line transfected with human MC5R was stained with isotype control (black curve) or mouse Anti-Human MC5R Monoclonal Antibody (Cat. No. CABh-25407) (green curve) by APC-conjugated Anti-Mouse IgG Secondary Antibody.

Antigen Details

Structure	7-transmembrane protein, G protein-coupled receptor (GPCR)
Function	regulation of sebaceous lipids
Ligand / Receptor	melanocyte-stimulating hormone (MSH) and adrenocorticotrophin hormone (ACTH)
Cell Type	Several cell types including sebocytes and epithelial cells
Molecular Family	G protein-coupled receptor
Gene ID	P33032