

MC4 Receptor Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54493**Specification**

MC4 Receptor Polyclonal Antibody - Product Information

Application	WB, FC
Primary Accession	P32245
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36943

MC4 Receptor Polyclonal Antibody - Additional Information**Gene ID** 4160**Other Names**

Melanocortin receptor 4, MC4-R, MC4R

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

MC4 Receptor Polyclonal Antibody - Protein Information**Name** MC4R**Function**

Hormone receptor that acts as a key component of the leptin- melanocortin pathway at the intersection of homeostatic maintenance of energetic state (PubMed:32327598, PubMed:33858992). Plays a role in regulating food intake: activation by a stimulating hormone such as anorexigenic alpha-melanocyte stimulating hormone (alpha-MSH) inhibits appetite, whereas binding to a natural antagonist like Agouti-related protein/AGRP promotes appetite. G-protein-coupled receptor that activates conventional G α signaling leading to induction of anorexigenic signaling in the hypothalamus to result in negative energy balance (PubMed:33858992). Regulates the firing activity of neurons from the hypothalamus by alpha-MSH and AGRP independently of G α signaling by ligand-induced coupling of closure of inwardly rectifying potassium channel KCNJ13 (By similarity). In intestinal epithelial cells, plays a role in the inhibition of hepatic glucose production via nesfatin-1/NUCB2 leading to increased cyclic adenosine monophosphate (cAMP) levels and glucagon-like peptide 1 (GLP-1) secretion in the intestinal epithelium (PubMed:39562740).

Cellular Location

Cell membrane; Multi-pass membrane protein

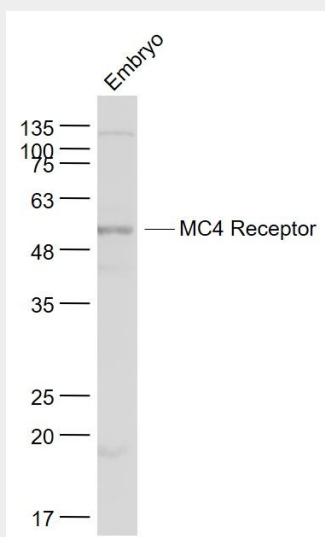
Tissue Location

Brain, placental, and gut tissues.

MC4 Receptor Polyclonal 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](#)

MC4 Receptor Polyclonal Antibody - Images**Sample:**

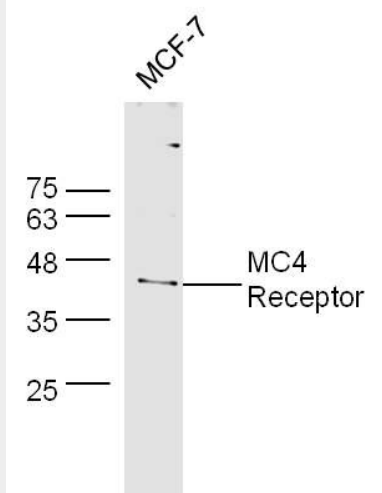
Embryo (Mouse) Lysate at 40 ug

Primary: Anti- MC4 Receptor (bs-11417R) at 1/1000 dilution

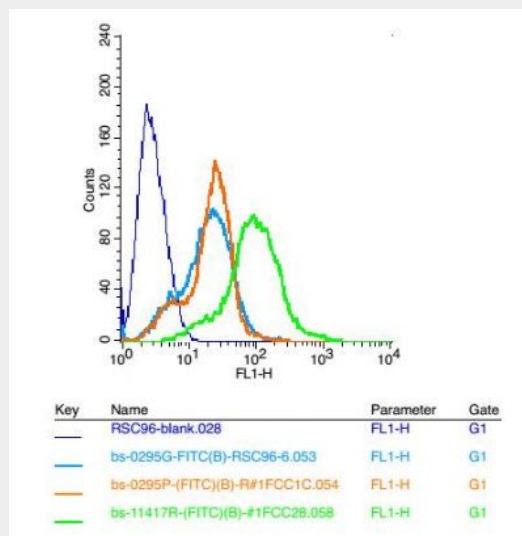
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 37 kD

Observed band size: 52 kD

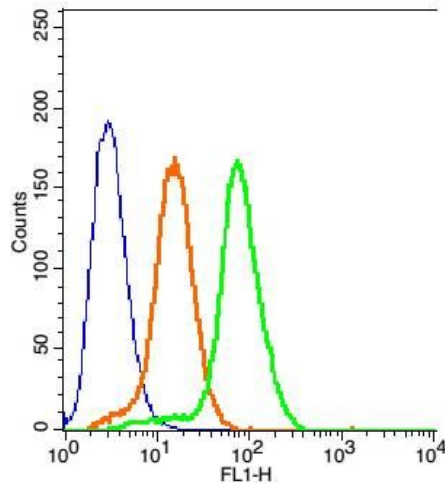


Sample: MCF-7 Cell (Human) Lysate at 40 ug
 Primary: Anti-MC4 Receptor (bs-11417R) at 1/300 dilution
 Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
 Predicted band size: 37 kD
 Observed band size: 40 kD



Positive control: RSC96

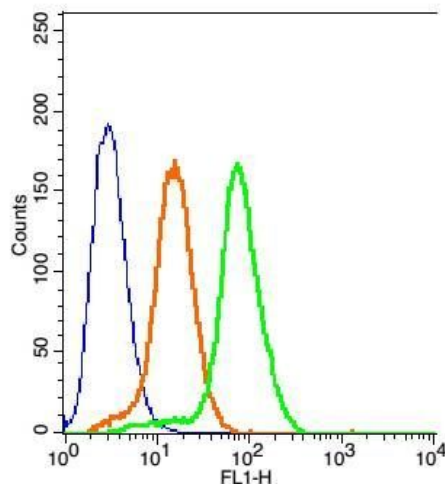
Isotype Control Antibody: Rabbit IgG ; Secondary Antibody: Goat anti-rabbit IgG-FITC, Dilution: 1:100 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 6 µg in 100 µL 1X PBS containing 0.5% BSA.



Blank control: 293T(fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice).

Primary Antibody: Rabbit Anti-MC4 Receptor /AF488 Conjugated antibody (bs-11417R-AF488), Dilution: 1 μ g in 100 μ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG/AF488(orange) ,used under the same conditions.



Blank control: 293T(fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice). Primary Antibody: Rabbit Anti-MC4 Receptor /AF488 Conjugated antibody (bs-11417R-AF488), Dilution: 1 μ g in 100 μ L 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG/AF488(orange) ,used under the same conditions.