



Rabbit Anti-MC4 Receptor antibody

SL11417R

Product Name:	MC4 Receptor
Chinese Name:	黑素皮质素4受体抗体
Alias:	MC4 R; MC4-R; MC4R; MC4R_HUMAN; Melanocortin 4 receptor; Melanocortin receptor 4; MGC126851; MGC138197.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-F=1:400-800Flow-Cyt=1μg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	37kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MC4 Receptor:1-50/332<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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 adenylyl 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.

Function:

Receptor specific to the heptapeptide core common to adrenocorticotrophic hormone and alpha-, beta-, and gamma-MSH. This receptor is mediated by G proteins that stimulate adenylate cyclase.

Subunit:

Interacts with ATRNL1. Interacts with MGRN1, but does not undergo MGRN1-mediated ubiquitination; this interaction competes with GNAS-binding and thus inhibits agonist-induced cAMP production.

Subcellular Location:

Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

Brain, placental, and gut tissues.

DISEASE:

Defects in MC4R are a cause of obesity (OBESITY) [MIM:601665]. It is a condition characterized by an increase of body weight beyond the limitation of skeletal and physical requirements, as the result of excessive accumulation of body fat.

Similarity:

Belongs to the G-protein coupled receptor 1 family.

SWISS:

P32245

Gene ID:

4160

Database links:

[Entrez Gene: 4160](#)Human

[Entrez Gene: 17202](#)Mouse

[Entrez Gene: 25635](#)Rat

[Oimim: 155541](#)Human

[SwissProt: P32245](#)Human

[SwissProt: P56450](#)Mouse

[SwissProt: P70596](#)Rat

[Unigene: 532833](#)Human

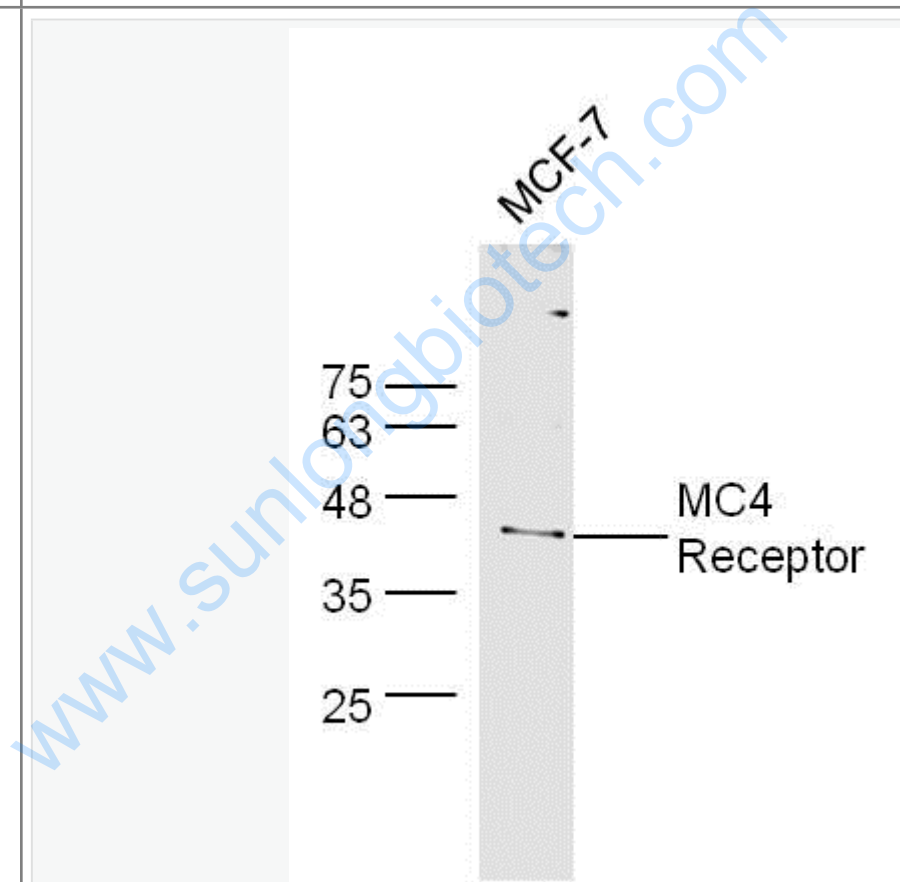
[Unigene: 229447](#)Mouse

[Unigene: 10620](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



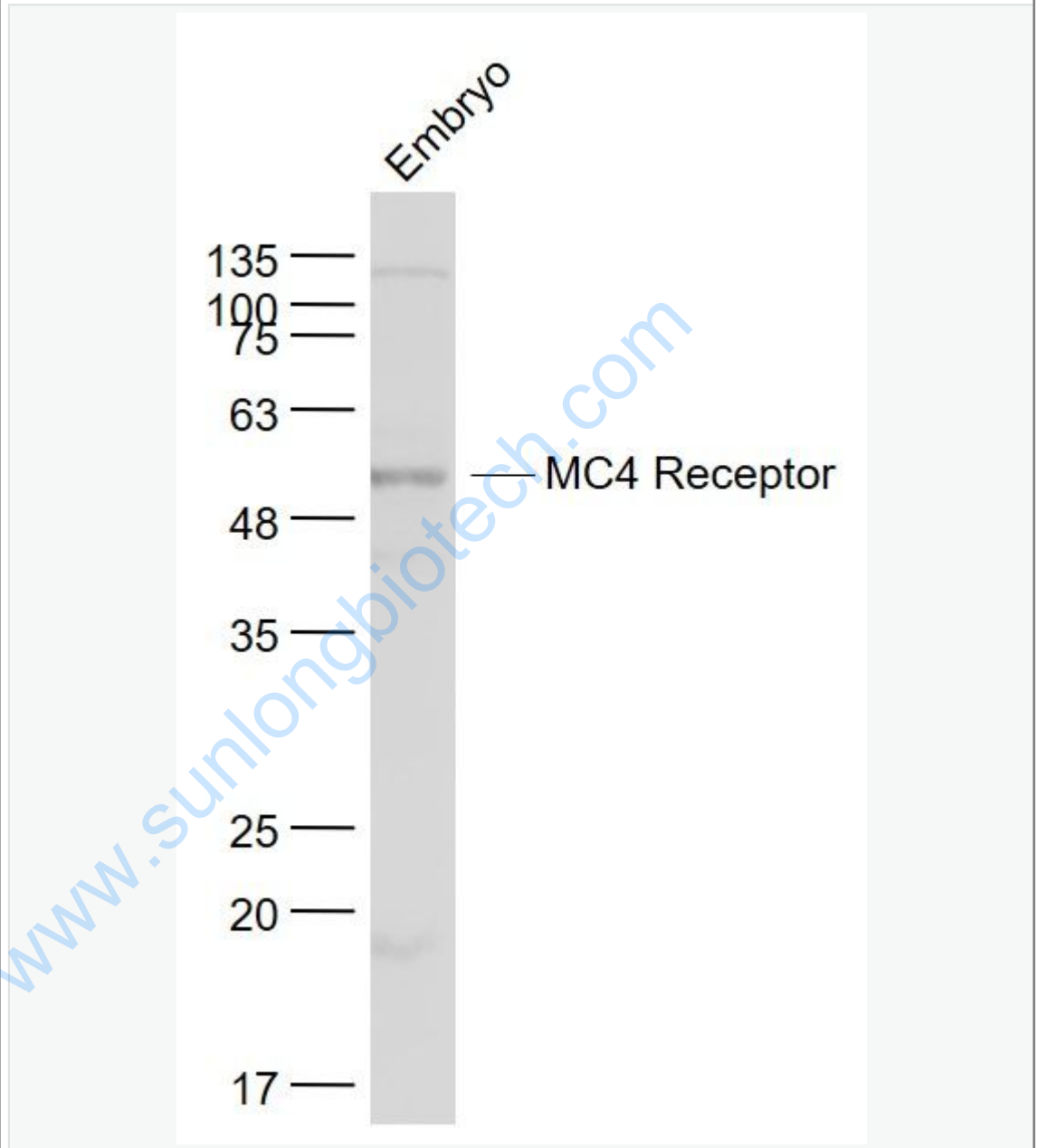
Sample: MCF-7 Cell (Human) Lysate at 40 ug

Primary: Anti-MC4 Receptor (SL11417R) at 1/300 dilution

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

Predicted band size: 37 kD

Observed band size: 40 kD



Sample:

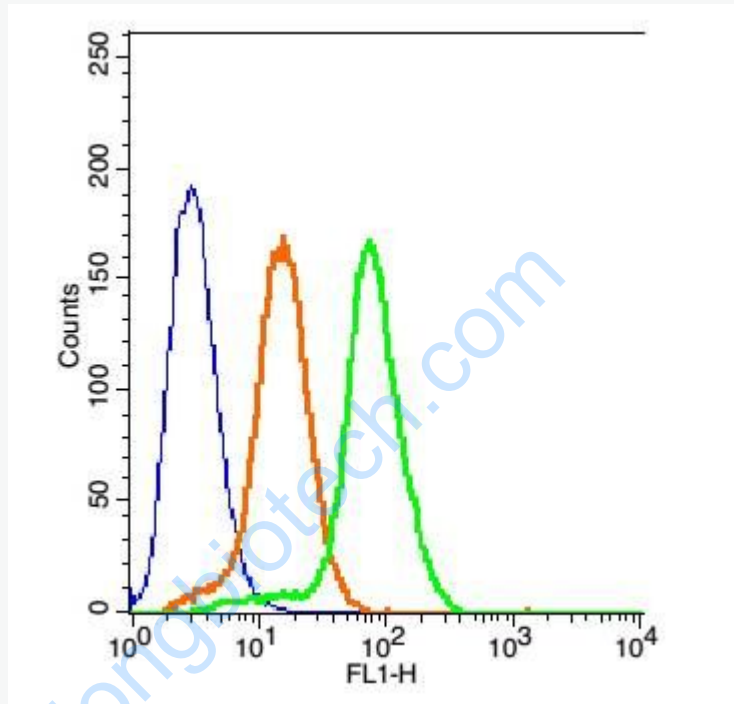
Embryo (Mouse) Lysate at 40 ug

Primary: Anti- MC4 Receptor (SL11417R) at 1/1000 dilution

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

Predicted band size: 37 kD

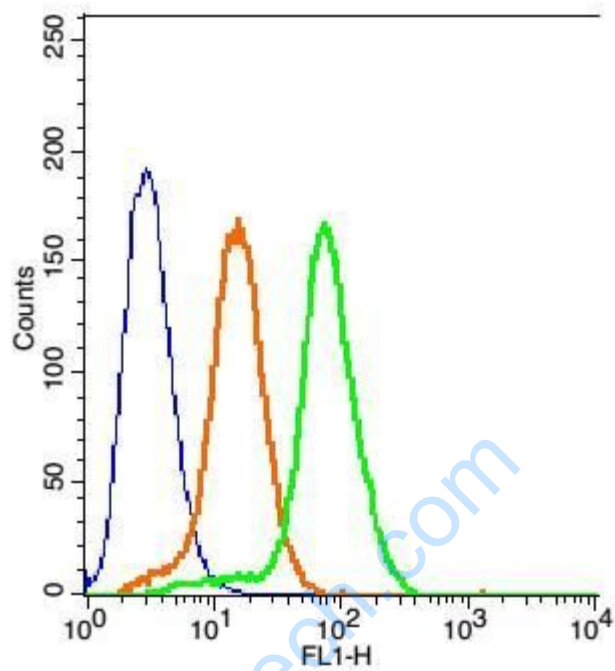
Observed band size: 52 kD



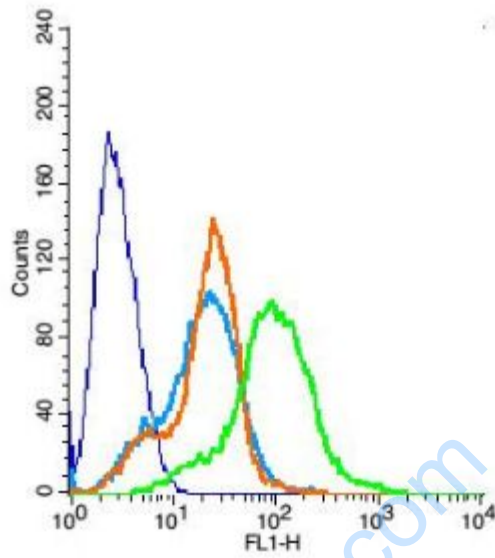
Blank control: 293T(fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice).

Primary Antibody: Rabbit Anti-MC4 Receptor /AF488 Conjugated antibody (SL11417R), 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.



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Key	Name	Parameter	Gate
—	RSC96-blank.028	FL1-H	G1
—	bs-0295G-FITC(B)-RSC96-6.053	FL1-H	G1
—	bs-0295P-(FITC)(B)-R#1FCC1C.054	FL1-H	G1
—	bs-11417R-(FITC)(B)-#1FCC2B.058	FL1-H	G1

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: 6µg in 100 µL 1X PBS containing 0.5% BSA.