

# **Goat Anti-Melanocortin 3 Receptor Antibody**

Peptide-affinity purified goat antibody Catalog # AF1666a

# **Specification**

## Goat Anti-Melanocortin 3 Receptor Antibody - Product Information

Application WB, E
Primary Accession P41968

Other Accession <u>NP\_063941</u>, <u>4159</u>

Reactivity
Host
Clonality
Concentration
Isotype
Human
Goat
Polyclonal
100ug/200ul
IgG

Isotype IgG
Calculated MW 36043

# Goat Anti-Melanocortin 3 Receptor Antibody - Additional Information

#### **Gene ID 4159**

#### **Other Names**

Melanocortin receptor 3, MC3-R, MC3R

#### **Dilution**

WB~~1:1000

E~~N/A

### **Format**

0.5 mg lgG/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-Melanocortin 3 Receptor Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Goat Anti-Melanocortin 3 Receptor Antibody - Protein Information

#### Name MC3R

# **Function**

Receptor for MSH (alpha, beta and gamma) and ACTH. This receptor is mediated by G proteins which activate adenylate cyclase. Required for expression of anticipatory patterns of activity and wakefulness during periods of limited nutrient availability and for the normal regulation of



circadian clock activity in the brain.

**Cellular Location** 

Cell membrane; Multi-pass membrane protein.

**Tissue Location** 

Brain, placental, and gut tissues.

# **Goat Anti-Melanocortin 3 Receptor Antibody - Protocols**

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

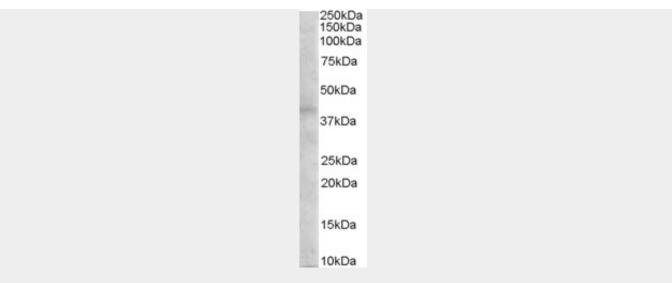
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Goat Anti-Melanocortin 3 Receptor Antibody - Images



AF1666a (1  $\mu$ g/ml) staining of Human Brain lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





EB06726 ( $1\mu g/ml$ ) staining of Human Brain lysate ( $35\mu g$  protein in RIPA buffer). Detected by chemiluminescence.

## Goat Anti-Melanocortin 3 Receptor Antibody - Background

This gene encodes a G-protein-coupled receptor for melanocyte-stimulating hormone and adrenocorticotropic hormone that is expressed in tissues other than the adrenal cortex and melanocytes. This gene maps to the same region as the locus for benign neonatal epilepsy. Mice deficient for this gene have increased fat mass despite decreased food intake, suggesting a role for this gene product in the regulation of energy homeostasis. Mutations in this gene are associated with a susceptibility to obesity in humans.

## Goat Anti-Melanocortin 3 Receptor Antibody - References

Identification of Three Novel Genetic Variants in the Melanocortin-3 Receptor of Obese Children. Zegers D, et al. Obesity (Silver Spring), 2010 Jun 10. PMID 20539302.

Association study of 182 candidate genes in anorexia nervosa. Pinheiro AP, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Jul. PMID 20468064.

Melanocortin-3 receptor gene variants: association with childhood obesity and eating behavior in Chilean families. Obreg∏n AM, et al. Nutrition, 2010 Jul-Aug. PMID 20144537.

Novel binding motif of ACTH analogues at the melanocortin receptors. Yang Y, et al. Biochemistry, 2009 Oct 20. PMID 19743876.