

# **Anti-Leptin Receptor LEPR Rabbit Monoclonal Antibody**

**Catalog # ABO14218** 

### **Specification**

## Anti-Leptin Receptor LEPR Rabbit Monoclonal Antibody - Product Information

Application WB
Primary Accession P48357
Host Rabbit Isotype Rabbit IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

**Description** 

Anti-Leptin Receptor LEPR Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

## Anti-Leptin Receptor LEPR Rabbit Monoclonal Antibody - Additional Information

**Gene ID 3953** 

**Other Names** 

Leptin receptor, LEP-R, HuB219, OB receptor, OB-R, CD295, LEPR, DB, OBR

Calculated MW 132494 MW KDa

**Application Details** WB 1:500-1:2000

**Subcellular Localization** 

Cell membrane; Single-pass type I membrane protein.

### **Tissue Specificity**

Isoform A is expressed in fetal liver and in hematopoietic tissues and choroid plexus. In adults highest expression in heart, liver, small intestine, prostate and ovary. Low level in lung and kidney. Isoform B is highly expressed in hypothalamus.

#### **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

### **Immunogen**

A synthesized peptide derived from human Leptin Receptor

**Purification** 

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for



up to one month. Avoid repeated freeze-thaw cycles.

## **Anti-Leptin Receptor LEPR Rabbit Monoclonal Antibody - Protein Information**

Name LEPR

Synonyms DB, OBR

#### **Function**

Receptor for hormone LEP/leptin (Probable) (PubMed:<a

href="http://www.uniprot.org/citations/22405007" target=" blank">22405007</a>). On ligand binding, mediates LEP central and peripheral effects through the activation of different signaling pathways such as JAK2/STAT3 and MAPK cascade/FOS. In the hypothalamus, LEP acts as an appetite- regulating factor that induces a decrease in food intake and an increase in energy consumption by inducing anorexinogenic factors and suppressing or xigenic neuropeptides, also regulates bone mass and secretion of hypothalamo-pituitary-adrenal hormones (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/9537324" target=" blank">9537324</a>). In the periphery, increases basal metabolism, influences reproductive function, regulates pancreatic beta-cell function and insulin secretion, is pro-angiogenic and affects innate and adaptive immunity (PubMed:<a href="http://www.uniprot.org/citations/12504075" target="\_blank">12504075</a>, PubMed:<a href="http://www.uniprot.org/citations/25060689" target="blank">25060689</a>, PubMed:<a href="http://www.uniprot.org/citations/8805376" target="blank">8805376</a>). Control of energy homeostasis and melanocortin production (stimulation of POMC and full repression of AgRP transcription) is mediated by STAT3 signaling, whereas distinct signals regulate NPY and the control of fertility, growth and glucose homeostasis. Involved in the regulation of counter-regulatory response to hypoglycemia by inhibiting neurons of the parabrachial nucleus. Has a specific effect on T lymphocyte responses, differentially regulating the proliferation of naive and memory T -ells. Leptin increases Th1 and suppresses Th2 cytokine production (By similarity).

### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Basolateral cell membrane

### **Tissue Location**

Isoform A is expressed in fetal liver and in hematopoietic tissues and choroid plexus. In adults highest expression in heart, liver, small intestine, prostate and ovary. Low level in lung and kidney. Isoform B is highly expressed in hypothalamus, but also in skeletal muscle. Detected in fundic and antral epithelial cells of the gastric mucosa (PubMed:19159218). Isoform B and isoform A are expressed by NK cells (at protein level) (PubMed:12504075)

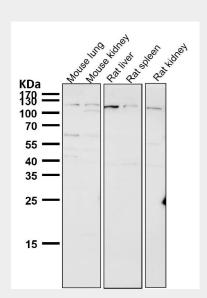
### Anti-Leptin Receptor LEPR Rabbit Monoclonal Antibody - Protocols

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

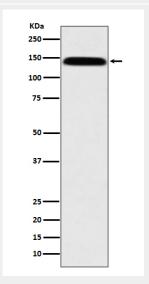
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **Anti-Leptin Receptor LEPR Rabbit Monoclonal Antibody - Images**





All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of Leptin Receptor expression in SH-SY5Y cell lysate.