

**Anti-Leptin Receptor LEPR Rabbit Monoclonal Antibody**  
**Catalog # ABO14218****Specification**

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

Application	WB
Primary Accession	<a href="#">P48357</a>
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 anorexigenic factors and suppressing orexigenic 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**

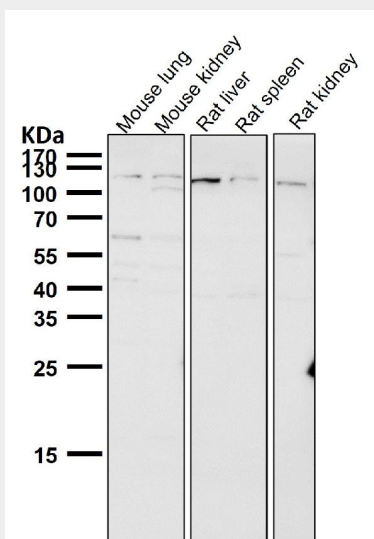
Isoform A is expressed in fetal liver and in hematopoietic tissues and choroid plexus. In adults highest expression in heart, liver, small intestine, prostate and ovary. Low level in lung and kidney. Isoform B is highly expressed in hypothalamus, but also in skeletal muscle. Detected in fundic and antral 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**

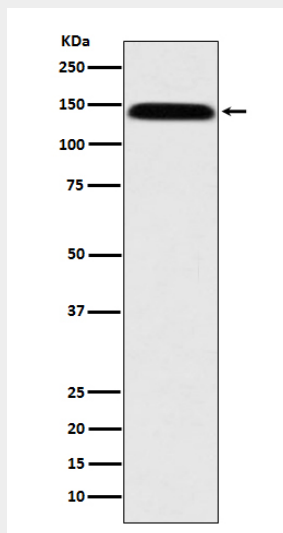
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.