

**Leptin Receptor Antibody**  
Rabbit mAb  
Catalog # AP91284**Specification**

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**Leptin Receptor Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P48357</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
Leptin receptor; LEP-R; HuB219 OB receptor; OB-R; CD295; LEPR; DB; OBR;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	132494 Da

**Leptin Receptor Antibody - Additional Information**

Dilution	WB~~1:1000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Leptin Receptor
Description	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).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**Leptin Receptor 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)

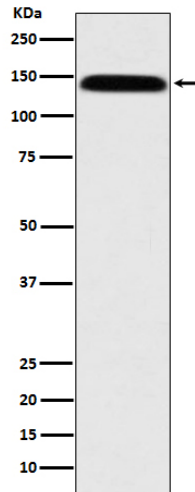
#### Leptin Receptor Antibody - Protocols

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](#)

#### Leptin Receptor Antibody - Images





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