**Applications** 

WB,ELISA



# **Ob-R Rabbit pAb**

CatalogNo: YT5282 Orthogonal Validated (5)

# **Key Features**

**Host Species** Reactivity Rabbit Human, Rat, Mouse,

MW Isotype

• 132kD (Observed) IgG

# **Recommended Dilution Ratios**

WB 1:500-1:2000 **ELISA 1:20000** 

Not yet tested in other applications.

# Storage

Storage\* -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

# Basic Information

**Clonality** Polyclonal

# Immunogen Information

**Immunogen** Synthesized peptide derived from Leptin receptor at AA range: 791-840

**Specificity** Ob-R Polyclonal Antibody detects endogenous levels of Ob-R protein.

# | Target Information

LEPR OBR **Gene name** 

#### **Protein Name**

Leptin receptor

Organism	Gene ID	UniProt ID
Human	<u>3953;</u>	<u>P48357;</u>
Mouse	<u>16847;</u>	<u>P48356;</u>
Rat	<u>24536;</u>	<u>Q62959;</u>

### Cellular Localization

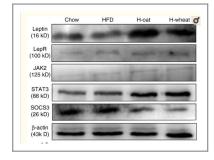
Cell membrane; Single-pass type I membrane protein. Basolateral cell membrane.; [Isoform E]: Secreted .

**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, 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).

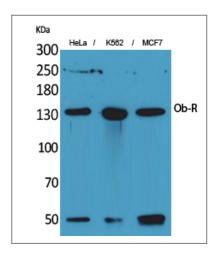
#### **Function**

Domain: The box 1 motif is required for JAK interaction and/or activation., Domain: The cytoplasmic domain may be essential for intracellular signal transduction by activation of JAK tyrosine kinase and STATs., Domain: The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding, Function: Receptor for obesity factor (leptin). On ligand binding, mediates signaling through JAK2/STAT3. Involved in the regulation of fat metabolism and, in a hematopoietic pathway, required for normal lymphopoiesis. May play a role in reproduction. Can also mediate the ERK/FOS signaling pathway.,PTM:On ligand binding, phosphorylated on two conserved C-terminal tyrosine residues (isoform B only) by JAK2. Tyr-986 is required for complete binding and activation of PTPN11, ERK/FOS activation and, for interaction with SOCS3 (By similarity). Phosphorylation on Tyr-1141 is required for STAT3 binding/activation., similarity: Belongs to the type I cytokine receptor family. Type 2 subfamily., similarity: Contains 1 Ig-like (immunoglobulin-like) domain., similarity: Contains 4 fibronectin type-III domains., subunit: On leptin stimulation, homodimerizes. The phosphorylated receptor binds a number of SH2 domain-containing proteins such as STAT3, PTPN11, and SOCS3 (By similarity). Interaction with SOCS3 inhibits LRb signaling., 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.,

### **Validation Data**



Zhang, Ru, et al. "Effects of cereal fiber on leptin resistance and sensitivity in C57BL/6| mice fed a high-fat/cholesterol diet." Food & nutrition research 60.1 (2016): 31690.



Western Blot analysis of HeLa, K562, MCF7 cells using Ob-R Polyclonal Antibody. Antibody was diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000

# | Contact information

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Please scan the QR code to access additional product information: **Ob-R Rabbit pAb** 

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Antibody | ELISA Kits | Protein | Reagents