

## **Ob-R Polyclonal Antibody**

Catalog No: YT5282

**Reactivity:** Human; Rat; Mouse;

**Applications:** WB;ELISA

Target: Ob-R

Fields: >>Cytokine-cytokine receptor interaction;>>Neuroactive ligand-receptor

interaction;>>AMPK signaling pathway;>>JAK-STAT signaling

pathway;>>Adipocytokine signaling pathway;>>Non-alcoholic fatty liver disease

Gene Name: LEPR OBR

Protein Name: Leptin receptor

P48357

P48356

Human Gene Id: 3953

**Human Swiss Prot** 

No:

Mouse Gene Id: 16847

**Mouse Swiss Prot** 

No:

Rat Gene ld: 24536

Rat Swiss Prot No: Q62959

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

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

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

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

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**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 132kD

**Cell Pathway:** Cytokine-cytokine receptor interaction; Neuroactive ligand-receptor

interaction; Jak\_STAT; Adipocytokine;

**Background:** The protein encoded by this gene belongs to the gp130 family of cytokine

receptors that are known to stimulate gene transcription via activation of cytosolic STAT proteins. This protein is a receptor for leptin (an adipocyte-specific hormone that regulates body weight), and is involved in the regulation of fat metabolism, as well as in a novel hematopoietic pathway that is required for normal lymphopoiesis. Mutations in this gene have been associated with obesity and pituitary dysfunction. Alternatively spliced transcript variants encoding

different isoforms have been described for this gene. It is noteworthy that this gene and LEPROT gene (GeneID:54741) share the same promoter and the first 2 exons, however, encode distinct proteins (PMID:9207021).[provided by RefSeq,

Nov 2010],

**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 similar

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

Location : membrane .; [Isoform E]: Secreted .

**Expression:** 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).

Tag: orthogonal,hot

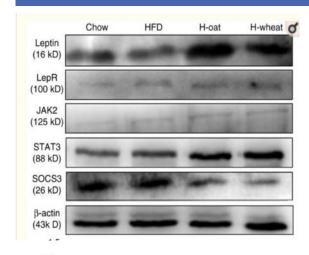
**Sort :** 1116

**No4:** 1

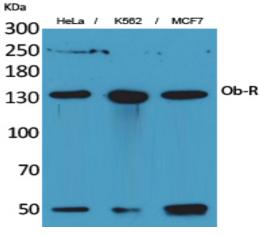
**Host:** Rabbit

Modifications: Unmodified

## **Products Images**



Zhang, Ru, et al. "Effects of cereal fiber on leptin resistance and sensitivity in C57BL/6J 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