

Ob-R (phospho Tyr1141) Polyclonal Antibody

Catalog No: YP1200

Reactivity: Human; 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

Human Gene Id: 3953

Human Swiss Prot

No:

Mouse Gene Id: 16847

Mouse Swiss Prot

No:

Immunogen: Synthesized phospho-peptide around the phosphorylation site of human Ob-R

(phospho Tyr1141)

P48357

P48356

Specificity: Phospho-Ob-R (Y1141) Polyclonal Antibody detects endogenous levels of Ob-R

protein only when phosphorylated at Y1141.

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: 1:5000. Not yet tested in other applications.

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 Location:

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

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).

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