

Summary

Production Name	Ob-R Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	LEPR OBR
Alternative Names	LEPR; DB; OBR; Leptin receptor; LEP-R; HuB219; OB receptor; OB-R; CD295
Gene ID	3953.0
SwissProt ID	P48357.Synthesized peptide derived from Leptin receptor at AA range: 791-840

Application

Dilution Ratio	WB 1:500-1:2000. ELISA: 1:20000.
Molecular Weight	132kD

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)

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Catalog #: APRab15089

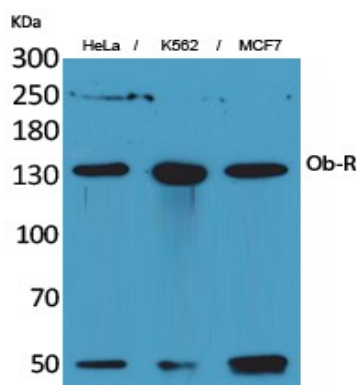


that regulates body weight), and is involved in the regulation of fat metabolism, as well as in a novel hematopoietic pathway that is required for normal lymphopoiesis. Mutations in this gene have been associated with obesity and pituitary dysfunction. Alternatively spliced transcript variants encoding 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],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.,

Research Area

Cytokine-cytokine receptor interaction;Neuroactive ligand-receptor interaction;Jak_STAT;Adipocytokine;

Image Data



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

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Note

For research use only.