

Product name:	Ob-R Rabbit Polyclonal Antibody
Cat number:	ABN15089
Conjugate:	Unconjugated
Size:	100μL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from Leptin receptor at AA range: 791-840
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:10000-1:20000
Molecular Weight:	132kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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],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.,