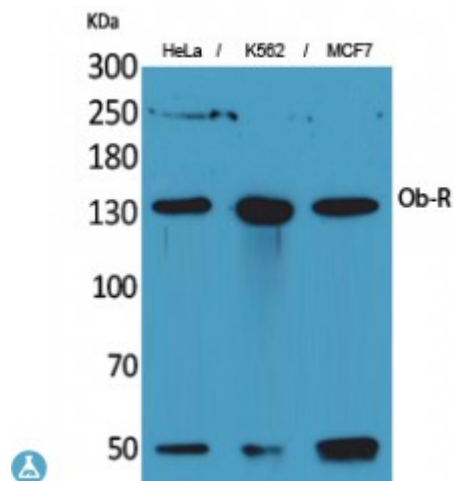


Anti-Ob-R antibody



Description	Rabbit polyclonal to Ob-R.
Model	STJ96647
Host	Rabbit
Reactivity	Human
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human Ob-R.
Immunogen Region	791-840 aa, Internal
Gene ID	3953
Gene Symbol	LEPR
Dilution range	WB 1:500-1:2000ELISA 1:20000
Specificity	Ob-R Polyclonal Antibody detects endogenous levels of Ob-R protein.
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 . Isoform B and isoform A are expressed by NK cells (at protein level) .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Leptin receptor LEP-R HuB219 OB receptor OB-R CD antigen CD295

Molecular Weight	130/50 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6554OMIM:601007
Alternative Names	Leptin receptor LEP-R HuB219 OB receptor OB-R CD antigen CD295
Function	Receptor for hormone LEP/leptin (Probable) . On ligand binding, mediates LEP central and peripheral effects through the activation of different signaling pathways such as JAK2/STAT3 and MAPK cascade/FOS. In the hypothalamus, LEP acts as an appetite-regulating factor that induces a decrease in food intake and an increase in energy consumption by inducing anorexinogenic factors and suppressing orexigenic neuropeptides, also regulates bone mass and secretion of hypothalamo-pituitary-adrenal hormones . In the periphery, increases basal metabolism, influences reproductive function, regulates pancreatic beta-cell function and insulin secretion, is pro-angiogenic and affects innate and adaptive immunity . Control of energy homeostasis and melanocortin production (stimulation of POMC and full repression of AgRP transcription) is mediated by STAT3 signaling, whereas distinct signals regulate NPY and the control of fertility, growth and glucose homeostasis. Involved in the regulation of counter-regulatory response to hypoglycemia by inhibiting neurons of the parabrachial nucleus. Has a specific effect on T lymphocyte responses, differentially regulating the proliferation of naive and memory T -ells. Leptin increases Th1 and suppresses Th2 cytokine production . Isoform A: May transport LEP across the blood-brain barrier. Binds LEP and mediates LEP endocytosis. Does not induce phosphorylation of and activate STAT3. Isoform E: Antagonizes Isoform A and isoform B-mediated LEP binding and endocytosis.
Sequence and Domain Family	The cytoplasmic domain may be essential for intracellular signal transduction by activation of JAK tyrosine kinase and STATs.; The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.; The box 1 motif is required for JAK interaction and/or activation.
Cellular Localization	Cell membrane Basolateral cell membrane Isoform E: Secreted
Post-translational Modifications	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,for interaction with SOCS3 and SOCS3 mediated inhibition of leptin signaling. Phosphorylation on Tyr-1141 is required for STAT3 binding/activation. Phosphorylation of Tyr-1079 has a more accessory role.