

32-20631: Recombinant Human Leptin Receptor(Discontinued)

Alternative Name : LEP-R, HuB219, Obesity Protein (OB) Receptor, OB-R

Description

Source:CHO cells

Encoded for, along with leptin, by the obese (ob) gene, leptin receptor is a single-transmembrane-domain protein of the Type I, or Class I, Cytokine Receptor Family. The full length isoform, OB-Rb, is highly expressed in hypothalamic neurons, T cells, and the vascular endometrium, and is thought to be the only isoform capable of transducing intracellular signals. Isoform OB-Ra, which is widely distributed at varying levels of expression, demonstrates weak signal activity and has been implicated in the active transport of leptin across the blood-brain barrier. Through ligand-binding with leptin receptor and the subsequent JAK2/STAT3 signaling cascade, the adipose-derived cytokine leptin functions to suppress appetite and increase thermogenesis. Leptin and leptin receptor have also, more recently, been implicated in the regulation of immune function, reproduction, glucose homeostasis, bone metabolism, wound healing, hematopoiesis, and angiogenesis. Mutations of the ob gene, which can result in leptin resistance and the down-regulation of ligand and/or receptor expression, have been connected to obesity and hypothalamic pituitary function in various in vivo models, including human, mouse, and rat. The Recombinant Human Leptin Receptor is a single, glycosylated polypeptide chain of 818 amino acid residues, corresponding to the human OB-Re isoform, and has a calculated molecular weight of approximately 93.5 kDa. As a result of glycosylation, Recombinant Human Leptin Receptor migrates with an apparent molecular mass of approximately 130-150 kDa by SDS-PAGE gel, under reducing and non-reducing conditions.

Product Info

Amount : 20 µg / 100 µg

Purification : Purity:>= 98% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : FNLSYPITPW RFKLSCMPN STYDYFLLPA GLSKNTSNSN GHYETAPEPK FNSSGTHFSN LSKTTFHCCF
RSEQDRNCSL CADNIEGKTF VSTVNSLVFQ QIDANWNIQC WLKGDCLKFI CYVESLFKNL FRNYNYKVHL
LYVLPEVLED SPLVPQKGSF QMVHCNCSVH ECCECLVPVP TAKLNDTLLM CLKITSGGVI FQSPLMSVQP
INMVKDPDPL GLHMEITDDG NLKISWSSPP LVPFPLQYQV KYSENSTTVI READKIVSAT SLLVDSILPG
SSYEVQVRGK RLDGPGIWSD WSTPRVFTTQ DVIYFPPKIL TSVGSNVSFH CIYKKENKIV PSKEIVWWMN
LAEKIPQSQY DVVSDHVSKEV TFFNLNETKP RGKFTYDAVY CCNEHECHHR YAEYVIDVN INISCETDGY
LTKMTCRWST STIQSLAEST LQLRYHRSSL YCSDIPSIHP ISEPKDCYLQ SDGFYECIFQ PIFLLSGYTM
WIRINHSLGS LDSPPTCVLP DSVVKPLPPS SVKAEITINI GLLKISWEKP VFPENNLQFQ IRYGLSGKEV
QWKMYEYDA KSKSVSLPVP DLCAVYAVQV RCKRLDGLGY WSNWSNPAYT VVMDIKVPMR
GPEFWRIING DTMKKEKNVT LLWKPLMKND SLCSVQRYVI NHHTSCNGTW SEDVGNHTKF
TFLWTEQAHT VTVLAINSIG ASVANFNLT SWPMSKVNV QLSAYPLNS SCVIVSWILS PSDYKLMYFI
IEWKNLNEDG EIKWLRISSS VKKYYIHDHF IPIEKYQFSL YPIFMEGVGK PKIINSFTQD DIEKHQSD