

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 RFKLSCMPPN STYDYFLLPA GLSKNTSNSN GHYETAVEPK FNSSGTHFSN
LSKTTFHCCF RSEQDRNCSL CADNIEGKTF VSTVNSLVFQ QIDANWNIQC WLKGDCLKFI
CYVESLFKNL FRNYNYKVHL LYVLPEVLED SPLVPQKGSF QMVHCNCSVH ECCECLVPVP
TAKLNDTLLM CLKITSGGVI FQSPLMSVQP INMVKPDPL GLHMEITDDG NLKISWSSPP
LVPFPLQYQV KYSENSTTVI READKIVSAT SLLVDSILPG SSYEVQVRGK RLDGPGIWS
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 QWKMYEVYDA KSKSVSLPVP DLCAVYAVQV RCKRLDGLGY
WSNWSNPAYT VVMDIKVPMR GPEFWRIING DTMKKEKNVT LLWKPLMKND SLCSVQRYVI
NHHTSCNGTW SEDVGNHTKF TFLWTEQAHT VTVLAINSIG ASVANFNLT SWPMSKVNIV
QSL SAYPLNS SCVIVSWILS PSDYKLMYFI IEWKNLNEDG EIKWLRISSS VKKYYIHDHF
IPIEKYQFSL YPIFMEGVGK PKIINSFTQD DIEKHQSD