

## 32-8994: Recombinant Human Leptin Receptor/LEPR/CD295 (C-10His)

**Gene :** LEPR  
**Gene ID :** 3953  
**Uniprot ID :** P48357

### Description

Source: Human Cells.  
MW :94.9kD.

Recombinant Human Leptin Receptor is produced by our Mammalian expression system and the target gene encoding Phe22-Asp839 is expressed with a 10His tag at the C-terminus. The Leptin receptor is a member of the Class I cytokine receptor family. It mediates the activities of Leptin, a multi-functional hormone produced primarily by adipose tissues that plays roles in food intake, energy metabolism, angiogenesis, reproduction, hematopoiesis, bone metabolism, and immune function. The human Leptin R gene encodes 1165 amino acids (aa) including a signal peptide, an extracellular region with cytokine receptor homology (CRH), multiple fibronectin type III domains and a WSXWS motif, a transmembrane domain, and a cytoplasmic domain that supports JAK/STAT signaling. Soluble Leptin R is the primary Leptin-binding protein in blood, where it maintains a pool of available bioactive Leptin, delays Leptin clearance from circulation, and down-regulates blood-brain transmission of Leptin. In humans, soluble Leptin R levels are inversely proportional to adiposity and are elevated in females versus males. Soluble Leptin R is also found up-regulated in patients with chronic heart failure, end-stage renal disease, and anorexia. It is expressed by tumor-initiating stem cells, and is proposed as a link between cancer and obesity.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** FNLSYPITPWRFKLSCMPNPNSTYDYFLLPAGLSKNTSNNGHYETAVEPKFNSSGTHFSNLSKTTFHCCFRSEQD  
RNCSLCADNIEGKTFVSTVNSLVFQQIDANWNIQCWLKGDCLKFICYVESLFKNLFRNYNYKVHLLYVLPVLED  
SPLVPQKGSFQMVHCNCSVHECCECLVPVPTAKLNDTLLMCLKITSGGVIFQSPMSVQPINMVKPDPPLGLHM  
EITDDGNLKSWSPPPLVPFPLQYQVKYSENSTTVIREADKIVSATSLLVDSILPGSSYEVQVRGKRLDGPPIWSD  
WSTPRVFTTQDVYIFPPKILTSVGSNVSFHICYKKENKIVPSKEIVWWWMLAEKIPQSQYDVVSDHVSKEVTFNL  
NETKPRGKFTYDAVYCCNEHECHHRYAELYVIDVNINISCETDGYLTMTCRWSTSTIQSLAESTLQLRYHRSSL  
YCSDIPSIHPISEPKDCYLQSDGFYECIFQPIFLLSGYTMWIRINHSLGSLDSPPTCVLPDSVVKPLPPSSVKAETIN  
IGLLKISWEKPVFPENNLQFQIRYGLSGKEVQWKMYEVYDAKSKSVSLPVPDLCAVYAVQVRCKRLDGLGYWS  
NWSNPAYTVVMDIKVPMRGPEFWRIINGDTMKKEKNVTLLWKPLMKNDLCSVQRYVINHHTSCNGTWSERVED  
GNHTKFTFLWTEQAHTVTVLAINSIGASVANFNLTFSWPMKVNIVQSLASAYPLNSSCIVSWILSPSDYKLMYFI  
IEWKNLNEDGEIKWLRISSSVKYYIHDHFIPIEKYQFSLYPIFMEGVGPKIINSFTQDDIEKHQSDHHHHHHHH  
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### Application Note

**Endotoxin :** Less than 0.1 ng/Åµg (1 IEU/Åµg) as determined by LAL test.