Leptin Receptor, Human Recombinant

CATALOG #:	4582-10	10 µg
	4582-50	50 µg
	4582-1000	1 mg

SYNONYMS: OB Protein, Obesity Protein, OBS, Obesity factor, LEPR, CD295, OBR

SOURCE: Human

HOST: Human cells

PURITY: > 95% by SDS-PAGE

ENDOTOXIN CONTENT: < 1.0 EU per µg protein as determined by the LAL method

FORM: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4

RECONSTITUTION: Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles

STORAGE CONDITIONS: 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.

DESCRIPTION:
Leptin receptor (LEPR), also known as OB-R and B219, is a single transmembrane-domain receptor of the cytokine receptor family. Leptin receptor exists as homodimer and binds Leptin with high affinity, thus mediates the biological function of the adipocyte-specific hormone Leptin. LEPR is expressed at high levels in hematopoietic stem cells, lymphohematopoietic cell lines, as well as adult reproductive organs. Several isoforms of LEPR have been identified, and LEPR structurally contains two hemopoietin receptor domains, a fibronectin type III domain and a WSXWS domain within the extracellular region. Interaction of leptin and leptin receptor is crucial for bodyweight and bone mass regulation in mammals through hypothalamic effects on satiety and energy expenditure. Meanwhile, research data supports a leptin receptor activation model based on ligand-induced conformational changes.

AMINO ACID SEQUENCE:
FNLSYPITPWRFKLSCMPPNSTYDYFLLPAGLSKNTSNSNGHYETAVEPKFNSSGTHFSNLSK
TTFHCCFRSEQDRNCSLCADNIEGKTFVSTVNSLVFQQIDANWNIQCWLKGDLKLFICYVESLF
KNLFRNYNYKVHLLYVLPEVLEDSPLVPQKGSFQMVHCNCSVHECCECLVPVPTAKLNDTLL
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GKFTYDAVYCCNEHECHHRYAELYVIDVNINISCETDGYLTKMTCRWSTSTIQSLAESTLQLRY
HRSSLYCSDIPSIHPISEPKDCYLQSDGFYECIFQPIFLLSGYTMWIRINHSLGSLDSPPTCVLPD
SVVKPLPPSSVKAEITINIGLLKISWEKPVFPENNLQFQIRYGLSGKEVQWKMYEVYDAKSKSV
SLPVPDLCAVYAVQVRCKRLDGLGYWSNWSNPAYTVVMDIKVPMRGPEFWRIINGDTMKKEK
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ASVANFNLTFSWPMSKVNIVQSLSAYPLNSSCVIVSWILSPSDYKLMYFIIEWKNLNEDGEIKWL
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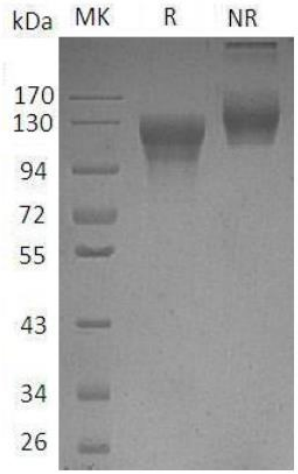

Recombinant Human
Leptin Receptor / LEPR

RELATED PRODUCTS:

- Leptin Antibody **(Cat. No. 5366-100)**
- Leptin Antibody **(Cat. No. 5367-100)**
- Leptin Antibody **(Cat. No. 5368-100)**
- Leptin Receptor Antibody **(Cat. No. 5582-100)**
- Leptin, Human recombinant **(Cat. No. 4366-02, -1, -5, -10)**
- Leptin, Murine recombinant **(Cat. No. 4367-02, -1, -5)**
- Leptin, Rat recombinant **(Cat. No. 4368-02, -1, -5)**

FOR RESEARCH USE ONLY! Not to be used in humans.