

Datasheet for ABIN114694

anti-Leptin Receptor antibody (Extracellular Domain)

1 Publication



Overview

| Quantity: | 0.1 mg |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target: | Leptin Receptor (LEPR) |
| Binding Specificity: | Extracellular Domain |
| Reactivity: | Human |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This Leptin Receptor antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunohistochemistry (Frozen Sections) (IHC (fro)), Enzyme Immunoassay (EIA) |
| Product Details | |
| Immunogen: | NSO mouse myeloma cell line. DNA sequence including the extracellular domain of Leptin Receptor (amino acid residues 1 839) fused to the Fc region of human IgG (with IIEGR added at the amino terminus and 6 histidine residues added at the carboxy terminus). |
| Clone: | LPR-01 |
| Isotype: | lgG1 |
| Purification: | Affinity chromatography on protein G |
| Target Details | |
| Target: | Leptin Receptor (LEPR) |
| Alternative Name: | CD295 / Leptin Receptor (LEPR Products) |
| | |

Target Details

Background:

Leptin receptor (OB R) was identified as a leptin binding protein (Leptin, the product of the ob gene, is a single chain 16 kDa protein consisting of 146 amino acid residues.) OB R was found to be a member of the class I cytokine receptor family with a large extracellular domain comprising 816 amino acid residues. Leptin receptor exists in multiple forms with a common extracellular domain and a variable length cytoplasmatic portion. Alternate splicing from a single gene derives the six isoforms of the Leptin receptor. The soluble form of the Leptin receptor, OB R contains no intracellular motifs or transmembrane residues, thus it consists entirely of the extracellular ligand binding domain of the receptor. Long forms of OB-R transcripts were reported to be expressed predominantly in regions of the hypothalamus which provides evidence that Leptin receptor is important in body weight regulation. Expression of short forms of OB-R transcripts have been found in multiple tissues, including the choroid plexus, lung, kidney, and primitive hematopoietic cell populations. Leptin receptor may act as a negative regulator of Leptin activity and it may maintain a pool of available bioactive Leptin by binding and delaying its clearance from circulation. Soluble Leptin receptor levels are indirectly proportional to adiposity and are increased in females versus males. Leptin receptor levels are highest in infants, decrease into adolescence, and remain relatively stable throughout adulthood. Soluble Leptin receptor is also found upregulated in patients with chronic heart failure, end-stage renal disease and anorexia. Synonyms: DB, HuB219, LEP-R, LEPR, OB receptor, OB-R, OBR

Gene ID:

9606

UniProt:

P48357

Pathways:

JAK-STAT Signaling, AMPK Signaling, Feeding Behaviour

Application Details

Application Notes: ELISA. Western Blot.

Restrictions: For Research Use only

Handling

| Reconstitution: | Restore with 0.1 mL of deionized water |
|-----------------|---------------------------------------------------------|
| Concentration: | 1.0 mg/mL |
| Buffer: | 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. AZIDE FREE |
| Preservative: | Azide free |

Handling

| Handling Advice: | Avoid repeated freezing and thawing. |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Storage: | -20 °C |
| Storage Comment: | Prior to reconstitution store at -70 $^{\circ}$ C. Following reconstitution store the antibody (in aliquots) at -20 $^{\circ}$ C for 6 month. |
| Expiry Date: | 6 months |
| Publications | |
| Product cited in: | Shen, Chen, Wang, Wang, Zhong, Han, Ouyang: "[Polymorphisms of CYP3A5 Gene in Acute |

Shen, Chen, Wang, Wang, Zhong, Han, Ouyang: "[Polymorphisms of CYP3A5 Gene in Acute Leukemia Patients and Their Role in Chemotherapy and Prognosis.]" in: **Zhongguo shi yan xue** ye xue za zhi / **Zhongguo bing li sheng li xue hui = Journal of experimental hematology /** Chinese Association of Pathophysiology, Vol. 16, Issue 1, pp. 26-30, (2008) (PubMed).