

## Product datasheet for DM2006

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Leptin Receptor (LEPR) Mouse Monoclonal Antibody [Clone ID: LPR-01]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: LPR-01

**Applications:** ELISA, IHC, WB

Recommended Dilution: ELISA.

Western Blot.

Immunohistochemistry.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

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).

**Specificity:** The Anti Human Leptin Receptor Antibody, Clone: LPR-01 is a mouse monoclonal antibody

against recombinant Human Leptin Receptor.

**Formulation:** 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. AZIDE FREE

State: Aff - Purified

State: Lyophilized purified IgG

Reconstitution Method: Restore with 0.1 ml of deionized water

**Concentration:** lot specific

**Purification:** Affinity chromatography on protein G

Conjugation: Unconjugated

**Storage:** Store lyophilized (preferably in a desiccator) at -20°C and in aliquots at -80°C.

Reconstituted antibody can be stored at 4°C for a limited period of time; it does not show

decline in activity after two weeks at 4°C. Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Gene Name: leptin receptor



### Leptin Receptor (LEPR) Mouse Monoclonal Antibody [Clone ID: LPR-01] - DM2006

Database Link: Entrez Gene 3953 Human

P48357

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: LEP-R, OB receptor, HuB219, LEPR, DB, OBR, OB-R