

### Human CellExp LEPR/CD295, human recombinant protein

LEPR, CD295, DKFZp686B1731, LEP-R, OB-R, OBR, Leptin receptor Catalog # PBV11118r

## **Specification**

# Human CellExp LEPR/CD295, human recombinant protein - Product info

Primary Accession P48357

Calculated MW This protein is fused with Fc fragment of

human IgG1 at the C-terminus and has a calculated MW of 121 kDa expressed. The predicted N-terminus is Phe22. Protein migrates as 150-165 kDa in reduced SDS-PAGE resulting from glycosylation.

**KDa** 

### Human CellExp LEPR/CD295, human recombinant protein - Additional Info

Gene ID 3953 Gene Symbol LEPR

**Other Names** 

LEPR, CD295, DKFZp686B1731, LEP-R, OB-R, OBR, Leptin receptor

Gene Source
Source
Assay&Purity
SDS-PAGE; ≥95%

Assay2&Purity2 N/A; Recombinant Yes

Results Measured by its ability to inhibit

Leptin-dependent proliferation of BaF3 mouse pro-B cells transfected with rhLEPR-Fc. The ED50 for this effect is typically 0.015-0.13 µg/ml in the presence

of 3 ng/ml rhLeptin.

Target/Specificity LEPR/CD295

# **Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

### Format

Lyophilized

#### **Storage**

-20°C; Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.



# Human CellExp LEPR/CD295, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Human CellExp LEPR/CD295, human recombinant protein - Images

# Human CellExp LEPR/CD295, human recombinant protein - Background

Leptin receptor (LEPR), also known as LEP-R, cluster of differentiation 295 (CD295), OB-R and B219, is a single-transmembrane-domain receptor of the gp130 family of cytokine receptors. Leptin receptor exists as homodimer and binds Leptin with high affinity, thus mediates the biological function of the adipocyte-specific hormone Leptin. LEPR is a receptor for leptin (an adipocyte-specific hormone that regulates body weight), and is involved in the regulation of fat metabolism, as well as in a novel hematopoietic pathway that is required for normal lymphopoiesis. Mutations in this protein have been associated with obesity and pituitary dysfunction. Interaction of leptin and leptin receptor is crucial for body weight 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.

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Bennett B.D., et al. Curr. Biol. 6:1170-1180(1996).
Cioffi J.A., et al. Nat. Med. 2:585-589(1996).
Thompson D.B., et al. Hum. Mol. Genet. 6:675-679(1997).
Luoh S.-M., et al. J. Mol. Endocrinol. 18:77-85(1997).