

## Datasheet for ABIN2566758

## Leptin Receptor Protein (LEPR) (Fc Tag)



| _ |   |   |    |    |   |
|---|---|---|----|----|---|
|   | W | 0 | rv | 10 | W |

| Overview                      |  |  |
|-------------------------------|--|--|
| Quantity:                     | 0.1 mg   |  |
| Target:                       | Leptin Receptor (LEPR)   |  |
| Origin:                       | Human  |  |
| Source:                       | HEK-293 Cells  |  |
| Protein Type:                 | Recombinant  |  |
| Biological Activity:          | Active   |  |
| Purification tag / Conjugate: | This Leptin Receptor protein is labelled with Fc Tag.  |  |
| Application:                  | Western Blotting (WB)  |  |
| Product Details               |  |  |
| Characteristics:              | 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 $\mu g/mL$ in the |  |
|                               | presence of 3 ng/mL rhLeptin.  |  |
|                               | Fusion tag: C-Fc Tag   |  |
| Purity:                       | >95 % as determined by SDS-PAGE.   |  |
| Target Details                |  |  |
| Target:                       | Leptin Receptor (LEPR)   |  |
| Alternative Name:             | LEPR (LEPR Products)   |  |
| Background:                   | Leptin receptor (LEPR) is 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.

| Molecular Weight: | 121 kDa   |
|-------------------|---|
| Gene ID:          | 3953  |
| NCBI Accession:   | NP_002294   |
| UniProt:          | P48357  |
| Pathways:         | JAK-STAT Signaling, AMPK Signaling, Feeding Behaviour |

## **Application Details**

| Application Notes: | This recombinant protein can be used for WB. For research use only. |
|--------------------|---|
| Restrictions:      | For Research Use only   |

## Handling

Format:

| Buffer:          | PBS, pH 7.4  |
|------------------|--|
| Storage:         | -80 °C,-20 °C  |
| Storage Comment: | Lyophilized Protein should be stored at -20°C or lower for long term storage. Upon reconstitution, working aliquots should be stored at -20°C or -70°C. Avoid repeated freeze-thaw |
|                  | cycles.  |

Lyophilized