

Synonym

LEPR, CD295, DKFZp686B1731, OBR, Leptin receptor

Source

Human Leptin R, Fc Tag(LER-H5252) is expressed from human 293 cells (HEK293). It contains AA Phe 22 - Asp 839 (Accession # [P48357-1](#)).
Predicted N-terminus: Phe 22

Molecular Characterization

Leptin R(Phe 22 - Asp 839) P48357-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.
The protein has a calculated MW of 119.6 kDa. The protein migrates as >180 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

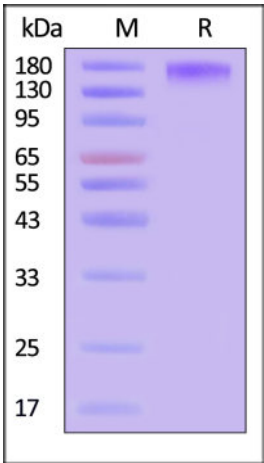
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

- This product is stable after storage at:
- 20°C to -70°C for 12 months in lyophilized state;
 - 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Leptin R, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

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



Human Leptin R / CD295 Protein, Fc Tag

Catalog # LER-H5252



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.

