

LEPR Protein, Mouse, Recombinant (mFc)

General Information

Synonyms:	LEPR;CD295;OB-R;LEP-R;HuB219;Leptin receptor;OBR;DB;OB receptor
Protein Construction:	Leu22-Gly839
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	P48356
Molecular Weight:	130-190 KDa (reducing condition)
AA Sequence:	Leu22-Gly839

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

The Leptin receptor is a member of the Class I cytokine receptor family. It mediates the activities of Leptin, a multi-functional hormone produced primarily by adipose tissues that plays roles in food intake, energy metabolism, angiogenesis, reproduction, hematopoiesis, bone metabolism, and immune function. The human Leptin R gene encodes 1165 amino acids (aa) including a signal peptide, an extracellular region with cytokine receptor homology (CRH), multiple fibronectin type III domains and a WSXWS motif, a transmembrane domain, and a

cytoplasmic domain that supports JAK/STAT signaling. Soluble Leptin R is the primary Leptin-binding protein in blood, where it maintains a pool of available bioactive Leptin, delays Leptin clearance from circulation, and down-regulates blood-brain transmission of Leptin. In humans, soluble Leptin R levels are inversely proportional to adiposity and are elevated in females versus males. Soluble Leptin R is also found up-regulated in patients with chronic heart failure, end-stage renal disease, and anorexia. It is expressed by tumor-initiating stem cells, and is proposed as a link between cancer and obesity.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481