

## Product Information

### LEPTIN RECEPTOR/FC CHIMERA Human, Recombinant Expressed in mouse NSO cells

Product Number **L4787**

#### Product Description

Leptin Receptor/Fc chimera is expressed in mouse NSO cells and is >97% pure as determined by SDS-PAGE. A DNA sequence encoding the extracellular domain of Leptin receptor (OB-R) (aa residues 1-839) is fused to the Fc region of human IgG, (with the IIEGR added at the amino-terminus and 6 histidine residues added at the carboxy-terminus).<sup>1</sup>

The ob gene product, leptin, is an important circulating signal for the regulation of body weight.<sup>1</sup> Leptin receptor (OB-R) is a single membrane-spanning receptor most related to the gp-130 signal-transducing component of the IL-6 receptor, the G-CSF receptor and the LIF receptor.<sup>1</sup> OB-R, also known as B219, is expressed in the yolk sac, early fetal liver, enriched hematopoietic stem cells and in a variety of lymphohematopoietic cell lines. OB-R is also expressed at high levels in adult reproductive organs.<sup>2</sup> OB-R action in hepatic cells may be equivalent to that of IL-6 receptor. Leptin does not play a specific role in muting insulin action on hepatoma cells and may not contribute to the diabetic symptoms associated with obesity.<sup>3</sup>

Leptin receptor/Fc Chimera is measured by its ability to neutralize the activity of rhLeptin on leptin-dependent rat OB-R transfected murine BAF3 cells.

#### Preparation Instructions

Reconstitute the contents of the vial using sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin. Prepare a stock solution of no less than 10µg/ml.

#### Storage/Stability

Store lyophilized samples at -20°C to -70°C for greater than six months. Upon reconstitution, store sample at 2°-4°C for one month or at -20°C to -70°C for three months.

#### Product Profile

Molecular Weight: 121kDa

Purity: >97% pure as determined by SDS-PAGE.

ED<sub>50</sub>: 0.02-0.12µg/ml in the presence of 3ng/ml rhLeptin.

Formulation: Lyophilized from a filtered solution in PBS containing 50µg of BSA per 1µg of cytokine.

Carrier Protein: BSA

Endotoxin: < 0.1ng per 1µg of Leptin receptor.

#### References

1. Tartaglia, L. A., et al., Cell 83: 1263-1271, 1995.
2. Cioffi, J. A., et al., Nat. Med. 2: 585-589, 1996.
3. Wang, Y., et al., J. Biol. Chem. 272: 16216-16223, 1997.

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