

## Product datasheet for **AP20585PU-S**

### Leptin Receptor (LEPR) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500. <b>Immunohistochemistry on paraffin sections</b> 1/50 - 1/200.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of Ob-R protein. (region surrounding Leu662)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 150 kDa
Gene Name:	leptin receptor
Database Link:	<a href="#">Entrez Gene 3953 Human P48357</a>

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**Background:**

Although there is substantial evidence that body weight is physiologically regulated, the molecular basis of obesity is unknown. Five single-gene mutations in mice that result in an obese phenotype have been identified. The first such recessive obesity mutation, the obese mutation (Ob), was identified in 1950. Mutation of Ob results in profound obesity and type II diabetes as part of a syndrome that resembles morbid obesity in humans. It has been postulated that the Ob gene product may function as a component of a signaling pathway in adipose tissue that functions to regulate body fat depot size. The cloning and sequence analysis of the mouse Ob gene and its human homolog has recently been described. Ob encodes an adipose tissue-specific mRNA with a highly conserved 167 amino acid open reading frame. The predicted amino acid sequence is 84% identical between human and mouse and has the features of a secreted protein. A nonsense mutation in codon 105 has been found in the original congenic C57BL/6J Ob/Ob mouse strain. The Ob gene encodes the protein leptin.

**Synonyms:**

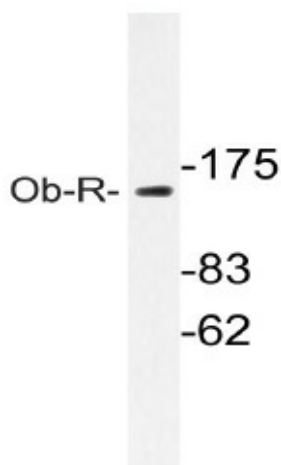
LEP-R, OB receptor, HuB219, LEPR, DB, OBR, OB-R

**Protein Families:**

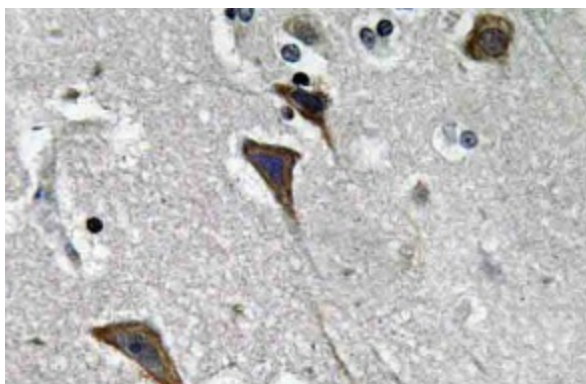
Druggable Genome, Secreted Protein, Transmembrane

**Protein Pathways:**

Adipocytokine signaling pathway, Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction

**Product images:**


Western blot (WB) analysis of Ob-R antibody (Cat.-No.: [AP20585PU-N]) in extracts from COLO cells.



Immunohistochemistry (IHC) analyzes of Ob-R antibody (Cat.-No.: [AP20585PU-N]) in paraffin-embedded human brain tissue.