abcam

Product datasheet

Anti-Leptin Receptor antibody ab5593

* ★ ★ ★ ★ ★ 6 Abreviews 33 References 1 Image

Overview

Product name Anti-Leptin Receptor antibody

Description Rabbit polyclonal to Leptin Receptor

Host species Rabbit

Tested applications Suitable for: IHC-Fr, WB, IP

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide corresponding to Rat Leptin Receptor aa 577-594 (extracellular).

Sequence:

KEIQWKTHEVFDAKSKSA

(Peptide available as ab5837)

Run BLAST with
Run BLAST with

Positive control WB: Mouse lung tissue extract.

General notes As per Uniprot database (P48357) OB receptor has 5 isoforms and is highly glycosylated, this

means the observed band size will be different than predicted and multiple bands are expected

depending upon the isoforms expressed in sample types.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.05% Sodium azide

Constituent: 99% PBS

Purity Ammonium Sulphate Precipitation

1

Purification notes No concentration is available.

Clonality Polyclonal

Isotype IgG

Applications

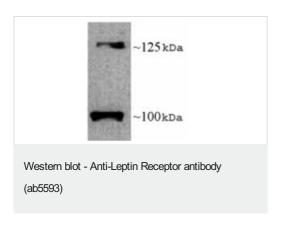
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab5593 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr	★ ☆ ☆ ☆ ☆ (1)	Use at an assay dependent concentration.
WB	★★★ ★ ★ ★ ★	1/2000. Detects a band of approximately 100, 125 kDa.Can be blocked with Leptin Receptor peptide (ab5837) . ab5593 detects an ~100 kDa and ~125 kDa protein representing the short and long forms of OB-R.
IP		Use at an assay dependent concentration. PubMed: 21151569

Target	
Function	Receptor for obesity factor (leptin). On ligand binding, mediates signaling through JAK2/STAT3. Involved in the regulation of fat metabolism and, in a hematopoietic pathway, required for normal lymphopoiesis. May play a role in reproduction. Can also mediate the ERK/FOS signaling pathway.
Tissue specificity	Isoform A is expressed in fetal liver and in hematopoietic tissues and choroid plexus. In adults highest expression in heart, liver, small intestine, prostate and ovary. Low level in lung and kidney. Isoform B is highly expressed in hypothalamus.
Sequence similarities	Belongs to the type I cytokine receptor family. Type 2 subfamily. Contains 4 fibronectin type-Ill domains. Contains 1 lg-like (immunoglobulin-like) domain.
Domain	The cytoplasmic domain may be essential for intracellular signal transduction by activation of JAK tyrosine kinase and STATs. The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding. The box 1 motif is required for JAK interaction and/or activation.
Post-translational modifications	On ligand binding, phosphorylated on two conserved C-terminal tyrosine residues (isoform B only) by JAK2. Tyr-986 is required for complete binding and activation of PTPN11, ERK/FOS activation and, for interaction with SOCS3 (By similarity). Phosphorylation on Tyr-1141 is required for STAT3 binding/activation.
Cellular localization	Secreted and Cell membrane.

Images



Anti-Leptin Receptor antibody (ab5593) at 1/2000 dilution + Mouse lung tissue lysate

Western blot detction of both short and long forms of Leptin (OB-R).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors