abcam

Product datasheet

Anti-Leptin antibody ab3583

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Overview

Product name	Anti-Leptin antibody
Description	Rabbit polyclonal to Leptin
Host species	Rabbit
Tested applications	**Suitable for:** ICC, IHC-Fr, Flow Cyt
Species reactivity	**Reacts with:** Mouse, Sheep, Human **Predicted to work with:** Goat, Horse, Chicken, Cow, Cat, Dog, Turkey, Chimpanzee, Rhesus monkey
Immunogen	Synthetic peptide corresponding to Mouse Leptin aa 25-44. Sequence: QKVQDDTKTLIKTIVTRIND Run BLAST with Run BLAST with
Positive control	ICC: 3T3-L1, HeLa and mesenchymal stem cells. IHC-P: Sheep brain tissue. Flow Cyt: 3T3-L1 cells.
General notes	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 Constituents: 0.1% BSA, 99% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab3583 in the following tested applications.

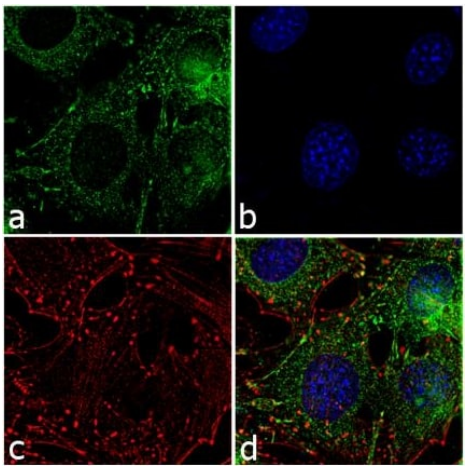
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC		Use a concentration of 5 µg/ml.
IHC-Fr	★☆☆☆☆ (1)	1/50 - 1/200.
Flow Cyt		Use 3-5µl for 10^6 cells.

Target

Function	May function as part of a signaling pathway that acts to regulate the size of the body fat depot. An increase in the level of LEP may act directly or indirectly on the CNS to inhibit food intake and/or regulate energy expenditure as part of a homeostatic mechanism to maintain constancy of the adipose mass.
Involvement in disease	Defects in LEP may be a cause of obesity (OBESITY) [MIM:601665]. It is a condition characterized by an increase of body weight beyond the limitation of skeletal and physical requirements, as the result of excessive accumulation of body fat.
Sequence similarities	Belongs to the leptin family.
Cellular localization	Secreted.

Images



Immunocytochemistry - Anti-Leptin antibody (ab3583)

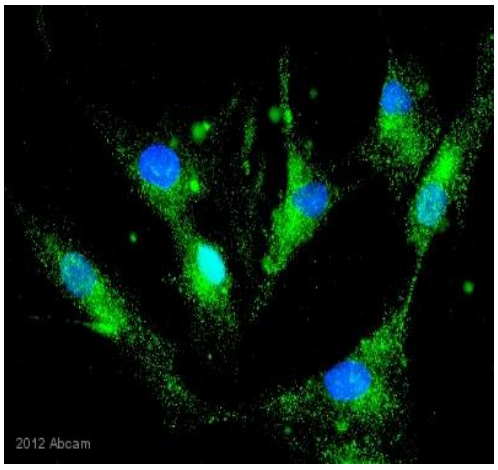
ab3583 staining Leptin in 3T3-L1 cells by ICC (Immunocytochemistry). Cells were fixed with 4% paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 1% BSA for 1 hour at room temperature. Samples were incubated with primary antibody (2ug/ml in 0.1% BSA) for 3 hours at room temperature. An Alexa Fluor® 488-conjugated Goat anti-rabbit IgG (H+L) polyclonal was used as the secondary antibody (1/2000) (Panel a). Nuclei were stained with DAPI (Panel b). F-actin stained with Rhodamine Phalloidin (panel c). Merged images shown in panel d.

Immunohistochemistry (Frozen sections) - Anti-Leptin antibody (ab3583)

Immunohistochemical staining of Leptin in Sheep brain using ab3583.

Immunocytochemistry - Anti-Leptin antibody (ab3583)

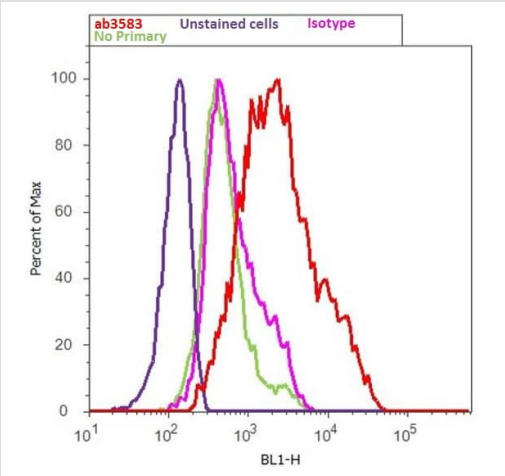
ICC image of ab3583 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab3583, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunocytochemistry - Anti-Leptin antibody (ab3583)

This image is courtesy of an Abreview submitted by Steven Johnstone

ab3583 staining Leptin in Human mesenchyml stem cells by ICC (Immunocytochemistry). Cells were fixed with paraformaldehyde and blocked with 10% serum for 30 minutes at 22°C. Samples were incubated with primary antibody (1/100 in 10% horse serum) for 1 hour at 22°C. A FITC-conjugated Mouse anti-rabbit IgG1 monoclonal was used as the secondary antibody (1/100).



Flow Cytometry - Anti-Leptin antibody (ab3583)

ab3583 staining Leptin in 3T3-L1 cells by Flow Cytometry. The sample was incubated with the primary antibody (3ug/ml in 2.5% BSA) for 2 hours at room temperature. An Alexa Fluor 488®-conjugated Goat anti-rabbit (1/400) was used as the secondary antibody. Red histogram represents ab3583, pink histogram represents isotype control, purple histogram represents unstained control, green histogram represents no primary antibody control

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