




Product datasheet

Anti-Leptin antibody ab16227

★★★★★ [3 Abreviews](#) [27 References](#) [5 Images](#)

Overview

Product name	Anti-Leptin antibody
Description	Rabbit polyclonal to Leptin
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Mouse, Human, Recombinant fragment Predicted to work with: Goat, Horse, Cow, Cat, Dog, Chimpanzee, Macaque monkey, Gorilla 
Immunogen	Synthetic peptide corresponding to Human Leptin aa 91-106. Sequence: SRNVIQISNDLENLRD Database link: P41159  Run BLAST with  Run BLAST with
Positive control	Human Serum
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Ammonium Sulphate Precipitation
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab16227 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/IF		1/20 - 1/200.
WB	★★★★★ (1)	1/500 - 1/5000. Detects a band of approximately 16 kDa.
IHC-P	★★★★★ (1)	Use at an assay dependent concentration.

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.

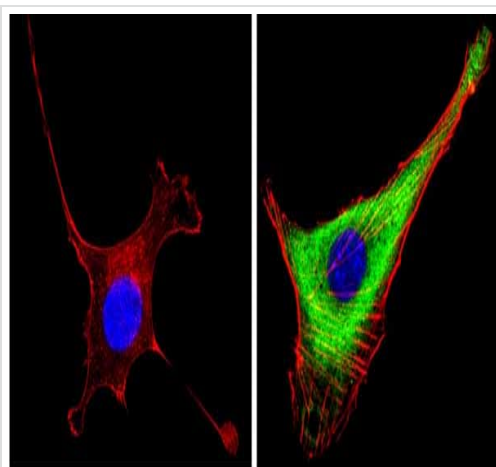
Sequence similarities

Belongs to the leptin family.

Cellular localization

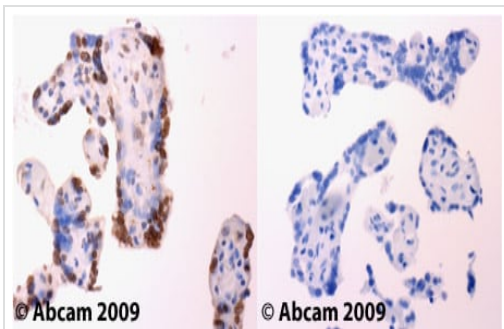
Secreted.

Images



Immunocytochemistry/ Immunofluorescence - Anti-Leptin antibody (ab16227)

Immunocytochemistry/Immunofluorescent analysis of Leptin (green) showing staining in the secretion of NIH-3T3 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with ab16227 in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4°C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 100x.

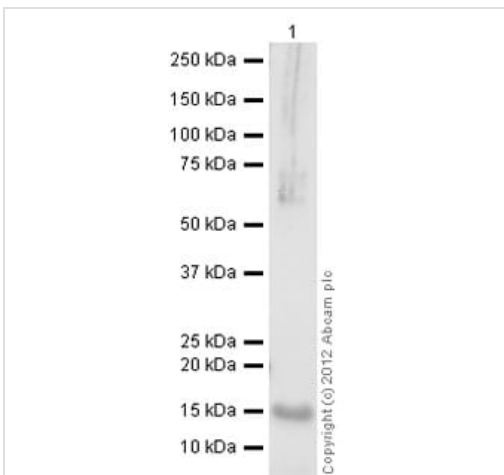


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Leptin antibody (ab16227)

Ab16227 staining human placenta.

Left panel: with primary antibody. Right panel: isotype control.

Sections were stained using an automated system DAKO Autostainer Plus , at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 antigen retrieval buffer citrate pH 6.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H₂O₂ in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Western blot - Anti-Leptin antibody (ab16227)

Anti-Leptin antibody (ab16227) at 1/500 dilution + Recombinant Human Leptin protein ([ab51273](#)) at 1 µg

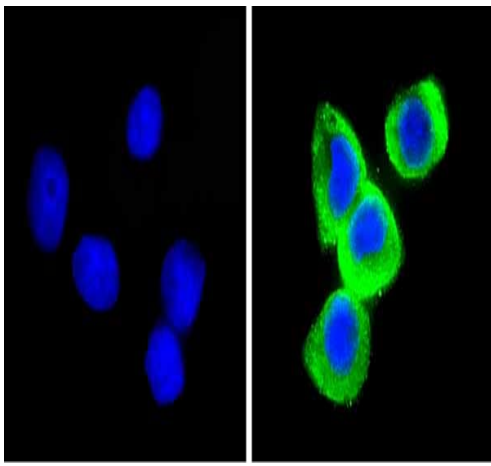
Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

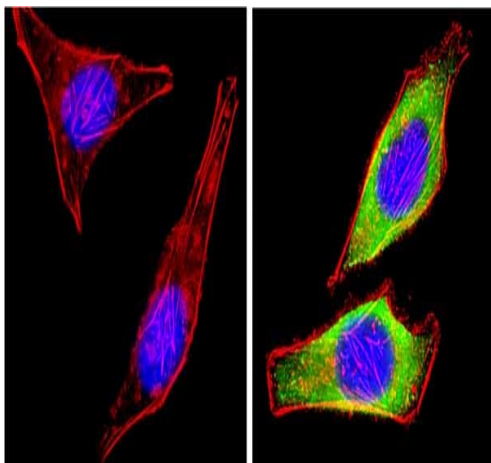
Performed under reducing conditions.

Exposure time: 3 minutes



Immunocytochemistry/ Immunofluorescence - Anti-Leptin antibody (ab16227)

Immunocytochemistry/Immunofluorescent analysis of Leptin (green) showing staining in the secretion of HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with ab16227 in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4°C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 100x.



Immunocytochemistry/ Immunofluorescence - Anti-Leptin antibody (ab16227)

Immunocytochemistry/Immunofluorescent analysis of Leptin (green) showing staining in the secretion of HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with ab16227 in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4°C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 100x.

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