

For Research Use Only

LEPR Polyclonal antibody

Catalog Number: 20966-1-AP

Featured Product

29 Publications



Basic Information

Catalog Number:

20966-1-AP

Size:

150ul, Concentration: 650 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_002303

GeneID (NCBI):

3953

UNIPROT ID:

P48357

Full Name:

leptin receptor

Calculated MW:

132 kDa

Observed MW:

100-150 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:1000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:10-1:100

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, PC-3 cells, mouse heart tissue, K-562 cells

IP: mouse heart tissue,

IHC: mouse liver tissue, human heart tissue, human prostate hyperplasia tissue

IF/ICC: MCF-7 cells,

FC (Intra): HeLa cells,

Background Information

The hormone leptin, secreted predominantly from adipose tissue, plays a crucial role in the regulation of numerous neuroendocrine functions, from energy homeostasis to reproduction (PMID: 22249808). Leptin acts through the leptin receptor (LEPR, also known as OB-R), a single-transmembrane-domain receptor of the cytokine receptor family. On ligand binding, LEPR mediates signaling through JAK2/STAT3 (PMID: 9102398). LEPR plays an important role in the regulation of glucose homeostasis via feeding and adiposity. Alternatively spliced transcript variants encoding different isoforms of LEPR have been described. This antibody can recognize long (LEPRb) and short (LEPRa,c,d) isoforms. The band at 150 kDa detected by this antibody is larger than the predicted molecular weight, probably due to glycosylation (PMID: 10026237).

Notable Publications

Author	Pubmed ID	Journal	Application
Yu Gao	36187750	PeerJ	WB,IHC
Paola Maroni	33213024	Biomedicines	IHC
Shintaro Sukegawa	31717278	Materials (Basel)	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

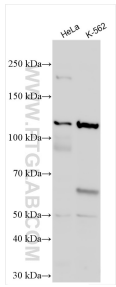
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

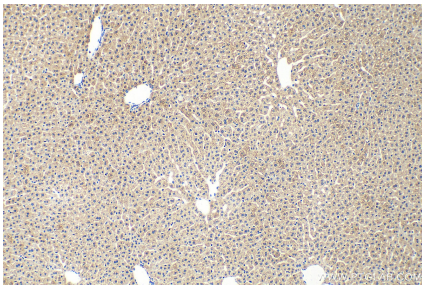
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

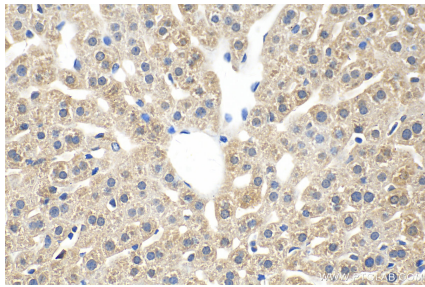
Selected Validation Data



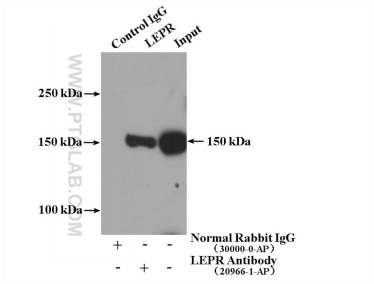
Various lysates were subjected to SDS PAGE followed by western blot with 20966-1-AP (LEPR antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



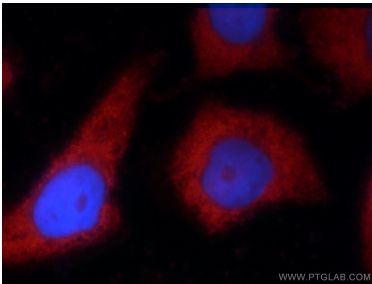
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 20966-1-AP (LEPR antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



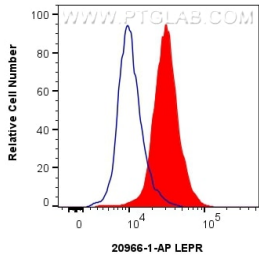
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 20966-1-AP (LEPR antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-LEPR (IP:20966-1-AP, 5ug; Detection:20966-1-AP 1:700) with mouse heart tissue lysate 4000ug.



Immunofluorescent analysis of MCF-7 cells using 20966-1-AP (LEPR antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



1x10⁶ HeLa cells were intracellularly stained with 0.4 ug LEPR Polyclonal antibody (20966-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).