

## Anti-Leptin Antibody Picoband™

Catalog Number: A00479-4

### About Lep

Leptin have been found to be obese and diabetic and to have reduced activity, metabolism and body temperature. cDNA clones encoding Leptin have been isolated from human, simian, mouse, and rat cells. The expression of Leptin mRNA has been shown to be restricted to adipose tissue. Although regulation of fat stores is deemed to be the primary function of leptin, it also plays a role in other physiological processes, as evidenced by its multiple sites of synthesis other than fat cells, and the multiple cell types beside hypothalamic cells that have leptin receptors. Many of these additional functions are yet to be defined.

### Overview

Product Name	Anti-Leptin Antibody Picoband™
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Leptin Antibody Picoband™ catalog # A00479-4. Tested in ELISA, IHC, WB applications. This antibody reacts with Mouse, Rat.
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P41160

### Technical Details

Immunogen	E. coli-derived mouse Leptin recombinant protein (Position: V22-C167).
Predicted Reactive Species	Chicken
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml</p> <p>ELISA (Cap), 1-5ug/ml</p>

## Anti-Leptin Antibody Picoband™ (A00479-4) Images

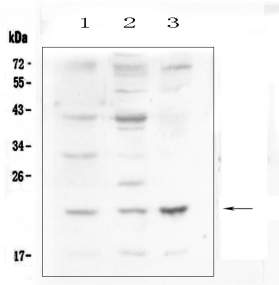


Figure 1. Western blot analysis of Leptin using anti-Leptin antibody (A00479-4).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: mouse small intestine tissue lysates,

Lane 2: mouse kidney tissue lysates,

Lane 3: mouse Neuro-2a whole cell lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes.

Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Leptin antigen affinity purified polyclonal antibody (Catalog # A00479-4) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Leptin at approximately 23KD. The expected band size for Leptin is at 18KD.

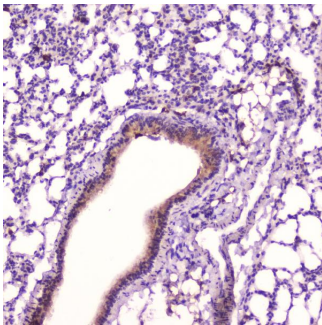


Figure 2. IHC analysis of Leptin using anti-Leptin antibody (A00479-4).

Leptin was detected in paraffin-embedded section of mouse lung tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Leptin Antibody (A00479-4) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

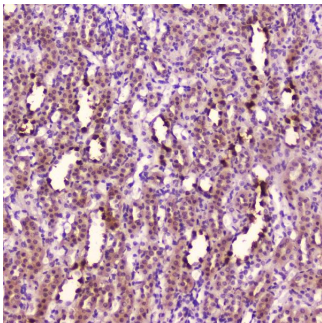
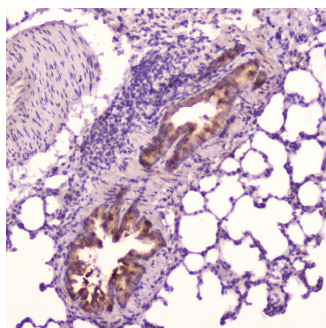


Figure 3. IHC analysis of Leptin using anti-Leptin antibody (A00479-4).

Leptin was detected in paraffin-embedded section of rat kidney tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Leptin Antibody (A00479-4) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Figure 4. IHC analysis of Leptin using anti-Leptin antibody



(A00479-4).

Leptin was detected in paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Leptin Antibody (A00479-4) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

## 5 Publications Citing This Product

1. PubMed ID: 10.1159/000479088, Trigonelline Inhibits Inflammation and Protects beta Cells to Prevent Fetal Growth Restriction during Pregnancy in a Mouse Model of Diabetes
2. PubMed ID: 10.1211/jpp.61.05.0004, Stress-induced cardiac insufficiency relating to abnormal leptin and FKBP12.6 is ameliorated by CPU0213, an endothelin receptor antagonist, which is not affected by the CYP3A suppressing effect of erythromycin
3. PubMed ID: 10.1007/s12020-016-1212-2, Influence of resveratrol on endoplasmic reticulum stress and expression of adipokines in adipose tissues/adipocytes induced by high-calorie diet or palmitic acid

Visit [bosterbio.com/anti-leptin-picoband-trade-antibody-a00479-4-boster.html](http://bosterbio.com/anti-leptin-picoband-trade-antibody-a00479-4-boster.html) to see all 5 publications.

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