



Datasheet for ABIN5692874
anti-Leptin antibody (AA 22-167)



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1 Image

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Overview

Quantity:	100 µg
Target:	Leptin (LEP)
Binding Specificity:	AA 22-167
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Leptin antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human Leptin recombinant protein (Position: V22-C167).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Leptin detection. Tested with WB, ELISA(Cap) in Human,Mouse,Rat.

Target Details

Target:	Leptin (LEP)
Alternative Name:	Lep (LEP Products)
Background:	Synonyms: Leptin

Target Details

Tissue Specificity: Adipose tissue is the main source of leptin it is also produced by other peripheral tissues such as the skeletal muscle (PubMed:7789654, PubMed:16052473, PubMed:12448771). Expressed by intercalated and striated tracts of submandibular and parotid salivary gland intralobular ducts (PubMed:12448771). Detected by fundic epithelium of the gastric mucosa (PubMed:10896907). Secreted into blood and gastric juice (PubMed:10896907).

Background: 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.

UniProt: [P41159](#)

Pathways: [JAK-STAT Signaling](#), [AMPK Signaling](#), [Hormone Transport](#), [Peptide Hormone Metabolism](#), [Hormone Activity](#), [Negative Regulation of Hormone Secretion](#), [Regulation of Carbohydrate Metabolic Process](#), [Feeding Behaviour](#), [Monocarboxylic Acid Catabolic Process](#)

Application Details

Application Notes: Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot.
Application Details: Western blot, 0.1-0.5 µg/mL
ELISA(Cap), 1-5 µg/mL

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg NaN₃.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage: 4 °C,-20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Publications

Product cited in: Shen, Fang, Lv, Pei, Wang, Jiang, Ding: "Heparin impairs angiogenesis through inhibition of microRNA-10b." in: **The Journal of biological chemistry**, Vol. 286, Issue 30, pp. 26616-27, (2011) ([PubMed](#)).

Validation report #103596 for Western Blotting (WB)



Western Blotting

Image 1. Western blot analysis of Leptin using anti-Leptin antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: recombinant human Leptin protein 1ng.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 #) at 0.5 µg/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 16KD. The expected band size for Leptin is at 16KD.