Datasheet for ABIN5692922

anti-Pleiotrophin antibody (AA 33-168)

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Overview

Quantity:	100 µg
Target:	Pleiotrophin (PTN)
Binding Specificity:	AA 33-168
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Pleiotrophin antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human Pleiotrophin recombinant protein (Position: G33-D168).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Pleiotrophin detection. Tested with WB, Direct ELISA in Human,Mouse,Rat.

Target Details

Target:	Pleiotrophin (PTN)
Alternative Name:	PTN (PTN Products)
Background:	Synonyms: Pleiotrophin, PTN, Heparin-binding brain mitogen, HBBM, Heparin-binding growth

Target Details

	factor 8, HBGF-8, Heparin-binding growth-associated molecule, HB-GAM, Heparin-binding neurite outgrowth-promoting factor 1, HBNF-1, Osteoblast-specific factor 1, OSF-1, PTN, HBNF1, NEGF1 Tissue Specificity: Osteoblast and brain. Background: Pleiotrophin (PTN), also known as heparin-binding brain mitogen (HBBM) or heparin-binding growth factor 8 (HBGF-8) or neurite growth-promoting factor 1 (NEGF1) or heparin affinity regulatory peptide (HARP) or heparin binding growth associated molecule (HB-GAM), is a protein that in humans is encoded by the PTN gene. PTN is the first member of a family of developmentally regulated cytokines. The PTN gene is mapped to 7q33-q34. A mutant PTN that contained only the first N-terminal 40 amino acids was a dominant negative. Pleiotrophin is expressed in the central and peripheral nervous system and also in several non-neural tissues, notably lung, kidney, gut and bone. Pleiotrophin binds to cell-surface nucleolin as a low affinity receptor. This binding can inhibit HIV infection.
UniProt:	P21246
Pathways:	RTK Signaling

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 Direct ELISA, 0.1-0.5 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 Na_2HPO_4, 0.05 mg NaN_3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month.

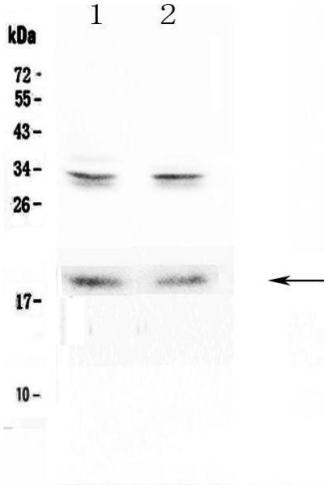
Handling

It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Publications

Product cited in: Zhang, Liu, Liu, Zhou, Song, Cao, An: "miR-182 aids in receptive endometrium development in dairy goats by down-regulating PTN expression." in: **PLoS ONE**, Vol. 12, Issue 7, pp. e0179783, (2017) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of Pleiotrophin using anti-Pleiotrophin antibody . 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: rat brain tissue lysates, Lane 2: mouse brain tissue 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-Pleiotrophin 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 Pleiotrophin at approximately 19KD. The expected band size for Pleiotrophin is at 19KD.