

Anti-RNH1 Picoband Antibody
Catalog # ABO12571**Specification**

Anti-RNH1 Picoband Antibody - Product Information

Application	WB
Primary Accession	P13489
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Ribonuclease inhibitor(RNH1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-RNH1 Picoband Antibody - Additional Information

Gene ID 6050

Other Names

Ribonuclease inhibitor, Placental ribonuclease inhibitor, Placental RNase inhibitor, Ribonuclease/angiogenin inhibitor 1, RAI, RNH1, PRI, RNH

Calculated MW

49973 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cytoplasm.

Protein Name

Ribonuclease inhibitor

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human RNH1 (2-37aa SLDIQSLDIQCEELSDARWAELLPLLQCCQVVRLLDD), different from the related mouse sequence by five amino acids, and from the related rat sequence by four amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

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.

Anti-RNH1 Picoband Antibody - Protein Information

Name RNH1 {ECO:0000303|PubMed:36935417, ECO:0000312|HGNC:HGNC:10074}

Function

Ribonuclease inhibitor which inhibits RNASE1, RNASE2 and angiogenin (ANG) (PubMed:12578357, PubMed:14515218, PubMed:3219362, PubMed:3243277, PubMed:3470787, PubMed:9050852). May play a role in redox homeostasis (PubMed:17292889). Required to inhibit the cytotoxic tRNA ribonuclease activity of ANG in the cytoplasm in absence of stress (PubMed:23843625, PubMed:32510170). Relocates to the nucleus in response to stress, relieving inhibition of ANG in the cytoplasm, and inhibiting the angiogenic activity of ANG in the nucleus (PubMed:23843625).

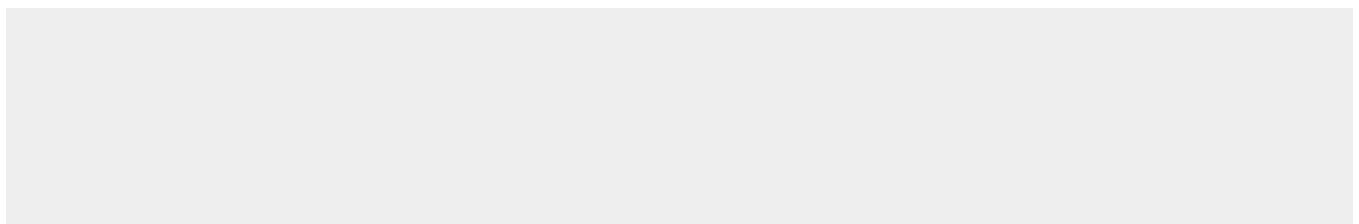
Cellular Location

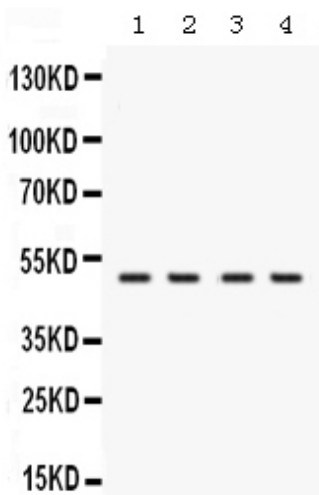
Cytoplasm. Nucleus Note=Localizes in the cytoplasm in absence of stress; translocates to the nucleus in response to stress.

Anti-RNH1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-RNH1 Picoband Antibody - Images



Western blot analysis of RNH1 expression in rat testis extract (lane 1), mouse brain extract (lane 2), human placenta extract (lane 3) and K562 whole cell lysates (lane 4). RNH1 at 50KD was detected using rabbit anti- RNH1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12571) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method.

Anti-RNH1 Picoband Antibody - Background

Ribonuclease inhibitor is an enzyme that in humans is encoded by the RNH1 gene. Placental ribonuclease inhibitor (PRI) is a member of a family of proteinaceous cytoplasmic RNase inhibitors that occur in many tissues and bind to both intracellular and extracellular RNases. In addition to control of intracellular RNases, the inhibitor may have a role in the regulation of angiogenin. Ribonuclease inhibitor, of 50,000 Da, binds to ribonucleases and holds them in a latent form. Since neutral and alkaline ribonucleases probably play a critical role in the turnover of RNA in eukaryotic cells, RNH may be essential for control of mRNA turnover; the interaction of eukaryotic cells with ribonuclease may be reversible in vivo.