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Anti-RNH1 Picoband Antibody

Catalog # ABO12571

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.

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
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Cytoplasm.
Source	Eukaryota
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 SLDIQSLDIQCEELSDARWAELLPLLQQCQVVRLDD), 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 r˚Constitution, 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.

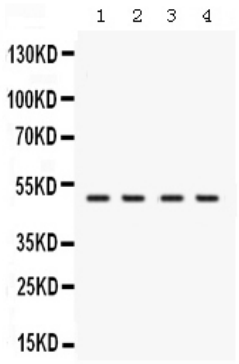
Protein Information

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.

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.

Images



Western blot analysis of RNH1 expression in rat testis extract (lane 1), mouse brain extract (lane 2), human placenta extract (lane 2) and K562 whole cell lysates (lane 4). RNH1 at 50KD was detected using rabbit anti- RNH1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12571) at0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.