

RNH1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12438b

Specification

RNH1 Antibody (C-term) - Product Information

Application	IF, WB,E
Primary Accession	P13489
Other Accession	NP_976318.1 , NP_976317.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	49973
Antigen Region	425-454

RNH1 Antibody (C-term) - Additional Information

Gene ID 6050

Other Names

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

Target/Specificity

This RNH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 425-454 amino acids from the C-terminal region of human RNH1.

Dilution

IF~~1:10~50
WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RNH1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RNH1 Antibody (C-term) - 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

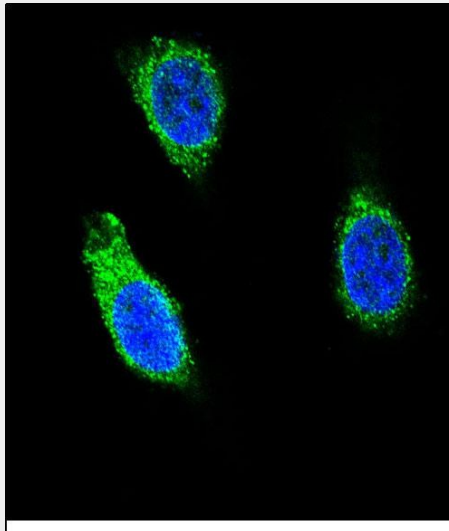
Cytoplasm. Nucleus Note=Localizes in the cytoplasm in absence of stress; translocates to the nucleus in response to stress.

RNH1 Antibody (C-term) - Protocols

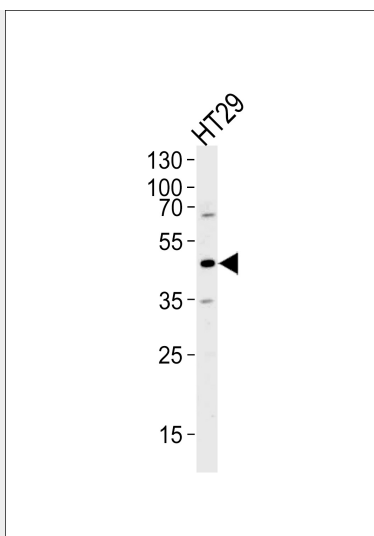
Provided below are standard protocols that you may find useful for product applications.

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

RNH1 Antibody (C-term) - Images



Confocal immunofluorescent analysis of RNH1 Antibody (C-term) (Cat#AP12438b) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



Western blot analysis of lysate from HT29 cell line, using RNH1 Antibody (C-term)(Cat. #AP12438b). AP12438b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

RNH1 Antibody (C-term) - Background

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 (summarized by Lee et al., 1988 [PubMed 3219362]). In addition to control of intracellular RNases, the inhibitor may have a role in the regulation of angiogenin (MIM 105850). 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.

RNH1 Antibody (C-term) - References

- Martins-de-Souza, D., et al. J Psychiatr Res 44(14):989-991(2010)
- Martins-de-Souza, D., et al. J Neural Transm 116(3):275-289(2009)
- Turcotte, R.F., et al. Biochem. Biophys. Res. Commun. 377(2):512-514(2008)
- Johnson, R.J., et al. Biochemistry 46(45):13131-13140(2007)
- Johnson, R.J., et al. J. Mol. Biol. 368(2):434-449(2007)