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RNH1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12438b

Specification

RNH1 Antibody (C-term) - Product Information

Application	**WB, IF,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
WB~~1:1000
IF~~1:10~50
E~~Use at an assay dependent concentration.

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).

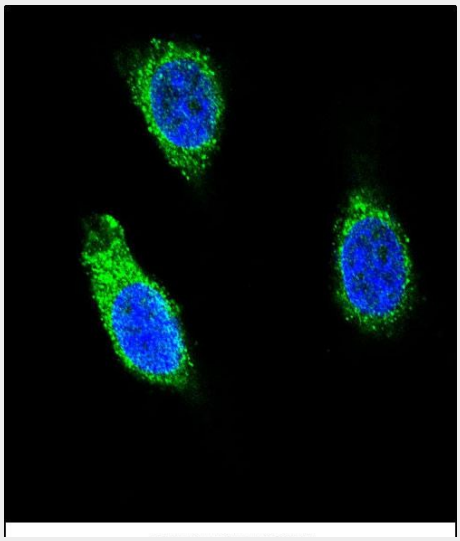
Cellular Location
Cytoplasm. Nucleus Note=Localizes in the cytoplasm in absence of stress; translocates to the nucleus in response to stress.

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 Cytomety
- 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 lgG (green). DAPI was used to stain the cell nuclear (blue).

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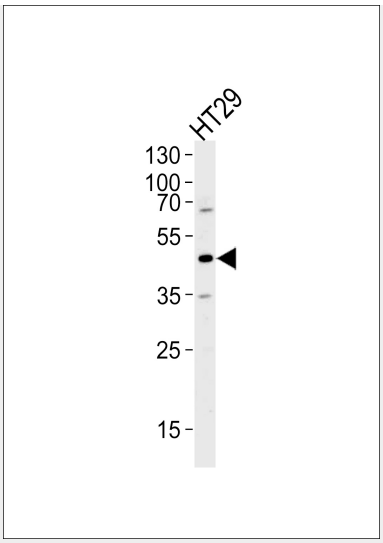

Western blot analysis of lysate from HT29 cell line,using RNH1 Antibody (C-term)(Cat. #AP12438b).AP12438b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug per lane.

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)
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