Product datasheet for TA306706

Ribonuclease H2, subunit A (RNASEH2A) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies
Applications: IF, WB
Recommended Dilution: WB: 1 ug/mL, ICC: 2 ug/mL, IF: 4 ug/mL
Reactivity: Human, Mouse, Rat
Host: Rabbit
Isotype: IgG
Clonality: Polyclonal
Immunogen: RNAse H2A antibody was raised against a 17 amino acid peptide near the center of human RNAse H2A.
Formulation: PBS containing 0.02% sodium azide.
Purification: Affinity chromatography purified via peptide column
Conjugation: Unconjugated
Storage: Store at -20°C as received.
Stability: Stable for 12 months from date of receipt.
Gene Name: ribonuclease H2 subunit A
Database Link: NP_006388
Entrez Gene 69724 Mouse Entrez Gene 364974 Rat Entrez Gene 10535 Human O75792

Background: Ribonucleases (RNAses) H are enzymes that hydrolyze the RNA strands of RNA/DNA hybrids. The major role of these enzymes is to remove the RNA strand from the RNA/DNA hybrids that form during DNA replication and repair. RNAse H2 is made up of three subunits; all three are required for RNAse activity. Recent evidence has demonstrated that mutations in RNAse H2A or any of the other subunits result in Aicardi-Goutieres syndrome (AGS), a neurological disorder with similar symptoms to viral brain infections including high levels of IFN-alpha in the cerebral spinal fluid. Similar conditions are observed with mutations in TREX1, a single-stranded DNA exonuclease, suggesting that RNAse H2 and TREX1 may have similar roles, and that mutations in any of these genes lead to an accumulation of intracellular nucleic acids, triggering an inflammatory response through activation of the innate immune system.
Synonyms: AGS4; JUNB; RNASEHI; RNHIA; RNHL

Protein Pathways: DNA replication

**Product images:**

Western blot analysis of RNAse H2A in HeLa cell lysate with RNAse H2A antibody at 1 ug/mL.

Figure from citation: Western blot analysis for confirming the knockdown of RNASEH2A in human astrocytes by using anti-RNASEH2A antibody. Dilution: 1:2000 [View Citation]

Immunocytochemistry of RNAse H2A in HeLa cells with RNAse H2A antibody at 2 ug/mL.
Immunofluorescence of RNase H2A in Hela cells with RNAse H2A antibody at 5 ug/mL.