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# RNASEH2A Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant RNASEH2A.
Catalog # AT3653a

## Product Information

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|---|---|
| **Application** | WB, E |
| **Primary Accession** | O75792 |
| **Other Accession** | BC011748 |
| **Reactivity** | Human |
| **Host** | mouse |
| **Clonality** | monoclonal |
| **Isotype** | IgG1 kappa |
| **Clone Names** | 3G5-F5 |
| **Calculated MW** | 33395 |

## Additional Information

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|---|---|
| **Gene ID** | 10535 |
| **Other Names** | Ribonuclease H2 subunit A, RNase H2 subunit A, Aicardi-Goutieres syndrome 4 protein, AGS4, RNase H(35), Ribonuclease HI large subunit, RNase HI large subunit, Ribonuclease HI subunit A, RNASEH2A, RNASEHI, RNHIA |
| **Target/Specificity** | RNASEH2A (AAH11748, 1 a.a. ~ 299 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| **Dilution** | WB~~1:500~1000 E~~N/A |
| **Format** | Clear, colorless solution in phosphate buffered saline, pH 7.2 . |
| **Storage** | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |
| **Precautions** | RNASEH2A Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures. |

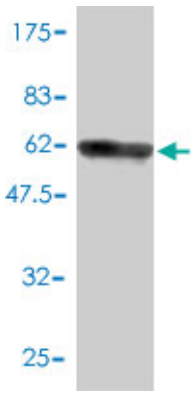
## Background

The protein encoded by this gene is a component of the heterotrimeric type II ribonuclease H enzyme (RNAseH2). RNAseH2 is the major source of ribonuclease H activity in mammalian cells and endonucleolytically cleaves ribonucleotides. It is predicted to remove Okazaki fragment RNA primers during lagging strand DNA synthesis and to excise single ribonucleotides from DNA-DNA duplexes. Mutations in this gene cause Aicardi-Goutieres Syndrome (AGS), a an autosomal recessive neurological disorder characterized by progressive microcephaly and psychomotor retardation, intracranial calcifications, elevated levels of interferon-alpha and white blood cells in the cerebrospinal fluid.

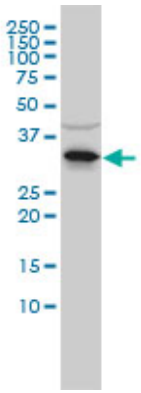
## References

Multiple loci influence erythrocyte phenotypes in the CHARGE Consortium. Ganesh SK, et al. Nat Genet, 2009 Nov. PMID 19862010.Genomics screen in transformed stem cells reveals RNASEH2A, PPAP2C, and ADARB1 as putative anticancer drug targets. Flanagan JM, et al. Mol Cancer Ther, 2009 Jan. PMID 19139135.Contributions of the two accessory subunits, RNASEH2B and RNASEH2C, to the activity and properties of the human RNase H2 complex. Chon H, et al. Nucleic Acids Res, 2009 Jan. PMID 19015152.Clinical and molecular phenotype of Aicardi-Goutieres syndrome. Rice G, et al. Am J Hum Genet, 2007 Oct. PMID 17846997.Mutations in genes encoding ribonuclease H2 subunits cause Aicardi-Gouti?res syndrome and mimic congenital viral brain infection. Crow YJ, et al. Nat Genet, 2006 Aug. PMID 16845400.

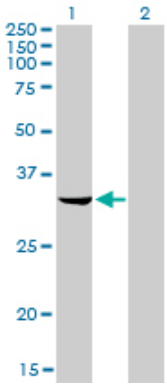
## Images




Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (58.63 KDa) .



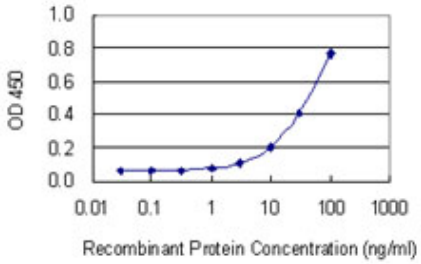

RNASEH2A monoclonal antibody (M01), clone 3G5-F5
Western Blot analysis of RNASEH2A expression in Jurkat ( (Cat # AT3653a )

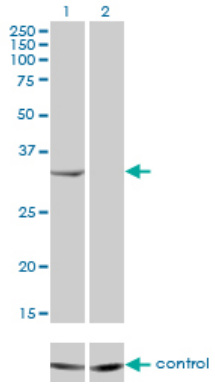



Western Blot analysis of RNASEH2A expression in transfected 293T cell line by RNASEH2A monoclonal antibody (M01), clone 3G5-F5.

Lane 1: RNASEH2A transfected lysate(33.4 KDa).
Lane 2: Non-transfected lysate.

Detection limit for recombinant GST tagged RNASEH2A is 1 ng/ml as a capture antibody.




Western blot analysis of RNASEH2A over-expressed 293 cell line, cotransfected with RNASEH2A Validated Chimera RNAi ( (Cat # AT3653a )