

Anti-Human/Mouse Activation-Induced Cytidine Deaminase (AID) Purified


Catalog Number: 14-5959

Also known as: aicda

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Human/Mouse Activation-Induced Cytidine Deaminase (AID) Purified

 **Catalog Number:** 14-5959

Clone: mAID-2

Concentration: 0.5 mg/mL

Host/Isotype: Rat IgG2a, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to vial

Use By: Refer to vial

Description

The monoclonal mAID-2 recognizes human and mouse AID (gene AICDA) also known as Activation-Induced Cytidine Deaminase. AID is a 24 kDa RNA-editing enzyme that converts cytosine into uracil. It plays a critical role during B cell development, specifically in somatic hypermutation (SHM) and immunoglobulin class switch recombination (CSR). Changes in levels of AID expression typically present with disease. For example, mutations in AID are found in Hyper-IgM Syndrome (type 2), a disease form without opportunistic infections, while overexpression correlates with poor prognosis in chronic lymphocytic leukemia/small lymphocytic lymphoma. AID is expressed mainly by activated mature B cells such as mature germinal centre (GC) B cells but also in intermediate GC cells (defined as IgD+CD38-CD23-CD71+). In addition to hematopoietic cells, AID is expressed in primary human hepatocellular carcinomas, helicobacter infected gastric epithelial cells, oocytes and embryonic stem cells although its role in these cells is not well understood. Because AID contains an NLS (nuclear localization signal), expression can be found both in the nucleus as well as in the cytoplasm.

Applications Reported

This mAID-2 antibody has been reported for use in immunoblotting (WB), immunohistologic staining of frozen tissue sections, and immunohistochemical staining of formalin-fixed paraffin embedded tissue sections.

Applications Tested

This mAID-2 antibody has been tested by western blot and/or immunohistochemistry on FFPE sections using antigen retrieval. This can be used at less than or equal to 20 µg/ml. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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Kolar GR, Mehta D, Pelayo R, Capra JD. A novel human B cell subpopulation representing the initial germinal center population to express AID. *Blood*. 2007 Mar 15;109(6):2545-52

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Okazaki IM, Hiai H, Kakazu N, Yamada S, Muramatsu M, Kinoshita K, Honjo T. Constitutive expression of AID leads to tumorigenesis. *J Exp Med*. 2003 May 5;197(9):1173-81.

Muramatsu M, Sankaranand VS, Anant S, Sugai M, Kinoshita K, Davidson NO, Honjo T. Specific expression of activation-induced cytidine deaminase (AID), a novel member of the RNA-editing deaminase family in germinal center

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B cells. J Biol Chem. 1999 Jun 25;274(26):18470-6.

Related Products

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