

Goat Anti-AID Antibody
Peptide-affinity purified goat antibody
Catalog # AF1038a**Specification**

Goat Anti-AID Antibody - Product Information

Application	WB
Primary Accession	O9GZX7
Other Accession	NP_065712 , 57379
Reactivity	Human
Predicted	Pig, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	23954

Goat Anti-AID Antibody - Additional Information**Gene ID** 57379**Other Names**

Single-stranded DNA cytosine deaminase, 3.5.4.38, Activation-induced cytidine deaminase, Cytidine aminohydrolase, AICDA, AID

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-AID Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-AID Antibody - Protein Information**Name** AICDA**Synonyms** AID**Function**

Single-stranded DNA-specific cytidine deaminase. Involved in somatic hypermutation (SHM), gene conversion, and class-switch recombination (CSR) in B-lymphocytes by deaminating C to U during transcription of Ig-variable (V) and Ig-switch (S) region DNA. Required for several crucial steps of

B-cell terminal differentiation necessary for efficient antibody responses (PubMed:18722174, PubMed:21385873, PubMed:21518874, PubMed:27716525). May also play a role in the epigenetic regulation of gene expression by participating in DNA demethylation (PubMed:21496894).

Cellular Location

Nucleus. Cytoplasm, cytosol Note=Predominantly cytosolic (PubMed:21385873). In the presence of MCM3AP/GANP, relocates to the nucleus (By similarity) {ECO:0000250|UniProtKB:Q9WVE0, ECO:0000269|PubMed:21385873}

Tissue Location

Strongly expressed in lymph nodes and tonsils.

Goat Anti-AID Antibody - 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](#)

Goat Anti-AID Antibody - Images



AF1038a (0.1 µg/ml) staining of Human Tonsil lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-AID Antibody - Background

This gene encodes a RNA-editing deaminase that is a member of the cytidine deaminase family. The protein is involved in somatic hypermutation, gene conversion, and class-switch recombination of immunoglobulin genes. Defects in this gene are the cause of autosomal recessive hyper-IgM immunodeficiency syndrome type 2 (HIGM2).

Goat Anti-AID Antibody - References

GANP-mediated recruitment of activation-induced cytidine deaminase to cell nuclei and to immunoglobulin variable region DNA. Maeda K, et al. J Biol Chem, 2010 Jul 30. PMID 20507984.

TP53 mutations coincide with the ectopic expression of activation-induced cytidine deaminase in the fibroblast-like synoviocytes derived from a fraction of patients with rheumatoid arthritis. Igarashi H, et al. Clin Exp Immunol, 2010 Jul 1. PMID 20491788.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

No association between AICDA 7888 C/T polymorphism, Helicobacter pylori seropositivity, and the risk of atrophic gastritis and gastric cancer in Japanese. Hishida A, et al. Gastric Cancer, 2010 Mar. PMID 20373075.

Determinants of sequence-specificity within human AID and APOBEC3G. Carpenter MA, et al. DNA Repair (Amst), 2010 May 4. PMID 20338830.