

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

---

**Goat Anti-AID Antibody - Product Information**

|                   |   |
|-------------------|---|
| Application       | WB  |
| Primary Accession | <a href="#">O9GZX7</a>                            |
| Other Accession   | <a href="#">NP_065712</a> , <a href="#">57379</a> |
| 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:<a href="http://www.uniprot.org/citations/18722174" target="\_blank">18722174</a>, PubMed:<a href="http://www.uniprot.org/citations/21385873" target="\_blank">21385873</a>, PubMed:<a href="http://www.uniprot.org/citations/21518874" target="\_blank">21518874</a>, PubMed:<a href="http://www.uniprot.org/citations/27716525" target="\_blank">27716525</a>). May also play a role in the epigenetic regulation of gene expression by participating in DNA demethylation (PubMed:<a href="http://www.uniprot.org/citations/21496894" target="\_blank">21496894</a>).

#### 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.