

# Anti-AID Antibody

Catalog # AP60139

## Product Information

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|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">Q9GZX7</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Calculated MW     | 23954                  |

## Additional Information

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|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID            | 57379                                                                                                                              |
| Other Names        | AID; Single-stranded DNA cytosine deaminase; Activation-induced cytidine deaminase; Cytidine aminohydrolase                        |
| Target/Specificity | KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human AID. The exact sequence is proprietary. |
| Dilution           | WB~~WB (1/500 - 1/1000)                                                                                                            |
| Format             | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.                          |
| Storage            | Store at -20 °C.Stable for 12 months from date of receipt                                                                          |

## Protein Information

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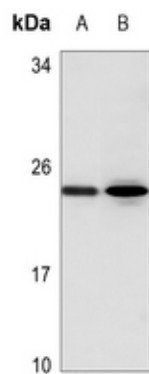
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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="#">18722174</a> , PubMed: <a href="#">21385873</a> , PubMed: <a href="#">21518874</a> , PubMed: <a href="#">27716525</a> ). May also play a role in the epigenetic regulation of gene expression by participating in DNA demethylation (PubMed: <a href="#">21496894</a> ). |
| Cellular Location | Nucleus. Cytoplasm, cytosol Note=Predominantly cytosolic (PubMed:21385873). In the presence of MCM3AP/GANP, relocalizes to the nucleus (By similarity) {ECO:0000250   UniProtKB:Q9WVE0, ECO:0000269   PubMed:21385873}                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**Tissue Location**

Strongly expressed in lymph nodes and tonsils.

**Images**

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Western blot analysis of AID expression in mouse lung (A), rat lung (B) whole cell lysates. (Predicted band size: 23 kD; Observed band size: 24 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.