

Rabbit Anti-AICDA antibody

SL7855R

Product Name:	AICDA
Chinese Name:	活化诱导胞嘧啶核苷脱氨酶抗体
Alias:	Activation induced cytidine deaminase; Activation induced deaminase; Activation- induced cytidine deaminase; AICDA; AICDA_HUMAN; AID; ARP 2; ARP2; CDA 2; CDA2; Cytidine aminohydrolase; HIGM2; Integrated into Burkitt's lymphoma cell line Ramos.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	24kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human AICDA:101-198/198
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	RNA-editing deaminase involved in somatic hypermutation, gene conversion, and class-switch recombination. Required for several crucial steps of B-cell terminal differentiation necessary for efficient antibody responses. Tissue specificity:Strongly expressed in lymph nodes and tonsils.

Involvement in disease:Defects in AICDA are the cause of hyper-IgM immunodeficiency syndrome type 2 (HIGM2); also known as hyper-IgM syndrome 2. HIGM2 is an autosomal recessive disorder characterized by normal or elevated serum IgM levels with absence of IgG, IgA, and IgE, resulting in a profound susceptibility to bacterial infections. HIGM2 causes the absence of Ig class switch recombination (CSR), the lack of Ig somatic hypermutations, and lymph node hyperplasia caused by the presence of giant germinal centers.

Function:

Single-stranded DNA-specific cytidine deaminase. Involved in somatic hypermutation, gene conversion, and class-switch recombination in B-lymphocytes. Required for several crucial steps of B-cell terminal differentiation necessary for efficient antibody responses. May also play a role in the epigenetic regulation of gene expression by participating in DNA demethylation.

Tissue Specificity:

Strongly expressed in lymph nodes and tonsils.

DISEASE:

Defects in AICDA are the cause of immunodeficiency with hyper-IgM type 2 (HIGM2) [MIM:605258]. A rare immunodeficiency syndrome characterized by normal or elevated serum IgM levels with absence of IgG, IgA, and IgE. It results in a profound susceptibility to bacterial infections.

Similarity:

Belongs to the cytidine and deoxycytidylate deaminase family.

SWISS: Q9GZX7

Gene ID: 57379

Database links:

Entrez Gene: 57379Human

Entrez Gene: 11628Mouse

<u>Omim: 605257</u>Human

SwissProt: Q9GZX7Human

SwissProt: Q9WVE0Mouse

Unigene: 149342Human

Unigene: 391503Mouse
Important Note:
This product as supplied is intended for research use only, not for use in human,
linerapeutic of diagnostic applications.