



Adenosine deaminase (ADA) polyclonal antibody

Cat. No.	Format	Size
PAB-10464	Purified	100 µg

Animal ID:

RB0045-0046

Host:

Rabbit

Reactivity:

human

Buffers:

Purified rabbit polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column and eluted out with both high and low pH buffers and neutralized immediately after elution then followed by dialysis against PBS.

Storage:

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C. Avoid repeated freeze-thaw cycles.

Application:

Tested by peptide-specific ELISA (1:1,000).

Immunogen:

KLH conjugated synthetic peptide comprised of amino acids 335 - 351 [LPEDEKRELLDLLYKAY] of the human adenosine deaminase (ADA) protein.

Accession number:

[NM_000022](#)

Description:

[Adenosine deaminase \(ADA\)](#) catalyzes the hydrolysis of adenosine to inosine. ADA deficiency causes one form of severe combined immunodeficiency disease (SCID), in which there is dysfunction of both B and T lymphocytes with impaired cellular immunity and decreased production of immunoglobulins. Serum adenosine deaminase-2 (but not adenosine deaminase-1) and cytidine deaminase levels were significantly higher in systemic lupus erythematosus patients. ADA1 is mainly purified concomitant with ADA-binding protein and CD26/dipeptidyl peptidase IV. In humans, two severe diseases are caused by ADA imbalance: [hemolytic anemia due to ADA excess](#) and [severe combined immunodeficiency due to ADA deficiency](#).

Alternative Name(s):

adenosine aminohydrolase

References:

1. [Iwaki-Egawa S, Watanabe Y](#): Characterization and purification of adenosine deaminase 1 from human and chicken liver. *Comp. Biochem. Physiol. B. Biochem. Mol. Biol.* 133(2): 173-182 (2002).
2. [Taysi S, Polat MF, Sari RA, Bakan E](#): Serum adenosine deaminase and cytidine deaminase activities in patients with systemic lupus erythematosus. *Clin. Chem. Lab. Med.* 40(5): 493-495 (2002).
3. [Richard E, Alam SM, Arredondo-Vega FX, Patel DD, Hershfield MS](#): Clustered charged amino acids of human adenosine deaminase comprise a functional epitope for binding the adenosine deaminase complexing protein

CD26/dipeptidyl peptidase IV. *J. Biol. Chem.* 277(22): 19720-19726 (2002).

4. [Wiginton DA, Kaplan DJ, States JC, Akeson AL, Perme CM, Bilyk IJ, Vaughn AJ, Lattier DL, Hutton JJ](#): Complete sequence and structure of the gene for human adenosine deaminase. *Biochemistry* 25(25): 8234-8244 (1986).
5. [Bonthron DT, Markham AF, Ginsburg D, Orkin SH](#): Identification of a point mutation in the adenosine deaminase gene responsible for immunodeficiency. *J. Clin. Invest.* 76(2): 894-897 (1985).
6. [Daddona PE, Shewach DS, Kelley WN, Argos P, Markham AF, Orkin SH](#): Human adenosine deaminase. cDNA and complete primary amino acid sequence. *J. Biol. Chem.* 259(19): 12101-12106 (1984).

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