

# ADA Antibody

Rabbit mAb Catalog # AP92392

### **Product Information**

Application	WB, IF, ICC, IP
Primary Accession	<u>P00813</u>
Reactivity	Rat, Human
Clonality	Monoclonal
Other Names	ada; ADA1;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	40764

#### **Additional Information**

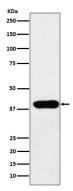
Dilution Purification	WB 1:500~1:2000 ICC/IF 1:50~1:200 IP 1:50 Affinity-chromatography
Immunogen	A synthesized peptide derived from human ADA
Description	Catalyzes the hydrolytic deamination of adenosine and 2-deoxyadenosine. Plays an important role in purine metabolism and in adenosine homeostasis. Modulates signaling by extracellular adenosine, and so contributes indirectly to cellular signaling events.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

#### **Protein Information**

Name	ADA
Synonyms	ADA1
Function	Catalyzes the hydrolytic deamination of adenosine and 2- deoxyadenosine (PubMed:16670267, PubMed:23193172, PubMed:26166670, PubMed:8452534, PubMed:9361033). Plays an important role in purine metabolism and in adenosine homeostasis. Modulates signaling by extracellular adenosine, and so contributes indirectly to cellular signaling events. Acts as a positive regulator of T-cell coactivation, by binding DPP4 (PubMed:20959412). Its interaction with DPP4 regulates lymphocyte-epithelial cell adhesion (PubMed:11772392). Enhances dendritic cell immunogenicity by affecting dendritic cell costimulatory molecule expression and cytokines and chemokines secretion (By similarity). Enhances CD4+ T-cell differentiation and proliferation (PubMed:20959412). Acts as a positive modulator of adenosine receptors ADORA1 and ADORA2A, by enhancing their ligand affinity via conformational change (PubMed:23193172). Stimulates plasminogen

	activation (PubMed: <u>15016824</u> ). Plays a role in male fertility (PubMed: <u>21919946</u> , PubMed: <u>26166670</u> ). Plays a protective role in early postimplantation embryonic development (By similarity). Also responsible for the deamination of cordycepin (3'-deoxyadenosine), a fungal natural product that shows antitumor, antibacterial, antifungal, antivirus, and immune regulation properties (PubMed: <u>26038697</u> ).
Cellular Location	Cell membrane; Peripheral membrane protein; Extracellular side. Cell junction. Cytoplasmic vesicle lumen {ECO:0000250 UniProtKB:P03958}. Cytoplasm. Lysosome. Note=Colocalized with DPP4 at the cell surface.
Tissue Location	Found in all tissues, occurs in large amounts in T- lymphocytes (PubMed:20959412). Expressed at the time of weaning in gastrointestinal tissues.

## Images



Western blot analysis of ADA expression in Jurkat cell lysate.

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