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ADA Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11650b

Specification

ADA Antibody (C-term) - Product Information

Application	**WB, IHC-P-Leica, FC,E**
Primary Accession	P00813
Other Accession	NP_000013.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**287-314**

ADA Antibody (C-term) - Additional Information

Gene ID 100

Other Names
Adenosine deaminase, Adenosine aminohydrolase, ADA, ADA1

Target/Specificity
This ADA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 287-314 amino acids from the C-terminal region of human ADA.

Dilution
WB~~1:1000
IHC-P-Leica~~1:500
FC~~1:25

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ADA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ADA Antibody (C-term) - 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:15016824). Plays a role in male fertility (PubMed:21919946, PubMed:26166670). 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:26038697).

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.

ADA Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ADA Antibody (C-term) - Images

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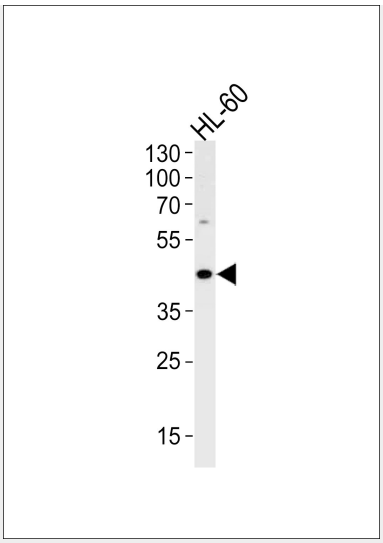
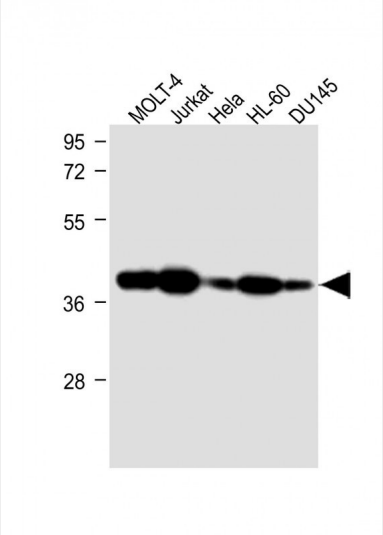
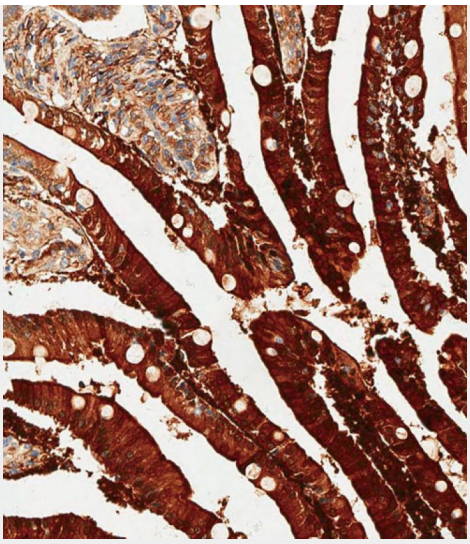


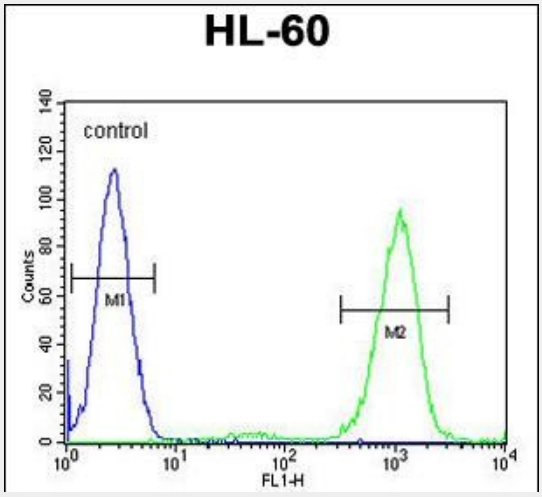
ADA Antibody (C-term) (Cat. #AP11650b) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the ADA antibody detected the ADA protein (arrow).



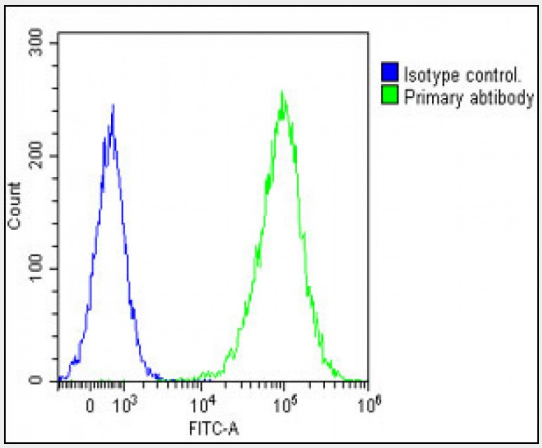
All lanes : Anti-ADA Antibody (C-term) at 1:1000 dilution Lane 1: MOLT-4 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: Hela whole cell lysate Lane 4: HL-60 whole cell lysate Lane 5: DU145 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded human duodenum tissue using AP11650b performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



ADA Antibody (C-term) (Cat. #AP11650b) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Overlay histogram showing Jurkat cells stained with AP11650b(green line). The cells were fixed

with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

ADA Antibody (C-term) - Background

This gene encodes an enzyme that catalyzes the hydrolysis of adenosine to inosine. Various mutations have been described for this gene and have been linked to human diseases. Deficiency in this enzyme causes a 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, whereas elevated levels of this enzyme have been associated with congenital hemolytic anemia.

ADA Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Gloria-Bottini, F., et al. Am. J. Med. Sci. 340(2):103-108(2010)
Levine, A.J., et al. Cancer Epidemiol. Biomarkers Prev. 19(7):1812-1821(2010)
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Ri, G., et al. Anticancer Res. 30(6):2347-2349(2010)