

# Adenosine Deaminase (ADA) Activity Assay Kit (Fluorometric) ab204695

★★★★★ 1 Abreviews 6 References 画像数 3

## 製品の概要

製品名	Adenosine Deaminase (ADA) Activity Assay Kit (Fluorometric)
検出方法	Fluorescent
サンプルの種類	Cell Lysate, Cell culture media, Purified protein, Tissue Lysate
アッセイタイプ	Enzyme activity
検出感度	10 µU
検出範囲	10 µU - 100 µU
種交差性	交差種: Mammals, Other species
製品の概要	Adenosine Deaminase (ADA) Activity Assay Kit (Fluorometric) (ab204695) is an assay where inosine formed from the breakdown of adenosine is detected via a multi-step reaction, resulting in the formation of an intermediate that reacts with the ADA Probe to generate a fluorescent product that can be easily quantified at Ex/Em = 535/587 nm. The kit measures total activity of Adenosine Deaminase with limit of quantification of 10 µU recombinant Adenosine Deaminase. The range of the assay is from 10-100 µU.

特記事項	<p>This product is manufactured by BioVision, an Abcam company and was previously called K328 Adenosine Deaminase Activity Assay Kit (Fluorometric). K328-100 is the same size as the 100 test size of ab204695.</p> <p>Adenosine Deaminase (ADA, EC 3.5.4.4) is an enzyme that catalyses the conversion of adenosine and 2'-deoxyadenosine to inosine and 2'-deoxyinosine. Adenosine Deaminase is widely distributed in various tissues and cells. There are two isoforms, ADA1 and ADA2. ADA1 is widely expressed in most cells in the body, particularly in lymphocytes and macrophages. It is present in the cytosol, nucleus and has been found associated with DPP4/CD26 in the cell membrane. ADA2 was first found in the spleen but is predominantly found in the plasma and serum. Increased serum ADA levels are found in certain infectious diseases such as tuberculosis and various liver diseases such as acute hepatitis, alcoholic hepatic fibrosis, chronic active hepatitis to name a few. Adenosine Deaminase is also a marker for T-lymphocyte proliferation.</p> <p>Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.</p>
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試験プラットフォーム	Microplate reader
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## 製品の特性

### 保存方法

Store at -20°C. Please refer to protocols.

内容	100 tests
10X ADA Assay Buffer	1 x 25ml
ADA Convertor	1 vial
Converter Enzyme VIII	1 vial
ADA Positive Control	1 vial
ADA Substrate	1 x 500µl
Inosine Standard	1 x 100µl
OxiRed Probe	1 x 200µl

### 機能

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. Acts as a positive regulator of T-cell coactivation, by binding DPP4. Its interaction with DPP4 regulates lymphocyte-epithelial cell adhesion.

### 組織特異性

Found in all tissues, occurs in large amounts in T-lymphocytes and, at the time of weaning, in gastrointestinal tissues.

### 関連疾患

Defects in ADA are the cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-negative/NK-cell-negative due to adenosine deaminase deficiency (ADASCID) [MIM:102700]. SCID refers to a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients with SCID present in infancy with recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development. ADA-SCID is an autosomal recessive form accounting for about 50% of non-X-linked SCIDs. ADA deficiency has been diagnosed in chronically ill teenagers and adults (late or adult onset). Population and newborn screening programs have also identified several healthy individuals with normal immunity who have partial ADA deficiency.

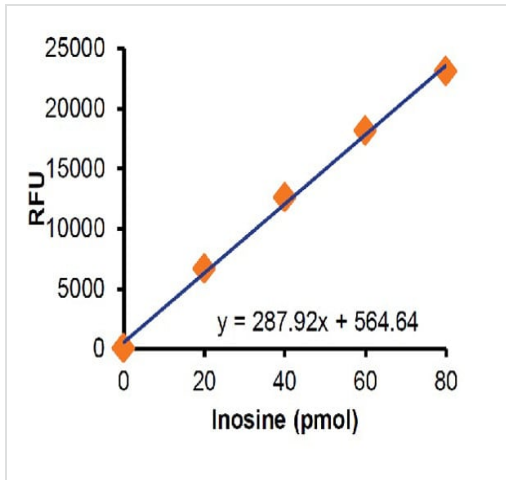
### 配列類似性

Belongs to the adenosine and AMP deaminases family.

### 細胞内局在

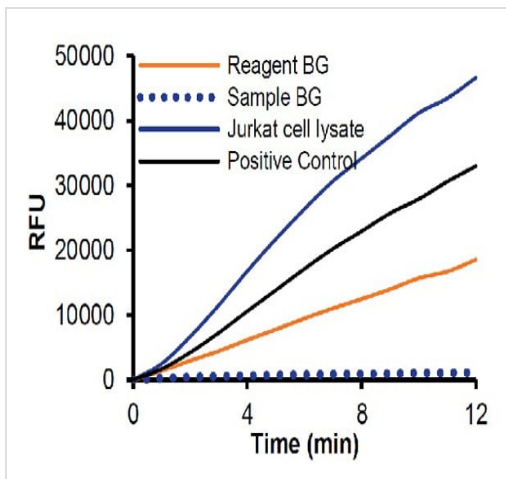
Cell membrane. Cell junction. Cytoplasmic vesicle lumen. Cytoplasm. Colocalized with DPP4 at the cell junction in lymphocyte-epithelial cell adhesion.

## 画像



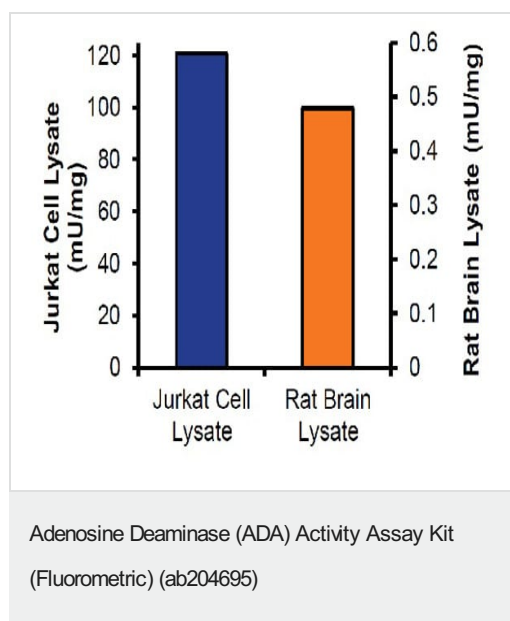
Typical Inosine Standard Curve

Adenosine Deaminase (ADA) Activity Assay Kit  
(Fluorometric) (ab204695)



Adenosine Deaminase Activity in Jurkat Cell (T-lymphocyte) lysate (105 ng) and Positive Control; BG: Background.

Adenosine Deaminase (ADA) Activity Assay Kit  
(Fluorometric) (ab204695)



Adenosine Deaminase specific activity in Jurkat cell lysate (105 ng) and rat brain lysate (2 µg).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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