

# Aspartate Aminotransferase Activity Assay Kit ab105135

★★★★★ [1 Abreviews](#) [64 References](#) [画像数 7](#)

### 製品の概要

製品名	Aspartate Aminotransferase Activity Assay Kit
検出方法	Colorimetric
サンプルの種類	Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
アッセイタイプ	Enzyme activity
検出感度	10 mU/well
全工程の試験時間	1h 00m
製品の概要	Aspartate Aminotransferase Activity Assay Kit (AST assay kit) ab105135 provides a rapid, simple, sensitive and reliable assay for AST activity.

In the AST assay protocol, an amino group is transferred from aspartate to alpha-ketoglutarate. The products of this reversible transamination reaction are oxaloacetate and glutamate. The glutamate is detected in a reaction that converts a nearly colorless probe to color ( $\lambda_{max} = 450$  nm).

The AST assay has a detection limit of 10 mU per well.

AST assay protocol summary:

- add samples and standards to wells
- add reaction mix
- incubate at 37°C and analyze with microplate reader after 10 mins and then again after 60 mins

**Chinese protocol available.** See protocols section below.

### 特記事項

This product is manufactured by BioVision, an Abcam company and was previously called K753 Aspartate Aminotransferase (AST or SGOT) Activity Colorimetric Assay Kit. K753-100 is the same size as the 100 test size of ab105135.

Aspartate aminotransferase (AST), also known as Aspartate transaminase and Glutamate-oxaloacetate transaminase (GOT), is a transaminase (EC 2.6.1.1) similar to the more liver specific alanine transaminase (ALT). Although commonly included clinically as part of a diagnostic liver function test, AST has a broader clinical utility since it may also be elevated in diseases affecting other organs, such as the heart or muscles in myocardial infarction, also in acute pancreatitis, acute hemolytic anemia, severe burns, acute renal disease, musculoskeletal diseases and trauma. It catalyzes the reaction: Aspartate + alpha-Ketoglutarate = Oxaloacetate +

Glutamate Diagnostically, it is almost always measured in units/liter (U/L).

試験プラットフォーム

Microplate reader

## 製品の特性

### 保存方法

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

内容	100 tests	2000 tests
Assay Buffer XIX	1 x 25ml	20 x 25ml
AST Enzyme Mix	1 vial	20 vials
AST Positive Control	1 vial	20 vials
AST Substrate	1 vial	20 vials
Developer Solution III	1 vial	20 vials
Glutamate Standard	1 x 0.1ml	20 x 0.1ml

### 機能

Plays a key role in amino acid metabolism.

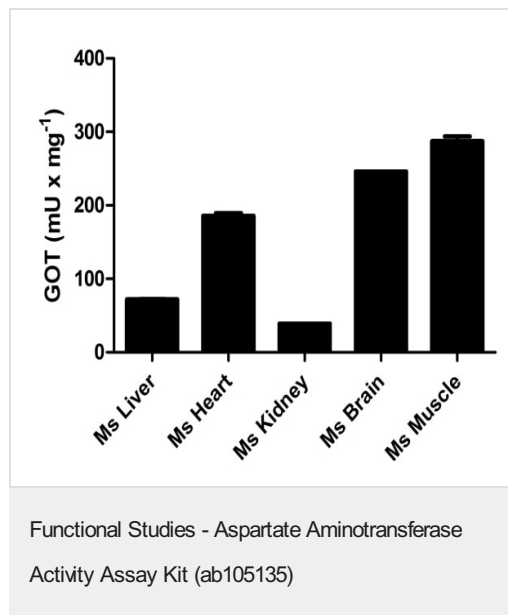
### 配列類似性

Belongs to the class-I pyridoxal-phosphate-dependent aminotransferase family.

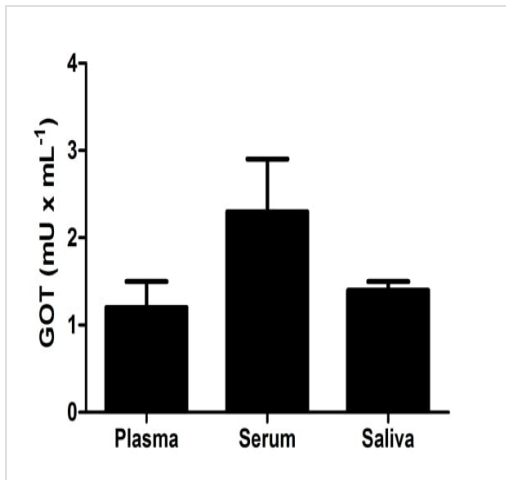
### 細胞内局在

Cytoplasm.

## 画像

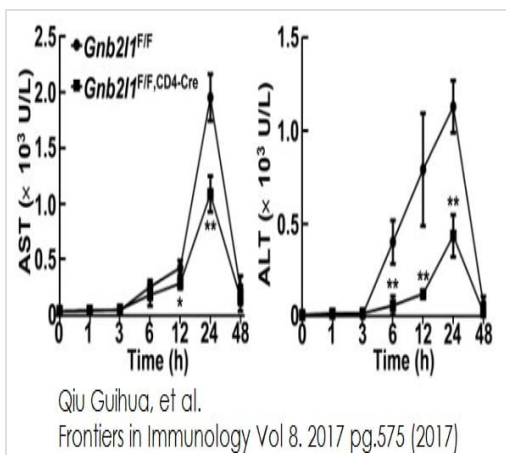


AST activity measured in mouse tissue lysates showing activity (mU) per mg of extracted protein (T1 = 2 min; T2 = 60 min).



AST activity measured in human biological fluids showing activity (mU) per mL of tested sample, (T1 = 2 min; T2 = 60 min) with background signals subtracted.

Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)

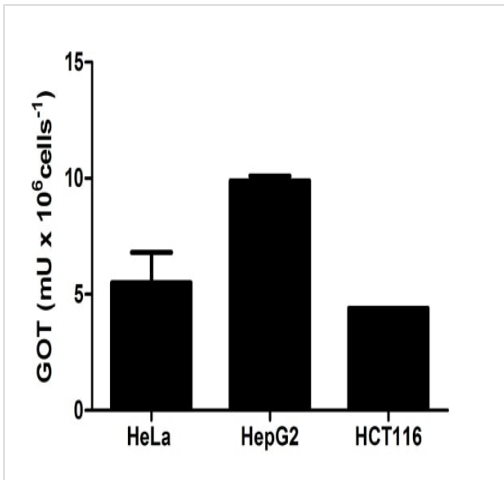


Serum aspartate transaminase (AST) levels were measured using ab105135 and alanine transaminase (ALT) levels were measured using [ab105134](#). Both levels were measured at various time periods post Con A injection. Mean values ± SD are shown (n = 4). \*P < 0.05 and \*\*P < 0.01.

Qiu Guihua, et al. Frontiers in Immunology Vol 8. 2017 pg.575 (2017)

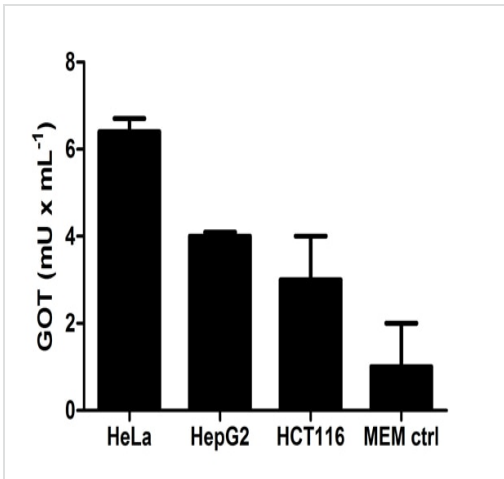
Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)

Qiu Guihua, et al., Frontiers in Immunology Vol 8. 2017 pg.575, Fig 8, doi:10.3389/fimmu.2017.00575



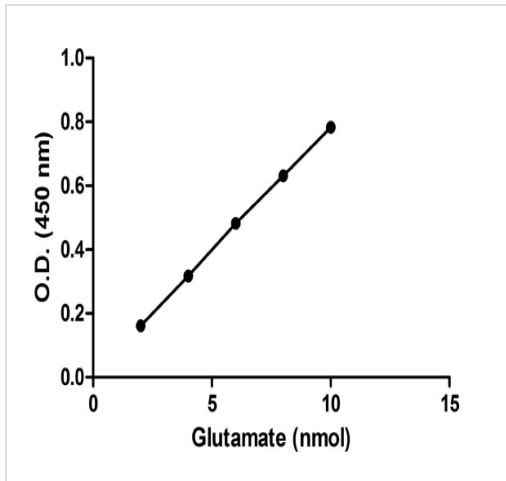
AST activity measured in cell lysates (T1 = 2 min; T2 = 60 min; duplicates (+/- SD), background signal subtracted).

Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)



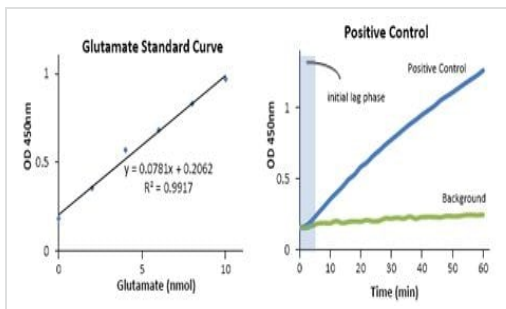
AST activity measured in cell culture medium and control medium, background signal subtracted. T1 = 2 min; T2 = 60 min.

Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)



Standard curve (60 minutes incubation): mean of duplicates (+/- SD) with background reads subtracted.

Functional Studies - Aspartate Aminotransferase  
Activity Assay Kit (ab105135)



Example of Standard Curve and Positive control detection using ab105135.

Functional Studies - Aspartate Aminotransferase  
Activity Assay Kit (ab105135)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors