# abcam

#### Product datasheet

## Aspartate Aminotransferase Activity Assay Kit ab105135

★★★★★ 1 Abreviews 64 References 7 图像

#### 概述

产品名称 Aspartate Aminotransferase Activity Assay试剂盒

检测方法 Colorimetric

样品类型 Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts

检测类型 Enzyme activity

**灵敏度** 10 mU/well

**检测时间** 1h 00m

产品概述 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.

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 +

说明

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

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.

平台

Microplate reader

#### 性能

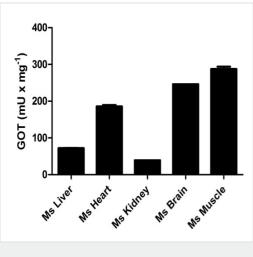
#### 存放说明

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

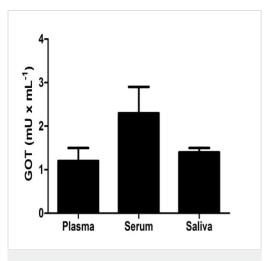
组件	100 tests	2000 tests
Assay Buffer XIX	1 x 25ml	20 x 25ml
AST Enzyme Mix	1 vial	20 vials
AST Positive Control	1 vial	20 vials
AST Substrate	1 vial	20 vials
Developer Solution III	1 vial	20 vials
Glutamate Standard	1 x 0.1ml	20 x 0.1ml

功能Plays a key role in amino acid metabolism.序列相似性Belongs to the class-I pyridoxal-phosphate-dependent aminotransferase family.细胞定位Cytoplasm.

#### 图片

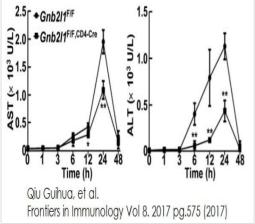


Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135) AST activity measured in mouse tissue lysates showing activity (mU) per mg of extracted protein (T1 = 2 min; T2 = 60 min).



Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)

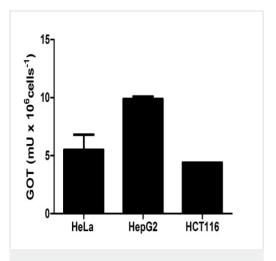
AST activity measured in human biological fluids showing activity (mU) per mL of tested sample, (T1 = 2 min; T2 = 60 min) with background signals subtracted.



### Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)

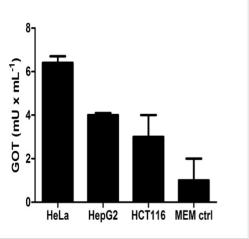
Qiu Guihua, et al., Frontiers in Immunology Vol 8. 2017 pg.575, Fig 8, doi:10.3389/fimmu.2017.00575

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.

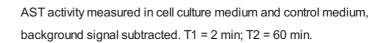


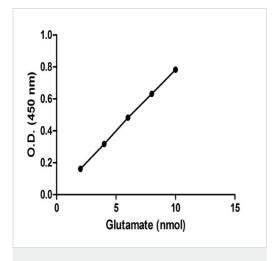
Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)

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

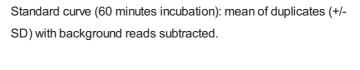


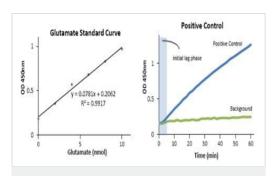
Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)





Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)





Functional Studies - Aspartate Aminotransferase Activity Assay Kit (ab105135)

Example of Standard Curve and Positive control detection using ab105135.

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