

Product datasheet

Aspartate Aminotransferase Activity Assay Kit (Fluorometric) ab138878

[3 References](#) [1 Image](#)

Overview

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|---------------------------|---|
| Product name | Aspartate Aminotransferase Activity Assay Kit (Fluorometric) |
| Detection method | Fluorescent |
| Sample type | Serum, Other biological fluids |
| Assay type | Enzyme activity |
| Sensitivity | 2 mU/ml |
| Species reactivity | Reacts with: Mammals, Other species |
| Product overview | <p>Aspartate Aminotransferase Activity Assay Kit / AST Assay Kit (Fluorometric) ab138878 provides a quick and sensitive assay for AST activity in biological samples.</p> <p>In the AST assay protocol, AST catalyzes the reaction of aspartate and α-ketoglutarate to oxaloacetate and glutamate:</p> $\text{Aspartate (Asp)} + \alpha\text{-ketoglutarate} \rightarrow \text{oxaloacetate} + \text{glutamate (Glu)}$ <p>The product L-glutamate is measured by the generation of a red fluorescent product through an enzyme coupled reaction cycle.</p> <p>The assay signal can be read by a fluorescence microplate reader at Ex/Em = 530-570 nm/590-600 nm (optimal Ex/Em = 540 nm/590 nm). The AST activity assay can detect as little as 2 mU/mL AST in a 100 μL reaction volume. The assay is robust, and can be readily adapted for a wide variety of applications.</p> |
| Notes | Aspartate aminotransferase (AST), also called Glutamic Oxaloacetic transaminase (GOT), is a member of transferase family. It catalyzes the reversible transfer of an α -amino group between aspartate and glutamate, and is an important enzyme in amino acid metabolism. |
| Platform | Microplate reader |

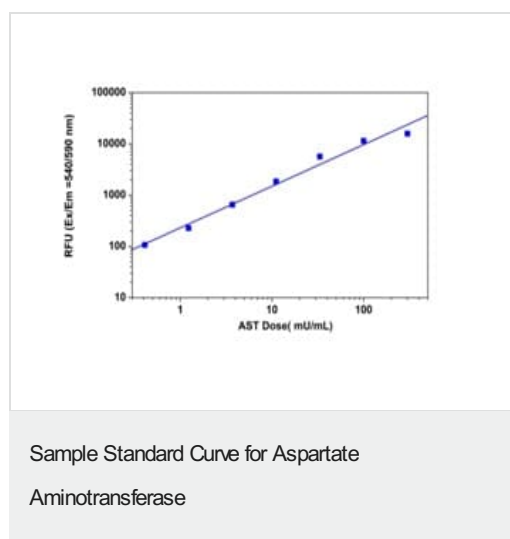
Properties

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

| Components | 1 kit |
|--------------------------|----------|
| AST Assay Buffer | 1 x 10ml |
| AST Assay Enzyme Mixture | 1 vial |
| AST Positive Control | 1 vial |
| NAD | 1 vial |

| | |
|------------------------------|---|
| Function | Plays a key role in amino acid metabolism. |
| Sequence similarities | Belongs to the class-I pyridoxal-phosphate-dependent aminotransferase family. |
| Cellular localization | Cytoplasm. |

Images



AST dose response was measured with ab138878 in a 96-well black plate using a fluorescence microplate reader. As low as 2 mU/ml AST can be detected with 60 min incubation (n=3) at room temperature.

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