

Glutamic Oxaloacetic Transaminase Activity Fluorometric Assay Kit

Cat. No. Kit-0382 **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Glutamic Oxaloacetic Transaminase Activity Assay Kit provides a quick and sensitive method for the measurement of GOT (glutamic oxaloacetic transaminase) in various biological samples. GOT catalyzes the reaction of aspartate and α -ketoglutarate to oxaloacetate and glutamate: Aspartate (Asp) + α -ketoglutarate $\rightarrow$ oxaloacetate + glutamate (Glu). The product L-glutamate is measured by the generation of a red fluorescent product through an enzyme coupled reaction cycle. The 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). It can detect as little as 2 mU/mL AST in a 100 μ reaction volume. The assay is robust, and can be readily adapted for a wide variety of applications.

Description

Glutamic Oxaloacetic Transaminase (GOT), also called aspartate aminotransferase (AST), 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. GOT is found in many body tissues such as liver, heart, muscle, kidneys, brain. In healthy subjects, serum AST levels are low. However, when cells are damaged, such as acute and chronic hepatitis, obstructive jaundice, carcinoma of liver, myocardial infarction, GOT may leak into the blood stream and the GOT levels are significantly elevated. Therefore, determination of serum GOT level has great clinical and diagnostic significance.

Applications

Functional Studies

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Target Species	Reacts with: Human Predicted to work with: A wide range of mammals
Storage	Keep at NAD, AST Assay Enzyme Mixture and AST Assay Buffer -20°C. AST Positive Control should be stored at 4°C (Do not freeze). The Reaction mixture (prepared by mixing AST Assay Enzyme Mixture and AST Assay Buffer, see Preparation of AST Reaction Mixture) is unstable at room temperature, and should be used promptly within 2 hours and avoid exposure to light.
Kit Components	Components 1 kit AST Assay Buffer 1 x 10ml AST Assay Enzyme Mixture 1 vial AST Positive Control 1 vial NAD 1 vial
Compatible Sample Types	Serum, Other biological fluids
Sensitivity	2 mU/ml

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