

Aspartate Aminotransferase (AST) Activity Assay Kit | AST assay kit

Aspartate Aminotransferase (AST) Activity Assay Kit (Colorimetric)

CATALOG #
AAA44673

PRODUCT SYNONYMS

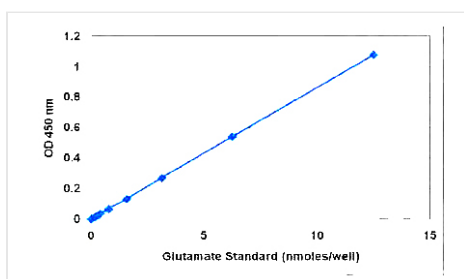
Aspartate Aminotransferase (AST) Activity; Aspartate Aminotransferase (AST) Activity Assay Kit (Colorimetric); AST assay kit

PRODUCT SPECIFICATIONS

Preparation and Storage

Upon receipt, store the AST Positive Control and 10X Assay Buffer at 4 degree C. Store the remaining components at -20 degree C.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for AST assay kit

Principle of the Assay: The Aspartate Aminotransferase (AST) Assay Kit measures AST activity through a series of enzyme driven reactions. AST within samples reacts with aspartate to transfer an amino group to alpha-ketoglutarate, producing glutamate and oxaloacetate. Glutamate is then detected with the colorimetric probe. Samples and standards are incubated for 60-120 minutes and then read with a standard 96-well spectrophotometric plate reader (450 nm). The AST activity is directly proportional to the amount of glutamate generated in the reaction. Sample AST levels are determined by comparison with the known glutamate standards.

Background/Introduction: Aspartate Aminotransferase (AST), also known as serum glutamic-oxaloacetic transaminase (GOT, SGOT), is an enzyme that catalyzes the transfer of an alpha amino group from aspartate to alpha-ketoglutarate, thereby producing glutamate and oxaloacetic acid (Figure 1). The reaction is important in amino acid biosynthesis and degradation. This pyridoxal phosphate (PLP) cofactor dependent transaminase is found in various tissues such as liver, heart, kidneys, brain, muscles, and red blood cells. AST is usually measured as a clinical marker of liver function to ascertain liver health in blood panel testing. Hepatocellular injury often leads to an increase in AST levels, which are usually measured in units per liter (U/L). Acute renal disease, musculoskeletal afflictions, myocardial infarction, pancreatitis, anemia, burns, and trauma have all displayed high levels of AST. The Aspartate Aminotransferase (AST) Assay Kit is a simple colorimetric assay that measures the activity of AST present within plasma, serum, tissue homogenates, or cell suspensions in a 96-well microtiter plate format. Each kit provides sufficient reagents to perform up to 100 assays, including blanks, standards and samples. An AST positive control is also provided.

Product Categories/Family for AST assay kit

[Metabolism Research](#); [Amino Acid Metabolism](#)

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

