

## Aspartate Transaminase (Crude Enzyme)

Cat. No. NATE-1816

Lot. No. (See product label)

### Introduction

**Description** (AST) or aspartate aminotransferase, also known as AspAT/ASAT/AAT or serum glutamic oxaloacetic transaminase (SGOT), is a pyridoxal phosphate (PLP)-dependent transaminase enzyme (EC 2. 6. 1. 1) that was first described by Arthur Karmen and colleagues in 1954. AST catalyzes the reversible transfer of an  $\alpha$ -amino group between aspartate and glutamate and, as such, is an important enzyme in amino acid metabolism. AST is found in the liver, heart, skeletal muscle, kidneys, brain, and red blood cells. Serum AST level, serum ALT (alanine transaminase) level, and their ratio (AST/ALT ratio) are commonly measured clinically as biomarkers for liver health. The tests are part of blood panels. This product with the indicated enzyme activity was briefly purified from engineered E. coli.

**Applications** synthesis; medicine; biotechnology

**Synonyms** glutamic-oxaloacetic transaminase; glutamic-aspartic transaminase; transaminase A; AAT; AspT; 2-oxoglutarate-glutamate aminotransferase; aspartate  $\alpha$ -ketoglutarate transaminase; aspartate aminotransferase; aspartate-2-oxoglutarate transaminase; aspartic acid aminotransferase; aspartic aminotransferase; aspartyl aminotransferase; AST; glutamate-oxalacetate aminotransferase; glutamate-oxalate transaminase; glutamic-aspartic aminotransferase; glutamic-oxalacetic transaminase; glutamic oxalic transaminase; GOT (enzyme) [ambiguous]; L-; L-aspartate- $\alpha$ -ketoglutarate transaminase; L-aspartate-2-ketoglutarate aminotransferase; L-aspartate-2-oxoglutarate aminotransferase; L-aspartate-2-oxoglutarate-transaminase; L-aspartic aminotransferase; oxaloacetate-aspartate aminotransferase; oxaloacetate transferase; aspartate:2-oxoglutarate aminotransferase; glutamate oxaloacetate transaminase

### Product Information

**Source** E. coli

**Appearance** Clear to translucent yellow solution

**EC Number** EC 2.6.1.1

**CAS No.** 9000-97-9

**Activity** Undetermined

**Reaction** L-aspartate + 2-oxoglutarate = oxaloacetate + L-glutamate

**Notes** Since this product needs to be freshly prepared, it will take about 2 weeks after you confirm the order. Each time of the freeze-thawing may cause partial inactivation. Therefore, it should be dispensed as required and stored at  $-20^{\circ}\text{C}$  or lower. With the preservation of the extension of time, the enzyme activity will decline to a certain extent, so the product should be used as soon as possible. This product may have turbidity or precipitation in the production and preservation process, it can be mixed after melting and will not affect the normal use. This product is limited to scientific research use, shall not be used for clinical diagnosis or treatment, shall not be used for food or medicine, shall not be stored in ordinary residential. For your safety and health, please wear an experimental suit and wear disposable gloves.

### Usage and Packaging

**Package** 100ml

### ***Storage and Shipping Information***

**Storage** at -20 °C or lower, for at least 1 month.