

## Human Aspartate Aminotransferase (AST) ELISA Kit | AST elisa kit

Human Aspartate Aminotransferase (AST) Mini Samples ELISA Kit

CATALOG #  
**AAA190268**

REACTIVITY  
**Human**

### PRODUCT SYNONYMS

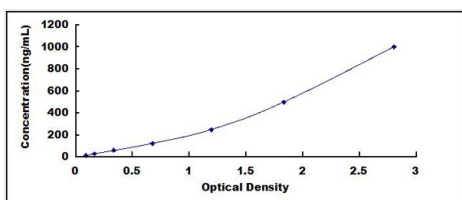
Aspartate Aminotransferase (AST); Human Aspartate Aminotransferase (AST) Mini Samples ELISA Kit; AST Mini-sample ELISA kit (Human); Aspartate Aminotransferase; cCAT; AAT; ASAT; SGOT; GOT1; Cysteine transaminase; cytoplasmic; Transaminase A; Aspartate Transaminase 1; Cytoplasmic; Glutamic-Oxaloacetic Transaminase 1; Soluble; AST elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Specificity             | This assay has high sensitivity and excellent specificity for detection of Mini Samples Aspartate Aminotransferase (AST). No significant cross-reactivity or interference between Mini Samples Aspartate Aminotransferase (AST) and analogues was observed.<br>Reactive with Human AST/Aspartate Aminotransferase                                                                                                                                                                                                                                                                                    |
| Assay Type              | Double-antibody Sandwich                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Samples                 | Serum, Plasma, Tissue homogenates, Cell lysates, Cell culture supernates and other biological fluids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Detection Range         | 15.6-1,000ng/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Sensitivity             | 5.5ng/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Sample Size             | 15-25uL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Detection Method        | Colormetric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Featured Series         | ME kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Precision               | Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Mini Samples Aspartate Aminotransferase (AST) were tested 20 times on one plate, respectively.<br>Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Mini Samples Aspartate Aminotransferase (AST) were tested on 3 different plates, 8 replicates in each plate.<br>CV(%) = SD/meanX100<br>Intra-Assay: CV<10%, Inter-Assay: CV<12%                                                                                                                           |
| Function                | Detects protein (micro-volume samples 15-25 ul)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Assay Procedure Summary | <ol style="list-style-type: none"> <li>1. Prepare all reagents, samples and standards</li> <li>2. Add 25ul standard or sample to each well. Incubate 1 hour at 37 degree C</li> <li>3. Aspirate and add 25ul prepared Detection Reagent A. Incubate 1 hour at 37 degree C</li> <li>4. Aspirate and wash 3 times</li> <li>5. Add 25ul prepared Detection Reagent B. Incubate 30 minutes at 37 degree C</li> <li>6. Aspirate and wash 5 times</li> <li>7. Add 25ul Substrate Solution. Incubate 10-20 minutes at 37 degree C</li> <li>8. Add 20ul Stop Solution. Read at 450nm immediately.</li> </ol> |

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Principle</b>          | The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Mini Samples Aspartate Aminotransferase (AST). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Mini Samples Aspartate Aminotransferase (AST). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Mini Samples Aspartate Aminotransferase (AST), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm +/- 10nm. The concentration of Mini Samples Aspartate Aminotransferase (AST) in the samples is then determined by comparing the O.D. of the samples to the standard curve. |
| <b>Research Area</b>           | Enzyme & Kinase, Tumor immunity, Infection immunity, Hepatology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Preparation and Storage</b> | Store at 4 degree C for 1 month/-20 degree C for long-term (One year within shelf life)<br>The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## IMAGES



Standard Curve (Sample)

## NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                                                                |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 4504067                                                                                                                                                                                                                                                        |
| NCBI GeneID                      | 2805                                                                                                                                                                                                                                                           |
| NCBI Accession #                 | NP_002070.1                                                                                                                                                                                                                                                    |
| NCBI GenBank Nucleotide #        | NM_002079.2                                                                                                                                                                                                                                                    |
| UniProt Accession #              | P17174; Q5VW80; B2R6R7; B7Z7E9                                                                                                                                                                                                                                 |
| Molecular Weight                 | 44,147 Da                                                                                                                                                                                                                                                      |
| NCBI Official Full Name          | aspartate aminotransferase, cytoplasmic                                                                                                                                                                                                                        |
| NCBI Official Synonym Full Names | glutamic-oxaloacetic transaminase 1, soluble                                                                                                                                                                                                                   |
| NCBI Official Symbol             | GOT1                                                                                                                                                                                                                                                           |
| NCBI Official Synonym Symbols    | cCAT; GIG18; cAspAT; ASTQTL1                                                                                                                                                                                                                                   |
| NCBI Protein Information         | aspartate aminotransferase, cytoplasmic; aspartate aminotransferase 1; aspartate transaminase 1; cysteine aminotransferase, cytoplasmic; cysteine transaminase, cytoplasmic; glutamate oxaloacetate transaminase 1; growth-inhibiting protein 18; transaminase |
| UniProt Protein Name             | Aspartate aminotransferase, cytoplasmic                                                                                                                                                                                                                        |
| UniProt Gene Name                | <b>GOT1</b>                                                                                                                                                                                                                                                    |
| UniProt Synonym Gene Names       | cAspAT; cCAT                                                                                                                                                                                                                                                   |
| UniProt Entry Name               | AATC_HUMAN                                                                                                                                                                                                                                                     |

**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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)

Online datasheet: <https://www.aaabiotech.com/human-elisa-kits/aspartate-aminotransferase-ast/190268>