

Aspartate Aminotransferase (AST) Active Protein | AST active protein

Active Aspartate Aminotransferase (AST)

CATALOG # AAA152060	HOST E. coli	REACTIVITY Homo sapiens (Human)	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	------------------------	---	---

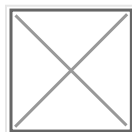
PRODUCT SYNONYMS

Aspartate Aminotransferase (AST); Active Aspartate Aminotransferase (AST); AST/Aspartate Aminotransferase; cCAT; AAT; ASAT; SGOT; GOT1; Cysteine transaminase; cytoplasmic; Transaminase A; Aspartate Transaminase 1; Cytoplasmic; Glutamic-Oxaloacetic Transaminase 1; Soluble; AST active protein

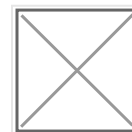
PRODUCT SPECIFICATIONS

Host	E. coli
Reactivity	Homo sapiens (Human)
Purity/Purification	>97%
Form/Format	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Concentration	Original Concentration: 1000ug/mL (varies by lot)
Applicable Applications for AST active protein	Activity Assay, Cell Culture
Source	Prokaryotic expression.
Residues	Met1~Gln413
Tags	N-terminal His-tag
Traits	Freeze-dried powder
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	6.6
Usage	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

IMAGES


WB (Western Blot)

Sample: Active recombinant AST, Human

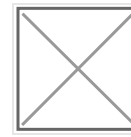

SDS_PAGE

SDS-PAGE



Identification

Gene Sequencing (extract



Bioactivity

Aspartate transaminase(AST) or aspartate aminotransferase, also known as AspAT/ASAT/AAT or glutamic oxaloacetic transaminase, is a pyridoxal phosphate-dependent transaminase enzyme AST catalyzes the reversible transfer of an α -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. In this test, an amino group is transferred from aspartate to α -ketoglutarate. The products of this reversible transamination reaction are oxaloacetate and glutamate. The oxaloacetic acid can be decomposed into pyruvate and carbon dioxide with the present of phenylamine citrate. The activity of aspartate transaminase can be measured by calculating the concentration of the pyruvate. The reaction was performed in adding 10ul different concentration recombinant AST(the blank tube add 10ul phosphate buffer) to 50ul mixture substrate containing 2mM 2-Ketoglutaric acid, 0.1M L-aspartic acid, in 0.2M phosphate buffer, pH7.4, incubate at 37°C for 1h, then add 10ul phenylamine citrate and 50ul 2,4-dinitrophenylhydrazine continue incubate at 37°C for 20min, stop the action by adding 500ul 0.4M NaOH, read the OD value at 520nm. Standard curve prepare by double dilute 2uM pyruvate with phosphate buffer then add 10ul phenylamine citrate and 50ul 2,4-dinitrophenylhydrazine, incubate at 37°C for 20min and record the OD value at 520nm. One unit of AST is the amount of enzyme that will generate 1umole of pyruvate per minute at pH7.4 at 37°C.



Sequence

ADDITIONAL INFORMATION

Product Categories/Family for AST active protein

Enzyme & Kinase; Tumor immunity; Infection immunity; Hepatology; Active proteins/AP

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	Predicted Molecular Mass: 47.8kDa Accurate Molecular Mass: 44kDa as determined by SDS-PAGE reducing conditions
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	GOT1

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
Online datasheet: <https://stage.aaabiotech.com/e-coli-homo-sapiens-human-active-protein/aspartate-aminotransferase-ast/152060>