Data Sheet (Cat.No.TMPY-03445)

TargetMol

Aspartate Aminotransferase/GOT1 Protein, Human, Recombinant (His)

General Information

Synonyms:	ASTQTL1;glutamic-oxaloacetic transaminase 1, soluble;cCAT;cAspAT;GIG18
Protein Construction:	A DNA sequence encoding the mature form of human GOT1 (P17174) (Met1-Gln413) was expressed with a polyhistidine tag at the N-terminus. Predicted N terminal: His
Species:	Human
Expression Host:	E. coli
Accession:	P17174
Molecular Weight:	48.1 kDa (predicted); 36-45 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

GOT1 (Glutamic-Oxaloacetic Transaminase 1) is a Protein Coding gene. GOT1 belongs to the class-I pyridoxal-phosphate-dependent aminotransferase family. Glutamic-oxaloacetic transaminase is a pyridoxal phosphate-dependent enzyme that exists in cytoplasmic and mitochondrial forms, GOT1 and GOT2, respectively. GOT plays a role in amino acid metabolism and the urea and tricarboxylic acid cycles. The two enzymes are homodimeric and show close homology. GOT1 is an important regulator of levels of glutamate, the major excitatory

neurotransmitter of the vertebrate central nervous system. GOT1 is broadly expressed in the heart, liver, and other tissues. Diseases associated with GOT1 include Aspartate Aminotransferase, Serum Level Of, Quantitative Trait Locus 1, and Lujo Hemorrhagic Fever.

Reference

Xiao X,et al. (2004) The SARS-CoV S glycoprotein. Cell Mol Life Sci. 61 (19-20): 2428-30.
Shen S,et al. (2007) Expression, glycosylation, and modification of the spike (S) glycoprotein of SARS CoV. Methods Mol Biol. 379: 127-35.
Du L,et al. (2009) The spike protein of SARS-CoV--a target for vaccine and therapeutic development. Nat Rev Microbiol. 7 (3): 226-36.

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