

Datasheet for 100-601-144**Aspartate Transaminase Antibody****Overview**

Description:	Anti-Aspartate Transaminase (AST) (SHEEP) Antibody - 100-601-144
Item No.:	100-601-144
Size:	2 mL
Reactivity:	Pig
Host Species:	Sheep

Product Details

Background:	Aspartate aminotransferase is involved in the biosynthesis of L-glutamate from L-aspartate or L-cysteine. It is an important regulator of the levels of glutamate, the major excitatory neurotransmitter of the vertebrate central nervous system. It acts as a scavenger of glutamate in brain neuroprotection. The aspartate aminotransferase activity is involved in hepatic glucose synthesis during development and in adipocyte glyceroneogenesis. Using L-cysteine as substrate, Aspartate aminotransferase regulates levels of mercaptopyruvate, an important source of hydrogen sulfide, then mercaptopyruvate is converted into H ₂ S via the action of 3-mercaptopyruvate sulfurtransferase (3MST). Hydrogen sulfide is an important synaptic modulator and neuroprotectant in the brain. In eukaryotes there are cytoplasmic, mitochondrial, and chloroplastic isozymes.
Synonyms:	sheep anti-Aspartate Transaminase Antibody, Aspartate aminotransferase 1 antibody, Aspartate aminotransferase cytoplasmic antibody, Aspartate aminotransferase cytosolic antibody, GIG 18 antibody, GIG18 antibody, Glutamate oxaloacetate transaminase 1 antibody
Host Species:	Sheep
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	GOT1
Reactivity:	Pig
Immunogen Type:	Native Protein

Immunogen:	Aspartate Aminotransferase (AST) [Pig Heart]
Purity/Specificity:	This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-sheep serum, purified and partially purified Aspartate Aminotransferase (AST) [Pig Heart]. Cross reactivity against Aspartate Aminotransferase (AST) from other tissues and species may occur but have not been specifically determined.
Relevant Links:	• UniProtKB - P00503 • NCBI - NP_999092.1 • GenelD - 396967

Application Details

Application Note:	Anti-Aspartate Transaminase has been assayed against 1.0 ug of Aspartate Aminotransferase (AST) [Pig Heart] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Sheep IgG [H&L] (Goat) code #611-1302 and (ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:4,000 to 1:16,000 of the reconstitution concentration is suggested for this product.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:25,000
WB:	1:500 - 1:3,000

Formulation

Physical State:	Lyophilized
Concentration:	96 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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Storage Condition: Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.