

Datasheet for 200-4658-0100**Anti-Glutamate Dehydrogenase Antibody Biotin Conjugated****Overview**

Description:	Anti-Glutamate Dehydrogenase (Bovine Liver) (RABBIT) Antibody Biotin Conjugated - 200-4658-0100
Item No.:	200-4658-0100
Size:	100 µg
Applications:	Dot Blot
Reactivity:	Bovine
Host Species:	Rabbit

Product Details**Background:**

Anti-glutamate dehydrogenase antibody recognizes the glutamate dehydrogenase protein. Glutamate dehydrogenase is an enzyme that is present in the mitochondria of eukaryotes. Glutamate dehydrogenase plays a role in urea synthesis by converting glutamate to α -ketoglutarate, and vice versa. Typically, the α -ketoglutarate to glutamate reaction does not occur in mammals as glutamate dehydrogenase equilibrium favors the production of ammonia and α -ketoglutarate. Glutamate dehydrogenase also has a very high affinity for ammonia. Therefore toxic levels of ammonia would have to be present in the body for the reverse reaction to proceed. In bacteria, the ammonia is assimilated to amino acids via glutamate and aminotransferases. In plants, the enzyme can work in either direction depending on environment and stress. Transgenic plants expressing microbial GLDHs are improved in tolerance to herbicide, water deficit, and pathogen infections. Anti-glutamate dehydrogenase antibody is suitable for researchers in Cell Biology and Immunology.

Synonyms:	rabbit anti-Glutamate Dehydrogenase Antibody biotin Conjugation, biotin Conjugated rabbit anti-Glutamate Dehydrogenase Antibody, Glutamate dehydrogenase 1 mitochondrial, GDH 1
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	GLUD1
Reactivity:	Bovine
Immunogen Type:	Native Protein
Immunogen:	Glutamate Dehydrogenase [Bovine Liver]
Purity/Specificity:	Anti-Glutamate Dehydrogenase is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Biotin, anti-Rabbit Serum as well as purified and partially purified Glutamate Dehydrogenase [Bovine Liver]. Cross reactivity against Glutamate Dehydrogenase from other sources may occur but have not been specifically determined.
Relevant Links:	• UniProtKB - P00366 • NCBI - 32880221 • GeneID - 281785

Application Details

Tested Applications:	Dot Blot
Application Note:	Anti-Glutamate Dehydrogenase Biotin Conjugated has been tested by dot blot and is suitable to be assayed against 1.0 ug of Glutamate Dehydrogenase in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 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 1:20,000 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.
IP:	1:100
WB:	1:500 - 1:2,000

Formulation

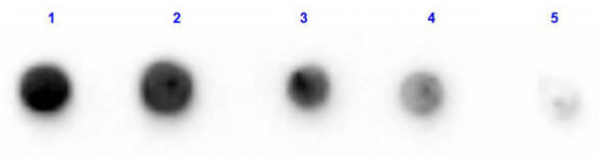
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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.

Images



Dot Blot

Dot Blot results of Rabbit Anti-Glutamate Dehydrogenase Biotin Conjugated. Antigen: Glutamate Dehydrogenase. Blot loaded at 3 fold dilution: 1. 100ng, 2. 33.3ng, 3. 11.1ng, 4. 3.70ng, 5. 1.23ng. Blocking: MB-070 Buffer for 30 minutes at RT. Primary Antibody: Rabbit Anti-Glutamate Dehydrogenase Biotin 1 μ g/mL for 1hr at RT. Secondary Antibody: Streptavidin-HRP (S000-03) at 1:40,000 for 30min at RT. Imaging System ChemiDoc, Filter used: Chemi.

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.