

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

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|----------------------|---------------------------------------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-Glutamate Dehydrogenase (Bovine Liver) (RABBIT) Antibody Biotin Conjugated (BULK ORDER) - 200-4658 |
| <b>Item No.:</b>     | 200-4658                                                                                                |
| <b>Size:</b>         | 10 mg                                                                                                   |
| <b>Applications:</b> | Dot Blot                                                                                                |
| <b>Reactivity:</b>   | Bovine                                                                                                  |
| <b>Host Species:</b> | Rabbit                                                                                                  |

**Product Details**

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| <b>Background:</b>   | 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 $\alpha$ -ketoglutarate, and vice versa. Typically, the $\alpha$ -ketoglutarate to glutamate reaction does not occur in mammals as glutamate dehydrogenase equilibrium favors the production of ammonia and $\alpha$ -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. |
| <b>Synonyms:</b>     | rabbit anti-Glutamate Dehydrogenase Antibody biotin Conjugation, biotin Conjugated rabbit anti-Glutamate Dehydrogenase Antibody, Glutamate dehydrogenase 1 mitochondrial, GDH 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Conjugate:</b>    | Biotin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Target Details**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| <b>Gene Name:</b>          | GLUD1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Reactivity:</b>         | Bovine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Immunogen Type:</b>     | Native Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Immunogen:</b>          | Glutamate Dehydrogenase [Bovine Liver]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Purity/Specificity:</b> | 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. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"> <li>• <a href="#">UniProtKB - P00366</a></li> <li>• <a href="#">NCBI - 32880221</a></li> <li>• <a href="#">GeneID - 281785</a></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                |

## Application Details

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| <b>Tested Applications:</b> | Dot Blot                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Application Note:</b>    | 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. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>ELISA:</b>               | 1:5,000 - 1:20,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>IP:</b>                  | 1:100                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>WB:</b>                  | 1:500 - 1:5,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Formulation

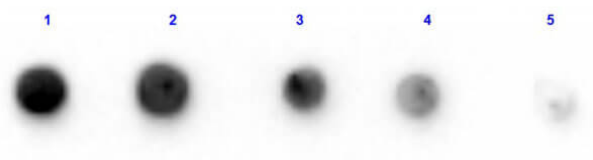
|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Lyophilized                                                |
| <b>Concentration:</b>  | 10.0 mg/mL by UV absorbance at 280 nm                      |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>Stabilizer:</b>            | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| <b>Reconstitution Volume:</b> | 1.0 mL                                                                 |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                                 |
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| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Condition:</b>  | 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. |
| <b>Expiration:</b>         | 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 1µg/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

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