

Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Biotin Conjugated
Anti-Glutamate Dehydrogenase Antibody Biotin Conjugated
Catalog # ASR4740**Specification****Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Biotin Conjugated - Product Information**

Host	Rabbit
Conjugate	Biotin
Target Species	Bovine
Reactivity	Bovine
Clonality	Polyclonal
Application	WB, IP, I, LCI
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.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Glutamate Dehydrogenase [Bovine Liver]
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Sodium Azide

Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Biotin Conjugated - Additional Information**Gene ID** 281785**Other Names**
281785**Purity**

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.

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.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Biotin Conjugated - Protein Information

Name GLUD1

Synonyms GLUD

Function

Mitochondrial glutamate dehydrogenase that converts L- glutamate into alpha-ketoglutarate. Plays a key role in glutamine anaplerosis by producing alpha-ketoglutarate, an important intermediate in the tricarboxylic acid cycle (PubMed:14659072, PubMed:4365183). Plays a role in insulin homeostasis (By similarity). May be involved in learning and memory reactions by increasing the turnover of the excitatory neurotransmitter glutamate (By similarity).

Cellular Location

Mitochondrion {ECO:0000250|UniProtKB:P00367}. Endoplasmic reticulum {ECO:0000250|UniProtKB:P00367}. Note=Mostly translocates into the mitochondria, only a small amount of the protein localizes to the endoplasmic reticulum. {ECO:0000250|UniProtKB:P00367}

Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Biotin Conjugated - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Biotin Conjugated - Images**Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Biotin Conjugated - 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.