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Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody

Glutamate Dehydrogenase Antibody
Catalog # ASR4590

Specification

Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Bovine**
Reactivity	**Bovine**
Clonality	**Polyclonal**
Application	**WB, E, IP, I, LCI**
Application Note	**Glutamate Dehydrogenase antibody has been tested by ELISA and western blot and is assayed against 1.0 ug of Glutamate Dehydrogenase [Bovine Liver] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Rabbit IgG [H&L] (Goat) code #611-1302 and (ABTS (2 ,2'-azino-bis-[3-ethylbenthiazoline-6-sulfon ic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:5,000 to 1:20,000 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)**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody - 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-Rabbit Serum as well as purified and partially purified Glutamate Dehydrogenase [Bovine Liver]. Cross reactivity against Glutamate Dehydrogenase from other tissues and species 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 - 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 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody - Images

Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody - Background

Glutamate Dehydrogenase, mitochondrial, converts L-glutamate into alpha-ketoglutarate. It plays a key role in glutamine anaplerosis by producing alpha-ketoglutarate, which is an important intermediate in the tricarboxylic acid cycle. It may be involved in learning and memory reactions by increasing the turnover of the excitatory neurotransmitter glutamate. It is subject to allosteric regulation. It is activated by ADP, inhibited by GTP and ATP, and ADP can occupy the NADH binding site and activate the enzyme.