

# Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Peroxidase Conjugated

Glutamate Dehydrogenase Antibody Peroxidase Conjugated Catalog # ASR4667

**Specification** 

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

Host Rabbit

Conjugate Peroxidase (Horseradish)

Target Species
Reactivity
Bovine
Clonality
Application
Bovine
WB, IP, I, LCI

Application Note Anti-Glutamate dehydrogenase has been

assayed against 1.0 ug of Glutamate Dehydrogenase [Bovine Liver] in a

standard capture ELISA using ABTS (2,2'-az ino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:20,000 to 1:100,000 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]

100 uL

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) Gentamicin Sulfate. Do NOT

add Sodium Azide!

# Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Peroxidase Conjugated - Additional Information

**Gene ID 281785** 

Reconstitution Volume

Other Names 281785

### **Purity**

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-Peroxidase, 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 Peroxidase **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: <a href="http://www.uniprot.org/citations/14659072" target=" blank">14659072</a>, PubMed:<a href="http://www.uniprot.org/citations/4365183" target="blank">4365183</a>). 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 Peroxidase **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 Cytomety
- Cell Culture

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

## Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody Peroxidase **Conjugated - Background**

Glutamate dehydrogenase (GLDH) is an enzyme, present in most microbes and the mitochondria of







eukaryotes, as are some of the other enzymes required for urea synthesis, that converts glutamate to  $\alpha$ -ketoglutarate, and vice versa. GLDH can be measured in a medical laboratory to evaluate the liver function. Elevated blood serum GLDH levels indicate liver damage and GLDH plays an important role in the differential diagnosis of liver disease, especially in combination with aminotransferases. GLDH is localized in mitochondria, therefore practically none is liberated in generalized inflammatory diseases of the liver such as viral hepatitis.