Datasheet for ABIN1607650

anti-GLN1 antibody (Biotin)

1 Image

Go to Product page

Overview

Quantity:	100 µg
Target:	GLN1
Reactivity:	Brevibacterium
Host:	Goat
Clonality:	Polyclonal
Conjugate:	This GLN1 antibody is conjugated to Biotin
Application:	Western Blotting (WB), Immunoprecipitation (IP), ELISA

Product Details

Immunogen:	Glutamine Synthetase [Microbial] Immunogen Type: Native Protein
Isotype:	IgG
Cross-Reactivity (Details):	Cross reactivity against Glutamine Synthetase from other sources is unknown.
Purity:	Anti-Glutamine Synthetase (microbial) antibody 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-Goat Serum as well as purified and partially purified Glutamine Synthetase [Microbial].
Endotoxin Level:	Low Endotoxin : No

Target Details

Target:	GLN1
Alternative Name:	Glutamine Synthetase (GLN1 Products)
Background:	Glutamine Synthetase is a key enzyme in the metabolism of nitrogen. Glutamine synthetase catalyzes an ATP-dependent condensation reaction between ammonia and glutamate to yield glutamine. Glutamine is a key builder of proteins as well as a vehicle to deliver nitrogen atoms to enzymes that build molecules dependent on nitrogen. Glutamine Synthetase from a microbial source is composed of twelve subunits that each house an active site. During the reaction of glutamine synthetase, the active sites bind ammonia and glutamate, as well as an ATP molecule to power the reaction. Negative feedback regulation is provided by the active sites ability to weakly bind other molecules and once their concentrations rise too high, the enzyme shuts off. Glutamine Synthetase has applications in neuroscience due to location in astrocytes within the brain and fluctuations in glutamine synthetase can detrimentally effect the astrocytes. Anti-Glutamine Synthetase (Microbial) Antibody is ideal for investigators in Molecular Biology, Neuroscience, and Enzymology. Synonyms: Glutamine synthetase EC=6.3.1.2
Gene ID:	3345165
UniProt:	Q79VE3
Pathways:	Positive Regulation of Peptide Hormone Secretion

Application Details

Application Notes:	Anti-Glutamine Synthetase (microbial) antibody has been assayed against 1.0 µg of Glutamine Synthetase 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. ELISA Dilution: 1:5.000 - 1:20.000 IF Immunoprecipitation Dilution: 1:100 Western Blot Dilution: 1:500 - 1:5.000
Restrictions:	For Research Use only

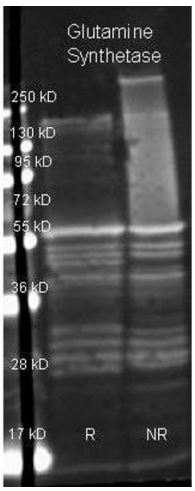
Handling

Format:	Liquid

Handling

Concentration:	10 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Handling Advice:	Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Storage:	-20 °C
Storage Comment:	Store vial at -20 °C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below.
Expiry Date:	Expiration date is one (1) year from date of opening.

Images



Western Blotting

Image 1. Goat anti Glutamine Synthetase antibody was used to detect Glutamine Synthetase under reducing (R) and non-reducing (NR) conditions. Reduced samples of purified target proteins contained 4% BME and were boiled for 5 minutes. Samples of ~1ug of protein per lane were run by SDS-PAGE. Protein was transferred to nitrocellulose and probed with 1:3000 dilution of primary antibody (ON 4 C in ABIN925618). Detection shown was using Dylight 649 conjugated Donkey anti goat (605-743-125 lot 20834 1:10K in TBS/ABIN925618) 1 hr RT. Images were collected using the BioRad VersaDoc System.