

Product datasheet for **TA396705S**

glnA Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IP, WB
Recommended Dilution:	WB: 1:500 - 1:2,500 ELISA: 1:2,000 - 1:10,000
Reactivity:	Brevibacterium
Host:	Goat
Clonality:	Polyclonal
Immunogen:	Glutamine Synthetase [Microbial]
Specificity:	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]. Cross reactivity against Glutamine Synthetase from other sources is unknown.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1.0 mg/mL - lot specific
Conjugation:	Biotin
Storage:	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. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is one (1) year from date of receipt.
Database Link:	Q79VE3



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Background:

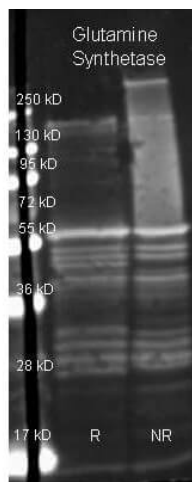
Glutamine Synthetase is a key enzyme in the metabolism of nitrogen. Glutamine synthetase catalyzes an ATP-dependent condensation reaction between ammonia and glutamate to yield glutamine. Glutamine is a key builder of proteins as well as a vehicle to deliver nitrogen atoms to enzymes that build molecules 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:

goat anti-Glutamine Synthetase Antibody biotin Conjugation, biotin Conjugated goat anti-Glutamine Synthetase Antibody, Glutamine synthetase

Note:

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.

Product images:

Rockland Goat anti Glutamine Synthetase antibody (200-101-238 lot 8182) 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 ~1 µg 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 MB-070). Detection shown was using Dylight 649 conjugated Donkey anti goat (605-743-125 lot 20834 1:10K in TBS/MB-070) 1 hr RT. Images were collected using the BioRad VersaDoc System.