

**Anti-GLUTAMINE SYNTHETASE (Microbial) (GOAT) Antibody Biotin Conjugated**  
**Glutamine Synthetase Antibody Biotin Conjugated**  
**Catalog # ASR4059****Specification****Anti-GLUTAMINE SYNTHETASE (Microbial) (GOAT) Antibody Biotin Conjugated - Product Information**

Host	Goat
Conjugate	Biotin
Target Species	Microbial
Clonality	Polyclonal
Application	WB, E, IP, I, LCI
Application 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.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Glutamine Synthetase [Microbial]
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-GLUTAMINE SYNTHETASE (Microbial) (GOAT) Antibody Biotin Conjugated - Additional Information****Other Names**  
3345165**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]. Cross reactivity against Glutamine Synthetase from other sources is unknown.

**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-GLUTAMINE SYNTHETASE (Microbial) (GOAT) Antibody Biotin Conjugated - Protein Information****Anti-GLUTAMINE SYNTHETASE (Microbial) (GOAT) 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-GLUTAMINE SYNTHETASE (Microbial) (GOAT) Antibody Biotin Conjugated - Images****Anti-GLUTAMINE SYNTHETASE (Microbial) (GOAT) Antibody Biotin Conjugated - 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.