

Datasheet for 800-101-098**Fab Biotin Antibody****Overview**

Description:	Fab Anti-Biotin (GOAT) Antibody - 800-101-098
Item No.:	800-101-098
Size:	1 mg
Applications:	Dot Blot, ELISA, Biochemical Assay, EM
Reactivity:	Biotin
Host Species:	Goat

Product Details

Background:	Fab Biotin antibody recognizes Biotin. Biotin, also known as vitamin H or coenzyme R, is a water-soluble B-vitamin (vitamin B7). It is composed of a ureido (tetrahydroimidizalone) ring fused with a tetrahydrothiophene ring. A valeric acid substituent is attached to one of the carbon atoms of the tetrahydrothiophene ring. Biotin is a coenzyme for carboxylase enzymes, involved in the synthesis of fatty acids, isoleucine, and valine, and in gluconeogenesis.
Synonyms:	Goat Fab Anti-Biotin Antibody, Goat Fab Fragment Anti-Biotin Antibody
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG Fab

Target Details

Reactivity:	Biotin
Immunogen Type:	Other
Immunogen:	Biotin conjugated to Keyhole Limpet Hemocyanin (KLH)
Purity/Specificity:	Fab fragment of Anti-Biotin antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Biotin coupled to sepharose beads followed by papain digestion and chromatographic separation. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum. No reaction was observed against anti-papain or anti-Goat IgG F(c).

Application Details

Tested Applications:	Dot Blot, ELISA
Suggested Applications:	Biochemical Assay, EM (Based on references)
Application Note:	Fab Anti-Biotin Antibody has been tested by ELISA and dot blot. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000
IHC:	User Optimized
WB:	User Optimized

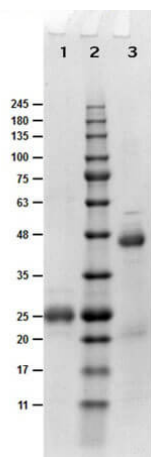
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

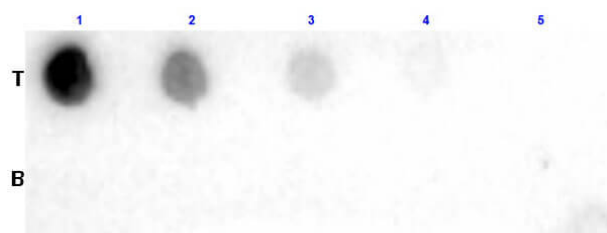
Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C prior to opening. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



SDS-PAGE

SDS-PAGE results of Goat Fab Anti-Biotin Antibody. Lane 1: reduced Goat Fab Anti-Biotin. Lane 2: Opal PreStained Molecular Weight Ladder (p/n MB-210-0500). Lane 3: non-reduced Goat Fab Anti-Biotin. Load: 1µg. 4-20% Gel, Coomassie Blue Stained.



Dot Blot

Dot Blot results of Goat Fab Anti-Biotin Antibody. Dots are top row (T) Biotin-BSA conjugated or bottom row (B) BSA alone: at (1) 100ng, (2) 33.3ng, (3) 11.1ng, (4) 3.70ng, (5) 1.23ng. Blocking: MB-070 for 30 min at RT. Primary Antibody: Goat Fab Anti-Biotin at 1µg/mL for 1hr at RT. Secondary Antibody: Donkey Anti-Goat HRP (p/n 605-703-125) at 1:40,000 for 30min at RT. Imaged with BioRad ChemiDoc, Chemi filter.

References

- Kanai T et al. Three-Dimensional Reconstruction of the Hepatitis C Virus Envelope Glycoprotein E1E2 Heterodimer by Electron Microscopic Analysis. *J Virol.* (2023)
- Eggenberger OM et al. Fluid surface coatings for solid-state nanopores: comparison of phospholipid bilayers and archaea-inspired lipid monolayers. *Nanotechnology.* (2019)
- Houghtaling J et al. Estimation of Shape, Volume, and Dipole Moment of Individual Proteins Freely Transiting a Synthetic Nanopore. *ACS Nano.* (2019)
- Ji Y et al. Quantifying Weak Glycan-Protein Interactions Using a Biolayer Interferometry Competition Assay: Applications to ECL Lectin and X-31 Influenza Hemagglutinin. *Adv Exp Med Biol.* (2018)
- Yusko EC et al. Real-time shape approximation and fingerprinting of single proteins using a nanopore. *Nature Nanotechnology* (2017)
- Yusko EC et al. Controlling protein translocation through nanopores with bio-inspired fluid walls. *Nature Nanotechnology* (2011)

Disclaimer

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