

Datasheet for B000-17**Biotin Beta Galactosidase Conjugated****Overview**

Description:	Biotin Beta Galactosidase Conjugated - B000-17
Item No.:	B000-17
Size:	1 mg
Applications:	Dot Blot, ELISA

Product Details

Background:	Biotin is a small biomolecule important for many cellular processes. Most importantly for biotechnology applications, biotin is amenable to conjugation to proteins for use in biochemical assays. Biotin has a very strong affinity for avidin and streptavidin; an attraction that is the strongest and most stable non-covalent interaction known. Beta-galactosidase (beta-gal; β -gal) is an enzyme that hydrolyzes β -galactosides (such as lactose and various glycoproteins) into simple sugars. Beta-galactosidase is routinely used as a reporter in biochemical experiments as well as a marker for gene expression experiments in <i>E. coli</i> . Beta-galactosidase can be used to cleave the chemical X-gal that forms an intense blue product that can easily be quantified.
Synonyms:	Vitamin H, Coenzyme R, Vitamin B7, β -galactosidase, β -gal, beta-gal, Biotin Beta Galactosidase Conjugated, Biotin Beta Gal Conjugated
Conjugate:	Biotin

Target Details

Purity/Specificity:	Biotin Beta Galactosidase Conjugated was prepared from electrophoretically pure Beta Galactosidase and Biotin. Biotin Beta Galactosidase assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-Beta Galactosidase (<i>E.coli</i>) and anti-Biotin.
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Application Details

Tested Applications:	Dot Blot, ELISA
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Application Note:	Biotin Beta Galactosidase Conjugated has been tested by ELISA and dot blot and is assayed against 1.0 ug of Streptavidin in a standard capture ELISA using pNPP p-nitrophenyl phosphate code # NPP-10 as a substrate for 30 minutes at room temperature. A working dilution of 1:1,000 to 1:3,000 is suggested for Biotin Beta Galactosidase Conjugated.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:8,000 - 1:32,000
IHC:	1:200 - 1:1,000
WB:	1:500 - 1:2,500

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.05 M Potassium Phosphate, 0.001M Magnesium Chloride, 0.1M Beta-Mercaptoethanol; pH 7.8

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C before opening. DO NOT FREEZE. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. Freezing Beta Galactosidase conjugates will result in a substantial loss of enzymatic activity.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

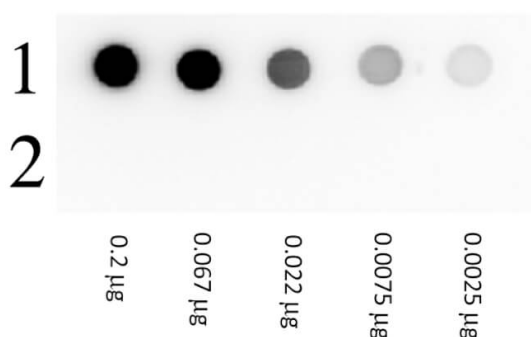


Bottle

BIOTIN BETA GALACTOSIDASE Conjugated

Dot Blot

Dot Blot of BIOTIN Conjugated BETA GALACTOSIDASE. Lane 1: BIOTIN Conjugated BETA GALACTOSIDASE. Lane 2: BETA GALACTOSIDASE. Load: 3-fold serial dilution starting at 200 ng. Primary Antibody: None. Secondary antibody: HRP Streptavidin at 1:40,000 for 30 min at RT. Block: 1% BSA-TTBS 30 min at RT.



References

- Sharma H et al. A Mem-dELISA platform for dual color and ultrasensitive digital detection of colocalized proteins on extracellular vesicles. *Biosens Bioelectron.* (2025)

Disclaimer

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