

## Datasheet for B000-17

## Biotin Beta Galactosidase Conjugated

### Overview

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

### Product Details

<b>Background:</b>	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; $\beta$ -gal) is an enzyme that hydrolyzes $\beta$ -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.
<b>Synonyms:</b>	Vitamin H, Coenzyme R, Vitamin B7, $\beta$ -galactosidase, $\beta$ -gal, beta-gal, Biotin Beta Galactosidase Conjugated, Biotin Beta Gal Conjugated
<b>Conjugate:</b>	Biotin

### Target Details

<b>Purity/Specificity:</b>	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.
----------------------------	--

### Application Details

<b>Tested Applications:</b>	Dot Blot, ELISA
-----------------------------	-----------------

<b>Application Note:</b>	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.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:8,000 - 1:32,000
<b>IHC:</b>	1:200 - 1:1,000
<b>WB:</b>	1:500 - 1:2,500

## Formulation

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

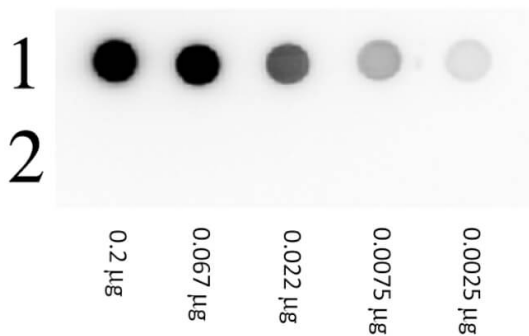
## Shipping & Handling

<b>Shipping Condition:</b>	Wet Ice
<b>Storage Condition:</b>	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.
<b>Expiration:</b>	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**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.