

## Datasheet for 200-4637S

## Glucose Oxidase Antibody Biotin Conjugated

### Overview

<b>Description:</b>	Anti-Glucose Oxidase (RABBIT) Antibody Biotin Conjugated - 200-4637S
<b>Item No.:</b>	200-4637S
<b>Size:</b>	25 µL
<b>Applications:</b>	ELISA, WB
<b>Reactivity:</b>	Aspergillus niger
<b>Host Species:</b>	Rabbit

### Product Details

<b>Background:</b>	Glucose Oxidase antibody detect the glucose oxidase protein. The glucose oxidase enzyme (GOx) (EC 1.1.3.4) is an oxido-reductase that catalyzes the oxidation of glucose to hydrogen peroxide and D-glucono- $\delta$ -lactone. In cells, it aids in breaking the sugar down into its metabolites. Glucose oxidase is widely used for the determination of free glucose in body fluids (diagnostics), in vegetal raw material, and in the food industry. GOx is a dimeric protein, the 3D structure of which has been elucidated. The active site where glucose binds is in a deep pocket. The enzyme, like many proteins that act outside of cells, is covered with carbohydrate chains. At pH 7, glucose exists in solution in cyclic hemiacetal form as 63.6% $\beta$ -D-glucopyranose and 36.4% $\alpha$ -D-glucopyranose, the proportion of linear and furanose form being negligible. Anti-Glucose Oxidase antibody is ideal for investigators involved in glucose energy metabolism research.
<b>Synonyms:</b>	rabbit anti-Glucose Oxidase Antibody biotin Conjugation, biotin Conjugated rabbit anti-Glucose Oxidase Antibody, Beta D Glucose Oxygen 1 Oxido Reductase antibody, Glucose oxidase (Precursor) antibody, Glucose Oxyhydrase antibody, GOD antibody
<b>Host Species:</b>	Rabbit
<b>Conjugate:</b>	Biotin
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

### Target Details

<b>Gene Name:</b>	gox
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<b>Reactivity:</b>	Aspergillus niger
<b>Immunogen Type:</b>	Native Protein
<b>Immunogen:</b>	Glucose Oxidase [A.niger]
<b>Purity/Specificity:</b>	Anti-GLUCOSE OXIDASE 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-Rabbit Serum as well as purified and partially purified Glucose Oxidase [A.niger]. Cross reactivity against Glucose Oxidase from other sources may occur but have not been specifically determined.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P13006</a></li><li>• <a href="#">NCBI - P13006.1</a></li><li>• <a href="#">GeneID - 2683500</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA, WB
<b>Application Note:</b>	Anti-GLUCOSE OXIDASE Biotin Conjugated Antibody has been tested by ELISA and Western blot. This product is assayed against 1.0 µg of Glucose Oxidase in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethylbentiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:5,000 to 1:25,000 of the reconstitution concentration is suggested for this product.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	User Optimized
<b>WB:</b>	User Optimized

## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Stabilizer:</b>	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

## Shipping & Handling

**Shipping Condition:** Dry Ice

**Storage Condition:** 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.

**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



### Western Blot

Western Blot of Rabbit anti-Glucose Oxidase antibody Biotin Conjugated. Lane 1: Glucose Oxidase. Load: 50 ng per lane. Primary antibody: Glucose Oxidase antibody Biotin conjugated at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: Blocking Buffer for Fluorescent Western Blotting (MB-070) for 30 min at RT. Predicted/Observed size: 66 kDa, 66 kDa for Glucose Oxidase.

## 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.