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Datasheet for 100-101-235

Pyranose Oxidase Antibody

Overview

Description:	Anti-Pyranose Oxidase (E. coli) (GOAT) Antibody - 100-101-235
Item No.:	100-101-235
Size:	2 mL
Applications:	WB
Reactivity:	Microbial
Host Species:	Goat

Product Details

Background:	Pyranose Oxidase catalyzes the oxidation of various aldopyranoses and disaccharides on carbon-2 to the corresponding 2-keto sugars concomitant with the reduction of O2 to H2O2. It plays an important role in lignin degradation of wood rot fungi by supplying the essential cosubstrate H2O2 for the ligninolytic peroxidases, lignin peroxidase, and manganese-dependent peroxidase. The preferred substrate is D-glucose which is converted to 2-dehydro-D-glucose. Acts also on D-xylose, together with D-glucose the major sugars derived from wood, on L-sorbose, D-galactose and 1,5-anhydroglucitol, a diagnostic marker of diabetes mellitus.
Synonyms:	Pyranose 2-oxidase, P2Ox, Pyranose oxidase, PROD, POD, POx, Pyranose:oxygen 2-oxidoreductase, Glucose 2-oxidase, FAD-oxidoreductase, goat anti-Pyranose Oxidase Antibody
Host Species:	Goat
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	P2OX
Reactivity:	Microbial
Immunogen Type:	Native Protein
Immunogen:	Pyranose Oxidase [E.coli]

Purity/Specificity:	This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-goat serum, purified and partially purified Pyranose Oxidase [E.coli]. Cross reactivity against Pyranose Oxidase from other sources is unknown.
Relevant Links:	• UniProtKB - P79076 • NCBI - Q5G234.1

Application Details

Tested Applications:	WB
Application Note:	Anti-Pyranose Oxidase has been tested by western blot and is suitable to be assayed against 1.0 ug of Pyranose Oxidase [E.coli] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Goat IgG [H&L] (Rabbit) code #605-4302 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 1:50,000 to 1:400,000 of the reconstitution concentration is suggested for this product.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IP:	1:100
WB:	1:500 - 1:5,000

Formulation

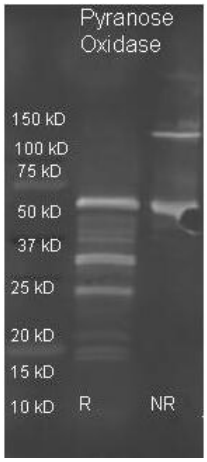
Physical State:	Lyophilized
Concentration:	90 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient

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

Images



Western Blot
Rockland Goat anti Pyranose Oxidase antibody (200-101-235 lot 8178) was used to detect pyranose oxidase under reducing (R) and non-reducing (NR) conditions. Reduced samples of purified target proteins contained 4% BME and were boiled for 5 minutes. Samples of ~1ug of protein per lane were run by SDS-PAGE. Protein was transferred to nitrocellulose and probed with 1:3000 dilution of primary antibody (ON 4 C in MB-070). Detection shown was using Dylight 488 conjugated Donkey anti goat (605-741-125 lot 21094 1:10K in TBS/MB-070 1 hr RT) . Images were collected using the BioRad VersaDoc System

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.