

Product datasheet for **TA396677S**

P2OX Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IP, WB
Recommended Dilution:	WB: 1:500 - 1:5,000 ELISA: 1:5,000 - 1:20,000
Reactivity:	Microbial
Host:	Goat
Clonality:	Polyclonal
Immunogen:	Pyranose Oxidase [E.coli]
Specificity:	Pyranose Oxidase 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-Peroxidase, anti-Goat Serum as well as purified and partially purified Pyranose Oxidase [E.coli]. Cross reactivity against Pyranose Oxidase from other sources is unknown.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1 mg/mL - lot specific
Conjugation:	HRP
Storage:	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.
Stability:	Expiration date is one (1) year from date of receipt.
Database Link:	P79076



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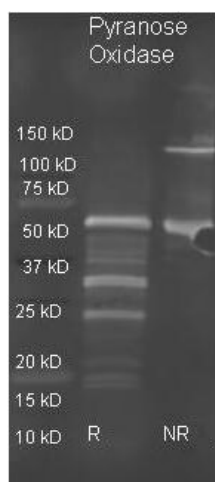
Background:

Pyranose Oxidase catalyzes the oxidation of various aldopyranoses and disaccharides on carbon-2 to the corresponding 2-keto sugars concomitant with the reduction of oxygen to hydrogen peroxide. It plays an important role in lignin degradation of wood rot fungi by supplying the essential cosubstrate hydrogen peroxide for the ligninolytic peroxidases, lignin peroxidase, and manganese-dependent peroxidase. The preferred substrate is D-glucose which is converted to 2-dehydro-D-glucose. It 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. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with oxygen as acceptor. This enzyme participates in pentose phosphate pathway. It employs one cofactor, FAD.

Synonyms:

goat anti-Pyranose Oxidase Antibody, HRP Conjugated goat anti-Pyranose Oxidase Antibody, P2Ox, Pyranose oxidase, PROD, POD, POx, Pyranose:oxygen 2-oxidoreductase, Glucose 2-oxidase, FAD-oxidoreductase

Note: Anti-Pyranose Oxidase has been assayed against 1.0 ug of Pyranose Oxidase [E.coli] in a standard capture ELISA using ABTS (2,2'-azino-bis-[3-ethylbenthiiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:20,000 to 1:100,000 of the reconstitution concentration is suggested for this product.

Product images:

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