

Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Peroxidase Conjugated
Pyranose Oxidase Antibody Peroxidase Conjugated
Catalog # ASR4006**Specification****Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Peroxidase Conjugated - Product Information**

Host	Goat
Conjugate	Peroxidase (Horseradish)
Target Species	Escherichia coli
Clonality	Polyclonal
Application	WB, E, IP, I, LCI
Application 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-ethylbenthiazoline-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.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Pyranose Oxidase [E.coli]
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!

Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Peroxidase Conjugated - Additional Information**Purity**

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.

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.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Peroxidase Conjugated - Protein Information

Name P2OX

Function

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. 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.

Cellular Location

Periplasm. Note=Hyphal periplasmic space.

Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Peroxidase Conjugated - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Peroxidase Conjugated - Images**Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Peroxidase Conjugated - 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.