

### 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-sulfoni c 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 Pyranose Oxidase [E.coli]

100 µL

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

**Immunogen** 

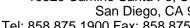
**Reconstitution Volume** 

Reconstitution Buffer

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 O(2) to H(2)O(2). Plays an important role in lignin degradation of wood rot fungi by supplying the essential cosubstrate H(2)O(2) 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 Dxylose, 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 Cvtometv
- 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.