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

Pyranose Oxidase Antibody Biotin Conjugated
Catalog # ASR4055

Specification

Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Biotin Conjugated - Product Information

Host	**Goat**
Conjugate	**Biotin**
Target Species	**Escherichia coli**
Clonality	**Polyclonal**
Application	**WB, E, IP, I, LCI**
Application Note	**Anti-Pyranose oxidase antibody has been assayed against 1.0 µg of Pyranose Oxidase in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethyl benthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:70,000 to 1:350,000 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) Sodium Azide**

Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Biotin Conjugated - Additional Information

Purity
Anti-Pyranose 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-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 Biotin 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 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 Biotin 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 Cytomety
- Cell Culture

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

Anti-PYRANOSE OXIDASE (E.coli) (GOAT) Antibody Biotin Conjugated - Background

Anti-Pyranose oxidase recognizes the oxidoreductase pyranose oxidase. In general, pyranose catalyzes the oxidation of aldopyranoses at the carbon 2 position to form 2-ketoaldoses . Notably, pyranose oxidase catalyzes the conversion of D-glucose and oxygen to 2-dehydro-D-glucose and hydrogen peroxide using flavin adenine dinucleotide (FAD) as a cofactor. Pyranose oxidase also plays a role in the pentose phosphate pathway.