

Datasheet for 200-4683-0100**Xanthine Oxidase Antibody Biotin Conjugated****Overview**

Description:	Anti-Xanthine Oxidase (Buttermilk) (RABBIT) Antibody Biotin Conjugated - 200-4683-0100
Item No.:	200-4683-0100
Size:	100 µg
Applications:	Dot Blot, IHC, WB
Reactivity:	Bovine
Host Species:	Rabbit

Product Details

Background:	Anti-Xanthine Oxidase recognizes xanthine oxidase, an oxidoreductase. Xanthine oxidase catalyzes the oxidation of hypoxanthine to xanthine and xanthine to uric acid. Both of these reactions also generate the reactive oxygen species hydrogen peroxide. In addition, xanthine oxidase is involved in the catabolism of purines and metabolism of caffeine. Clinically, xanthine oxidase has been linked to gout, a condition in which uric acid accumulates in the kidneys and joints. Anti-Xanthine Oxidase antibody is ideal for investigators interested in Metabolism and Signal Transduction research.
Synonyms:	rabbit anti-Xanthine Oxidase Antibody biotin Conjugation, biotin Conjugated rabbit anti-Xanthine Oxidase Antibody, Xanthine dehydrogenase antibody, Xanthine dehydrogenase/oxidase antibody, Xanthine oxidase antibody, Xanthine oxidoreductase antibody, xdh antibody, xdha antibody, XO antibody, xor antibody
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	XDH
Reactivity:	Bovine
Immunogen Type:	Native Protein

Immunogen:	Xanthine Oxidase [Bovine Buttermilk]
Purity/Specificity:	Anti-Xanthine 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-Rabbit Serum as well as purified and partially purified Xanthine Oxidase [Bovine Buttermilk]. Cross reactivity against Xanthine Oxidase from other sources is unknown.
Relevant Links:	• UniProtKB - P80457 • NCBI - DAA24801.1 • GenelD - 280960

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	IHC, WB (Based on references)
Application Note:	Anti-Xanthine Oxidase Biotin conjugated antibody has been tested by dot blot and is suitable to be assayed against 1.0 ug of Xanthine Oxidase in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 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 1:10,000 to 1:40,000 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:	1:500 - 1:2,000
IP:	1:100
WB:	1:250

Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

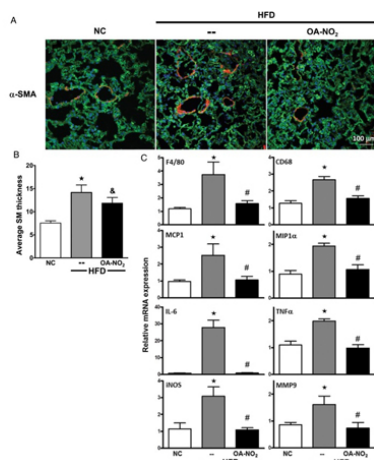
Shipping & Handling

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

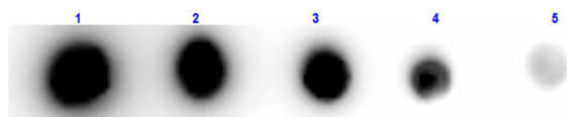


Immunofluorescence Microscopy

OA-NO₂ reduces pulmonary vascular remodeling and inflammation. (A) Representative confocal images of vascular remodeling stained with α -SMA, red; 4',6-diamidino-2-phenylindole (DAPI), blue; and XO, green). (C) Lung inflammatory cytokine expression was determined by qPCR using Taqman assays. Data represent mean $\pm$ SEM; *P < 0.001 to NC; #P < 0.01 to HFD; &P < 0.05 to HFD; no significance between NC and HFD + OA-NO₂ (n $\geq$ 6 per group). Fig 5. PMID: 24385344

Dot Blot

Dot Blot results of Rabbit Anti-Xanthine Oxidase Antibody Biotin Conjugated. Dots are Xanthine Oxidase at (1) 100ng, (2) 33.3ng, (3) 11.1ng, (4) 3.70ng, (5) 1.23ng. Blocking: MB-070 for 30 min at RT. Primary Antibody: Rabbit Anti-Xanthine Oxidase Antibody Biotin at 1 μ g/mL for 1hr at RT. Secondary Antibody: Streptavidin-HRP (p/n S000-03) at 1:40,000 for 30min at RT. Imaged with BioRad ChemiDoc, Chemi filter.



References

- Kelley EE et al. Fatty acid nitroalkenes ameliorate glucose intolerance and pulmonary hypertension in high-fat diet-induced obesity. *Cardiovasc Res.* (2014)

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.