

## Datasheet for 200-4683S

**Xanthine Oxidase Antibody Biotin Conjugated****Overview**

|                      |                                                                                    |
|----------------------|------------------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-Xanthine Oxidase (Buttermilk) (RABBIT) Antibody Biotin Conjugated - 200-4683S |
| <b>Item No.:</b>     | 200-4683S                                                                          |
| <b>Size:</b>         | 25 µL                                                                              |
| <b>Applications:</b> | Dot Blot, IHC, WB                                                                  |
| <b>Reactivity:</b>   | Bovine                                                                             |
| <b>Host Species:</b> | Rabbit                                                                             |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | 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. |
| <b>Synonyms:</b>     | 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                                                                                                                                                                                                                                                                                               |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Conjugate:</b>    | Biotin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Target Details**

|                        |                |
|------------------------|----------------|
| <b>Gene Name:</b>      | XDH            |
| <b>Reactivity:</b>     | Bovine         |
| <b>Immunogen Type:</b> | Native Protein |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Xanthine Oxidase [Bovine Buttermilk]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity/Specificity:</b> | 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. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P80457</a></li><li>• <a href="#">NCBI - DAA24801.1</a></li><li>• <a href="#">GenelD - 280960</a></li></ul>                                                                                                                                                                                                                                                                                                                                                                  |

## Application Details

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b>    | Dot Blot                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Suggested Applications:</b> | IHC, WB (Based on references)                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Application Note:</b>       | 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. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                               |
| <b>IP:</b>                     | 1:100                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>WB:</b>                     | 1:250                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Formulation

|                        |                                                                        |
|------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                              |
| <b>Concentration:</b>  | 1.0 mg/mL by UV absorbance at 280 nm                                   |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2             |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                               |
| <b>Stabilizer:</b>     | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |

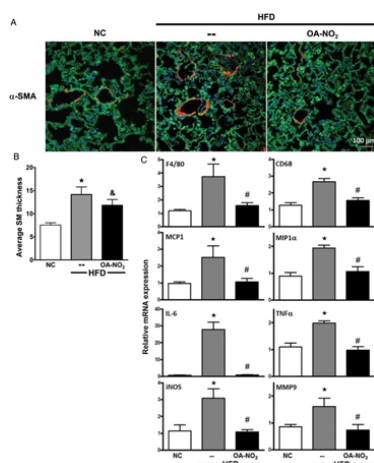
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Dry Ice |
|----------------------------|---------|

**Storage Condition:** 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.

**Expiration:** Expiration date is one (1) year from date of receipt.

## Images

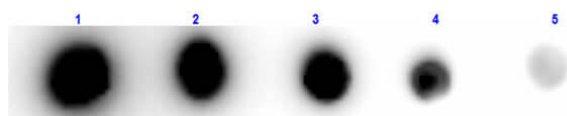


### Immunofluorescence Microscopy

OA-NO<sub>2</sub> reduces pulmonary vascular remodelling and inflammation. (A) Representative confocal images of vascular remodelling 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 ± SEM; \*P < 0.001 to NC; #P < 0.01 to HFD; &P < 0.05 to HFD; no significance between NC and HFD + OA-NO<sub>2</sub> (n ≥ 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 1µg/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.