

Datasheet for 600-401-Y02**ALDH3A1 Antibody****Overview**

Description:	Anti-ALDH3A1 (RABBIT) Antibody - 600-401-Y02
Item No.:	600-401-Y02
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Aldh3A1 is a member of the aldehyde dehydrogenase superfamily, a group of NAD(P)(+)-dependent enzymes that catalyze the oxidation of a wide spectrum of aliphatic and aromatic aldehydes. Aldh3A1 is highly expressed in stomach and even more strongly in cornea, representing between 5 to 50% of the water soluble protein fraction in mammalian corneas. It is thought that Aldh3A1 acts to protect the cornea from UV-induced oxidative stress by not only detoxification of reactive aldehydes by also through the direct absorption of UV energy. However, corneas from Aldh3A1-null mice are indistinguishable from those from wild-type mice; mice lacking both Aldh3A1 and Aldh1A1 showed increased cataract formation following UVB exposure, suggesting that Aldh1A1 may be able to compensate for the loss of Aldh3A1.
Synonyms:	Aldh3A1 Antibody, ALDH3, ALDHIII, ALDH3, Aldehyde dehydrogenase, dimeric NADP-preferring
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ALDH3A1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Aldh3A1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 13 amino acid synthetic peptide near the C-terminus of the human Aldh3A1.
Purity/Specificity:	Anti-Aldh3A1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. At least two isoforms of Aldh3A1 are known to exist. This antibody is predicted to have no cross-reactivity to Aldh3A2.
Relevant Links:	• UniProtKB - P30838 • GeneID - 218 • NCBI - NP_000682

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Aldh3A1 Antibody has been tested for use in ELISA and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 50 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
WB:	1 - 2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

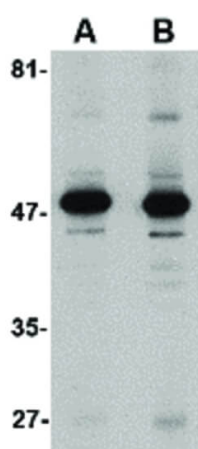
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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



Western Blot

Western Blot of Aldh3A1 antibody. Lane A: Human stomach lysate at 1 µg/mL. Lane B: Human stomach lysate at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 50.3 kDa, ~50 kDa for Aldh3A1.

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.