

## Datasheet for 200-4144-0100

## Aldehyde Dehydrogenase Antibody

### Overview

|                      |                                                               |
|----------------------|---------------------------------------------------------------|
| <b>Description:</b>  | Anti-Aldehyde Dehydrogenase (RABBIT) Antibody - 200-4144-0100 |
| <b>Item No.:</b>     | 200-4144-0100                                                 |
| <b>Size:</b>         | 100 µg                                                        |
| <b>Applications:</b> | WB                                                            |
| <b>Reactivity:</b>   | <i>S. cerevisiae</i>                                          |
| <b>Host Species:</b> | Rabbit                                                        |

### Product Details

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | The enzyme encoded by this gene belongs to the aldehyde dehydrogenase family of enzymes that catalyze the chemical transformation from acetaldehyde to acetic acid. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of this enzyme, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations. The ALDH2 gene encodes a mitochondrial isoform, which has a low $K_m$ for acetaldehydes, and is localized in mitochondrial matrix; in contrast the ALDH1 gene codes for the cytosolic isoform. Anti-ALDEHYDE DEHYDROGENASE is ideal for researches interested in metabolism research. |
| <b>Synonyms:</b>     | rabbit anti-Aldehyde Dehydrogenase Antibody, Aldehyde dehydrogenase [NAD(P)+] 1, ALD2, ALD5, ALD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

### Target Details

|                        |                                |
|------------------------|--------------------------------|
| <b>Gene Name:</b>      | ALD2                           |
| <b>Reactivity:</b>     | <i>S. cerevisiae</i>           |
| <b>Immunogen Type:</b> | Native Protein                 |
| <b>Immunogen:</b>      | Aldehyde Dehydrogenase [Yeast] |

**Purity/Specificity:** Anti-Aldehyde Dehydrogenase 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-Rabbit Serum as well as purified and partially purified Aldehyde Dehydrogenase [Yeast]. Cross reactivity against Aldehyde Dehydrogenase from other tissues and species may occur but have not been specifically determined.

**Relevant Links:**

- [UniProtKB - P47771](#)
- [NCBI - NP\\_013893.1](#)
- [GeneID - 855206](#)

## Application Details

|                             |                                                                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | WB                                                                                                                                              |
| <b>Application Note:</b>    | Anti-Aldehyde Dehydrogenase has been tested by western blot. Assays should be optimized by the end user for specific conditions for reactivity. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                 |
| <b>ELISA:</b>               | 1:5,000 - 1:20,000                                                                                                                              |
| <b>IP:</b>                  | 1:100                                                                                                                                           |
| <b>WB:</b>                  | 1:500 - 1:2,000                                                                                                                                 |

## Formulation

|                               |                                                            |
|-------------------------------|------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                |
| <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>            | None                                                       |
| <b>Reconstitution Volume:</b> | 100 µL                                                     |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)               |

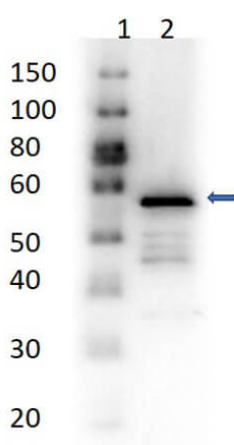
## Shipping & Handling

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



### Western Blot

Western Blot Results of Rabbit Anti-Aldehyde Dehydrogenase Antibody. Lane 1: Molecular Weight Marker. Lane 2: Aldehyde Dehydrogenase. Primary Antibody: Anti-Aldehyde Dehydrogenase at 1:1000 overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit IgG (p/n 611-103-122) at 1:40,000 for 30 mins at RT. Block: BlockOut Buffer (p/n MB-073) for 30 min at RT. Expect MW: ~55kDa.

## 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.