

Datasheet for 100-4143**Alcohol Dehydrogenase Antibody****Overview**

Description:	Anti-Alcohol Dehydrogenase (Yeast) (RABBIT) Antibody - 100-4143
Item No.:	100-4143
Size:	2 mL
Applications:	WB
Reactivity:	<i>S. cerevisiae</i>
Host Species:	Rabbit

Product Details

Background:	Alcohol dehydrogenase is an isozyme that preferentially catalyzes the conversion of acetaldehyde to acetone. Alcohol dehydrogenase has an apparent molecular weight of 37 kDa (monomer subunit) and forms a homotetramer. This enzyme acts on a variety of primary unbranched aliphatic alcohols and requires 2 bound zinc ions per subunit. Alcohol dehydrogenase shows a cytoplasmic localization. Microheterogeneities may also occur at positions 137, 138, 242-244, and 255 and near position 287.
Synonyms:	rabbit anti-Alcohol Dehydrogenase Antibody, Alcohol dehydrogenase 1, Alcohol dehydrogenase I, YADH-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	ADH1
Reactivity:	<i>S. cerevisiae</i>
Immunogen Type:	Native Protein
Immunogen:	This antibody was prepared from whole rabbit serum produced by repeated immunizations with full length Alcohol Dehydrogenase isolated from yeast.

Purity/Specificity: This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, purified and partially purified Alcohol Dehydrogenase [Yeast]. Cross reactivity against Alcohol Dehydrogenase from most fungal sources is likely due to sequence homology as determined by BLAST analysis. Cross reactivity with Alcohol Dehydrogenase from other sources is unknown.

Relevant Links:

- [UniProtKB - P00330](#)
- [NCBI - 12643994](#)
- [GeneID - 2538902](#)
- [100-4143 SDS](#)

Application Details

Suggested Applications:	WB (Based on references)
Application Note:	Anti-Alcohol Dehydrogenase Antibody is suitable for use in ELISA and western blot.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:25,000
IP:	1:100
WB:	1:500 - 1:2,000

Formulation

Physical State:	Lyophilized
Concentration:	90 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

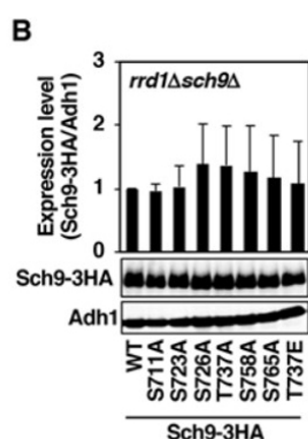
Shipping & Handling

Shipping Condition:	Ambient
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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.

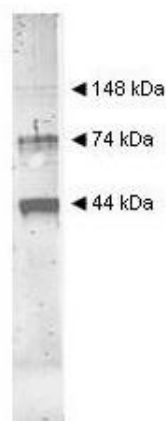
Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Anti-Alcohol Dehydrogenase Antibody. High pressure promotes Sch9 phosphorylation in an EGOC- and Pib2-dependent manner. (B) Whole cell lysates were prepared from the *rrd1Δsch9Δ* mutant expressing wild-type (WT) or point-mutated Sch9-3HA (CEN) and analyzed by western blotting using anti-HA and anti-Adh1 antibodies. OD600 from more than three independent experiments. Protein levels in B were quantified using ImageJ software and are presented as mean±s.d. from three independent experiments. Fig 4. PMID: 32801125.



Western Blot

Western blot analysis with Rockland's Anti-Alcohol Dehydrogenase antibody was used to detect yeast Alcohol Dehydrogenase. Comparison to molecular weight markers (not shown) indicates estimated molecular weights consistent with monomer, dimer and tetramer present in this preparation. The blot was incubated with a 1:500 dilution of the antibody at room temperature for 2 h followed by detection using IRDye™800 labeled Goat-a-Rabbit IgG [H&L] (611-132-122) diluted 1:5,000 for 45 min at room temperature. The IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

References

- Funada C et al. SOD1 mutations cause hypersensitivity to high-pressure-induced oxidative stress in *Saccharomyces cerevisiae*. *Biochim Biophys Acta Gen Subj*. (2022)
- Uemura S et al. Amino acid homeostatic control by TORC1 in *Saccharomyces cerevisiae* under high hydrostatic pressure. *J Cell Sci*. (2020)

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.