

DATASHEET

ALDH1A2 Rabbit Polyclonal Antibody

CAT. NO. APA09102

KEY FEATURES

Target	ALDH1A2	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Catalyzes the NAD-dependent oxidation of aldehyde substrates, such as all-trans-retinal and all-trans-13,14-dihydroretinal, to their corresponding carboxylic acids, all-trans-retinoate and all-trans-13,14-dihydroretinoate, respectively. Retinoate signaling is critical for the transcriptional control of many genes, for instance it is crucial for initiation of meiosis in both male and female (Probable). Recognizes retinal as substrate, both in its free form and when bound to cellular retinol-binding protein. Can metabolize octanal and decanal, but has only very low activity with benzaldehyde, acetaldehyde and propanal. Displays complete lack of activity with citral.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200
IF/ICC	1:100 - 1:500

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to ALDH1A2
Specificity	Recognizes endogenous levels of ALDH1A2 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human ALDH1A2. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 56 kD; Observed: 57 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	RALDH2; Retinal dehydrogenase 2; RALDH 2; RaLDH2; Aldehyde dehydrogenase family 1 member A2; Retinaldehyde-specific dehydrogenase type 2; RALDH(II)
Gene Symbol	ALDH1A2
Entrez Gene	8854(Human); 19378(Mouse); 116676(Rat)
SwissProt	O94788(Human); Q62148(Mouse); Q63639(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

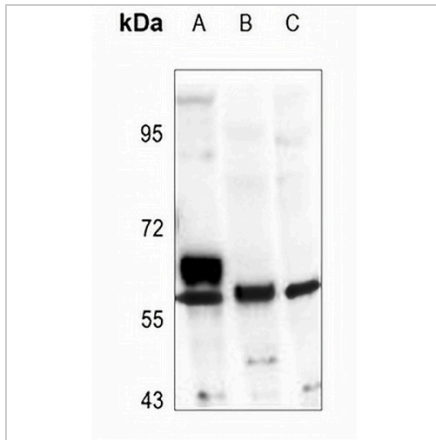
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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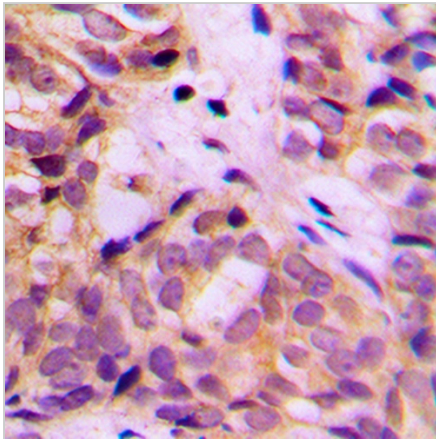
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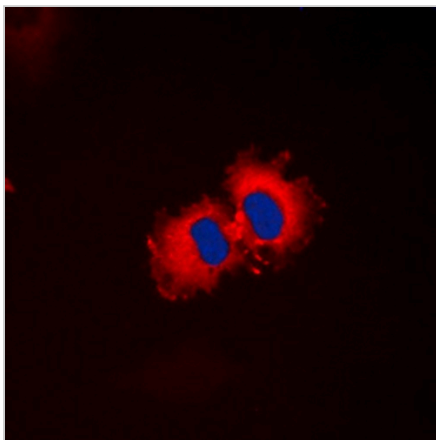
DATA



Western blot analysis of ALDH1A2 expression in K562 (A), PC12 (B), CT26 (C) whole cell lysates. (Predicted band size: 56 kD; Observed band size: 57 kD)



Immunohistochemical analysis of ALDH1A2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of ALDH1A2 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.