DATASHEET

ADH5 Rabbit Polyclonal Antibody

CAT. NO. APA13289

KEY FEATURES

Target	ADH5	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, 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 oxidation of long-chain primary alcohols and the oxidation of S-(hydroxymethyl) glutathione glutathione . Also oxidizes long chain omega-hydroxy fatty acids, such as 20-HETE, producing both the intermediate aldehyde, 20-oxoarachidonate and the end product, a dicarboxylic acid, (5Z,8Z,11Z,14Z)-eicosatetraenedioate . Class-III ADH is remarkably ineffective in oxidizing ethanol . Required for clearance of cellular formaldehyde, a cytotoxic and carcinogenic metabolite that induces DNA damage . Also acts as a S-nitroso-glutathione reductase by catalyzing the NADH-dependent reduction of S-nitrosoglutathione, thereby regulating protein S-nitrosylation .

APPLICATION

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

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

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

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to ADH5
Specificity	Recognizes endogenous levels of ADH5 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human ADH5
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 39 kD; Observed: 39 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	ADHX; FDH; Alcohol dehydrogenase class-3; Alcohol dehydrogenase 5; Alcohol dehydrogenase class chi chain; Alcohol dehydrogenase class-III; Glutathione-dependent formaldehyde dehydrogenase; FALDH; FDH; GSH-FDH; S-(hydroxymethyl)glutathione dehydrogenase
Gene Symbol	ADH5
Entrez Gene	128(Human); 11532(Mouse); 100145871(Rat)
SwissProt	P11766(Human); P28474(Mouse); P12711(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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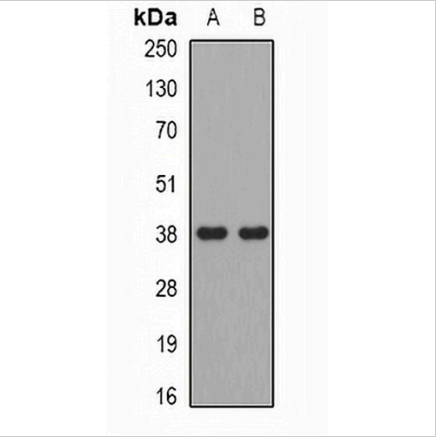
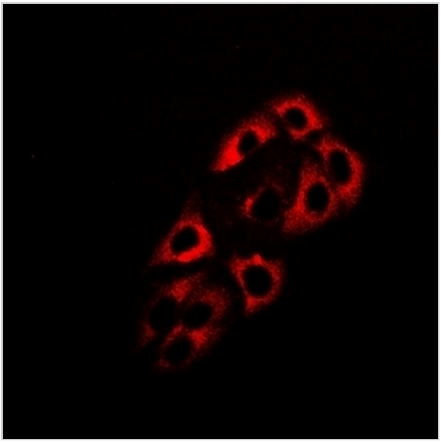
DATA



Western blot analysis of ADH5 expression in U251 (A), U937 (B) whole cell lysates. (Predicted band size: 39 kD; Observed band size: 39 kD)



Immunofluorescent analysis of ADH5 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.

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.