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ADH1B Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6738C

Product Information

Application	WB, IHC-P, FC, IF, E
Primary Accession	P00325
Other Accession	P06757, P00329, P23991, P00326, P07327
Reactivity	Human
Predicted	Chicken, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19698
Calculated MW	39835
Antigen Region	209-237

Additional Information

Gene ID	125
Other Names	Alcohol dehydrogenase 1B, Alcohol dehydrogenase subunit beta, ADH1B, ADH2
Target/Specificity	This ADH1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 209-237 amino acids from the Central region of human ADH1B.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ADH1B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ADH1B (HGNC:250)
Synonyms	ADH2

Function Catalyzes the NAD-dependent oxidation of all-trans-retinol and its derivatives such as all-trans-4-hydroxyretinol and may participate in retinoid metabolism (PubMed:15369820, PubMed:16787387). In vitro can also catalyze the NADH-dependent reduction of all-trans- retinal and its derivatives such as all-trans-4-oxoretinal (PubMed:15369820, PubMed:16787387). Catalyzes in the oxidative direction with higher efficiency (PubMed:16787387). Has the same affinity for all-trans-4-hydroxyretinol and all-trans-4-oxoretinal (PubMed:15369820).

Cellular Location Cytoplasm.

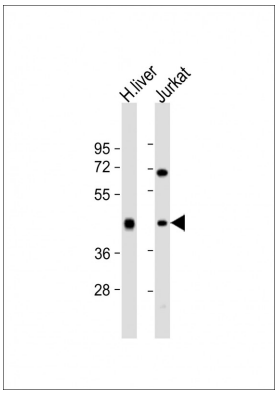
Background

The protein is a member of the alcohol dehydrogenase family. Members of this enzyme family metabolize a wide variety of substrates, including ethanol, retinol, other aliphatic alcohols, hydroxysteroids, and lipid peroxidation products. This encoded protein, consisting of several homo- and heterodimers of alpha, beta, and gamma subunits, exhibits high activity for ethanol oxidation and plays a major role in ethanol catabolism.

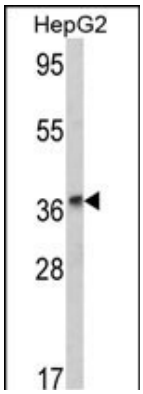
References

Alcohol intake, Am. J. Gastroenterol. 104 (9), 2182-2188 (2009) Nishimura,F.T., Nihon Arukoru Yakubutsu Igakkai Zasshi 44 (3), 139-155 (2009)

Images

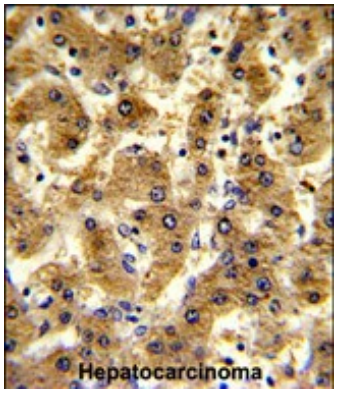


All lanes : Anti-ADH1B Antibody (Center) at 1:2000 dilution Lane 1: human liver lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

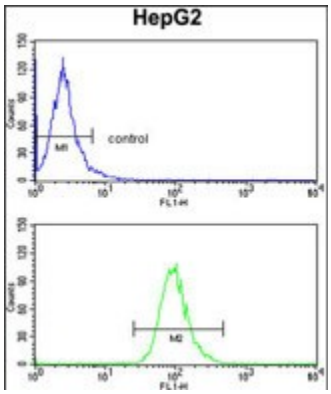


Western blot analysis of ADH1B Antibody (Center) (Cat. #AP6738c) in HepG2 cell line lysates (35ug/lane). ADH1B (arrow) was detected using the purified Pab.

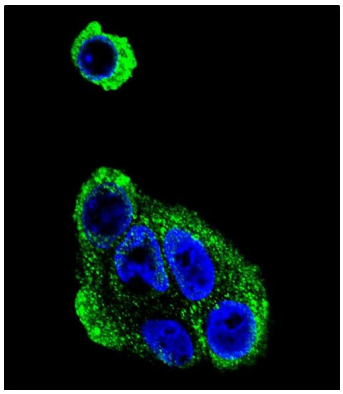
Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with ADH1B Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for



immunohistochemistry; clinical relevance has not been evaluated.



ADH1B Antibody (Center) (Cat.#AP6738c) flow cytometry analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Confocal immunofluorescent analysis of ADH1B Antibody (Center)(Cat#AP6738c) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).