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Anti-ADH7 Antibody

Catalog # AP51719

Product Information

Application	WB, IF/IC
Primary Accession	P40394
Reactivity	Human, Mouse, Rat, Pig, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41481

Additional Information

Gene ID	131
Other Names	Alcohol dehydrogenase class 4 mu/sigma chain; Alcohol dehydrogenase class IV mu/sigma chain; Gastric alcohol dehydrogenase; Retinol dehydrogenase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ADH7. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

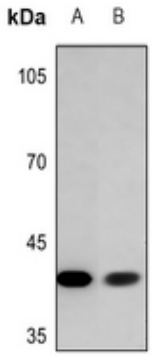
Name	ADH7 (HGNC:256)
Function	Catalyzes the NAD-dependent oxidation of all-trans-retinol, alcohol, and omega-hydroxy fatty acids and their derivatives (PubMed:15369820, PubMed:16787387, PubMed:9600267). Oxidizes preferentially all trans-retinol, all-trans-4-hydroxyretinol, 9-cis- retinol, 2-hexenol, and long chain omega-hydroxy fatty acids such as juniperic acid (PubMed:15369820, PubMed:16787387, PubMed:9600267). In vitro can also catalyze the NADH-dependent reduction of all-trans- retinal and aldehydes and their derivatives (PubMed:15369820, PubMed:16787387, PubMed:9600267). Reduces preferentially all trans- retinal, all-trans-4-oxoretinal and hexanal (PubMed:15369820, PubMed:16787387). Catalyzes in the oxidative direction with higher efficiency (PubMed:15369820, PubMed:16787387). Therefore may participate in retinoid metabolism, fatty acid omega-oxidation, and elimination of cytotoxic aldehydes produced by lipid peroxidation (PubMed:15369820, PubMed:16787387, PubMed:9600267).

Cellular Location	Cytoplasm.
Tissue Location	Preferentially expressed in stomach.

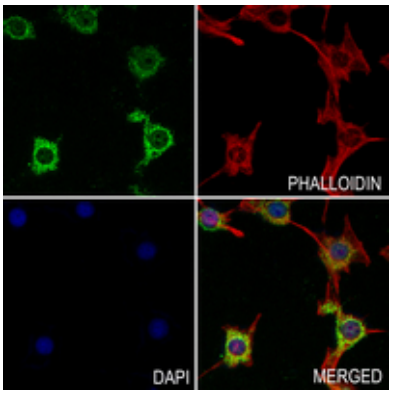
References

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Images



Western blot analysis of ADH7 expression in mouse brain (A), rat brain (B) whole cell lysates. (Predicted band size: 41 kD; Observed band size: 40 kD)



Immunofluorescent analysis of ADH7 staining in NIH3T3 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 hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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