

#5295 Store at -20C

ADH1 Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M	Endogenous	40	Rabbit	#P00325	125

Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	ADH1 Antibody detects endogenous levels of total ADH1 protein. The antigen is 100% conserved between human ADH1A, ADH1B and ADH1C proteins.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val74 of human ADH1B protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Human alcohol dehydrogenase (<i>ADH</i>) genes are grouped into five classes, with three distinct class I <i>ADH</i> genes (<i>ADH1A</i> , <i>ADH1B</i> and <i>ADH1C</i>) and <i>ADH4</i> , <i>ADH5</i> , <i>ADH7</i> and <i>ADH6</i> belonging to classes II, III, IV, and V, respectively. ADH is a zinc-containing, dimeric enzyme that catalyzes the conversion of cytosolic alcohol to acetaldehyde in the liver with the coenzyme NAD (1). ADH1A is monomorphic and is the predominant fetal and neonatal liver ADH enzyme. In contrast, polymorphic ADH1B and ADH1C enzymes are predominant in adult livers (2). Polymorphisms in the human class I <i>ADH</i> genes result in functionally variable ADH enzymes; evidence suggests that specific variants may provide protection from the risk of alcoholism (3).	
Background References	<ol style="list-style-type: none"> Edenberg, H.J. (2000) <i>Prog Nucleic Acid Res Mol Biol</i> 64, 295-341. Su, J.S. et al. (2006) <i>J Biol Chem</i> 281, 19809-21. Chen, C.C. et al. (1999) <i>Am J Hum Genet</i> 65, 795-807. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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