

**ADH1 Antibody**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	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 (*ADH*) genes are grouped into five classes, with three distinct class I *ADH* genes (*ADH1A*, *ADH1B* and *ADH1C*) and *ADH4*, *ADH5*, *ADH7* and *ADH6* 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 *ADH* genes result in functionally variable ADH enzymes; evidence suggests that specific variants may provide protection from the risk of alcoholism (3).

**Background References**

1. Edenberg, H.J. (2000) *Prog Nucleic Acid Res Mol Biol* 64, 295-341.
2. Su, J.S. et al. (2006) *J Biol Chem* 281, 19809-21.
3. Chen, C.C. et al. (1999) *Am J Hum Genet* 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**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human **M:** Mouse

**Trademarks and Patents**

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](http://cellsignal.com/trademarks) for more information.

**Limited Uses**

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a

component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.