

# ADH5 Antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI16054

## Product Information

Application	WB
Primary Accession	<a href="#">P11766</a>
Other Accession	<a href="#">NP_000662</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39724

## Additional Information

Gene ID	128
Alias Symbol Other Names	ADH5, ADHX, FDH, Alcohol dehydrogenase class-3, 1.1.1.1, Alcohol dehydrogenase 5, Alcohol dehydrogenase class chi chain, Alcohol dehydrogenase class-III, Glutathione-dependent formaldehyde dehydrogenase, FALDH, FDH, GSH-FDH, 1.1.1.-, S-(hydroxymethyl)glutathione dehydrogenase, 1.1.1.284, ADH5 ( <a href="#">HGNC:253</a> ), ADHX, FDH
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 &mu; l of distilled water. Final Anti-ADH5 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.
Precautions	ADH5 Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Name	ADH5 ( <a href="#">HGNC:253</a> )
Synonyms	ADHX, FDH
Function	Catalyzes the oxidation of long-chain primary alcohols and the oxidation of S-(hydroxymethyl) glutathione (PubMed: <a href="#">8460164</a> ). 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 (PubMed: <a href="#">16081420</a> ). Class-III ADH is remarkably ineffective in oxidizing ethanol (PubMed: <a href="#">8460164</a> ). Required for

clearance of cellular formaldehyde, a cytotoxic and carcinogenic metabolite that induces DNA damage (PubMed:[33355142](#)). Also acts as a S-nitroso-glutathione reductase by catalyzing the NADH-dependent reduction of S-nitrosoglutathione, thereby regulating protein S-nitrosylation (By similarity).

**Cellular Location** Cytoplasm.

## Background

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Class-III ADH is remarkably ineffective in oxidizing ethanol, but it readily catalyzes the oxidation of long-chain primary alcohols and the oxidation of S-(hydroxymethyl) glutathione.

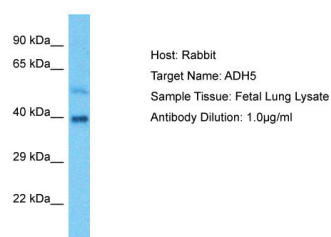
## References

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Sharma C.P.,et al.Biochem. Biophys. Res. Commun. 164:631-637(1989).  
Giri P.R.,et al.Biochem. Biophys. Res. Commun. 164:453-460(1989).  
Hur M.W.,et al.Gene 121:305-311(1992).  
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.  
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.

## Images

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Host: Rabbit  
Target Name: ADH5  
Sample Tissue: Fetal Lung lysates  
Antibody Dilution: 1.0µg/ml

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.