

### Summary

Production Name	ADH7 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Monkey

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at $4^{\circ}$ C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

#### Immunogen

Gene Name	ADH7
Alternative Names	ADH7; Alcohol dehydrogenase class 4 mu/sigma chain; Alcohol dehydrogenase class IV
	mu/sigma chain; Gastric alcohol dehydrogenase; Retinol dehydrogenase
Gene ID	131.0
SwissProt ID	P40394.The antiserum was produced against synthesized peptide derived from human
	ADH7. AA range:211-260

# Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.
Molecular Weight	40kD



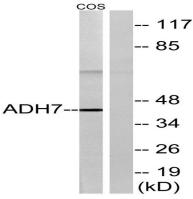
#### Background

This gene encodes class IV alcohol dehydrogenase 7 mu or sigma subunit, which is a member of the alcohol dehydrogenase family. Members of this family metabolize a wide variety of substrates, including ethanol, retinol, other aliphatic alcohols, hydroxysteroids, and lipid peroxidation products. The enzyme encoded by this gene is inefficient in ethanol oxidation, but is the most active as a retinol dehydrogenase; thus it may participate in the synthesis of retinoic acid, a hormone important for cellular differentiation. The expression of this gene is much more abundant in stomach than liver, thus differing from the other known gene family members. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2009],catalytic activity:An alcohol + NAD(+) = an aldehyde or ketone + NADH,cofactor:Binds 2 zinc ions per subunit,cofactor:Zinc.,function:Could function in retinol oxidation for the synthesis of retinoic acid, a hormone important for cellular differentiation. Medium-chain (octanol) and aromatic (m-nitrobenzaldehyde) compounds are the best substrates. Ethanol is not a good substrate but at the high ethanol concentrations reached in the digestive tract, it plays a role in the ethanol oxidation and contributes to the first pass ethanol metabolism.,miscellaneous:There are 7 different ADH's isozymes in human: three belongs to class-I: alpha, beta, and gamma, one to class-II: pi, one to class-III: chi, one to class-IV: ADH7 and one to class-V: ADH6, similarity:Belongs to the zinc-containing alcohol dehydrogenase family. Class-IV subfamily.,subunit:Homodimer,tissue specificity:Preferentially expressed in stomach.,

#### **Research Area**

Glycolysis / Gluconeogenesis;Fatty acid metabolism;Tyrosine metabolism;Retinol metabolism;Metabolism of xenobiotics by cytochrome P450;Drug metabolism;

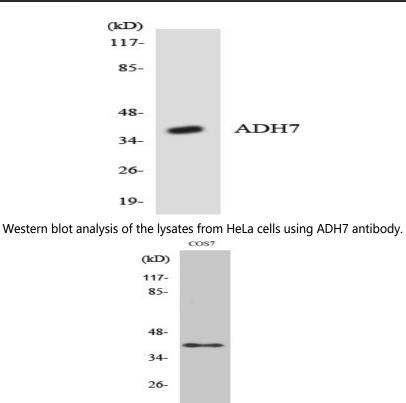
### Image Data



Western blot analysis of lysates from COS7 cells, using ADH7 Antibody. The lane on the right is blocked with the synthesized peptide.

## Product Name: ADH7 Rabbit Polyclonal Antibody Catalog #: APRab06629





Western Blot analysis of various cells using ADH7 Polyclonal Antibody

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#### Note

For research use only.