10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ADH7 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51719

Specification

ADH7 Antibody - Product Information

Application	**WB, E**
Primary Accession	P40394
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**40 KDa**

ADH7 Antibody - 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, ADH7

Dilution
WB~~1:1000
E~~N/A

Format
0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage
Store at -20 °C.Stable for 12 months from date of receipt

ADH7 Antibody - 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:<a

href="http://www.uniprot.org/citations/16787387" target="_blank">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.

ADH7 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ADH7 Antibody - Images

ADH7 Antibody - Background

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.

ADH7 Antibody - References

Farres J.,et al.Eur. J. Biochem. 224:549-557(1994).
Satre M.A.,et al.J. Biol. Chem. 269:15606-15612(1994).
Zgombic-Knight M.,et al.J. Biol. Chem. 270:4305-4311(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).