

## **ALDH1A2 Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50614

# **Specification**

## **ALDH1A2 Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Antigen Region

WB
O94788
Human, Mouse, Rat
Rabbit
Polyclonal
57,53,55,46 KDa
410-445

## **ALDH1A2 Antibody - Additional Information**

#### **Gene ID 8854**

#### **Other Names**

Retinal dehydrogenase 2, RALDH 2, RalDH2, Aldehyde dehydrogenase family 1 member A2, Retinaldehyde-specific dehydrogenase type 2, RALDH(II), ALDH1A2, RALDH2

### **Dilution**

WB~~ 1:1000

#### **Format**

Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

### **Storage Conditions**

-20°C

### **ALDH1A2 Antibody - Protein Information**

### Name ALDH1A2

### Synonyms RALDH2

### **Function**

Catalyzes the NAD-dependent oxidation of aldehyde substrates, such as all-trans-retinal and all-trans-13,14-dihydroretinal, to their corresponding carboxylic acids, all-trans-retinoate and all-trans- 13,14-dihydroretinoate, respectively (PubMed:<a

href="http://www.uniprot.org/citations/29240402" target="\_blank">29240402</a>, PubMed:<a href="http://www.uniprot.org/citations/33565183" target="\_blank">33565183</a>). Retinoate signaling is critical for the transcriptional control of many genes, for instance it is crucial for initiation of meiosis in both male and female (Probable) (PubMed:<a

href="http://www.uniprot.org/citations/33565183" target="\_blank">33565183</a>). Recognizes retinal as substrate, both in its free form and when bound to cellular retinol-binding protein (By



similarity). Can metabolize octanal and decanal, but has only very low activity with benzaldehyde, acetaldehyde and propanal (By similarity). Displays complete lack of activity with citral (By similarity).

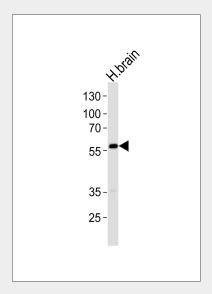
**Cellular Location** Cytoplasm.

# **ALDH1A2 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **ALDH1A2 Antibody - Images**



Western blot analysis of lysate from human brain tissue lysate, using ALDH1A2 Antibody(AP50614). AP50614 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

### ALDH1A2 Antibody - Background

Recognizes as substrates free retinal and cellular retinol-binding protein-bound retinal. Does metabolize octanal and decanal but does not metabolize citral, benzaldehyde, acetaldehyde and propanal efficiently (By similarity).

### **ALDH1A2 Antibody - References**

Ono Y.,et al.Mol. Cell. Biol. 18:6939-6950(1998). Ota T.,et al.Nat. Genet. 36:40-45(2004). Zody M.C.,et al.Nature 440:671-675(2006).





Bechtel S., et al.BMC Genomics 8:399-399(2007). Burkard T.R., et al.BMC Syst. Biol. 5:17-17(2011).