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ALDH1A2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50614

Product Information

Application	WB
Primary Accession	O94788
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	56724

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℃

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:29240402, PubMed:33565183). 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:33565183). 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.

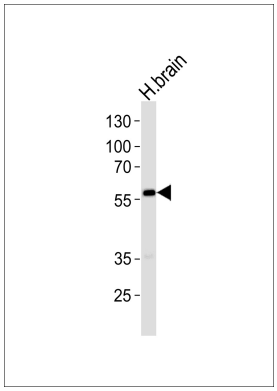
Background

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).

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).

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.