

ALDH1A2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP8609b**Specification**

ALDH1A2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [O94788](#)**ALDH1A2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 8854**Other Names**

Retinal dehydrogenase 2, RALDH 2, RaIDH2, Aldehyde dehydrogenase family 1 member A2, Retinaldehyde-specific dehydrogenase type 2, RALDH(II), ALDH1A2, RALDH2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8609b](/products/AP8609b) was selected from the C-term region of human ALDH1A2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ALDH1A2 Antibody (C-term) Blocking Peptide - 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](http://www.uniprot.org/citations/29240402), PubMed: [33565183](http://www.uniprot.org/citations/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 (PubMed: [33565183](http://www.uniprot.org/citations/33565183)) (Probable). 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 (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ALDH1A2 Antibody (C-term) Blocking Peptide - Images**ALDH1A2 Antibody (C-term) Blocking Peptide - Background**

ALDH1A2 belongs to the aldehyde dehydrogenase family of proteins. This protein is an enzyme that catalyzes the synthesis of retinoic acid (RA) from retinaldehyde. Retinoic acid, the active derivative of vitamin A (retinol), is a hormonal signaling molecule that functions in developing and adult tissues. The studies of a similar mouse gene suggest that this enzyme and the cytochrome CYP26A1, concurrently establish local embryonic retinoic acid levels which facilitate posterior organ development and prevent spina bifida.

ALDH1A2 Antibody (C-term) Blocking Peptide - References

Kim,H., et.al., Cancer Res. 65 (18), 8118-8124 (2005)Niederreither,K., et.al., Nat. Genet. 31 (1), 84-88 (2002)