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

ALDH1A3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7847C

Specification

ALDH1A3 Antibody (Center) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	P47895
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**56108**
Antigen Region	**318-348**

ALDH1A3 Antibody (Center) - Additional Information

Gene ID 220

Other Names
Aldehyde dehydrogenase family 1 member A3, Aldehyde dehydrogenase 6, Retinaldehyde dehydrogenase 3, RALDH-3, RalDH3, ALDH1A3, ALDH6

Target/Specificity
This ALDH1A3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 318-348 amino acids from the Central region of human ALDH1A3.

Dilution
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ALDH1A3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ALDH1A3 Antibody (Center) - Protein Information

Name ALDH1A3

Synonyms ALDH6 {ECO:0000303|PubMed:7698756}

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 (By similarity) (PubMed:27759097). High specificity for all-trans-retinal as substrate, can also accept acetaldehyde as substrate in vitro but with lower affinity (PubMed:27759097). Required for the biosynthesis of normal levels of retinoate in the embryonic ocular and nasal regions; a critical lipid in the embryonic development of the eye and the nasal region (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:Q9JHW9}.

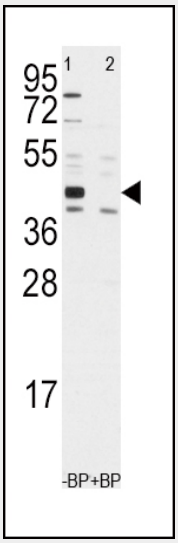
Tissue Location
Expressed at low levels in many tissues and at higher levels in salivary gland, stomach, and kidney

ALDH1A3 Antibody (Center) - 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

ALDH1A3 Antibody (Center) - Images



Western blot analysis of anti-ALDH1A3 Antibody (Center) (Cat.#AP7847c) pre-incubated with and without blocking peptide in Jurkat cell line lysate. ALDH1A3 (arrow) was detected using the purified Pab.

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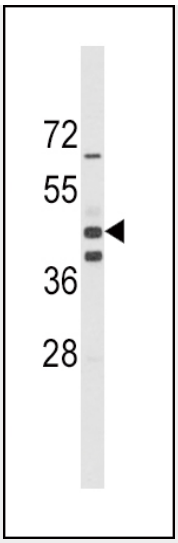
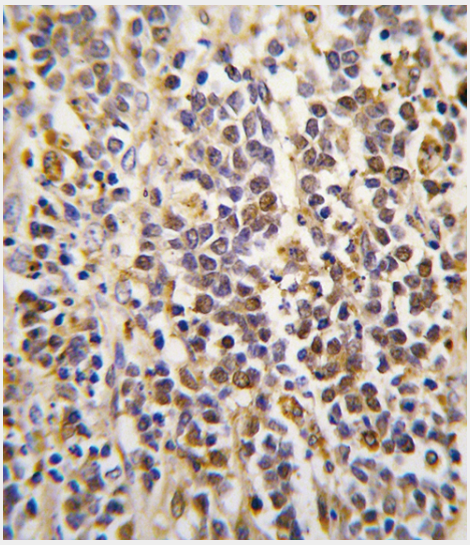


Western blot analysis of ALDH1A3 Antibody (Center) (Cat. #AP7847c) in mouse spleen tissue lysates (35ug/lane). ALDH1A3 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human kidney tissue reacted with ALDH1A3 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ALDH1A3 Antibody (Center) - Background

Aldehyde dehydrogenase isozymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. The enzyme ALDH1A3 uses retinal as a substrate, either in a free or cellular retinol-binding protein form.

ALDH1A3 Antibody (Center) - References

Rexer,B.N., Cancer Res. 61 (19), 7065-7070 (2001) Yoshida,A., Eur. J. Biochem. 251 (3), 549-557 (1998)