

ALDH1A3 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7847C

Specification

ALDH1A3 Antibody (Center) - Product Information

Application	WB, IHC-P,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

WB~~1:1000
IHC-P~~1:10~50

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

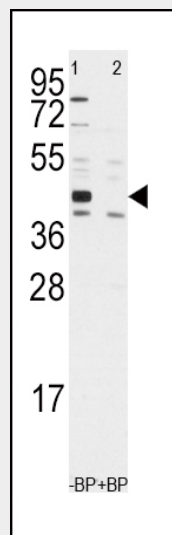
Expressed at low levels in many tissues and at higher levels in salivary gland, stomach, and kidney

ALDH1A3 Antibody (Center) - Protocols

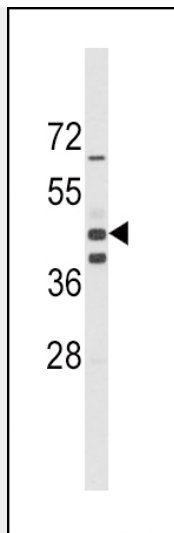
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

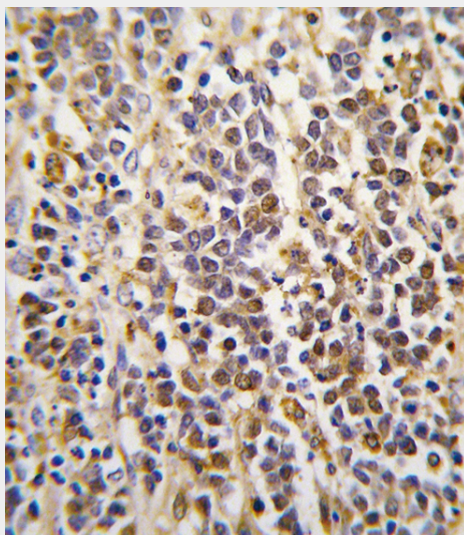
ALDH1A3 Antibody (Center) - Images



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.



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)