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Anti-ALDH3A1 Antibody

Catalog # AP50971

Product Information

Application	WB, IF/IC
Primary Accession	P30838
Reactivity	Human, Mouse, Rat, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50395

Additional Information

Gene ID	218
Other Names	ALDH3; Aldehyde dehydrogenase, dimeric NADP-preferring; ALDHIII; Aldehyde dehydrogenase 3; Aldehyde dehydrogenase family 3 member A1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ALDH3A1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

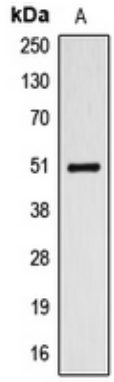
Protein Information

Name	ALDH3A1
Synonyms	ALDH3
Function	ALDHs play a major role in the detoxification of alcohol- derived acetaldehyde (Probable). They are involved in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation (Probable). Oxidizes medium and long chain aldehydes into non-toxic fatty acids (PubMed:1737758). Preferentially oxidizes aromatic aldehyde substrates (PubMed:1737758). Comprises about 50 percent of corneal epithelial soluble proteins (By similarity). May play a role in preventing corneal damage caused by ultraviolet light (By similarity).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:P47739}.
Tissue Location	High levels in stomach, esophagus and lung; low level in the liver and kidney

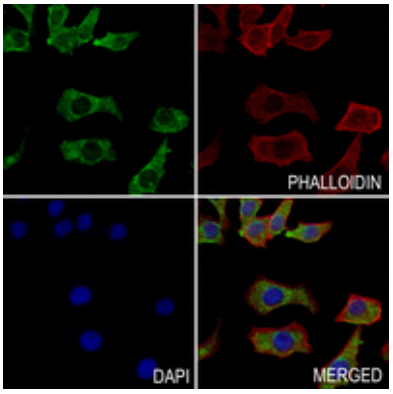
References

Schuuring E.M.D.,et al.Submitted (AUG-1991) to the EMBL/GenBank/DDBJ databases.
Hsu L.C.,et al.J. Biol. Chem. 267:3030-3037(1992).
Hsu L.C.,et al.Adv. Exp. Med. Biol. 328:141-152(1993).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images



Western blot analysis of ALDH3A1 expression in A549 (A) whole cell lysates. (Predicted band size: 50 kD; Observed band size: 50 kD)



Immunofluorescent analysis of ALDH3A1 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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