

Anti-ALDH3A1 Antibody

Catalog # ABO11380

Product Information

Application	WB, IHC-P
Primary Accession	P30838
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Aldehyde dehydrogenase, dimeric NADP-preferring(ALDH3A1) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	218
Other Names	Aldehyde dehydrogenase, dimeric NADP-preferring, 1.2.1.5, ALDHIII, Aldehyde dehydrogenase 3, Aldehyde dehydrogenase family 3 member A1, ALDH3A1, ALDH3
Calculated MW	50395
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Cytoplasm.
Tissue Specificity	High levels in stomach, esophagus and lung; low level in the liver and kidney.
Source	Eukaryota
Protein Name	Aldehyde dehydrogenase, dimeric NADP-preferring
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ALDH3A1(440-453aa KVRYPSPAKMTQH).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

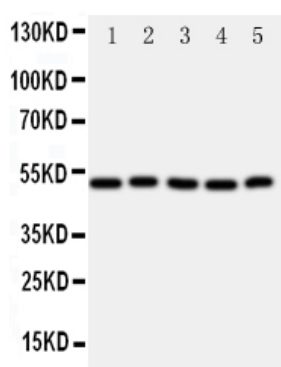
Protein Information

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

Background

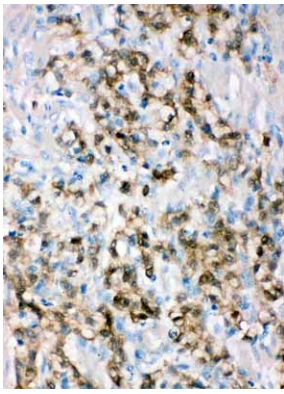
ALDH3A1(Aldehyde Dehydrogenase, Family 3, Subfamily A, Member 1), also known as ALDH3, is an enzyme that in humans is encoded by the ALDH3A1 gene. By in situ hybridization, Hiraoka et al.(1995) mapped the ALDH3 gene to 17p11.2. ALDHs play a major role in the detoxification of alcohol-derived acetaldehyde. They are involved in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. This protein preferentially oxidizes aromatic aldehyde substrates. It may play a role in the oxidation of toxic aldehydes.

Images



Anti-ALDH3A1 antibody, ABO11380, Western blotting
All lanes: Anti ALDH3A1 (ABO11380) at 0.5ug/ml
Lane 1: SMMC Whole Cell Lysate at 40ug
Lane 2: HELA Whole Cell Lysate at 40ug
Lane 3: COLO320 Whole Cell Lysate at 40ug
Lane 4: MCF-7 Whole Cell Lysate at 40ug
Lane 5: A549 Whole Cell Lysate at 40ug
Predicted bind size: 50KD
Observed bind size: 50KD

Anti-ALDH3A1 antibody, ABO11380, IHC(P)
IHC(P): Human Gastric Cancer Tissue



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.