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ALDH3A2 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM1840b

Product Information

Application	WB, IHC-P, E
Primary Accession	P51648
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,IgK
Clone Names	151CT1.3.1
Calculated MW	54848

Additional Information

Gene ID	224
Other Names	Fatty aldehyde dehydrogenase, Aldehyde dehydrogenase 10, Aldehyde dehydrogenase family 3 member A2, Microsomal aldehyde dehydrogenase, ALDH3A2, ALDH10, FALDH
Target/Specificity	This ALDH3A2 antibody is generated from mouse immunized with ALDH3A2 recombinant protein.
Dilution	WB~~1:500~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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	ALDH3A2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ALDH3A2
Function	Catalyzes the oxidation of medium and long chain aliphatic aldehydes to fatty acids. Active on a variety of saturated and unsaturated aliphatic aldehydes between 6 and 24 carbons in length (PubMed:18035827, PubMed:18182499, PubMed:22633490, PubMed:25047030, PubMed:9133646,

	PubMed:9662422). Responsible for conversion of the sphingosine 1-phosphate (S1P) degradation product hexadecenal to hexadecenoic acid (PubMed:22633490).
Cellular Location	Microsome membrane; Single-pass membrane protein. Endoplasmic reticulum membrane; Single-pass membrane protein; Cytoplasmic side {ECO:0000250|UniProtKB:P30839}
Tissue Location	Detected in liver (at protein level).

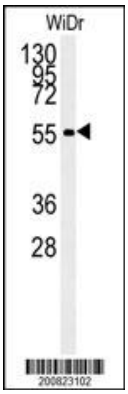
Background

Aldehyde dehydrogenase isozymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. This gene product catalyzes the oxidation of long-chain aliphatic aldehydes to fatty acid. Mutations in the gene cause Sjogren-Larsson syndrome. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

References

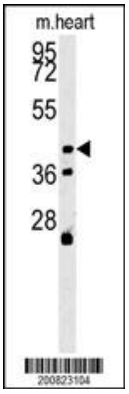
An approach based on a genome-wide association study reveals candidate loci for narcolepsy. Shimada M, et al. Hum Genet, 2010 Oct. PMID 20677014.
New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.
Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.
Association study between single-nucleotide polymorphisms in 199 drug-related genes and commonly measured quantitative traits of 752 healthy Japanese subjects. Saito A, et al. J Hum Genet, 2009 Jun. PMID 19343046.
Molecular genetics of successful smoking cessation: convergent genome-wide association study results. Uhl GR, et al. Arch Gen Psychiatry, 2008 Jun. PMID 18519826.

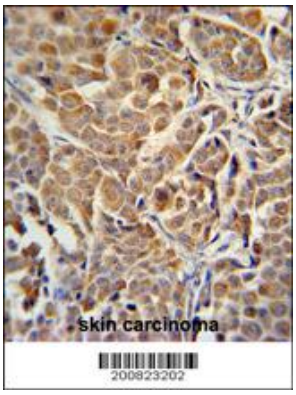
Images



ALDH3A2 Monoclonal Antibody(Cat. #AM1840b) western blot analysis in WiDr cell line lysates (15µg/lane).This demonstrates the ALDH3A2 antibody detected the ALDH3A2 protein (arrow).

ALDH3A2 (Cat. #AM1840b) western blot analysis in mouse heart tissue line lysates (15µg/lane).This demonstrates the ALDH3A2 antibody detected the ALDH3A2 protein (arrow).(18µg/ml)1:20





ALDH3A2 Monoclonal Antibody (Cat. #AM1840b) immunohistochemistry analysis in formalin fixed and paraffin embedded human skin carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ALDH3A2 Monoclonal Antibody for immunohistochemistry. Clinical relevance has not been evaluated.