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

ALDH3A1 Antibody (monoclonal) (M08)

Mouse monoclonal antibody raised against a full length recombinant ALDH3A1.
Catalog # AT1112a

Product Information

Application	IP, E
Primary Accession	P30838
Other Accession	BC004370
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	2G4
Calculated MW	50395

Additional Information

Gene ID	218
Other Names	Aldehyde dehydrogenase, dimeric NADP-preferring, ALDHIII, Aldehyde dehydrogenase 3, Aldehyde dehydrogenase family 3 member A1, ALDH3A1, ALDH3
Target/Specificity	ALDH3A1 (AAH04370, 1 a.a. ~ 453 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	IP~~N/A E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ALDH3A1 Antibody (monoclonal) (M08) is for research use only and not for use in diagnostic or therapeutic procedures.

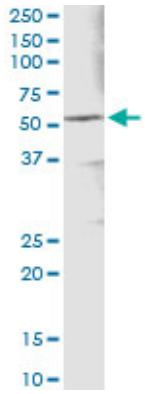
Background

Aldehyde dehydrogenases oxidize various aldehydes to the corresponding acids. They are involved in the detoxification of alcohol-derived acetaldehyde and in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. The enzyme encoded by this gene forms a cytoplasmic homodimer that preferentially oxidizes aromatic and medium-chain (6 carbons or more) saturated and unsaturated aldehyde substrates. It is thought to promote resistance to UV and 4-hydroxy-2-nonenal-induced oxidative damage in the cornea. The gene is located within the Smith-Magenis syndrome region on chromosome 17. Multiple alternatively spliced variants, encoding the same protein, have been identified.

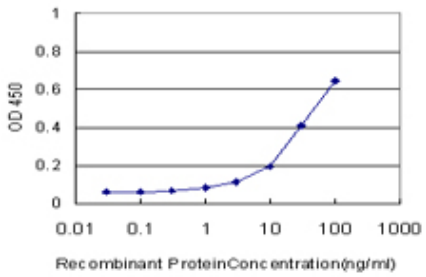
References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.Childhood brain tumors, residential insecticide exposure, and pesticide metabolism genes. Nielsen SS, et al. Environ Health Perspect, 2010 Jan. PMID 20056567.The oxidation status of ALDH3A1 in human saliva and its correlation with antioxidant capacity measured by ORAC method. Bogucka M, et al. Acta Pol Pharm, 2009 Sep-Oct. PMID 19894643.Association study of genetic polymorphism in ABCC4 with cyclophosphamide-induced adverse drug reactions in breast cancer patients. Low SK, et al. J Hum Genet, 2009 Oct. PMID 19696793.

Images



Immunoprecipitation of ALDH3A1 transfected lysate using anti-ALDH3A1 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with ALDH3A1 MaxPab rabbit polyclonal antibody.



Detection limit for recombinant GST tagged ALDH3A1 is approximately 1ng/ml as a capture antibody.

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