Mouse Anti-ALDH1A1 [MD304]: MC0140, MC0140RTU7

Intended Use: For Research Use Only

Description: ALDH1A1 belongs to the aldehyde dehydrogenase family. Aldehyde dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. ALDH1A1 is known to catalyze the oxidation of retinaldehyde to retinoic acid. ALDH1A1 has been a well established marker of hematopoietic stem cells and progenitor cells. Recent studies also show that ALDH1A1 is an important cancer stem marker associated with tumor progression in cancers of the breast, prostate and lung. This antibody labels epithelial cells of the stomach, liver, kidney and thyroid, neural cells and stromal cells including endothelial cells. In tumors, it stains stromal cells as well as tumor cells in many types of cancers.

Description	Cat	alog No.	Size
Package:			
Applications:	IHC, WB		
Storage:	Store at 2°- 8°C		
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN3)		
Localization:	Cytoplasm		
Immunogen:	Recombinant fragment aa 315-434 of human ALDH1A1 protein		
Reactivity:	Human		
Isotype:	IgG1		
Source:	Mouse		
Clone:	MD304		
Specifications:			

Description	Catalog 10.	Size
ALDH1A1 Concentrated	MC0140	1 ml
ALDH1A1 Prediluted	MC0140RTU7	7 ml

IHC Procedure*:

Positive Control Tissue:	Embryonal liver, breast cancer
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual
* Result should be confirmed by	an established diagnostic procedure.



FFPE human colon carcinoma stained with anti-ALDH1A1 using DAB

References:

- 1. Distinct patterns of ALDH1A1 expression predict metastasis and poor outcome of colorectal carcinoma. Xu SL, et al. Int J Clin Exp Pathol. May 15;7(6):2976-86, 2014.
- 2. The prognostic significance of aldehyde dehydrogenase 1A1 (ALDH1A1) and CD133 expression in early stage non-small cell lung cancer. Alamgeer M, et al. Thorax. Dec;68(12):1095-104, 2013.

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