

Mouse Anti-ALDH1A1 [44]: MC0499, MC0499RTU7

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.

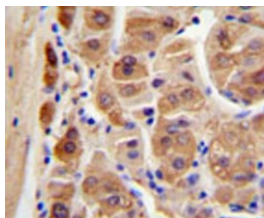
Specifications:

Clone: 44
Source: Mouse
Isotype: IgG1
Reactivity: Human
Localization: Cytoplasm
Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC, WB
Package:

| Description | Catalog No. | Size |
|----------------------|-------------|------|
| ALDH1A1 Concentrated | MC0499 | 1 ml |
| ALDH1A1 Prediluted | MC0499RTU7 | 7 ml |

IHC Procedure*:

Positive Control Tissue: Embryonal liver, breast cancer
Concentrated Dilution: 50-100
Pretreatment: EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using 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 HCC 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.

Doc. 100-MC0499
Rev. A