

**Rabbit Anti-ALDH1A1 [MD305R]: RM0445, RM0445RTU7**

**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:**

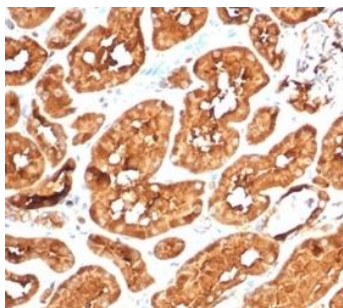
Clone: MD305R  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human  
 Immunogen: Recombinant fragment aa 315-434 of human ALDH1A1 protein  
 Localization: Cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
ALDH1A1 Concentrated	RM0445	1 ml
ALDH1A1 Prediluted	RM0445RTU7	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 kidney 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.