

**ALDH1L1 (E7D7G) Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, W-S, IF-F	<b>Reactivity:</b> H M R	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 98	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #O75891	<b>Entrez-Gene Id:</b> 10840
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**Product Usage Information****Application**

Western Blotting  
Simple Western™  
Immunofluorescence (Frozen)

**Dilution**

1:1000  
1:50 - 1:250  
1:50

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

**Specificity/Sensitivity**

ALDH1L1 (E7D7G) Rabbit mAb recognizes endogenous levels of total ALDH1L1 protein. This product detects only Rodent ALDH1L1 for the IF-F and IF-IC applications.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp158 of human ALDH1L1 protein.

**Background**

Aldehyde dehydrogenase 1 family member L1 (ALDH1L1), also known as 10-formyltetrahydrofolate dehydrogenase (FDH), is a member of the aldehyde dehydrogenase super family. It is a key enzyme in folate metabolism, playing an important role in regulation of cellular metabolism including proliferation (1,2). Downregulation of ALDH1L1 has been seen in tumors, leading to decreased suppression of cancer cell proliferation (2,3).

ALDH1L1 has also been shown to be a useful astrocyte marker throughout the gray and white matter of the brain, labeling both the cell body and processes of astrocytes. ALDH1L1 does not label oligodendrocytes or neurons (4). It has been shown that expression of ALDH1L1 in astrocytes is stably expressed through normal tissue and during astrogliosis (5).

**Background References**

1. Krupenko, S.A. (2009) *Chem Biol Interact* 178, 84-93.
2. Krupenko, S.A. and Oleinik, N.V. (2002) *Cell Growth Differ* 13, 227-36.
3. Chen, X.Q. et al. (2012) *Med Oncol* 29, 1843-9.
4. Cahoy, J.D. et al. (2008) *J Neurosci* 28, 264-78.
5. Michalovicz, L.T. et al. (2019) *J Neurochem* 150, 420-40.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **W-S:** Simple Western™ **IF-F:** Immunofluorescence (Frozen)

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat

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