

Product datasheet for UM500041CF

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

ALDH1L1 Mouse Monoclonal Antibody [Clone ID: UMAB45]

Product data:

Product Type: Primary Antibodies

Clone Name: UMAB45
Applications: IF, IHC, WB

Recommended Dilution: IHC 1:100, IF 1:100

Reactivity: Human, Dog, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human ALDH1L1 (NP_036322) produced in

HEK293T cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 98.6 kDa

Gene Name: aldehyde dehydrogenase 1 family member L1

Database Link: NP 036322

Entrez Gene 64392 RatEntrez Gene 100855730 DogEntrez Gene 10840 Human

075891



ALDH1L1 Mouse Monoclonal Antibody [Clone ID: UMAB45] - UM500041CF

Background: The protein encoded by this gene catalyzes the conversion of 10-formyltetrahydrofolate,

nicotinamide adenine dinucleotide phosphate (NADP+), and water to tetrahydrofolate, NADPH, and carbon dioxide. The encoded protein belongs to the aldehyde dehydrogenase family. Loss of function or expression of this gene is associated with decreased apoptosis, increased cell motility, and cancer progression. There is an antisense transcript that overlaps on the opposite strand with this gene locus. Alternative splicing results in multiple transcript

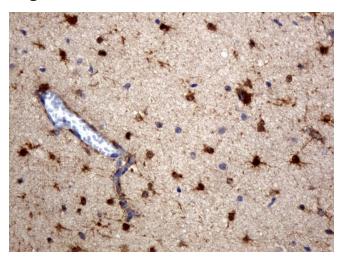
variants. [provided by RefSeq, Jun 2012]

Synonyms: 10-fTHF; 10-FTHFDH; FDH; FTHFD

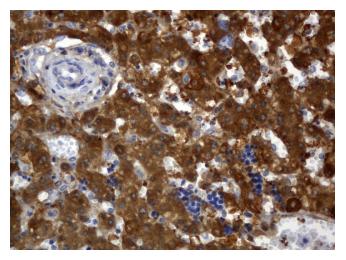
Protein Families: Druggable Genome

Protein Pathways: One carbon pool by folate

Product images:

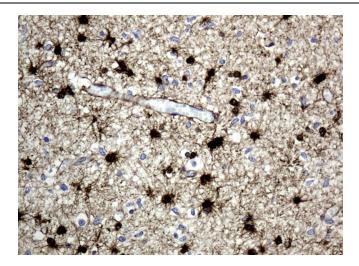


Immunohistochemical staining of paraffinembedded Human adult brain tissue using anti-ALDH1L1 mouse monoclonal antibody. ([UM500041]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

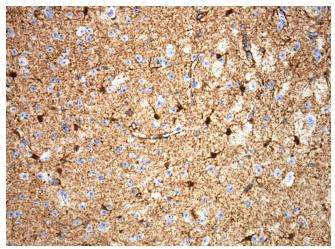


Immunohistochemical staining of paraffinembedded Human embryonic liver tissue using anti-ALDH1L1 mouse monoclonal antibody. ([UM500041]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

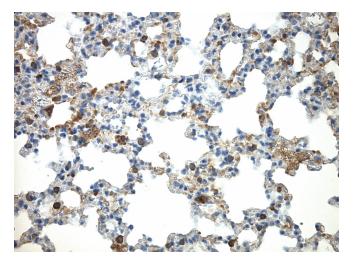




Immunohistochemical staining of paraffinembedded Human embryonic brain cortex tissue using anti-ALDH1L1 mouse monoclonal antibody. ([UM500041]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

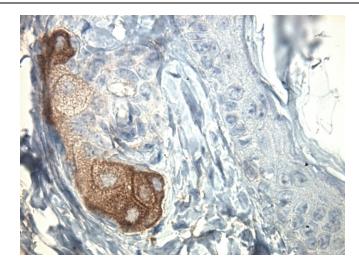


Immunohistochemical staining of paraffinembedded mouse brain tissue using anti-ALDH1 clone UMAB45 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500041] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

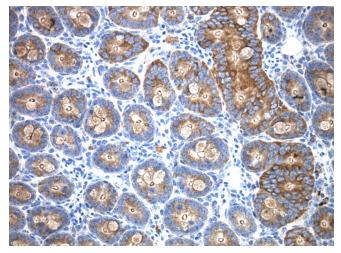


Immunohistochemical staining of paraffinembedded mouse lung tissue using anti-ALDH1 clone UMAB45 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500041] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

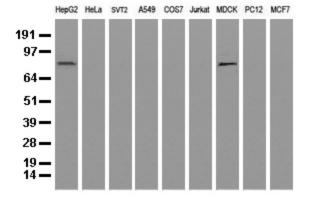




Immunohistochemical staining of paraffinembedded mouse skin tissue using anti-ALDH1 clone UMAB45 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500041] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

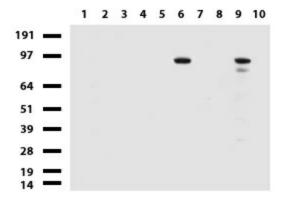


Immunohistochemical staining of paraffinembedded mouse small intestine tissue using anti-ALDH1 clone UMAB45 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500041] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

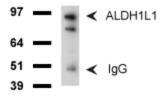


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ALDH1L1 monoclonal antibody (Clone UMAB45).

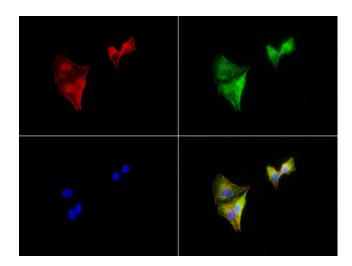




Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Liver, 7: Ovary, 8: Thyroid, 9: Colon, 10: Spleen). Diluation: 1:500.

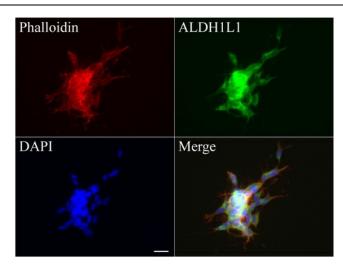


Western blot of mouse tissue lysates (20ug) from Liver. Diluation: 1:500.



Immunofluorescent staining of HepG2 cells using ALDH1L1 mouse monoclonal antibody ([UM500041], green). Actin filaments were labeled with TRITC-phalloidin (red), and nuclear with DAPI (blue). The three-color overlay image is located at the bottom-right corner.





Immunofluorescent staining of SH-SY5Y cells using anti-ALDH1L1 mouse monoclonal antibody ([UM500041], green, 1:100). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue). Scale bar, 20µm.