

OriGene Technologies, Inc.

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Product datasheet for UM500040CF

ALDH1L1 Mouse Monoclonal Antibody [Clone ID: UMAB44]

Product data:

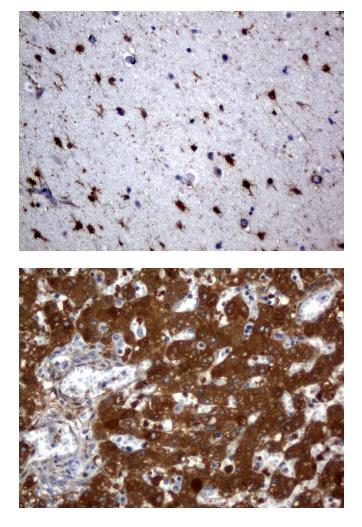
Product Type:	Primary Antibodies
Clone Name:	UMAB44
Applications:	IF, IHC, WB
Recommended Dilution:	IHC 1:100, IF 1:100
Reactivity:	Human, Dog, Mouse, Rat
Host:	Mouse
lsotype:	lgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human ALDH1L1 (NP_036322) produced in HEK293T 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:	<u>NP_036322</u> <u>Entrez Gene 64392 RatEntrez Gene 100855730 DogEntrez Gene 10840 Human</u> <u>O75891</u>



Service Ald H1L1 Mouse Monoclonal Antibody [Clone ID: UMAB44] – UM500040CF

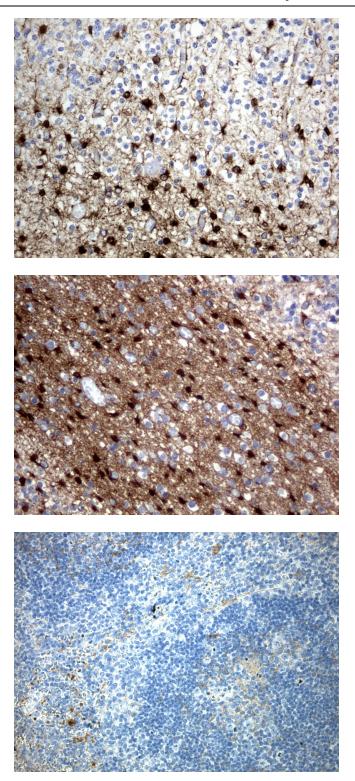
Background:	The protein encoded by this gene catalyzes the conversion of 10-formyltetrahydrofolate, nicotinamide adenine dinucleotide phosphate (NADP+), and water to tetrahydrofolate, NADPH, and carbon dioxide. The encoded protein belongs to the aldehyde dehydrogenase family. Loss of function or expression 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. ([UM500040]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

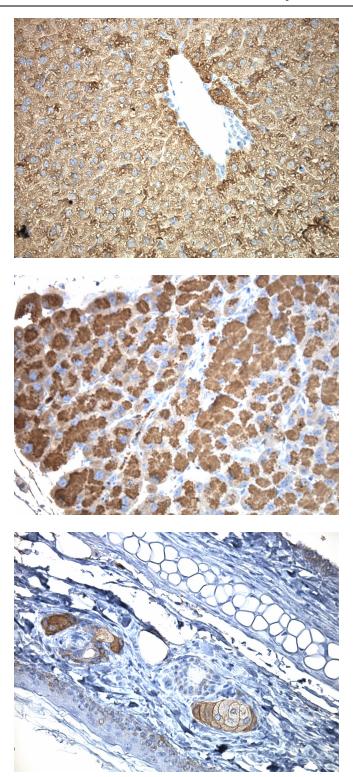
Immunohistochemical staining of paraffinembedded Human embryonic liver tissue using anti-ALDH1L1 mouse monoclonal antibody. ([UM500040]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



Immunohistochemical staining of paraffinembedded Human embryonic brain cortex tissue using anti-ALDH1L1 mouse monoclonal antibody. ([UM500040]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

Immunohistochemical staining of paraffinembedded Human embryonic cerebellum using anti-ALDH1L1 mouse monoclonal antibody. ([UM500040]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

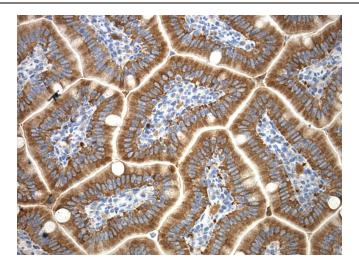
Immunohistochemical staining of paraffinembedded mouse spleen tissue using anti-ALDH1 clone UMAB44 mouse monoclonal antibody. HIER ACCEL buffer ([B22C-125]) C/N [B22C-125] (pH8.7) at 110C for 10 min, [UM500040] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.



Immunohistochemical staining of paraffinembedded mouse liver tissue using anti-ALDH1 clone UMAB44 mouse monoclonal antibody. HIER ACCEL buffer ([B22C-125]) (pH8.7) at 110C for 10 min, [UM500040] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

Immunohistochemical staining of paraffinembedded mouse kidney tissue using anti-ALDH1 clone UMAB44 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500040] (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 UMAB44 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500040] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.



HepG2 HeLa SVT2 A549 COS7 Jurkat MDCK PC12 MCF7

6 7

8 9 10

1 2 3 4 5

191 — 97 — 64 —

51-

39 — 28 — 19 — 14 —

191 **-**97 **-**

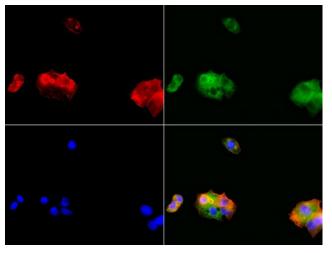
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Immunohistochemical staining of paraffinembedded mouse small intestine tissue using anti-ALDH1 clone UMAB44 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500040] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

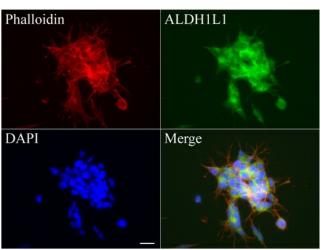
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ALDH1L1 monoclonal antibody (Clone UMAB44).

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.





Immunofluorescent staining of HepG2 cells using ALDH1L1 mouse monoclonal antibody ([UM500040], 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 ([UM500040], green, 1:100). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue). Scale bar, 20µm.