

## Product datasheet for **UM500040**

### 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  |
| Isotype:                | IgG1   |
| Clonality:              | Monoclonal   |
| Immunogen:              | Full length human recombinant protein of human ALDH1L1 (NP_036322) produced in HEK293T cell.   |
| Formulation:            | PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.   |
| Concentration:          | 0.5~1.0 mg/ml (Lot Dependent)  |
| 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:          | <a href="#">NP_036322</a><br><a href="#">Entrez Gene 64392 Rat</a> <a href="#">Entrez Gene 100855730 Dog</a> <a href="#">Entrez Gene 10840 Human</a><br><a href="#">O75891</a> |


[View online »](#)

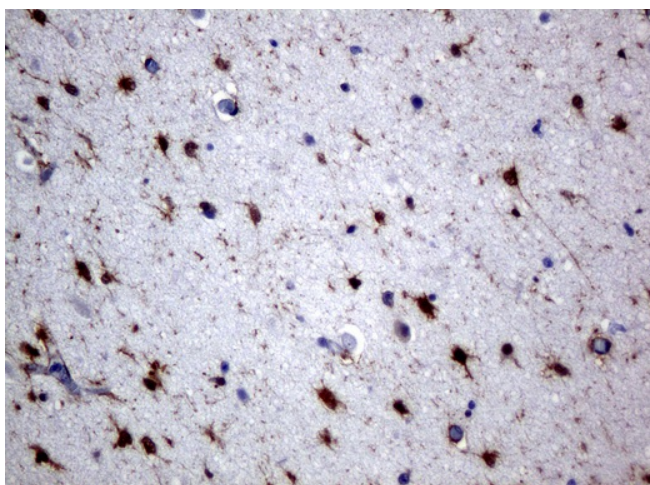
**Background:** The protein encoded by this gene catalyzes the conversion of 10-formyltetrahydrofolate, nicotinamide adenine dinucleotide phosphate (NADP+), and water to tetrahydrofolate, NADPH, and carbon dioxide. The encoded protein belongs to the aldehyde dehydrogenase family. Loss of function or 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

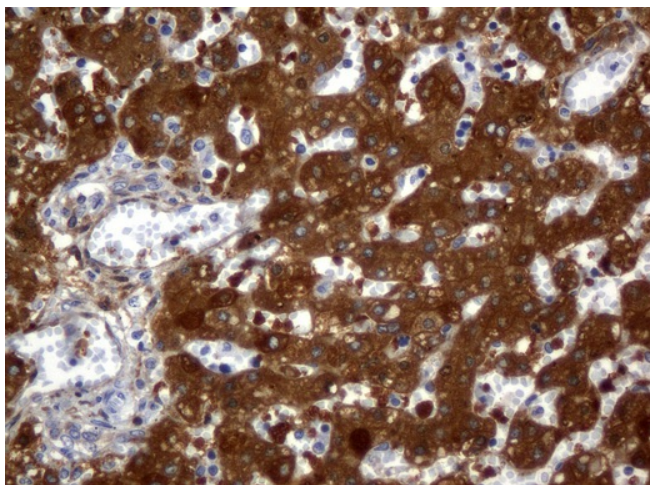
**Protein Families:** Druggable Genome

**Protein Pathways:** One carbon pool by folate

## Product images:

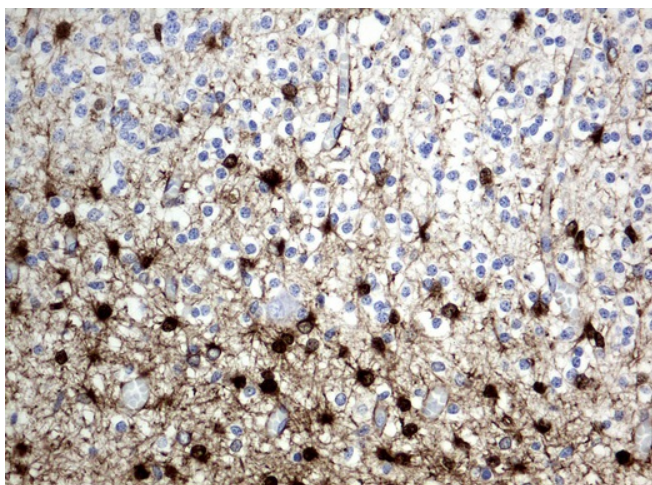


Immunohistochemical staining of paraffin-embedded Human adult brain tissue using anti-ALDH1L1 mouse monoclonal antibody. (UM500040; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

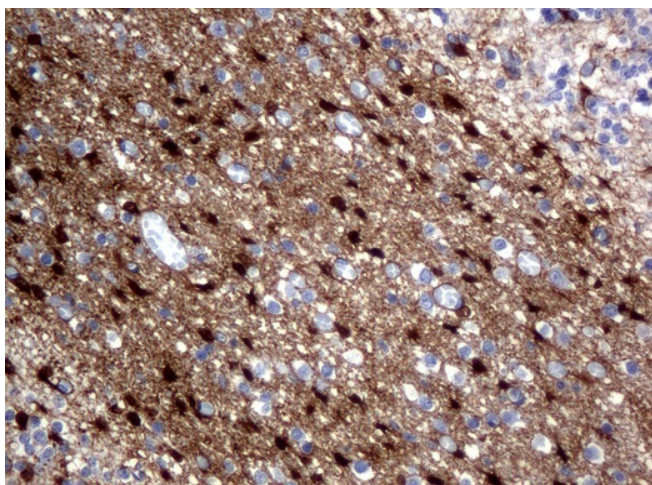


Immunohistochemical staining of paraffin-embedded Human embryonic liver tissue using anti-ALDH1L1 mouse monoclonal antibody. (UM500040; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

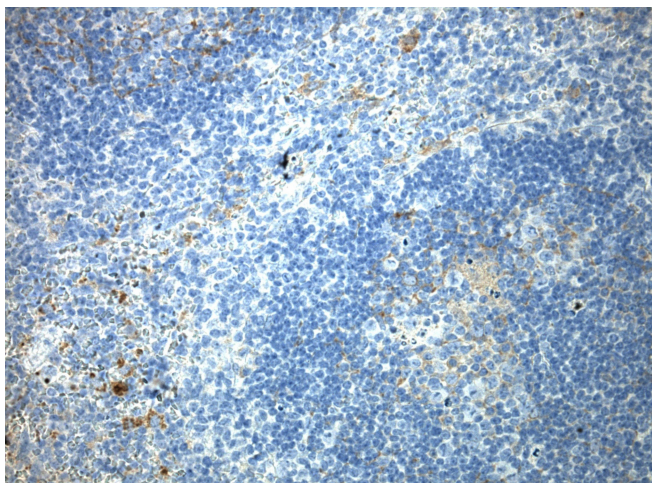




Immunohistochemical staining of paraffin-embedded Human embryonic brain cortex tissue using anti-ALDH1L1 mouse monoclonal antibody. (UM500040; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

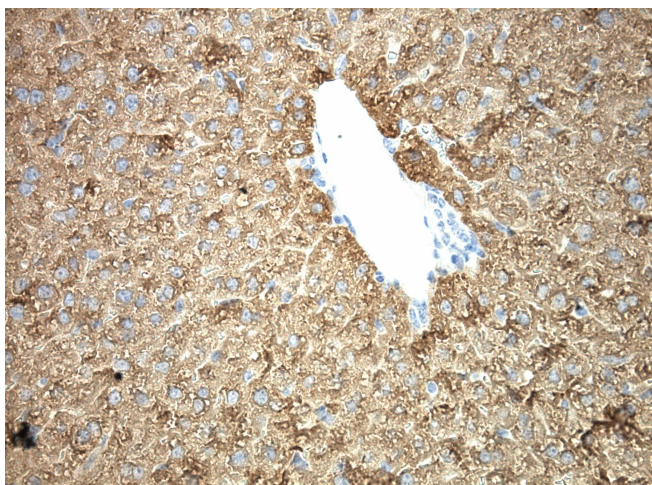


Immunohistochemical staining of paraffin-embedded Human embryonic cerebellum using anti-ALDH1L1 mouse monoclonal antibody. (UM500040; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

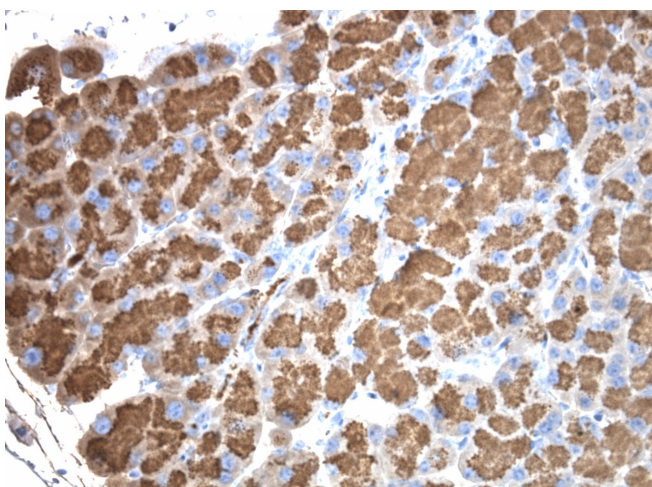


Immunohistochemical staining of paraffin-embedded mouse spleen tissue using anti-ALDH1 clone UMAB44 mouse monoclonal antibody. HIER ACCEL buffer ([B22C-125]) C/N [B22C-125] (pH8.7) at 110C for 10 min, UM500040 (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

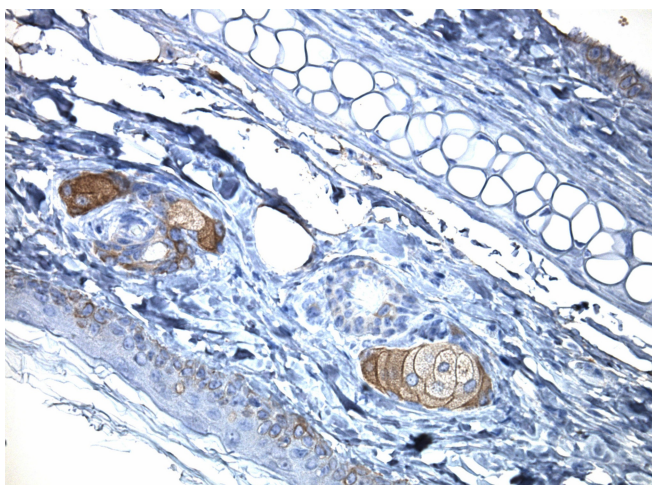




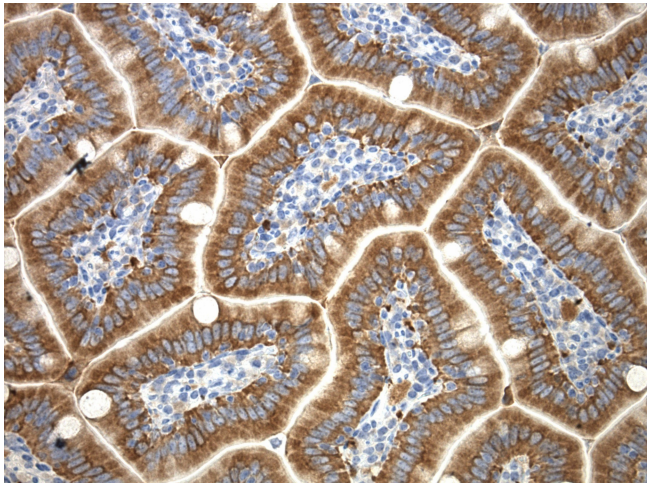
Immunohistochemical staining of paraffin-embedded mouse liver tissue using anti-ALDH1 clone UMAB44 mouse monoclonal antibody. HIER ACCEL buffer ([B22C-125]) (pH8.7) at 110C for 10 min, UM500040 (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.



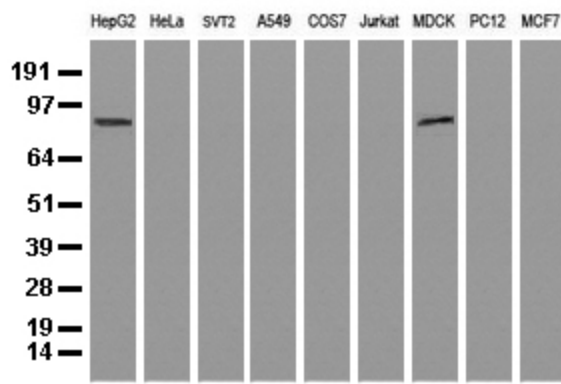
Immunohistochemical staining of paraffin-embedded mouse kidney tissue using anti-ALDH1 clone UMAB44 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, UM500040 (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.



Immunohistochemical staining of paraffin-embedded 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.



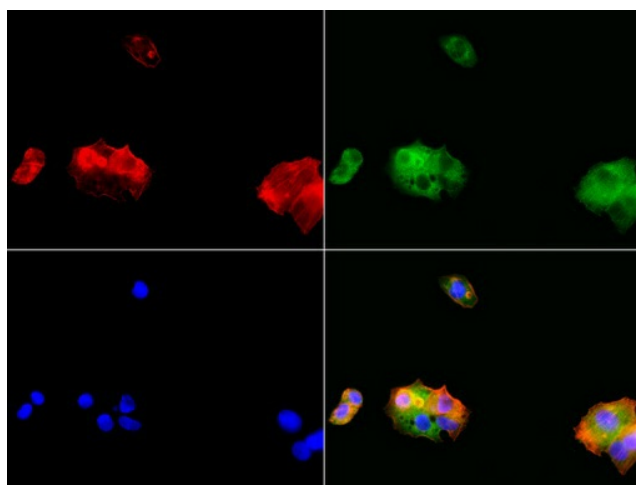
Immunohistochemical staining of paraffin-embedded mouse small intestine tissue using anti-ALDH1 clone UMAB44 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, UM500040 (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.



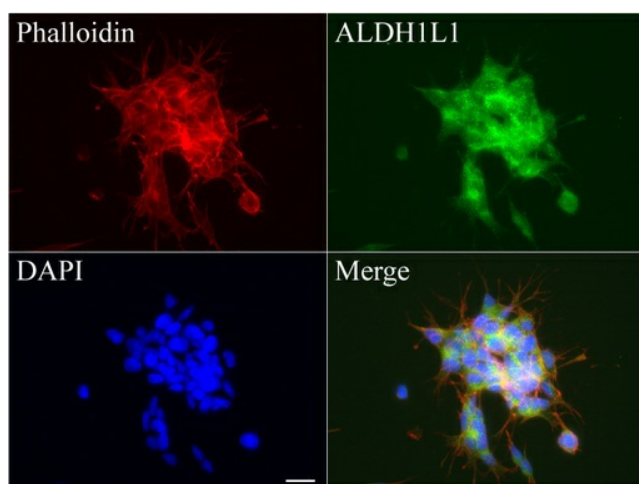
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ALDH1L1 monoclonal antibody (Clone UMAB44).



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). Dilution: 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.