

ALDH4A1 | Validation File

TARGET ALDH4A1 (Delta-1-pyrroline-5-carboxylate dehydrogenase, mitochondrial)

CLONE NAME **ALMU227D**

DESCRIPTION Rat monoclonal

ANTIGEN USED human ALDH4A1-HIS-GST full length

ISOTYPE IgG2a

SPECIES REACTIVITY human

LOCALIZATION mitochondrion

POSITIVE CONTROL kidney

STORAGE BUFFER Tissue culture supernatant: 0.02% sodium azide

Purified antibody: PBS plus 1%BSA and 0.02% sodium azide. MAb concentration: 1mg/ml

STORAGE Aliquot and store at 4C. Do not freeze

 Recommended

 Inconclusive

 Not Recommended

 Not Tested

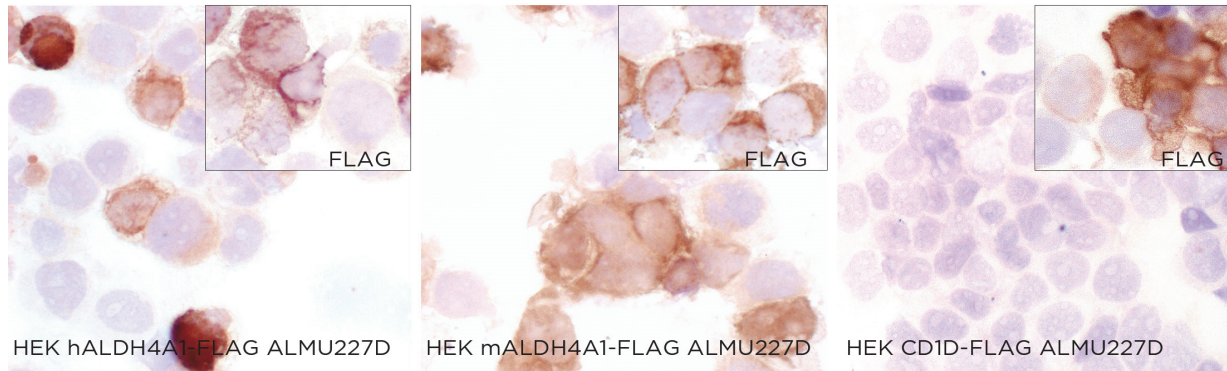
APPLICATIONS

● | ICC | *Immunocytochemistry*

ALMU227D is able to detect human and mouse ALDH4A1 protein in immunocytochemistry

DILUTION Neat supernatant

To confirm that ALMU227D mAb recognizes human and mouse ALDH4A1 protein, immunocytochemistry on frozen cytospin preparations of human and mouse ALDH4A1 expressed in HEK293 cell line was performed. Anti-FLAG antibody was used as positive control. HEK-CD1D-FLAG was used as negative control.



● | WB | **Western Blotting**

ALMU227D mAb is able to detect human and mouse ALDH4A1 protein by WB.

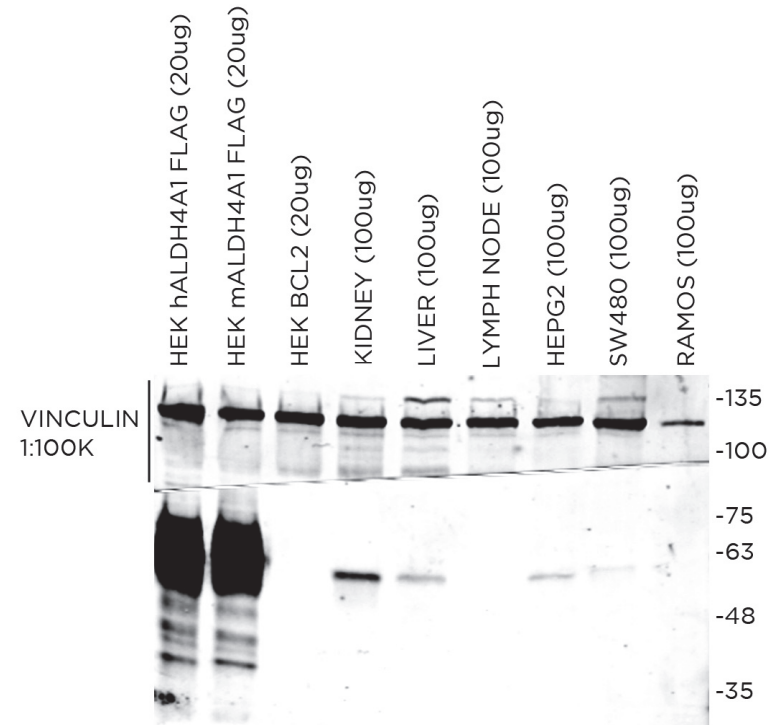
DILUTION neat supernatant

Predicted molecular weight: **61kDa**
Observed molecular weight: **61kDa**

LANES

Lane 1	HEK-hALDH4A1-FLAG	(20ug) (+)
Lane 2	HEK-mALDH4A1-FLAG	(20ug) (+)
Lane 3	HEK-BCL2	(20ug) (-)
Lane 4	Human kidney	(100ug) (+)
Lane 5	Human liver	(100ug) (+)
Lane 6	Human lymph node	(100ug) (-)
Lane 7	HEPG2 cell line	(100ug) (+)
Lane 8	SW480 cell line	(100ug) (+)
Lane 9	Ramos cell line	(100ug) (-)

Vinculin was used as loading control



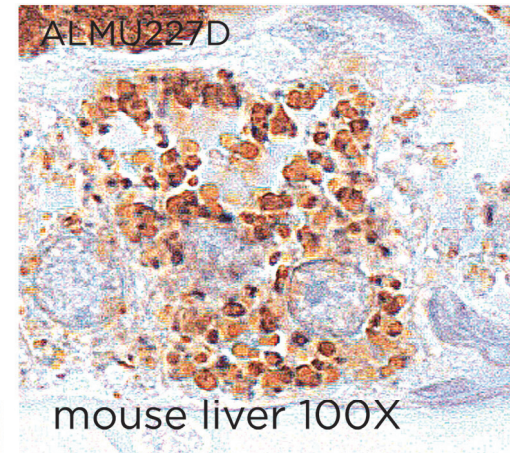
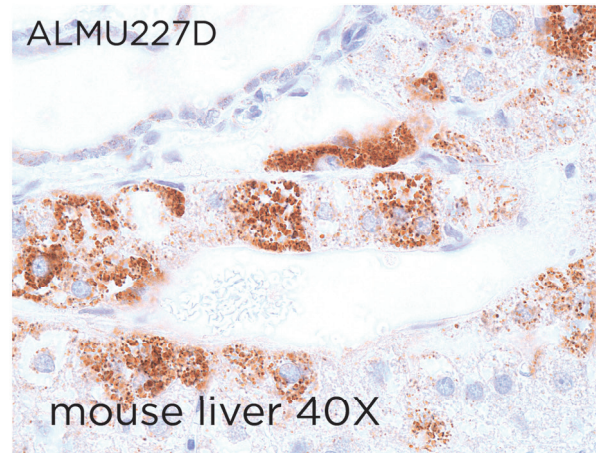
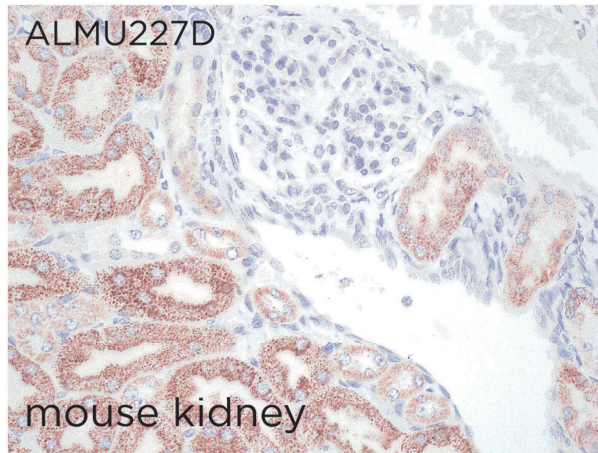
● | M-IHC-P | **Immunohistochemistry (paraffin)**

ALMU227D mAb can be used to detect mouse ALDH4A1 protein in paraffin tissues

TISSUE SAMPLE kidney and liver

DILUTION neat supernatant 1:3

DETECTION SYSTEM Discovery XT (Ventana) CC1 OmniMap rabbit. Please add a rabbit anti-rat biotinylated



● | IHC-P | **Immunohistochemistry (paraffin)**

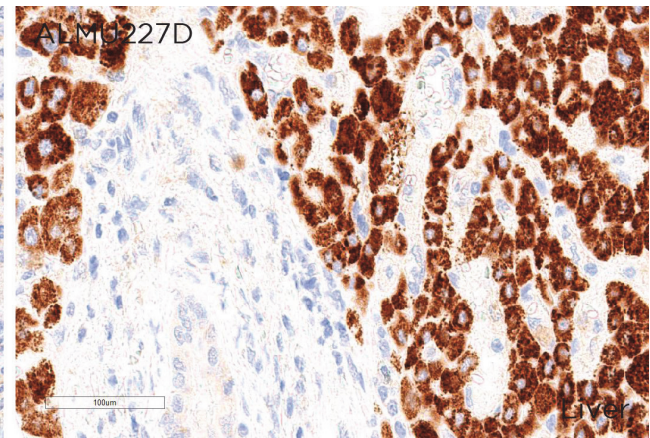
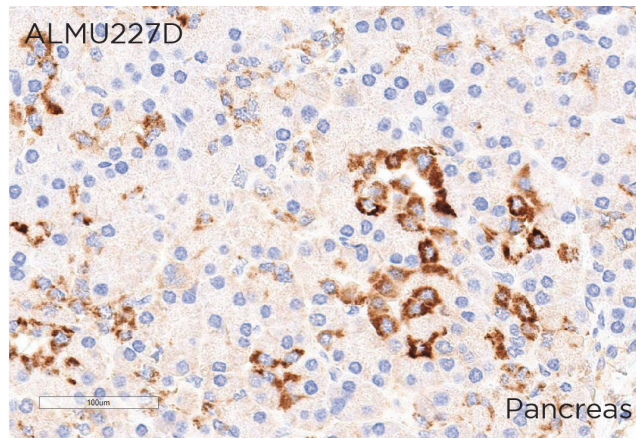
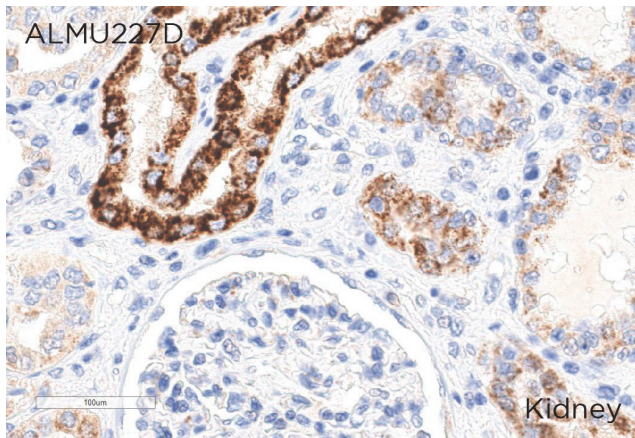
ALMU227D mAb can be used to detect human ALDH4A1 protein in paraffin tissues

TISSUE SAMPLE kidney pancreas and liver

DILUTION 1:10 supernatant

ANT. RETRIEVAL 20 minutes ER2 (Tris-EDTA)

DETECTION SYSTEM Novolink kit (BondMax Leica)

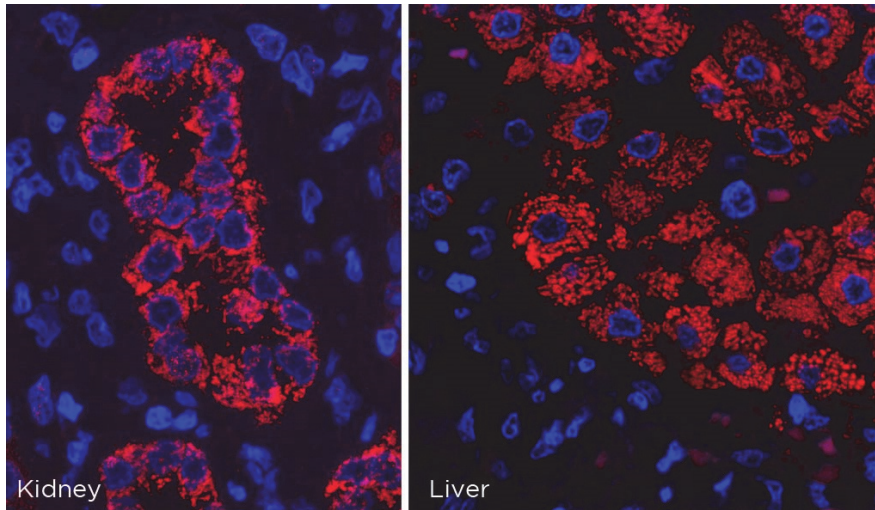


● | IF | **Immunofluorescence (paraffin)**

ALMU227D mAb can be used to detect human ALDH4A1 protein by IF in paraffin tissues

SAMPLE human kidney and liver

DILUTION neat supernatant



● | IHC-F | **Immunohistochemistry (frozen)** Not tested

● | FC | **Flow Cytometry** Not tested

● | IP | **Immunoprecipitation** Not Tested