

For Research Use Only

ALDH1A1 Recombinant antibody

Catalog Number:83830-2-RR



Basic Information

Catalog Number: 83830-2-RR	GenBank Accession Number: BC001505	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 216	CloneNo.: 240995F4
Source: Rabbit	UNIPROT ID: P00352	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:50-1:500
Isotype: IgG	Full Name: aldehyde dehydrogenase 1 family, member A1	
Immunogen Catalog Number: AG8665	Calculated MW: 501 aa, 55 kDa	
	Observed MW: 50-55 kDa	

Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity:

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : K-562 cells, mouse liver tissue, mouse lung tissue

IHC : human cervical squamous cancer tissue,

Background Information

ALDH1A1(Aldehyde dehydrogenase family 1 member A1), also named as ALDC, ALDH1 and PUMB1, belongs to the aldehyde dehydrogenase family. The ALDH1A1 gene encodes a liver cytosolic isoform of acetaldehyde dehydrogenase, an enzyme involved in the major pathway of alcohol metabolism after alcohol dehydrogenase. ALDH1A1 plays a critical role in protection against oxidative stress-induced cytotoxicity in lens epithelial cells(PMID:19296407). And it is important for multiple biological activities including drug resistance, cell differentiation, and oxidative stress response(PMID:19025616). As a novel cancer stem cell marker, ALDH1A1 can be used for tumors whose corresponding normal tissues express ALDH1 in relatively restricted or limited levels such as breast, lung, ovarian or colon cancer(PMID: 20422001).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

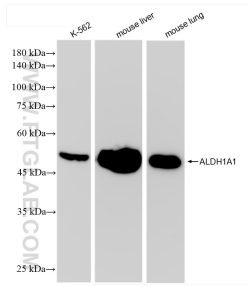
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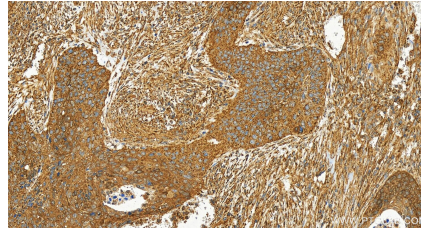
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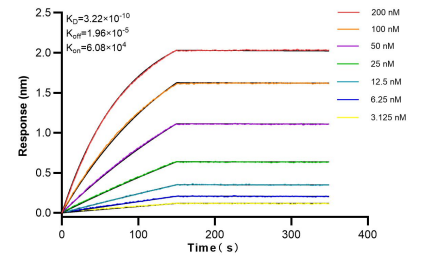
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 83830-2-RR (ALDH1A1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human cervical squamous cancer tissue slide using 83830-2-RR (ALDH1A1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Bi-layer interferometry (BLI) kinetic assays of 83830-2-RR against Human ALDH1A1 were performed. The affinity constant is 0.322 nM.