

For Research Use Only

ALDH1A1 Monoclonal antibody, PBS Only

Catalog Number: 60171-1-PBS

Featured Product



Basic Information

Catalog Number:

60171-1-PBS

Concentration:

1mg/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG8551

GenBank Accession Number:

BC001505

GeneID (NCBI):

216

UNIPROT ID:

P00352

Full Name:

aldehyde dehydrogenase 1 family, member A1

Calculated MW:

501 aa, 55 kDa

Observed MW:

52 kDa

Purification Method:

Protein A purification

CloneNo.:

1A10A2

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity:

human, mouse, rat, pig

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 ALDH1A1 in relatively restricted or limited levels such as breast, lung, ovarian or colon cancer (PMID: 20422001).

Storage

Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS Only

For technical support and original validation data for this product please contact:

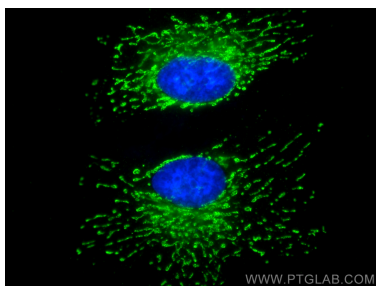
T: 4006900926

E: Proteintech-CN@ptglab.com

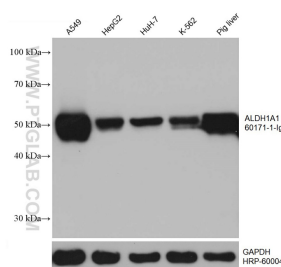
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

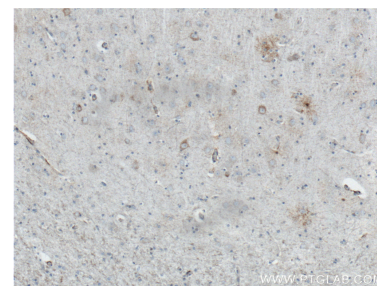
Selected Validation Data



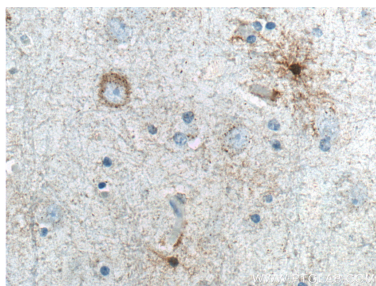
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using ALDH1A1 antibody (60171-1-Ig, Clone: 1A10A2) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 60171-1-PBS in a different storage buffer formulation.



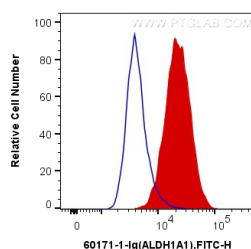
Various lysates were subjected to SDS PAGE followed by western blot with 60171-1-Ig (ALDH1A1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 60171-1-PBS in a different storage buffer formulation.



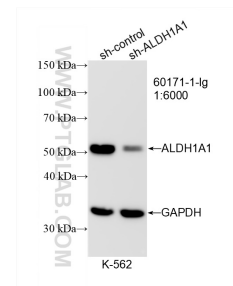
Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 60171-1-Ig (ALDH1A1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieved with Sodium Citrate buffer (pH 6.0). This data was developed using the same antibody clone with 60171-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 60171-1-Ig (ALDH1A1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieved with Sodium Citrate buffer (pH 6.0). This data was developed using the same antibody clone with 60171-1-PBS in a different storage buffer formulation.



1X10⁶ HepG2 cells were intracellularly stained with 0.2 ug Anti-Human ALDH1A1 (60171-1-Ig, Clone:1A10A2) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 60171-1-PBS in a different storage buffer formulation.



WB result of ALDH1A1 antibody (60171-1-Ig; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ALDH1A1 transfected K-562 cells. This data was developed using the same antibody clone with 60171-1-PBS in a different storage buffer formulation.