

For Research Use Only

ALDH4A1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 86297-1-PBS



Basic Information

Catalog Number: 86297-1-PBS	GenBank Accession Number: BC023600	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 8659	CloneNo.: 250957F8
Source: Rabbit	UNIPROT ID: P30038	
Isotype: IgG	Full Name: aldehyde dehydrogenase 4 family, member A1	
Immunogen Catalog Number: AG2147	Calculated MW: 563 aa, 62 kDa	
	Observed MW: 62 kDa	

Applications

Tested Applications:
WB, Cytometric bead array, Indirect ELISA, Sample test

Species Specificity:
human, mouse, rat

Product Information

86297-1-PBS targets ALDH4A1 as part of a matched antibody pair:

MP02370-1: 86297-2-PBS capture and 86297-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

ALDH4A1 (Aldehyde dehydrogenase family 4 member A1) is also named as ALDH4, P5CDH, P5C dehydrogenase and belongs to the aldehyde dehydrogenase family. P5CDH is a mitochondrial matrix NAD(+) -dependent dehydrogenase which catalyzes the second step of the proline degradation pathway, converting pyrroline-5-carboxylate to glutamate. Defects in ALDH4A1 are the cause of hyperprolinemia type 2 (HP-2).

Storage

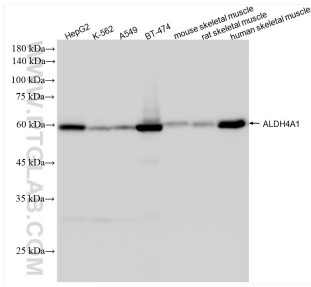
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

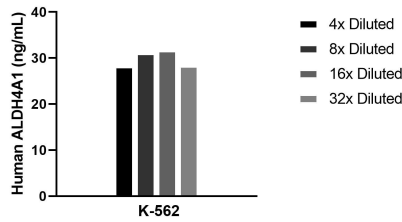
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

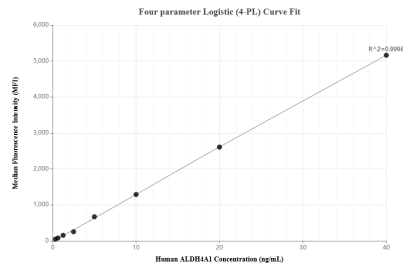
Selected Validation Data



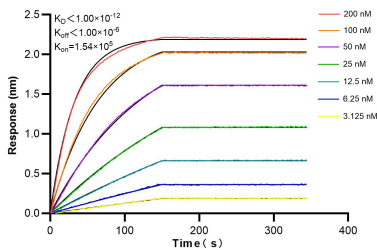
Various lysates were subjected to SDS PAGE followed by western blot with 86297-1-RR (ALDH4A1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86297-1-PBS in a different storage buffer formulation.



The mean ALDH4A1 concentration was determined to be 29.8 ng/mL in K-562 cell extract based on a 3.0 mg/mL extract load.



Cytometric bead array standard curve of MP02370-1, ALDH4A1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 86297-2-PBS. Detection antibody: 86297-1-PBS. Standard: Ag2147. Range: 0.312-40 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 86297-1-RR against Human ALDH4A1 were performed. The affinity constant is below 1 pM.