For Research Use Only

ALDH4A1 Recombinant antibody, PBS Only (Detector)

Catalog Number:86297-1-PBS



Purification Method:

Protein A purification

CloneNo.:

250957F8

Basic Information

Catalog Number: GenBank Accession Number: 86297-1-PBS BC023600

Concentration: GeneID (NCBI): 1 mg/ml 8659 Source: **UNIPROT ID:**

Rabbit P30038 Isotype: Full Name:

aldehyde dehydrogenase 4 family, member A1

AG2147 Calculated MW: 563 aa, 62 kDa

Observed MW: 62 kDa

Applications

Tested Applications:

Immunogen Catalog Number:

WB, Cytometric bead array, Indirect ELISA, Sample test

Species Specificity: human, mouse, rat

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-5carboxylate to glutamate. Defects in ALDH4A1 are the cause of hyperprolinemia type 2 (HP-2).

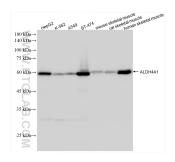
Storage

Storage:

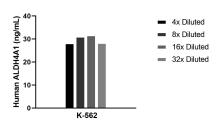
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

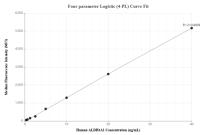
Selected Validation Data



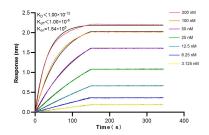
Various lysates were subjected to SDS PAGE followed by western blot with 86297-1-RR (ALDH4A1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86297-1-PBS in a different storage buffer formulation.



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.