## For Research Use Only

## PYCR1 Polyclonal antibody

Catalog Number:22150-1-AP

Featured Product

1 Publications



**Basic Information** 

Catalog Number:

GenBank Accession Number: BC022244

Antigen affinity purification

22150-1-AP Size:

GeneID (NCBI):

Recommended Dilutions:

**Purification Method:** 

150ul, Concentration: 400 ug/ml by

WB 1:500-1:2000

Nanodrop and 327 ug/ml by Bradford  $\,$  UNIPROT ID: method using BSA as the standard;

P32322

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Source:

Full Name:

protein lysate

Rabbit Isotype:

pyrroline-5-carboxylate reductase 1

IF/ICC 1:50-1:500

IgG

Calculated MW: 319 aa, 33 kDa

Immunogen Catalog Number:

Observed MW:

AG17745

33 kDa

**Applications** 

**Tested Applications:** 

WB, IF/ICC, IP, ELISA

Positive Controls:

WB: HeLa cells, COLO 320 cells

**Cited Applications:** WB

IP: HeLa cells. IF/ICC: HeLa cells,

Species Specificity:

human, mouse, rat

Cited Species:

human

**Background Information** 

PYCR1, also named as P5CR1, belongs to the pyrroline-5-carboxylate reductase family. It is a housekeeping enzyme that catalyzes the last step in proline biosynthesis. PYCR1 can utilize both NAD and NADP, but has higher affinity for NAD. It is involved in the cellular response to oxidative stress. Mutation in PYCR1 will cause ARCL type II(ARCL2B).  $Some\ mutation\ will\ cause\ DeBarsy\ syndrome\ (DBS)\ which\ is\ characterized\ by\ progeroid\ features,\ ophthalmological$ abnormalities, intrauterine growth retardation, and cutis laxa. The MW of PYCR1 is about 33-35kd. This antibody may have cross reaction to PYCR2 due to the high homology.

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Emily J Kay	35760868	Nat Metab	WB

Storage

Storage:

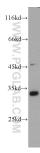
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

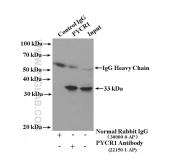
PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

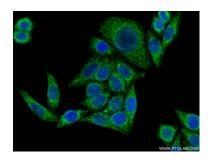
## **Selected Validation Data**



HeLa cells were subjected to SDS PAGE followed by western blot with 22150-1-AP (PYCR1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP result of anti-PYCR1 (IP:22150-1-AP, 4ug; Detection:22150-1-AP 1:1000) with HeLa cells lysate 3200ug.



Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 22150-1-AP (PYCR1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).