

# PYCR1 Polyclonal antibody

Catalog Number: 22150-1-AP

Featured Product

1 Publications

## Basic Information

**Catalog Number:**

22150-1-AP

**Size:**

400 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG17745

**GenBank Accession Number:**

BC022244

**GeneID (NCBI):**

5831

**UNIPROT ID:**

P32322

**Full Name:**

pyrroline-5-carboxylate reductase 1

**Calculated MW:**

319 aa, 33 kDa

**Observed MW:**

33 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:2000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IF/ICC 1:50-1:500

## Applications

**Tested Applications:**

WB, IF/ICC, IP, ELISA

**Cited Applications:**

WB

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human

**Positive Controls:**

WB : HeLa cells, COLO 320 cells

IP : HeLa cells,

IF/ICC : HeLa cells,

## 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 DeBary syndrome (DBS) which is characterized by progeroid features, ophthalmological abnormalities, intrauterine growth retardation, and cutis laxa. The MW of PYCR1 is about 33-35 kDa. 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:**

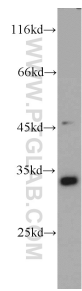
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

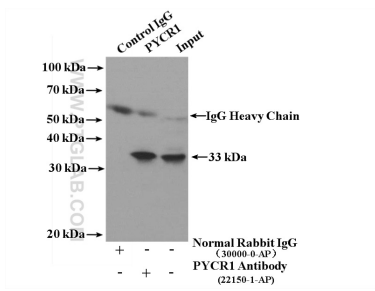
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

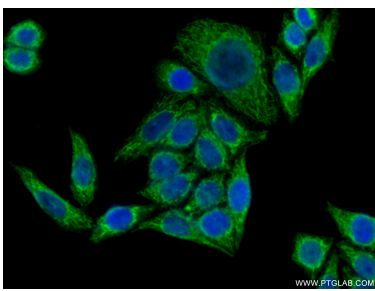
Selected Validation Data



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 AffiniPure Goat Anti-Rabbit IgG(H+L).