### For Research Use Only

# PYCR1-specific Polyclonal antibody

Catalog Number: 20962-1-AP 3 Publications



**Basic Information** 

Catalog Number:

20962-1-AP

Concentration:

600 µg/ml

Source:

Rabbit

P32322

Isotype:

GenBank Accession Number:

NM\_006907

GeneID (NCBI):

5831

UNIPROT ID:

P32322

Full Name:

pyrroline-5-carboxylate reductase 1

Calculated MW: 33 kDa Observed MW: 34 kDa Purification Method: Antigen affinity purification Recommended Dilutions:

WB: 1:500-1:2000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC: 1:20-1:200

Applications

Tested Applications: WB, IP, IHC, ELISA Cited Applications:

Species Specificity: human, mouse Cited Species:

human, mouse

WB

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls:

WB: Raji cells, human brain tissue

IP: Raji cells,

IHC: human colon cancer tissue,

## **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 is specific to PYCR1.

#### **Notable Publications**

| Author          | Pubmed ID | Journal      | Application |
|-----------------|-----------|--------------|-------------|
| Simon Schwörer  | 32134147  | EMBO J       | WB          |
| Lirong Chen     | 33391405  | J Cancer     | WB          |
| Nneka Southwell | 37222423  | EMBO Mol Med | WB          |

Storage

Storage:

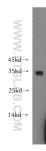
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

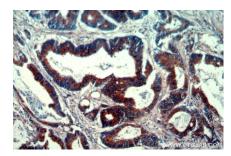
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

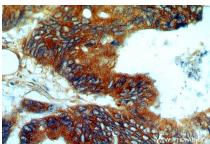
## **Selected Validation Data**



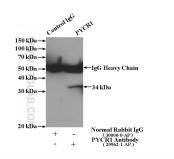
Raji cells were subjected to SDS PAGE followed by western blot with 20962-1-AP (PYCR1 antibody) at dilution of 1:500 incubated at room temperature for



Immunohistochemical analysis of paraffinembedded human colon cancer using 20962-1-AP (PYCR1 antibody) at dilution of 1:50 (under 10x lens)



Immunohistochemical analysis of paraffinembedded human colon cancer using 20962-1-AP (PYCR1 antibody) at dilution of 1:50 (under 40x



IP result of anti-PYCR1-specific (IP:20962-1-AP, 4ug; Detection:20962-1-AP 1:500) with Raji cells lysate 1440ug.