### For Research Use Only

# PYCR1-specific Polyclonal antibody

Catalog Number: 20962-1-AP

2 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 20962-1-AP NM\_006907

Size: GeneID (NCBI):

150ul , Concentration: 600 µg/ml by 5831

Nanodrop and 313 µg/ml by Bradford Full Name:

method using BSA as the standard;

method using BSA as the standard; pyrroline-5-carboxylate reductase 1

Source: Calculated MW:

Isotype: Observed MW: 33 kDa

Sotype: Observed MW: 34 kDa

Purification Method: Antigen affinity purification

Recommended Dilutions: WB 1:500-1:2000

IP 0.5-4.0 ug for IP and 1:500-1:1000

for WB IHC 1:20-1:200

**Applications** 

Tested Applications:

IHC, IP, WB, ELISA

**Cited Applications:** 

WB

Species Specificity: human, mouse

Cited Species:

human, mouse

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
Nneka Southwell	37222423	EMBO Mol Med	WB

Storage

Storage:

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

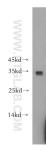
Storage Buffer

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

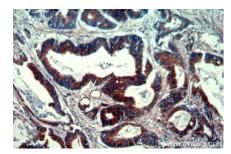
Aliquoting is unnecessary for -20°C storage

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

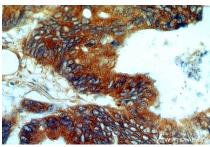
## **Selected Validation Data**



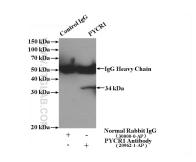
Raji cells were subjected to SDS PAGE followed by western blot with 20962-1-AP (PYCR1 antibody) at dilution of 1:500 incubated at room temperature for



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 lens)



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