

For Research Use Only

# PYCR1 Monoclonal antibody

Catalog Number: 66510-1-Ig **2 Publications**



## Basic Information

<b>Catalog Number:</b> 66510-1-Ig	<b>GenBank Accession Number:</b> BC022244	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1800 ug/ml	<b>GeneID (NCBI):</b> 5831	<b>CloneNo.:</b> 1H2G1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P32322	<b>Recommended Dilutions:</b> WB 1:1000-1:6000 IHC 1:150-1:600 IF/ICC 1:400-1:1600
<b>Isotype:</b> IgG2a	<b>Full Name:</b> pyrroline-5-carboxylate reductase 1	
<b>Immunogen Catalog Number:</b> AG17919	<b>Calculated MW:</b> 319 aa, 33.8 kDa <b>Observed MW:</b> 33 kDa, 35 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC, IHC, WB, ELISA	<b>Positive Controls:</b> <b>WB :</b> HeLa cells, HEK-293 cells, COLO 320 cells, MCF-7 cells, HSC-T6 cells, NIH/3T3 cells, RAW 264.7 cells <b>IHC :</b> human breast cancer tissue, <b>IF/ICC :</b> HeLa cells,
<b>Cited Applications:</b> WB, IHC	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yimin Sun	36366731	Cancer Med	WB
Ola A Harb	37982568	Appl Immunohistochem Mol Morphol	IHC

## 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**

For technical support and original validation data for this product please contact:

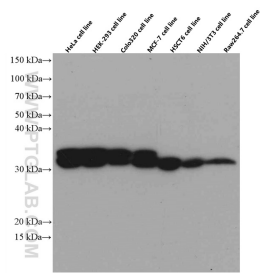
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

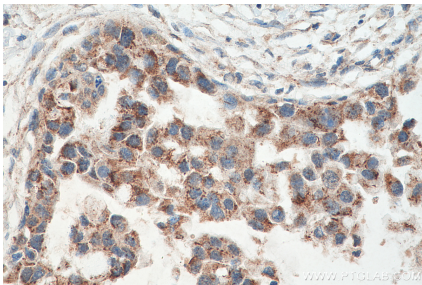
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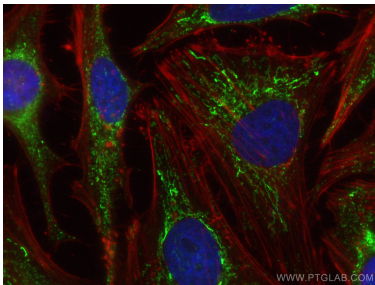
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66510-1-Ig (PYCR1 antibody) at dilution of 1:3000 incubated at room temperature for 1 hour.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66510-1-Ig (PYCR1 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PYCR1 antibody (66510-1-Ig, Clone: 1H2G1 ) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).