

For Research Use Only

# PYCR1 Monoclonal antibody, PBS Only (Detector)

Catalog Number: 66510-1-PBS



## Basic Information

<b>Catalog Number:</b> 66510-1-PBS	<b>GenBank Accession Number:</b> BC022244	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5831	<b>CloneNo.:</b> 1H2G1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P32322	
<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

**Tested Applications:**  
WB, IHC, IF/ICC, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Product Information

66510-1-PBS targets PYCR1 as part of a matched antibody pair:

MP50786-1: 66510-2-PBS capture and 66510-1-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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.

## Storage

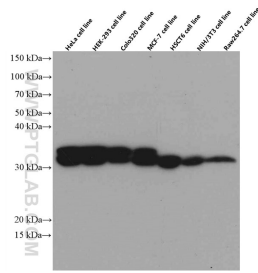
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

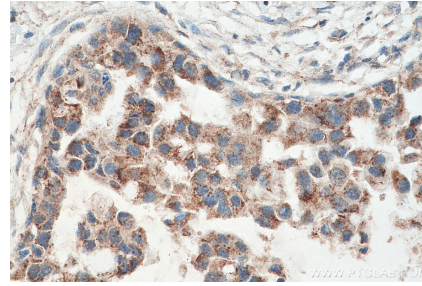
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

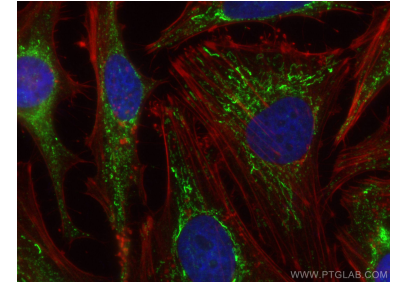
## Selected Validation Data



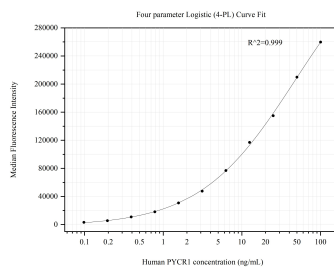
Various lysates were subjected to SDS PAGE followed by western blot with 66510-1-Ig (PYCR1 antibody) at dilution of 1:3000 incubated at room temperature for 1 hour. This data was developed using the same antibody clone with 66510-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66510-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66510-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP50786-1, PYCR1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66510-2-PBS. Detection antibody: 66510-1-PBS. Standard: Ag17919. Range: 0.098-100 ng/mL.