For Research Use Only

PYCR1
Polyclonal ANTIBODY

Catalog Number: 13108-1-AP  Featured Product  14 Publications

Basic Information

Catalog Number: 13108-1-AP
Size: 46 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification
Immunogen Catalog Number: AG3764

GenBank Accession Number: BC032244
GeneID (NCBI): 5831
Full Name: pyrroline-5-carboxylate reductase 1
Calculated MW: 319 kDa
Observed MW: 33 kDa, 35 kDa

Recommended Dilutions:
- WB: 1:500-1:2000
- IP: 0.5-4.0 μg for IP and 1:100-1:1000 for WB
- IHC: 1:100-1:400
- IF: 1:20-1:200

Applications

Tested Applications: IF, IHC, IP, WB, ELISA
Cited Applications: IF, IHC, WB
Species Specificity: human, mouse, rat, zebrafish
Cited Species: human, mouse, zebrafish

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 33-35 kDa. PYCR1 has 3 isoforms produced by alternative splicing.

Notable Publications

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<tr>
<th>Author</th>
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<tr>
<td>Wei Liu</td>
<td>26598224</td>
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<td>Inge Kühl</td>
<td>29132502</td>
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<td>Fabricio Loayza-Puch</td>
<td>26978238</td>
<td>Nature</td>
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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:
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

WB result of PYCR1 antibody (13108-1-AP, 1:5000) with si-Control and si-PYCR1 transfected HeLa cells.

Immunofluorescent analysis of MCF-7 cells, using PYCR1 antibody 13108-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).

HT-1080 cells were subjected to SDS PAGE followed by western blot with 13108-1-AP (PYCR1 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.

IP Result of anti-PYCR1 (IP: 13108-1-AP, 3ug; Detection: 13108-1-AP 1:1000) with mouse brain tissue lysate 4000ug.

Immunohistochemistry of paraffin-embedded human prostate cancer tissue slide using 13108-1-AP (PYCR1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieved with Tris-EDTA buffer (pH9).

Immunohistochemistry of paraffin-embedded human prostate cancer tissue slide using 13108-1-AP (PYCR1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieved with Tris-EDTA buffer (pH9).