For Research Use Only

PYCR1 Polyclonal antibody

Catalog Number: 22150-1-AP

Featured Product

1 Publications



Basic Information

Applications

Catalog Number: 22150-1-AP

GenBank Accession Number:

Purification Method: Antigen affinity purification

Size:

BC022244 GeneID (NCBI):

Recommended Dilutions:

150ul, Concentration: 400 µg/ml by

5831

WB 1:500-1:2000

Nanodrop and 327 µg/ml by Bradford Full Name:

IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB

method using BSA as the standard;

Calculated MW:

pyrroline-5-carboxylate reductase 1 IF 1:50-1:500

319 aa, 33 kDa

Rabbit Isotype: IgG

Observed MW:

33 kDa

Immunogen Catalog Number:

AG17745

Tested Applications: IF, IP, WB, ELISA

WB: HeLa cells, COLO 320 cells

Cited Applications:

IP: HeLa cells, IF: HeLa cells,

Positive Controls:

Species Specificity:

human, mouse, rat

Cited Species:

human

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 may have cross reaction to PYCR2 due to the high homology.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-------------|-----------|-----------|-------------|
| Emily J Kay | 35760868 | Nat Metab | WB |

Storage

Storage:

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

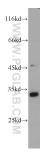
Storage Buffer

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

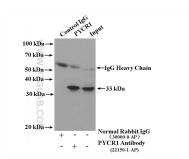
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

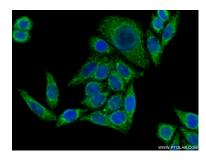
Selected Validation Data



HeLa cells were subjected to SDS PAGE followed by western blot with 22150-1-AP (PYCR1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP Result of anti-PYCR1 (IP:22150-1-AP, 4ug; Detection:22150-1-AP 1:1000) with HeLa cells lysate 3200ug.



Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 22150-1-AP (PYCR1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).