

Product Name: KD-Validated PYCR1 Mouse Monoclonal Antibody**Catalog #: KVA00038**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 33.4kDa

Antigen Information

Gene Name	PYCR1 PYCR1; Pyrroline-5-Carboxylate Reductase 1; P5C; Pyrroline-5-Carboxylate Reductase 1,
Alternative Names	Mitochondrial; P5C Reductase 1; EC 1.5.1.2; Proliferation-Inducing Protein 45; ARCL2B; ARCL3B; P5CR 1; PIG45; PP222; P5CR; PRO3; PYCR
Gene ID	5831.0
SwissProt ID	P32322
Immunogen	Recombinant protein of human PYCR1

Background

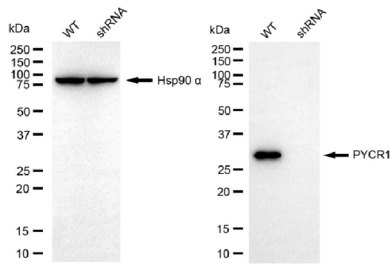
This gene encodes an enzyme that catalyzes the NAD(P)H-dependent conversion of pyrroline-5-carboxylate to proline. This enzyme may also play a physiologic role in the generation of NADP(+) in some cell types. The protein forms a homopolymer

and localizes to the mitochondrion. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]

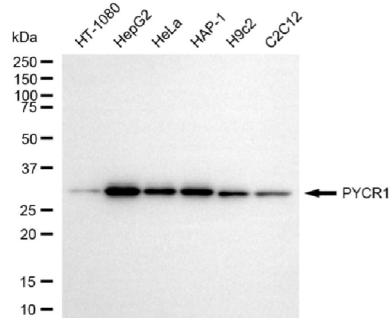
Research Area

Signal Transduction, Metabolism

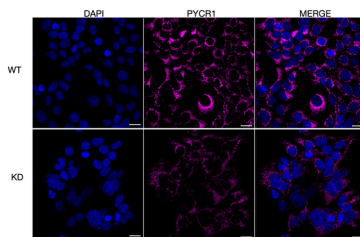
Image Data



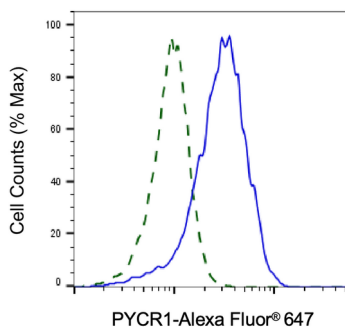
Western blotting analysis using PYCR1 antibody (KVA00038). PYCR1 expression in wild-type (WT) and PYCR1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with PYCR1 antibody (KVA00038, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



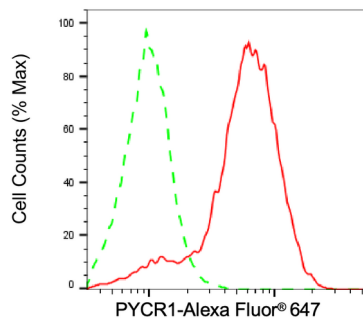
Western blotting analysis using PYCR1 antibody (KVA00038). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PYCR1 antibody (KVA00038, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using PYCR1 antibody (KVA00038, 1:1,000). Top panel: wild-type (WT); Bottom panel: PYCR1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; PYCR1 was stained magenta with Alexa Fluor® 647. Scale bar: 20 µm.



Validation of PYCR1 knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HeLa cells were stained with PYCR1 antibody (KVA00038, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of PYCR1 expression in HepG2 cells using PYCR1 antibody (KVA00038, 1:2,000). Green, isotype control; red, PYCR1.