

Product Name: CYP2R1 Rabbit Polyclonal Antibody**Catalog #: APRab09659**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Monkey
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Molecular Weight	52kDa

Antigen Information

Gene Name	CYP2R1
Alternative Names	CYP2R1; Vitamin D 25-hydroxylase; Cytochrome P450 2R1
Gene ID	120227.0
SwissProt ID	Q6VVX0
Immunogen	The antiserum was produced against synthesized peptide derived from human CYP2R1. AA range:251-300

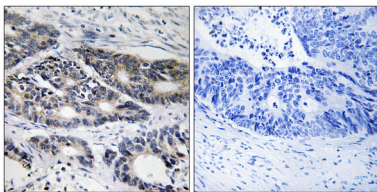
Background

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are

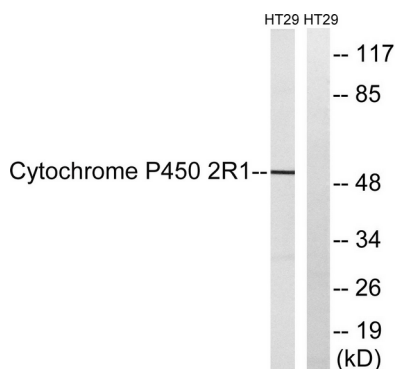
monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This enzyme is a microsomal vitamin D hydroxylase that converts vitamin D into the active ligand for the vitamin D receptor. A mutation in this gene has been associated with selective 25-hydroxyvitamin D deficiency. [provided by RefSeq, Jul 2008],catalytic activity:5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol + NADPH + O(2) = (25R)-5-beta-cholestane-3-alpha,7-alpha,12-alpha,26-tetraol + NADP(+) + H(2)O.,cofactor:Heme group.,disease:Defects in CYP2R1 are a cause of 25-hydroxyvitamin D(3) deficiency (25HOD3D)[MIM:600081]; also known as pseudovitamin D(3) deficiency rickets due to 25-hydroxylase deficiency. First described in patients who had rickets at a young age despite a history of adequate vitamin D intake. The patients sera had low calcium concentrations, low phosphate concentrations, elevated alkaline phosphatase activity, and low levels of 25-hydroxyvitamin D.,function:Has a D-25-hydroxylase activity on both forms of vitamin D, vitamin D(2) and D(3).,similarity:Belongs to the cytochrome P450 family.,subunit:Homodimer.,

Research Area

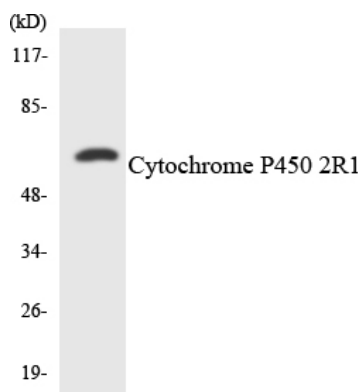
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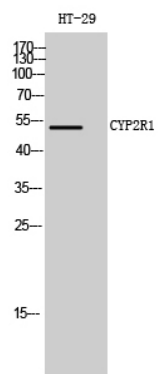
Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using Cytochrome P450 2R1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HT29 cells, using Cytochrome P450 2R1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HT-29 cells using Cytochrome P450 2R1 antibody.



Western Blot analysis of HT-29 cells using CYP2R1 Polyclonal Antibody