

CYP2R1 Polyclonal Antibody

Catalog # AP69405

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q6VVX0
Reactivity	Human, Mouse, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57359

Additional Information

Gene ID	120227
Other Names	CYP2R1; Vitamin D 25-hydroxylase; Cytochrome P450 2R1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

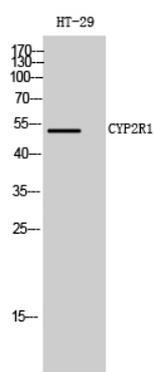
Protein Information

Name	CYP2R1
Function	A cytochrome P450 monooxygenase involved in activation of vitamin D precursors. Catalyzes hydroxylation at C-25 of both forms of vitamin D, vitamin D(2) and D(3) (calciol) (PubMed: 12867411 , PubMed: 15465040 , PubMed: 18511070). Can metabolize vitamin D analogs/prodrugs 1alpha-hydroxyvitamin D(2) (doxercalciferol) and 1alpha-hydroxyvitamin D(3) (alfacalcidol) forming 25-hydroxy derivatives (PubMed: 15465040 , PubMed: 18511070). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH-ferrihemoprotein reductase) (PubMed: 12867411 , PubMed: 15465040 , PubMed: 18511070).
Cellular Location	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

Background

Has a D-25-hydroxylase activity on both forms of vitamin D, vitamin D(2) and D(3).

Images



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

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