



# CYP2R1 Polyclonal Antibody

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| <b>Catalog No</b>                  | YP-Ab-02589                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Reactivity</b>                  | Human;Mouse;Monkey                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Name</b>                   | CYP2R1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human CYP2R1. AA range:251-300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Specificity</b>                 | CYP2R1 Polyclonal Antibody detects endogenous levels of CYP2R1 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Dilution</b>                    | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Synonyms</b>                    | 241072F11;EC:1.14.14.24;Vitamin D 25 hydroxylase;Vitamin D 25-hydroxylase; CYP2R1;Cytochrome P450 2R1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Observed Band</b>               | 52kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Calculated Molecular Weight</b> | 52kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Cell Pathway</b>                | Endoplasmic reticulum membrane ; Peripheral membrane protein. Microsome membrane ; Peripheral membrane protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Tissue Specificity</b>          | Liver,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Function</b>                    | 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.,

**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],

**matters needing attention**

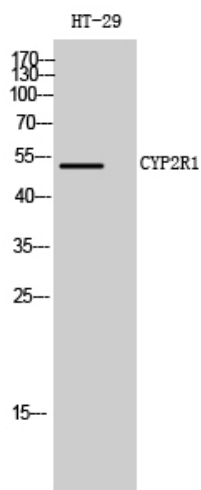
Avoid repeated freezing and thawing!

**Usage suggestions**

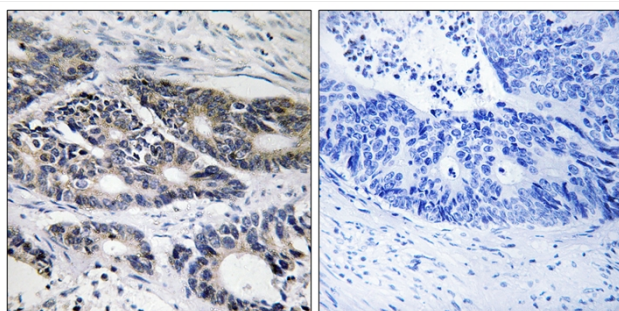
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



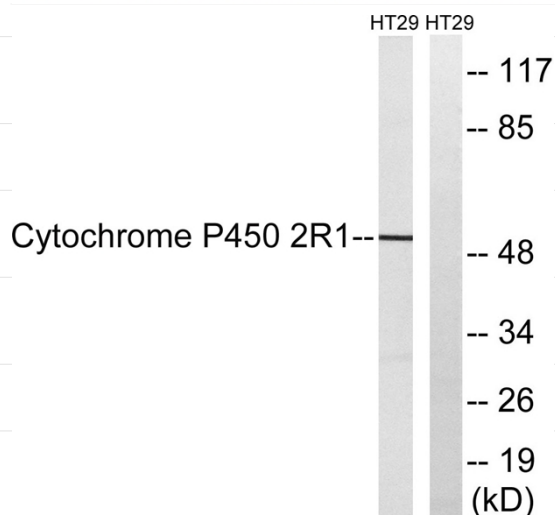
## Products Images



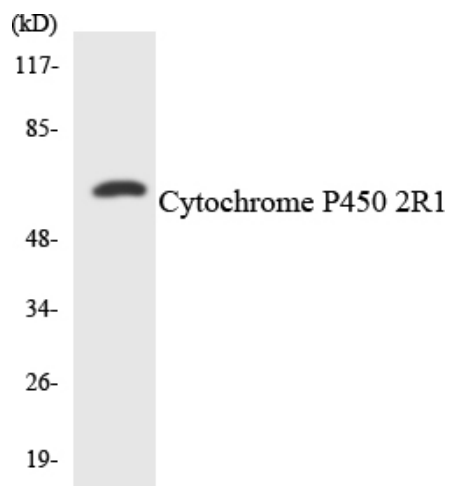
Western Blot analysis of HT-29 cells using CYP2R1 Polyclonal Antibody



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.