

For Research Use Only

CYP2R1 Recombinant antibody

Catalog Number: 84378-5-RR



Basic Information

Catalog Number:

84378-5-RR

Size:

1000 μ g/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG12873

GenBank Accession Number:

BC104909

GeneID (NCBI):

120227

UNIPROT ID:

Q6VVX0

Full Name:

cytochrome P450, family 2, subfamily R, polypeptide 1

Calculated MW:

501 aa, 57 kDa

Observed MW:

57 kDa

Purification Method:

Protein A purification

CloneNo.:

241072F11

Recommended Dilutions:

WB 1:1000-1:4000

Applications

Tested Applications:

WB, FC (Intra), ELISA

Species Specificity:

human

Positive Controls:

WB : HeLa cells, HepG2 cells, HuH-7 cells, human placenta tissue

Background Information

CYP2R1 is a member of the cytochrome P450 superfamily of enzymes which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids, and other lipids. CYP2R1 primarily functions as a 25-hydroxylase of vitamin D, responsible for converting vitamin D to 25-hydroxyvitamin D (25-OH-D), affecting the production of the active hormone 1,25(OH)₂D (PMID: 12867411). CYP2R1 enzyme is a key vitamin D 25-hydroxylase, mutations in CYP2R1 are associated with Rickets vitamin D-dependent 1B (PMID: 25942481, 15128933).

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

For technical support and original validation data for this product please contact:

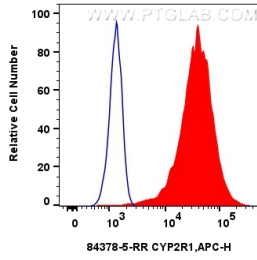
T: 4006900926

E: Proteintech-CN@ptglab.com

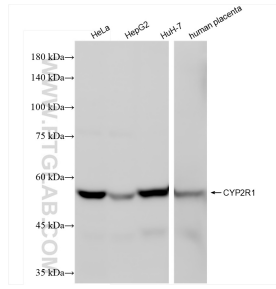
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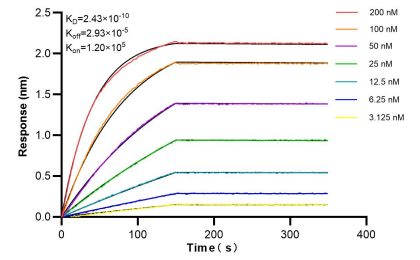
Selected Validation Data



1×10^6 HeLa cells were intracellularly stained with 0.25 μg CYP2R1 Recombinant antibody (84378-5-RR, Clone:241072F11) and PE-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 μg Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with 84378-5-RR (CYP2R1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Bi-layer interferometry (BLI) kinetic assays of 84378-5-RR against Human CYP2R1 were performed. The affinity constant is 0.243 nM.