

For Research Use Only

# CYP2R1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 84378-5-PBS



## Basic Information

<b>Catalog Number:</b> 84378-5-PBS	<b>GenBank Accession Number:</b> BC104909	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 120227	<b>CloneNo.:</b> 241072F11
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q6VVX0	
<b>Isotype:</b> IgG	<b>Full Name:</b> cytochrome P450, family 2, subfamily R, polypeptide 1	
<b>Immunogen Catalog Number:</b> AG12873	<b>Calculated MW:</b> 501 aa, 57 kDa	
	<b>Observed MW:</b> 57 kDa	

## Applications

**Tested Applications:**  
WB, FC (Intra), Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human

## Product Information

84378-5-PBS targets CYP2R1 as part of a matched antibody pair:

MP01251-2: 84378-3-PBS capture and 84378-5-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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)<sub>2</sub>D (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 -80°C.  
**Storage Buffer:**  
PBS Only

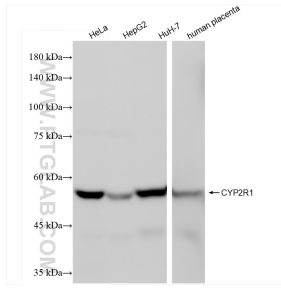
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

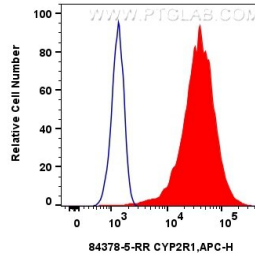
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

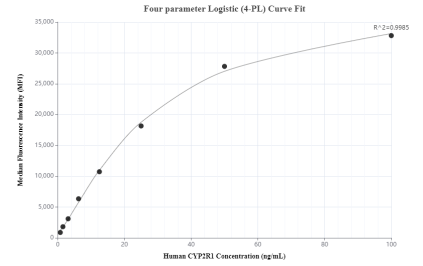
## Selected Validation Data



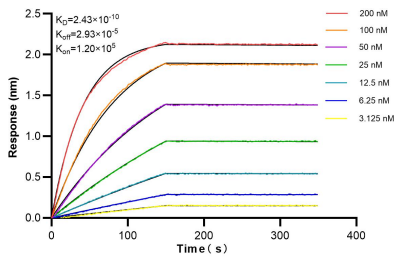
Various lysates were subjected to SDS PAGE followed by western blot with 84378-5-RR (CYP2R1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84378-5-PBS in a different storage buffer formulation.



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25  $\mu$ g CYP2R1 Recombinant antibody (84378-5-RR, Clone:241072F11) and PE-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25  $\mu$ g 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). This data was developed using the same antibody clone with 84378-5-PBS in a different storage buffer



Cytometric bead array standard curve of MP01251-2, CYP2R1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84378-3-PBS. Detection antibody: 84378-5-PBS. Standard: Ag12873. Range: 0.781-100 ng/mL



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