For Research Use Only

## CYP2R1 Recombinant antibody, PBS Only (Detector)

Catalog Number:84378-5-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

241072F11

**Basic Information** 

Catalog Number: GenBank Accession Number: 84378-5-PBS BC104909

BC104909 GeneID (NCBI):

 Size:
 GeneID (NCBI)

 1 mg/ml
 120227

 Source:
 UNIPROT ID:

Source: UNIPROTIC
Rabbit Q6VVX0
Isotype: Full Name:

IgG cytochrome P450, family 2, subfamily

Immunogen Catalog Number: R, polypeptide 1
AG12873 Calculated MW:
501 aa, 57 kDa

Observed MW: 57 kDa

**Applications** 

**Tested Applications:** 

WB, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity:

human

**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:

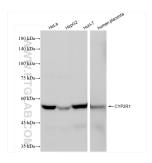
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

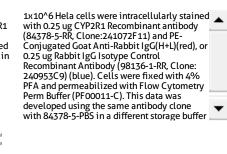
Storage Buffer:

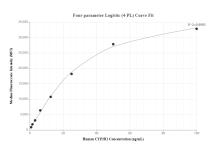
PBS Only

## **Selected Validation Data**

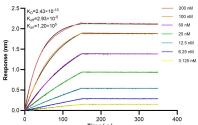


Various lysates were subjected to SDS PAGE followed by western blot with 84378-5-RR (CYP2R1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84378-5-PBS in a different storage buffer formulation.





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



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