For Research Use Only

VDR Recombinant monoclonal antibody, PBS Only (Capture)

Catalog Number:87335-1-PBS

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Basic Information

Catalog Number:
87335-1-PBS

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG28176

GenBank Accession Number:
BC060832

GeneID (NCBI):
7421

UNIPROT ID:
P11473

Full Name:
vitamin D (1,25- dihydroxyvitamin D3) receptor

Calculated MW:
48 kDa

Observed MW:
48 kDa

Purification Method:
Protein A purification

CloneNo.:
252576C4

Applications

Tested Applications:
WB, IP, Sandwich ELISA, Indirect ELISA

Species Specificity:
human

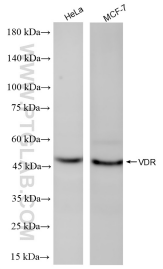
Background Information

The vitamin D3 receptor (VDR), also known as NR1I1 (nuclear receptor subfamily 1, group I, member 1), is a member of the nuclear receptor family of transcription factors. Upon activation by vitamin D, the VDR forms a heterodimer with the retinoid-X receptor and binds to hormone response elements on DNA resulting in expression or trans-repression of specific gene products.It is an intracellular hormone receptor that specifically binds 1,25(OH)2D3 and mediates its effects. Downstream targets of this nuclear hormone receptor are principally involved in mineral metabolism though the receptor regulates a variety of other metabolic pathways, such as those involved in the immune response and cancer. Defects in VDR are the cause of rickets vitamin D-dependent type 2A (VDDR2A). A disorder of vitamin D metabolism results in severe rickets, hypocalcemia and secondary hyperparathyroidism. Most patients have total alopecia in addition to rickets. The VDR exists two isoform with the MV 48 kDa and 54 kDa.

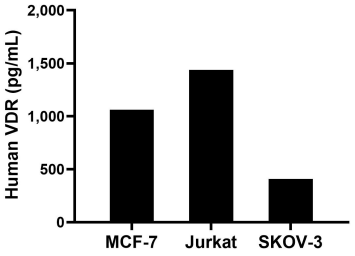
Storage

Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C
Storage Buffer:
PBS only, pH7.3

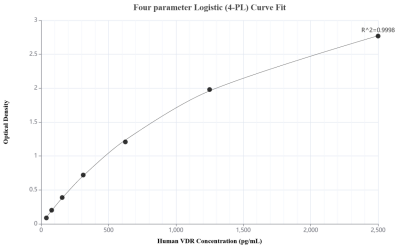
Selected Validation Data



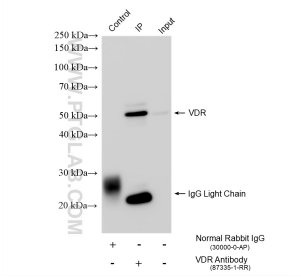
Various lysates were subjected to SDS PAGE followed by western blot with 87335-1-RR (VDR antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87335-1-PBS in a different storage buffer formulation.



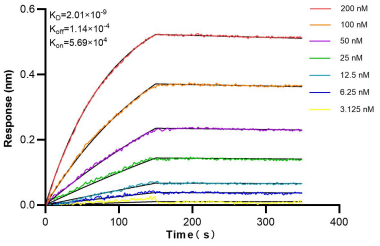
The mean VDR concentration was determined to be 1,062.7 pg/mL in MCF-7 cell extract based on a 1.2 mg/mL extract load, 1,437.4 pg/mL in Jurkat cell extract based on a 1.2 mg/mL extract load and 407.7 pg/mL in SKOV-3 cell extract based on a 1.1 mg/mL extract load.



Sandwich ELISA standard curve of MP03026-1, Human VDR Recombinant Matched Antibody Pair - PBS only. 87335-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag28176. 87335-2-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL.



IP result of anti-VDR (IP:87335-1-RR, 4ug; Detection:87335-1-RR 1:1500) with HeLa cells lysate 1320 ug. This data was developed using the same antibody clone with 87335-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 87335-1-RR against Human VDR were performed. The affinity constant is 2.01 nM.