

Human VD3 (Vitamin D3) ELISA Kit | VD3 elisa kit

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CATALOG #
AAA277244

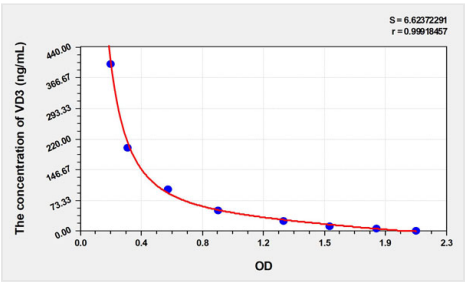
REACTIVITY
Human

PRODUCT SYNONYMS

VD3 (Vitamin D3); Human VD3 (Vitamin D3) ELISA Kit; Cholecalciferol; Toxiferol; Activated 7-Dehydrocholesterol; VD3 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Assay Type	Competitive Inhibition
Samples	serum, plasma and other biological fluids
Detection Range	6.25-400ng/mL
Sensitivity	2.14ng/mL
Standard	400ng/mL
Assay Length	2h
Precision	Intra-assay Precision (Precision within an assay): CV%<8% Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision. Inter-assay Precision (Precision between assays): CV%<10% Three samples of known concentration were tested in forty separate assays to assess inter-assay precision.
Test Principle	This assay employs the competitive inhibition enzyme immunoassay technique. The microtiter plate provided in this kit has been pre-coated with Vitamin D3 (VD3) protein. Standards or samples are added to the appropriate microtiter plate wells then with a biotin-conjugated antibody specific to Vitamin D3 (VD3). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 10 nm. The concentration of Vitamin D3 (VD3) in the samples is then determined by comparing the OD of the samples to the standard curve.
Standard Curve	Matrices listed below were spiked with certain level of recombinant VD3 and the recovery rates were calculated by comparing the measured value to the expected amount of VD3 in samples. Matrix Recovery range Average serum (n=5) 90-105% 97 EDTA plasma (n=5) 89-103% 96 Heparin plasma (n=5) 90-105% 97
Recovery Rate	The linearity of the kit was assayed by testing samples spiked with appropriate concentration of VD3 and their serial dilutions. The results were demonstrated by the percentage of calculated concentration to the expected. Matrix 1:21:41:81:16 serum (n=5) 82-95% 89-102% 85-92% 96-104% EDTA plasma (n=5) 98-106% 87-98% 83-95% 84-99% Heparin plasma (n=5) 78-92% 83-96% 95-107% 87-102%



Standard Curve (Sample)

ADDITIONAL INFORMATION

Product Categories/Family for VD3 elisa kit

Metabolic pathway; Reproductive science; Nutrition metabolism; Bone metabolism

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/vd3-vitamin-d3/277244>