

Human Vitamin DBP ELISA Kit | DBP elisa kit

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CATALOG #
AAA125832

REACTIVITY
Human

PRODUCT SYNONYMS

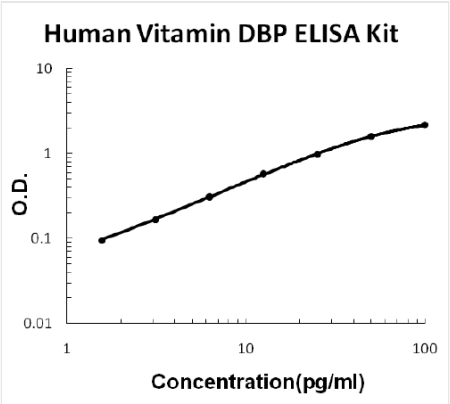
Vitamin DBP; Human Vitamin DBP ELISA Kit; Vitamin D-binding protein; DBP; VDB; Gc protein-derived macrophage activating factor ; GC; vitamin D binding protein; DBP elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant human Vitamin DBP
Samples	cell culture supernatants, serum, plasma (heparin, EDTA), saliva, urine and human milk
Detection Range	1.56ng/ml-100ng/ml
Sensitivity	<150pg/ml
Capture/Detection Antibodies	Capture antibody- a monoclonal antibody from mouse Detection antibody- a biotinylated polyclonal antibody from goat
Sample Data	Concentration(ng/ml) 0 1.56 3.12 6.25 12.5 25 50 100 O.D. 0.008 0.103 0.175 0.316 0.584 0.992 1.600 2.167
Intra-Assay Precision	Sample 1 2 3 n 16 16 16 Mean(pg/ml) 3726 12058 49927 Standard deviation 182.57 940.52 2346.56 CV(%) 4.9% 7.8% 4.7%
Inter-Assay Precision	Sample 1 2 3 n 24 24 24 Mean(pg/ml) 3646 11478 49590 Standard deviation 236.99 1033.02 2578.68 CV(%) 6.5% 9% 5.2%
Reproducibility	To assay reproducibility, three samples with differing target protein concentrations were assayed using four different lots. Lots: Lot 1 (pg/ml) Lot 2 (pg/ml) Lot 3 (pg/ml) Lot 4 (pg/ml) Mean (pg/ml) Standard Deviation CV (%) Sample 1: 3726 3810 3849 3865 3812 53.79 1.4% Sample 2: 12058 12135 11622 10357 11543 712.13 6.1% Sample 3: 49927 48196 52754 50855 50433 1645.09 3.2% *number of samples for each test n=16.
Cross Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen	Expression system for standard: NS0; Immunogen sequence: L17-L474
Anticoagulant	heparin or EDTA

Principle	Human Vitamin DBP ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Vitamin DBP has been precoated onto 96-well plates. Standards(Expression system for standard: NS0, Immunogen sequence: L17-L474) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Vitamin DBP is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Vitamin DBP amount of sample captured in plate.
Assay Procedure Step 1	Aliquot 0.1ml per well of the 100ng/ml, 50ng/ml, 25ng/ml, 12.5ng/ml, 6.25ng/ml, 3.12ng/ml, 1.56ng/ml human Vitamin DBP standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernatants, serum, plasma (heparin, EDTA), saliva, urine or human milk to each empty well. See "Sample Dilution Guideline" for details. It is recommended that each human Vitamin DBP standard solution and each sample be measured in duplicate.
TMB Incubation Time	15-20
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles. (Shipped with wet ice.)

IMAGES



Standard Curve (Sample)
Human Vitamin DBP ELISA Kit standard curve

ADDITIONAL INFORMATION

Related Product Information for DBP elisa kit	Vitamin D-binding protein, also/originally known as gc-globulin (group-specific component), is a protein that in humans is encoded by the GC gene. The protein encoded by this gene belongs to the albumin gene family. It is a multifunctional protein found in plasma, ascitic fluid, cerebrospinal fluid and on the surface of many cell types. It binds to vitamin D and its plasma metabolites and transports them to target tissues.
Product Categories/Family for DBP elisa kit	ELISA kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	324021745
NCBI GeneID	2638
NCBI Accession #	NP_001191236.1
NCBI GenBank Nucleotide #	NM_001204307.1
UniProt Accession #	P02774 ; Q16309 ; Q16310 ; Q53F31 ; Q6GTG1 ; B4DPP2 ; D6RAK8
Molecular Weight	52,964 Da

NCBI Official Full Name	vitamin D-binding protein isoform 3
NCBI Official Synonym Full Names	group-specific component (vitamin D binding protein)
NCBI Official Symbol	GC
NCBI Official Synonym Symbols	DBP; GRD3; VDBG; VDBP; DBP/GC
NCBI Protein Information	vitamin D-binding protein; VDB; gc-globulin; vitamin D-binding alpha-globulin
UniProt Protein Name	Vitamin D-binding protein
UniProt Gene Name	GC
UniProt Synonym Gene Names	DBP; VDB
UniProt Entry Name	VTDB_HUMAN

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/vitamin-dbp/125832>