25(OH) Vitamin D ELISA kit

Rapid, easy-to-use ELISA kit to quantify 25(OH) Vitamin D for bone metabolism, nutrition, endocrinology, immunity and cancer.

The 25(OH) Vitamin D ELISA kit is a complete, colorimetric, competitive immunoassay kit for the quantitative determination of 25(OH) Vitamin D in plasma and serum with results in just 1.5 hours.

Recent research efforts have shown that Vitamin D levels affect various disease states and are being linked with numerous indicators of well-being in humans. These include bone diseases such as osteoporosis and arthritis, but also additional disease including hypertension, diabetes, cancer and heart disease to name a few. Our Vitamin D ELISA kit offers an alternative to labor intensive and/or costly methods of testing for Vitamin D levels in human serum. The transformation to the active form of Vitamin D begins with 7-dehydrocholesterol being acted upon by UV rays from the sun to form parent Vitamin D_3. Alternatively, Vitamin D can be ingested as parent Vitamin D_2 from various food sources, native or fortified. These parent compounds are transported to the liver and undergo hydroxylation to 25(OH)Vitamin D. This metabolite is then transported to the kidney where it undergoes a second hydroxylation to $1,25(OH)_2$ Vitamin D, the biologically active form of Vitamin D. It is important to note that levels of Vitamin D metabolites increase proportionately with increased uptake of parent Vitamin D. This combined with the greater half-life and stability of 25(OH) Vitamin D in circulation versus the active form (25 days versus 8 hours) are the reasons that the detection of the 25(OH) Vitamin D metabolite is used as the indicator for total Vitamin D concentration.

Citations: 11 View Online »

- Rapid results in just 1.5 hours with up to 40 sample in duplicate or 80 samples in singlicate
- Easy-to-use and simple protocol with rapid dissociation step to reduce errors and labor
- Convenient and user-friendly alternative to mass spectrometry
- Highly sensitive measurement as little as 1.98 ng/ml of 25(OH) Vitamin D
- Correlated and comparable results to current methods
- Controls available for use with the 25(OH) Vitamin D ELISA Kit

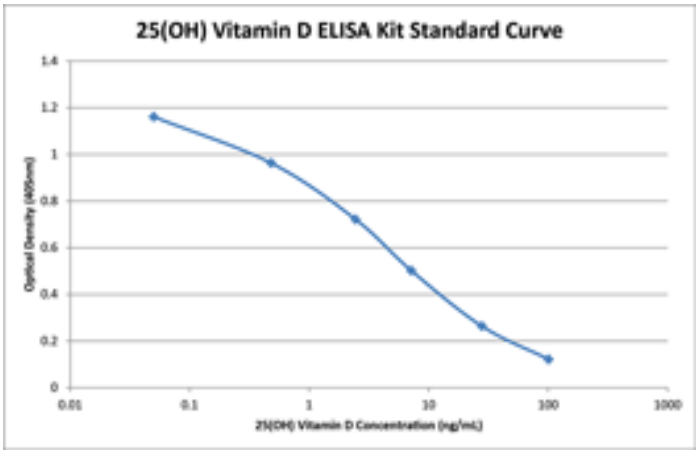
Ordering Information

Order Online »

ADI-900-215-0001	96 wells

Manuals, SDS & CofA

View Online »


25(OH) Vitamin D ELISA Kit Standard Curve
Optical Density (A450nm)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0.01
0.1
1
10
100
1000
25(OH) Vitamin D Concentration (ng/mL)

Handling & Storage

Use/Stability	All kit components should be stored at -20ºC.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	25-Hydroxyvitamin D
Application	Colorimetric detection, ELISA
Application Notes	For the quantitative determination of human 25(OH) Vitamin D in plasma and serum.
Assay Time	~1.5 hours
Compatibility	This product is compatible with the **Absorbance 96 Plate Reader**.
Contents	Microtiter Plate, Conjugate Concentrate, Antibody, Dissociation Buffer, Conjugate Diluent, Sample Diluent, Wash Buffer Concentrate, Standards, Substrate, Stop Solution, Assay Layout
Crossreactivity	25(OH) Vitamin D3 (100%), 25(OH) Vitamin D2 (~80%), 1,25(OH)2-Vit. D2 (>100%), 1,25(OH)2-Vitamin D3 (>100%), 3-epi 25(OH) Vitamin D3 (~10%), 24,25(OH)2-Vitamin D3 (~6%) and <1%: 1α(OH) Vitamin D2, 1α(OH) Vitamin D3, Vitamin D2, Vitamin D3
Sensitivity	1.98 ng/ml (range 0.5-1010 ng/ml)
Species Reactivity	Human
Wavelength	405 nm

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