ARG80775
25-OH Vitamin D ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	Immunoenzymetric assay for the in vitro quantitative measurement of 25-hydroxyvitamin D2 and D3 (25OH-D2 and 25OH-D3) in serum samples.
Tested Application	ELISA
Target Name	25-OH Vitamin D
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sensitivity	2.81 ng/ml
Sample Type	Serum.
Standard Range	3.45 - 120 ng/ml
Sample Volume	50 µl

Application Instructions

Assay Time	2 h, 30, 15 min (RT/shaker)

Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

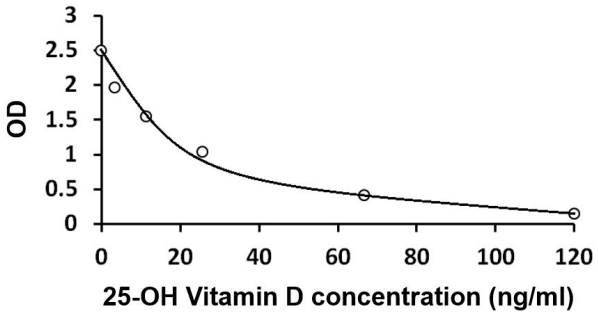
Bioinformation

Gene Full Name	25-OH Vitamin D
Background	Vitamin D is the generic term used to designate Vitamin D2 or ergocalciferol and Vitamin D3 or cholecalciferol. Humans naturally produce Vitamin D3 when the skin is exposed to ultraviolet sun rays. In the liver mainly, Vitamin D3 is metabolised into 25-Hydroxyvitamin D3 (25-OH D3) which is the main form of Vitamin D circulating in the body. 25OH D3 is a precursor for other Vitamin D metabolites and has also a limited activity by itself. The most active derivative is 1,25-hydroxyvitamin D3, produced in the kidney (or placenta) by 1?hydroxylation of 25-OH D3. 25-OH Vitamin D stimulates the intestinal absorption of both calcium and phosphorus and also bone resorption and mineralisation. 25-OH Vitamin D might also be active in other tissues responsible for calcium transport (placenta, kidney, mammary gland …) and endocrine gland (parathyroid glands, beta cells…). Vitamin D3 and Vitamin D2 are also available by ingestion through food or dietary supplementation. As Vitamin D2 is metabolised in a similar way to Vitamin D3, both contribute to the overall Vitamin D status of an individual. It is the reason why it is very important to measure both forms of 25-OH Vitamin D equally for a correct diagnosis of Vitamin D deficiency, insufficiency or intoxication. Vitamin D deficiency is an important risk factor for rickets, osteomalacia, senile osteoporisis, cancer and pregnancy outcomes. The measurement of both 25-OH Vitamin D forms is also required to determine

the cause of abnormal serum calcium concentrations in patients. Vitamin D intoxication has been shown to cause kidney and tissue damages.

Research Area	Metabolism kit

Images



ARG80775 25-OH Vitamin D ELISA Kit standard curve image

ARG80775 25-OH Vitamin D ELISA Kit results of a typical standard run with optical density reading at 450 nm.