

## BIOHIT Total 250H Vitamin D





- Detects both 250H vitamin D2 and D3 for a clinically meaningful assessment of vitamin D status
- Calibrated against the ID-LC/MS-MS Reference Measurement Procedure
- Proven ELISA technology, support for both automated and manual analysis methods

# Ordering details:

REF	Product
602310.02	BIOHIT Total 250H Vitamin D, 96 tests

### Contact our team for more information.



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# **BIOHIT** Total 250H Vitamin D

For a conclusive determination of vitamin D status







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### Multifunctional vitamin D

Vitamin D has multiple roles in the human body. In addition to its well established role in the regulation of calcium absorption and promoting bone growth, it is recognized for other health benefits including reducing risk of diseases such as type 1 diabetes and common cancers.

### Clinical background

Two major forms of vitamin D are important in the human body, vitamin D2 (ergocalciferol) and vitamin D3 (cholecalciferol). Vitamin D3 is the form synthesized in the skin in response to sunlight UVB exposure yet can also be obtained from animal based foods. Vitamin D2, on the other hand, is the form synthesized by plants and is obtained from plant derived foodstuff. Both are metabolized in the liver to their respective 250H vitamin D3 and D2 forms which are in turn converted to their active form in the kidneys.

The best indicator of vitamin D status is the serum concentration of 250H vitamin D. For a correct diagnosis of vitamin D deficiency, insufficiency or intoxication, the assay must recognize both the D2 and D3 forms. As both forms have clinical relevance, the total concentration provides information that can be acted upon.

### BIOHIT Total 250H Vitamin D kit

The BIOHIT Total 250H vitamin D kit is a quantitative immunoenzymatic assay. While detecting both 250H vitamin D2 and D3, the kit provides clinically relevant information on the vitamin D status. Reliability of the results is ensured by validation against the ID-LC/MS-MS Reference Measurement Procedure (Ghent method) as approved by the Vitamin D Standardization Program (VDSP) with R>0.97.

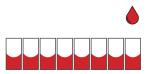
"The best indicator of vitamin D status is the serum concentration of 250H vitamin D."



### The assay protocol

The assay protocol includes just five steps making it easy to perform and reducing the hands-on time. Featuring pretreatment technology performed in assay's microplate wells, any open ELISA platform can be easily programmed to run the assay from start to finish.

1. Add 50 µl of sample, calibrators and controls, and 150 µl of incubation buffer to the wells.



Incubate 120 min at RT with shaking → Wash plate

2. Add 200 µl conjugate

Incubate 30 min at RT with shaking → Wash plate

3. Add 100 µl TMB

Incubate 15 min at RT with shaking

4. Add 100 µl STOP

5. Read Absorbance at 450 nm