VITAMIN D, 1, 25 DIHYDROXY, SERUM (CLIA)  

| pmol/L | 47.76-190.32 |

Note:
- The assay measures both D2 (Ergocalciferol) and D3 (Cholecalciferol) metabolites of vitamin D.
- 1,25-dihydroxy vitamin D concentrations are not a reliable indicator of vitamin D toxicity; normal (or even low) results may be seen in such cases.

Comment:
1,25-dihydroxy Vitamin D is the major biologically active form of Vitamin D. Its concentration is only 1/1000 that of 25, hydroxy Vitamin D and has half life of 5 to 6 hrs. Circulating levels are regulated by PTH, phosphate & calcium. While 1,25-dihydroxy vitamin D is the most potent vitamin D metabolite, levels of the 25-OH forms of vitamin D more accurately reflect the body's vitamin D stores. However, in the presence of renal disease, 1,25-dihydroxy vitamin D levels may be needed to adequately assess vitamin D status.

Uses:
- Differentiation of Primary hyperparathyroidism from Hypercalcaemia of cancer
- Differentiation of Vitamin D dependent and Vitamin D resistant rickets
- Monitoring Vitamin D status in Chronic renal failure
- Assessing compliance of 1,25 dihydroxy Vitamin D therapy

Increased levels:
- Granulomatous disease
- Primary hyperparathyroidism
- Lymphoma
- 1,25 dihydroxy Vitamin D intoxication
- Vitamin D dependent Rickets type II

Decreased levels:
- Renal failure
- Hyperphosphatemia
- Hypomagnesemia
- Hypoparathyroidism
- Pseudohypoparathyroidism
- Vitamin D dependent Rickets Type I
- Hypercalcemia of malignancy