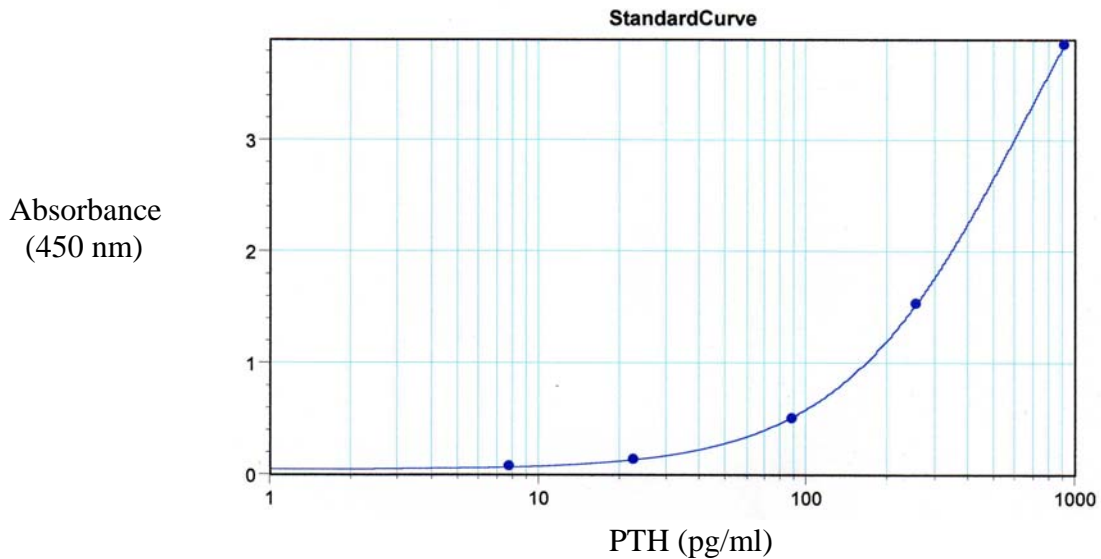


Human Parathyroid Hormone EIA Analysis



Serum or EDTA plasma Required: 50 μ l
Range of Values Observed: 22-135 pg/ml

Human intact parathyroid hormone (PTH) is measured utilizing a two-site enzyme-linked immunosorbent assay (ELISA) specific for the biologically intact 84 amino acid chain of PTH. A kit from MD Biosciences Inc., St. Paul, MN (Catalogue #PTH.96) is utilized in the analysis. The assay employs two different purified goat polyclonal antibodies, one biotinylated antibody specific for the mid region and C-terminal end of PTH (amino acids 39-84) and a second antibody targeting bound with horseradish peroxidase targeting the N terminal region of PTH (1-34). Standards and samples are added in duplicate to 96 well plates, followed by addition of the two antibodies and incubated on a shaker for 3 1/2 hours. After washing to remove any unbound substances substrate solution is added to each well and color allowed to develop proportionate to the amount of PTH present. The color development is stopped with the addition of 1 N H₂SO₄ and the microplate then read at 450 nm and also at 590 nm as a background control. Plots of log concentration vs absorbance for standards are prepared and concentrations of unknown samples extrapolated from the standard curve using a four parameter fit and adjusted for any dilution of plasma.