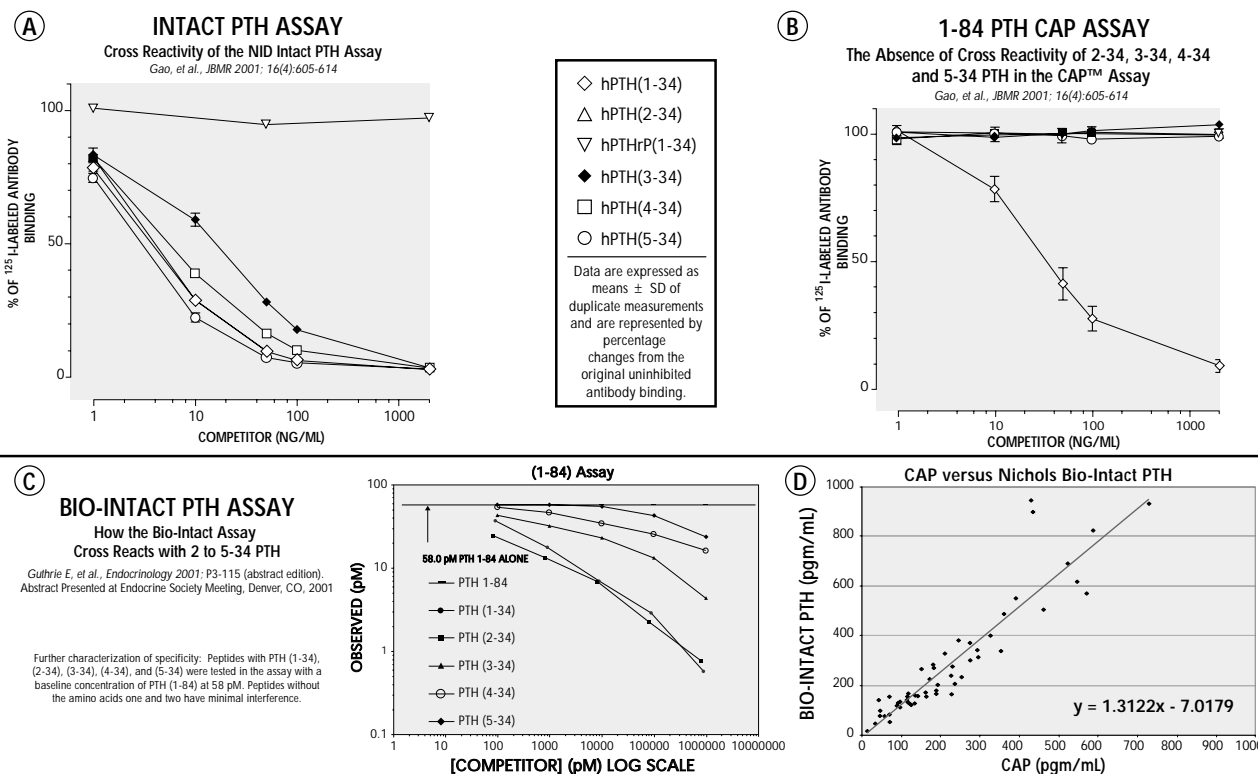


What is the Difference Between the Scantibodies CAP (1-84 PTH) Assay and the Nichols Bio-Intact (1-84 PTH) Assay

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The iPTH assay is a measurement of both 1-84 PTH and 7-84 PTH. This explains the overestimation of iPTH in ESRD patients reported by Dr. Quarles et al. in 1992. Two immunoassays have been developed for the specific measurement of 1-84 PTH: the Scantibodies CAP (cyclase activating PTH) assay and the Nichols Bio-Intact PTH assay. A logical question is whether these two assays are the same, and what, if any, are the significant differences between them. The key differences lie in the tracer antibodies that bind the amino end of PTH and impart specificity to the assay. Both companies have published their tracer antibody specificity studies. A set amount of 1-84 PTH was measured with increasing amounts of 2-34, 3-34, 4-34, and 5-34 PTH. The non specific iPTH assay reacted with all PTH analogs. The CAP assay reacted with only 1-34 PTH, indicating a measurement of only 1-84 PTH. The Bio-Intact PTH assay reacted with 1-34 PTH and 2-34 PTH and had less reaction with 3-34 PTH, 4-34 PTH and 5-34 PTH. Comparative data for ESRD patient specimens for the 2 assays confirm differences between the two assays which may be the result of PTH fragments present in patients or differences in assay calibrations.



Cantor T. What is the Difference Between Scantibodies CAP (1-84 PTH) Assay and the Nichols Bio-Intact (1-84 PTH) Assay. *J Am Soc Nephrol* 2004; 15(10):F-PO1003, p. 284A.