Anti-Thyroglobulin in Serum- This highly sensitive, direct radioimmunoassay system is based on the use of a highly purified, stable preparation of <sup>125</sup>I- labeled thyroglobulin (1). The assay is standardized against the MRC (Medical Research Council) thyroglobulin autoantibody First International Reference Preparation (coded 65/93). Specimens containing known amounts of thyroglobulin antibody and specimens containing unknowns are incubated for 1 hour with the purified <sup>125</sup>I-thyroglobulin. During this incubation, the thyroglobulin antibodies present bind with labeled thyroglobulin. Protein A is added and the tubes are incubated for another hour. During this incubation, the Fc portion of thyroglobulin antibodies present is bound by the protein A. Assay buffer is added and the tubes are centrifuged. After centrifuging, the supernatants are decanted or aspirated. The amount of radioactivity in the pellets is directly proportional to the amount of thyroglobulin antibody contained in the calibrators and unknowns. Calibrator concentrations are plotted on semilog graph paper, and the concentration of antibody in the unknowns is interpolated from the curve.

1. Kronus 1991 Product Insert: P/N 114J, dated 3/91, Thyroglobulin Antibody (TgAb) RIA Kit.

-from Laboratory Procedures Used for the Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994 Elaine W. Gunter, Brenda G. Lewis, and Sharon M. Koncikowski, 1996