

Antibody to Hepatitis B Virus Core Antigen- This FDA-licensed method is commercially obtained in kit form. The literature and instructions with each kit constitute the standard operating procedure (SOP) for the method. A test sample is mixed in a reaction well with detection-phase reagent. The detection-phase reagent consists of I-conjugated antibody directed against HBc. The sample- 125 conjugate mixture is incubated in the presence of a polystyrene bead permanently bound with a specific amount of HBc antigen. Any anti-HBc present in the sample will compete with the conjugate for HBc epitopes present on the bead (1). At the end of the incubation, the amount of conjugate immunochemically bound to the bead will be inversely proportional to the concentration of anti-HBc in the sample. Beads are washed to remove unbound material. A gamma counter is then used to analyze the beads for the presence of I. The instrument used to measure the test results is equipped with 125 software that calculates a cutoff value. The cutoff calculation is based upon values obtained from control reagents included with each testing series. Results are expressed as "positive" or "negative" for anti-HBc.

1. Overby LR, Ling CM. Radioimmune assay for anti-core as evidence for exposure to hepatitis B virus. *Rush-Presbyterian St. Luke's Med Bull* 1976;15:83-92.

-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