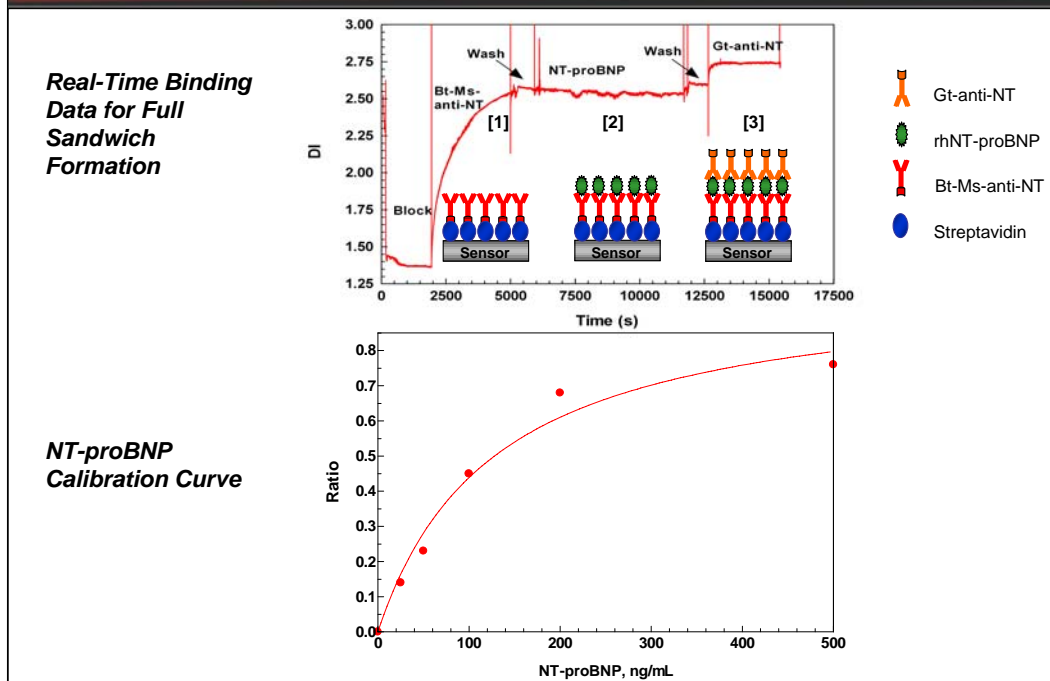


NT-proBNP Detection Using Direct Sandwich Assay



A combination of capture and detector antibodies to NT-proBNP were used for detection. The real-time binding data for this full sandwich formation is shown in the upper panel. A schematic for each of the complexes formed on dotLab Sensor surface is shown under each binding event in the real-time data trace. For internal calibration purposes and to minimize any impact of inter-sensor or reagent variability, the ratio of the signal increase for the detector-binding event to that for the capture-antibody binding event was calculated. With this approach, a calibration curve for recombinant NT-proBNP from 10 - 1000 ng/mL or approximately 1.25 - 125 nmol/L in a PBS matrix was generated (lower panel). The curve was fitted using a one site binding calculation. Alternatively, a ratio of binding rates can be used, obviating the need to observe reactions until saturation and speeding time to result.