**Human Albumin ELISA**

**Manufacturer/Trade:**  Exocell / Albuwell II  

**Catalogue Numbers:**  1004  

**Methodology:**  Competitive ELISA, Strip Plate  

**Summary of Procedure:** This kit was designed to monitor kidney function by quantitative estimation of albumin in human urine. It successfully measures albumin concentrations well outside the range of conventional dip-stick methods.

To complete the assay, standard dilutions and urine samples are added to a plate pre-coated with human albumin. An enzyme conjugated anti-albumin antibody is added, and the plate is incubated for 30 minutes. During this time, the conjugated antibody binds to either the albumin on the solid phase or to that in the liquid phase, hence the notion of competition. Thereafter, components remaining in the liquid phase are washed away, and bound conjugate determined using TMB Substrate Solution. The chromogenic reaction is stopped after 2-5 minutes using dilute acid. Color intensity is determined using a microtiter plate reader. Results are made quantitative by comparing urine sample response with that of the standards.

**Specimen Required:**  10 uL, 50 uL or 100 uL  

**Assay Range:**  0.15 - 2,560 ug/mL  

**Precision:** Intra- and interassay precision for samples within the assay range have a C. V. < 7 %.

**Specificity:** The antibody is specific for human albumin. It does not cross-react with rat albumin or with other proteins that occur in urine.

**Expected Values:** A total of 42 timed urine samples representing collection intervals from 2-8 hours were collected from normal volunteers. Normal excretion rate ranged from 1.7-16.1 ug/min., with an average of 4.3 ug/min. 95% of the normal population had excretion rates less than 9.5 ug/min. A random screening of diabetic patients showed that 16 (51%) had normal levels of urinary albumin, 10 (33%) were microalbuminuric and 5 (16%) were proteinuric.

**Method Comparison:** Diagnostic Products Corp., Double Antibody RIA

**References:**