

EXO

collagenIVh

#1015



EXOCELL, INC.

hCollagen IV

Manufacturer/Trade: Exocell, Inc. / Collagen IV H

Catalogue Numbers: 1015 Strip Plate

Methodology: Competitive ELISA

Summary of procedure: Collagen IV H is an indirect competitive ELISA designed to measure type IV collagen in biological and tissue culture specimens of human origin. The assay may be completed in a "normal sensitivity" mode, with a useful assay range of 0.156-10 ug collagen IV/mL. A slightly different procedure, the "enhanced sensitivity" mode typically yields a useful assay range of 0.02-2.5 ug/mL, and is sensitive enough to detect collagen IV in urine specimens.

To complete the assay, sample and goat anti-collagen IV antibody are added to human collagen IV coated wells. The antibody interacts and binds with the collagen IV immobilized to the stationary phase or with the antigen in the fluid phase, hence the notion of competitive binding. After a suitable incubation period, the plates are washed, and a rabbit anti-goat -HRP conjugate is used to detect bound antibody. After washing, only the antibody-conjugate bound to the stationary phase remains in the well, and this is detected using a chromogenic reaction. Color intensity is inversely proportional to the logarithm of collagen IV in the fluid phase. The assay may be completed in less than 3 hours.

The "enhanced sensitivity" mode is completed by placing the samples and anti-collagen IV antibody into tubes and incubating 2-24 hours. Here, the antibody can only react with the collagen IV of the fluid phase. Subsequently, aliquots of the mixture are added to the plate where remaining free antibody can react with the antigen of the stationary phase. The bound antibody is detected as described above.

Specimen Required: 50-100 uL Cell Culture Extract, Urine

Normal Sensitivity: 0.156-10 ug/mL

Assay Range:

Enhanced Sensitivity: 0.02-2.5 ug/mL

Precision:

Intraassay and interassay precision for samples within the useful range of the assay have a C.V.<10% of the mean.