The Non-Collagenous Domain (NC1) Fraction of Bovine Type IV Collagen

Catalog # 1102

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION: NC1 fraction of type IV collagen isolated from collagenase-solubilized bovine glomerular basement membrane.

APPLICATION: Use for the induction of experimental autoimmune glomerulonephritis (EAG) in Wistar Kyoto (WKY) rats.

QUANTITY: 1 mg

FORM: Lyophilized powder

SOURCE: Bovine kidney glomerular basement membrane

USAGE: Please refer to the “Induction of experimental autoimmune glomerulonephritis in WKY rats" protocol for more detailed explanations.

Induction of EAG by immunization of NC1 fraction of type IV collagen:

Animals: 7-8 weeks or older WKY rats. Sensitivity to EAG may vary depending on the sub-strain of WKY rat, animal vendor, or facility.

Antigen: Dissolve one vial of NC1 fraction in 1 ml of PBS.

Emulsion: Make an emulsion using 1 mg/ml of NC1 fraction with an equal volume of complete Freund’s adjuvant (catalog # 7008 - M. Tuberculosis, 1 mg/ml).

Immunization: Inject 0.2 ml (NC1 fraction - 0.1 mg) of the emulsion, subcutaneously at the base of the rat tail.

Evaluation of EAG: Measure a 16-hour proteinuria to determine the severity of EAG once a week after immunization. Chondrex’s Rat Urinary Protein Assay Kit (catalog # 9040) is recommended for the proteinuria assay. Proteinuria is usually observed on day 14 - 21 in susceptible WKY rats and reaches a maximum level on day 21 - 28. We recommend observing the rats until day 35.

STORAGE TEMPERATURE: 4°C in the dark

STABILITY: 1 year