Chondrex, Inc.

Immunization Grade Porcine Type XI Collagen, Lyophilized

Catalog # 1083

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION: Type XI collagen is purified from pepsin-solubilized articular cartilage by repeated salt precipitation. Type XI collagen is one of three types of collagen which make up cartilage fibrils and consists of three α-chains, α1 (XI), α2 (XI), and α3 (XI), where α3 (XI) is homologous to the α1 (II) chain of type II collagen (1).

Note: Type XI collagen shares significant similarities with type V collagen, which consists of α1 (V), α2 (V), and α3 (V) chains, but these alpha chains are not identical (2).

APPLICATION: Use as an immunizing antigen to generate antibodies, an antigen to detect anti-type XI collagen antibodies in ELISA, or as a standard for gel analysis.

Note: Antibodies against type II collagen partially cross-react to type XI collagen due to the homology between α3 (XI) and α1 (II).

QUANTITY: 5 mg

FORM: Lyophilized powder

SOURCE: Porcine

MOLECULAR WEIGHT: Intact type XI collagen, approximately 360 kDa. By 6% gel analysis, type XI collagen is separated into three α-chains: α1 (XI), α2 (XI), and α3 (XI) (1052, 1478, and 1060 A.A. residues)

PURITY: >90% by SDS-PAGE gel analysis

SOLUBILITY: Type XI collagen can be dissolved at 4 mg/ml in acidic solution, such as 0.01-0.05M acetic acid (pH 3.0-3.3) or 0.15M citrate buffer (pH 3.6), by stirring at 4°C overnight. To neutralize the solution, add 1/10 volume of a 10X concentrated neutral buffer containing 1.5M NaCl or dialyze the solution against a neutral buffer containing 0.15M NaCl.

STORAGE TEMPERATURE: 4°C in the dark. After reconstitution, store at–20°C. Collagen may degrade under neutral conditions.

STABILITY: 2 years

REFERENCES:

1. Von der Mark K, Van Menxel M, Wiedemann H. Isolation and characterization of new collagens from chick cartilage. Eur. J. Biochem. 124: 57-62 (1982)
2. Burgeson RE, Hebda PA, Morris NP and Hollister DW. Human cartilage collagens. Comparison of artilage collagens with human type V collagen.

2607 151st Place NE
Redmond, WA 98052

Phone: 425.702.6365 or 888.246.6373
Fax: 425.882.3094

www.chondrex.com
support@chondrex.com