

Immunization Grade Human Type III Collagen

Catalog # 1305

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION:	Human type III collagen purified from pepsin-solubilized placenta by repeating salt precipitation.
APPLICATION:	Use as an immunizing antigen to generate antibodies, an antigen to detect anti-type III collagen antibodies in ELISA, or as a standard for gel analysis.
QUANTITY:	1 mg
FORM:	Lyophilized powder
SOURCE:	Human placenta
MOLECULAR WEIGHT:	300 Kd (consisting of three $\alpha 1(\text{III})$ chains formed with inter-chain disulfide bonds)
PURITY:	>90% by 6% SDS-PAGE with 4M Urea under reducing condition ¹⁾ , co-exsiting human type I collagen less than 10%.
SOLUBILITY:	Type III 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 10X neutral buffer containing 1.5M NaCl or dialyze the solution against a neutral buffer.
STORAGE TEMPERATURE:	4°C in the dark for lyophilized form and -20°C for solution. Collagen might be gradually degraded under neutral pH conditions.
STABILITY:	2 years in lyophilized form
REFERENCES:	1. Separation of the alpha chains of type I and III collagens by SDS-polyacrylamide gel electrophoresis. Hayashi T, Nagai Y. J Biochem. 1979 Aug;86 (2):453-9.