

Immunization Grade Rat Type I Collagen

Catalog # 1064

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION:	Highly purified type I collagen
APPLICATION:	Use for immunization to generate antibodies and for general purposes in biochemistry and bioengineering.
QUANTITY:	5 mg
FORM:	Lyophilized powder
SOURCE:	Rat skin
MOLECULAR WEIGHT:	300 kDa (consists of two $\alpha 1(I)$ chains and one $\alpha 2(I)$ chain)
PURITY:	>99% by SDS-PAGE
USAGE:	<p>Type I collagen can be dissolved at 4 mg/ml in an acidic buffer such as 0.01-0.05M acetic acid, pH 3.0-3.3 or 0.15M citrate buffer, pH 3.6, mixed at 4°C overnight. Due to the rigid and long triple helical conformation of the collagen molecule, Chondrex, Inc. recommends keeping the collagen solution concentration below 4 mg/ml; concentrations greater than 4 mg/ml will be hard to handle due to the high viscosity. If high concentrations of collagen are required (preparing bio-materials such as collagen sheets, sponges, or beads for example), the collagen can be mixed with acidic buffer by mechanical stirring.</p> <p>In order to dissolve collagen in neutral buffer, dissolve the collagen in 0.01-0.05M acetic acid, add it into a 2X neutral buffer, and dilute with a 1X buffer. It is important to keep the concentration of NaCl between 0.15-0.2M. Always keep collagen solutions on ice. Do not leave a neutral collagen solution at room temperature, as the collagen can form a gel.</p>
STORAGE:	4°C in the dark for lyophilized form and at -20°C for solution form. Collagen will gradually degrade under neutral conditions.
STABILITY:	2 years
NOTES:	N/A
REFERENCES:	N/A