

Immunization Grade Human Amnion Type V Collagen, Lyophilized

Catalog # 1095

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION:	Human type V collagen purified from pepsin-solubilized amnion by repeat salt precipitation. Amnion type V collagen consists of two $\alpha 1$ chains and one $\alpha 2$ chain, [$\alpha 1(V)$] ₂ and $\alpha 2(V)$.
APPLICATION:	Use as an immunizing antigen to generate antibodies, an antigen to detect anti-type V collagen antibodies in ELISA, or as a standard for gel analysis.
QUANTITY:	1 mg
FORM:	Lyophilized powder
SOURCE:	Human
MOLECULAR WEIGHT:	Intact amnion type V collagen: approximately 540 kDa. By 6% gel analysis, amnion type V collagen separates into two chains: $\alpha 1(V)$ and $\alpha 2(V)$ (1840 and 1258 amino acid residues) from the top of the gel.
PURITY:	>90% by SDS-PAGE gel analysis
STORAGE:	4°C in the dark for lyophilized form and -20°C for solution form. Collagen may gradually degrade under neutral conditions
STABILITY:	2 years for lyophilized form
NOTES:	Type V collagen can be dissolved at 4 mg/ml in acidic solutions 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.
REFERENCES:	<p>C. Niyibizi, P. Fietzek, M. van der Rest, Human placenta type V collagens. Evidence for the existence of an alpha 1(V) alpha 2(V) alpha 3(V) collagen molecule. <i>J Biol Chem</i> 259, 14170-4 (1984).</p> <p>M. Abedin, S. Ayad, J. Weiss, Type V collagen: the presence of appreciable amounts of alpha 3(V) chain in uterus. <i>Biochem Biophys Res Commun</i> 102, 1237-45 (1981).</p> <p>Sato, K <i>et al.</i> Simple and Rapid Chromatographic Purification of Type V Collagen from a Pepsin Digest of Porcine Intestinal Connective Tissue, an Unmanageable Starting Material for Conventional Column Chromatography. <i>Journal of Chromatography</i> 790:277-283 (2003).</p>