

Immunization Grade Human Placenta Type V Collagen, Lyophilized

Catalog # 10951

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION:	Human type V collagen purified from pepsin-solubilized placenta by repeating salt precipitation. Placenta type V collagen consists of two subtypes of type V collagen, $[\alpha 1(V)]_2\alpha 2(V)$ and $\alpha 1(V)\alpha 2(V)\alpha 3(V)$.
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 placenta type V collagen: approximately 480 Kd. By 6% gel analysis, placenta type V collagen is separated into three chains: $\alpha 1(V)$, $\alpha 3(V)$, and $\alpha 2(V)$ (1840, 1737, and 1258 amino acid residues) from the top of the gel.
PURITY:	>90% by SDS gel analysis
SOLUBILITY:	Type V 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 conditions.
STABILITY:	2 years in lyophilized form
REFERENCES:	Christopher Niyibizi et al. Human Placenta Type V Collagens. Journal of Biological Chemistry. Vol. 259, No.22:14170-14174 (1984)