

3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

Collagen from bovine tracheal cartilage

Product Number C1188 Storage Temperature 2-8 °C

Product Description
CAS Number: 9007-34-5

This collagen is Bornstein and Traub Type II, not to be confused with Sigma's catalog type, which is an organizational placeholder.

Collagen breaks down metabolically in the body to release N-telopeptide, which is the N-terminus of collagen. There is also C-telopeptide, which is presumably the C-terminus. N-telopeptide is released in urine, and its detection in diagnostic tests is used to screen for osteoporosis.

Although different types of collagen exist, they are all composed of molecules containing three polypeptide chains arranged in a triple helical conformation. Slight differences in the primary structure (amino acid sequence) establish differences between the types. The amino acid sequence of the primary structure is

mainly a repeating motif with glycine in every third position and proline or 4-hydroxyproline frequently preceeding the glycine residue. 1,2

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is an acid soluble collagen. It can be dissolved in water with acetic acid added to pH 3.0 (5 mg/ml), yielding an opalescent, colorless solution.

References

- 1. Tanzer, M. L., Cross-linking of collagen. Science, **180(86)**, 561-566 (1973).
- Bornstein, P. and Sage, H., Ann. Rev. Biochem., 49, 959 (1980).

MWM/CMH/RXR 5/06