

□ Cat # RP-919

Recombinant Human Collagen-1

Size: □ 10 mg

Collagen, a major component of the extracellular matrix, is a fibrous protein that provides tensile strength to tissues giving them structural integrity. Collagen and its derivative, gelatin, have been widely used in medical, pharmaceutical and consumer products for more than 100 years. The supply of these materials, created from animal remains, is both abundant and inexpensive. However, most formulations are not highly purified and have the potential to cause an inflammatory reaction in some product users. Products that contain animal-derived collagen can induce potentially harmful inflammatory or immune responses in humans and pose risk of contamination with viruses or prions, potentially life-threatening pathogens. Recombinant collagens are essentially identical to the native collagen protein thereby reducing the risk of inflammation, immune response, and disease as compared to animal-sourced collagen.

SOURCE:

DNA sequences encoding the human proalpha1(I), proalpha2(I) and both alpha and beta subunits of prolyl hydroxylase were co-expressed in the yeast *Pichia pastoris*. Procollagen I was converted into mature collagen by a controlled proteinase digestion. The protein solution in 0.01M HCl.

APPLICATION AND SUGGESTED DILUTIONS:

Greater than 99.0% as determined by SDS-PAGE. Users must optimize the appropriate concentration and conditions for each assay.

STORAGE & STABILITY:

Collagen-I should be stored at 2-8°C. If supplied in powder then reconstitute it in 100ul water for 1mg/mL stock and store in liquid at 4°C for ~ 1week or aliquots in suitable size and store at -20°C for long term storage.

USAGE:

This item is for LABORATORY RESEARCH USE ONLY.

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