9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

Collagen-II Human

Human Collagen-II
RCP0485

Product Overview

Name	Collagen-II Human

Description

Human Collagen-II

Introduction

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. In addition, concerns have been raised over the last several years about the potential for contamination of bovine products with the agent that causes mad cow disease and its human variant, Creutzfeldt-Jakob Disease. Animal collagens are subject to extensive modifications that continue over the life of the molecule in the extracellular space. These differences influence both the extractability of collagens from tissue and the biophysical characteristics of these collagens. As a result, collagens isolated from tissues exhibit significant lot-to-lot variability and, as bulk materials, are often analytically intractable. 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

Human cartilage.

Physical Appearance

Filtered White lyophilized (freeze-dried) powder.

Formulation

Collagen-I was lyophilized without additives.

Stability

Lyophilized Collagen-II although stable at room temperature for 3 weeks, should be stored desiccated below -18C. Upon reconstitution Collagen-II should be stored at 4C between 2-7 days and for future use below -18C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

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Purity

> 95.0%.

Solubility

It is recommended to add 0.5 M acetic acid, pH 2.5 to prepare a working stock solution not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

Collagen-II Human is for research use only and not for use in diagnostic or therapeutic procedures.