

COLLAGEN, TYPE IV, HUMAN, POWDER, NON-STERILIZE Catalog Number 5016

## **Product Description**

Type IV collagen is the primary collagen found in the extracellular basement membranes separating a variety of epithelial and endothelial cells. It is a major component of the dermal-epidermal junction where it is mostly found in the lamina densa. It is a heterotrimeric molecule containing two  $\alpha$ 1-like and one  $\alpha$ 2-like chains.

This Type IV collagen is isolated from human placenta and is purified using a multi-step process. The product is supplied as a non-sterile powder containing 5 mg of Type IV collagen per vial. This product is not intended for aseptic applications.

Type IV human collagen is suitable for use as a substrate for collagenase assays and positive controls. Since this product is sterilized, it is not recommended for aseptic applications.

## Characterization

Identity/Purity: The identity and purity of Type IV Human Collagen is qualitatively evaluated using electrophoresis (SDS-PAGE) which shows the typical banding pattern for Type IV collagen.

**Storage:** This product is stored at -20°C prior to solubilization and is shipped on frozen gel packs. If entire amount of material is not used immediately after solubilization, dispense into appropriate aliquots and store frozen. Avoid repeated freeze and thaw.

<u>Stability:</u> The product shelf life after reconstitution is 3 months when stored at 2-10°C.

## **Precautions and Disclaimer**

This product is for R&D use only and is not intended for human or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

The raw material source for this product is human placenta. The raw material has been tested for the presence of infectious viruses (HIV 1 & 2, HBV, HCV) and found nonreactive. However, no known test method can offer complete assurance of safety. Appropriate safety and personal protective practices should be followed when handling this product.

## **Preparation Procedure**

1. Reconstitute the 5 mg vial with 5 ml of cold, sterile 0.25% acetic acid and mix by pipetting up and down several times. Allow to sit at 2 to 8°C swirling periodically for > 1 hour.

Note: The resulting solution will be slightly hazy. If there are some insoluble materials present and you wish to remove it, aseptically centrifuge the material for approximately 2 minutes at 3000 RPM.

2. Dilute the product to desired concentration with 0.25% acetic acid.