Certificate of Analysis

BD™ COLLAGEN VI, HUMAN

Collagen VI is a large, multidomain extracellular matrix protein. Its heterotrimeric chains assemble into a microfibrillar network via tetramerization and end-to-end association[1]. Its pattern of distribution and its unique structure and expression compared with other ECM molecules indicate that Collagen VI may fulfill specialized tasks in tissue organization and cell functioning[2,3,4]. It mediates the three-dimensional organization of fibronectin in the extracellular matrix of cultured fibroblasts[5]. Soluble Collagen VI drives serum-starved fibroblasts through S phase and prevents apoptosis via down-regulation of Bax[6]. Elevated tissue and blood levels of Collagen VI during embryogenesis, wound healing, and fibrosis suggests Collagen VI-induced inhibition of apoptotic cell death[6]. Mutations in Collagen VI genes cause Bethlem myopathy and Ullrich congenital muscular dystrophy[7].

CATALOG NUMBER:	354261	LOT NUMBER:_____

SOURCE: Human placenta

NOTE: Any of the human source material used in the manufacturing of this material was tested and found nonreactive for hepatitis B surface antigen (HBsAG), for antibody to hepatitis C virus (anti-HCV), for antibody to human immunodeficiency virus-1 (anti-HIV-1), for antibody to human immunodeficiency virus-2 (anti-HIV-2), and for antibody to syphilis (RPR). Regardless of the test data this product should be handled observing the same Universal Safety Precautions employed when handling any potentially infectious material.

QUANTITY: 0.5 mg, frozen.

CONCENTRATION: _____ mg/mL

FORMULATION: 1 M Sodium Chloride, 1.25 mM Tris, pH 8.0

RECONSTITUTION & USE: BD Collagen VI, human, is generally used as a coating, but may also be added to cell culture media. The optimal concentration for cell attachment and culture may differ for various cell types. Some experimentation may be required to determine the optimal conditions for individual cell culture systems. If the material is not to be used all at once, dispense into appropriate aliquots and store at -70^{o} C. **AVOID MULTIPLE FREEZE THAWS**.

PURITY: Electrophoretic homogeneity $\geq$90% by SDS-PAGE.

QUALITY CONTROL: BD Collagen VI, human, has been tested and found negative for the presence of bacteria, fungi and mycoplasma.

_____ endotoxin units/milliliter (by Limulus Amoebocyte Lysate Assay)

STORAGE: Stable when stored at -70°C. Avoid multiple freeze-thaws. Do not store in frost-free freezer. **KEEP FROZEN**.

EXPIRATION DATE: _____

 LOT NUMBER:

REFERENCES:

1. Bruns, R.R., et.al., *J. Cell Biol,* **103**:393 (1986).
2. Loreal, O., et.al., *Gastroenterology.,* **102**:980 (1992).
3. Hatamochi, A., et.al., *J. Biol. Chem.,* **264**:3494 (1989).
4. Kuo, H.J., et.al., *J. Biol. Chem.,* **272**:26522 (1997).
5. Sabatelli, P., et.al., *Matrix Biol.,* **20**:475 (2001).
6. Ruhl, M., et.al., *J. Biol. Chem.,* **274**:34361 (1999).
7. Baker, N.L., et.al., *Hum. Mol. Genet.,* **14**:279 (2005).

NOTE: For more details on BD Collagen products and technical resources please visit support page at www.bdbiosciences.com/cellculture/ecm

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.

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