



## User Manual

**Epigen (EPG) (Human)**

**Cat. No. HEOPP-05033**

**Description:**

Epigen (EPG) is an EGF-related polypeptide growth factor that signals through the ErbB receptor-1. It is produced in several tissues, including the testis, liver, heart and in certain tumor cells. Epigen is mitogenic for fibroblasts and epithelial cells. Human Epigen is initially synthesized as a glycosylated 14.7 kDa transmembrane precursor protein, which is processed by proteolytic cleavage to produce a mature soluble sequence.

**Source:**

*Escherichia coli*

**Unit:**

1 mg

**Reconstitution:**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

**Formulation:**

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

**Storage:**

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

**Molecular Weight:**

Approximately 7.9 kDa monomeric protein, containing 72 amino acid residues, which comprises the EGF homologous portion of the Epigen precursor.

**Endotoxin:**

Less than 1 EU/ $\mu$ g of EPG as determined by LAL method.

**Usage:**

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

**Biological Activity:**

The ED50 determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 300 ng/mL, corresponding to a specific activity of  $> 3.3 \times 10^3$  IU/mg.

**Physical Appearance:**

Sterile filtered white lyophilized (freeze-dried) powder.

**AA Sequence:**

AVTVTPPITA QQADNIEGPI ALKFSHLCLE DHNSYINGA CAFHHELEKA  
ICRCFTGYTG ERCEHLTLTS YA

**Purity:**

$> 98\%$  by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

Cyagen Biosciences reserves all rights on the technical documents of its culture products. No part of this document may be reproduced or adapted for other purposes without written permission from Cyagen Biosciences.