

Epigen, Human

Cat. No.: Z02864-25

Size: 25.0 ug

Synonyms: Epigen (EPG), Human;

Description:

Epigen 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.

Amino Acid Sequence:

00001 AVTVTPPITA QQADNIEGPI ALKFSHLCLE DHNSYCLNGA
00041 CAFHHELEKA ICRCFTGYTG ERCEHLTLTS YA

Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ as 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.

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

Formulation: Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity: > 98 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/ μ g of rHuEpigen as determined by LAL method.

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.