



Epigen, human recombinant (rHuEPGN)

Catalog No: 08550
Lot No: XXXXX
Source: *E. coli*
Synonyms: EPG, Epigen, PRO9904, ALGV3072, FLJ75542, EPGN, Epithelial mitogen

Background

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

Description

Epigen human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 72 amino acids and having a molecular mass of 7.9 kDa. Epigen is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

EPGN was lyophilized from 20 mM PBS buffer pH 7.4 containing 130 mM sodium chloride.

Solubility

It is recommended to reconstitute the lyophilized Epigen in sterile 18 M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

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

Purity

Greater than 98.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

AVTVTPPITA QQADNIEGPI ALKFSHLCLE DHNSYINGA CAFHHELEKA ICRCFTGYTG ERCEHLTLTS YA

Activity

Determined by the dose-dependent stimulation of the proliferation of murine Balb/3T3 cells. The expected ED50 for this effect is 150 - 300 ng/ml corresponding to a specific activity of 3,334 - 6,667 IU/mg.

Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.