

Growth Factor Data Sheet

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EPGN is a member of the epidermal growth factor family and expression has been seen in several tissues, including the testis, liver, heart and certain tumor cells. It is a strong mitogen for fibroblasts and epithelial cells but has low affinity for its main receptor, ErbB1. The enhanced mitogenic potential is attributed to inefficient receptor ubiquitylation and endocytosis. EPGN stimulates phosphorylation of c-*erbB*-1 and MAP kinases in epithelial cells. The protein contains a conserved sequence of six cysteine residues and two N-linked glycosylation sites, with two hydrophobic regions comprised of a signal sequence and a transmembrane domain. Alternative splicing of the EPGN gene results in multiple isoforms.

Catalog Number	1150-06
Product Name	EPGN (Epigen), Human Recombinant Human Epithelial Mitogen Epigen EPG ALGV2072 PRO9904
Source	<i>Escherichia coli</i>
MW	~7.9 kDa (72 amino acids)
Sequence	AVTVTPPITA QQADNIEGPI ALKFSLCLE DHNSYINGA CAFHHELEKA ICRCFTGYTG ERCEHLTLTS YA
Accession Number	Q6UW88
Purity	>98% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ 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.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.