

Recombinant Human EPGN protein

Cat. No. EPGN-131H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human EPGN protein was expressed in Escherichia coli.
Species	Human
Source	E.coli
ProteinLength	72
Description	Epigen is a member of the epidermal growth factor family and is expressed by several tissues, including the testis, liver, heart and in certain tumor cells. It is strongly mitogenic for fibroblasts and epithelial cells, despite its relatively weak affinity for its main receptor, ErbB1. The mitogenic potential of Epigen is enhanced by its unusually long persistence on the membrane before ubiquitylation and receptor-mediated depletion. The gene of human Epigen encodes a 154 amino acid (a.a.) residue type I transmembrane precursor glycoprotein which contains a 22 a.a. signal peptide, an 88 a.a. extracellular domain, a 21 a.a. transmembrane domain and a 23 a.a. cytoplasmic domain. By alternative splicing of the gene, Epigen has several isoforms. The mature, shed form of human Epigen (54 – 104a.a.) shares 92 %, 94 % and 94 % a.a. sequence identity with mouse, rat and equine Epigen, respectively.
Form	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
Bio-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.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	Approximately 7.9 kDa monomeric protein, containing 72 amino acid residues, which comprises the EGF homologous portion of the Epigen precursor.
AA Sequence	AVTVTPPITAQQADNIEGPIALKFSHLCLEDHNSYINGACAFHHELEKAICRCFTGYT GERCEHLTLTSYA
Endotoxin	Less than 1 EU/μg of rHuEpigen as determined by LAL method.
Purity	>98% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
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 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	EPGN
Official Symbol	EPGN
Synonyms	EPGN; epithelial mitogen homolog (mouse); epigen; ALGV3072; EPG; PRO9904; FLJ75542;
Gene ID	255324

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

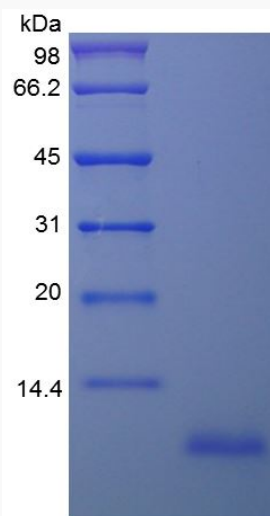
 45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq NM_001013442

Protein Refseq NP_001013460

UniProt ID Q6UW88

SDS-PAGE of EPGN-131H



Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA