

Datasheet for ABIN2017766

Epigen Protein (AA 24-95)



Overview

Quantity:	50 μg
Target:	Epigen (EPGN)
Protein Characteristics:	AA 24-95
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Product Details	
Characteristics:	ED50 < 1 xg/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 1x 10^3 units/mg. AA 24-95, expressed with an N-terminal Met.
Purity:	> 95 % by SDS-PAGE analysis.
Endotoxin Level:	< 0.2 EU/µg, determined by LAL method.
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Target Details

Target:	Epigen (EPGN)
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Alternative Name:	Epigen (EPGN Products)
Background:	Epigen is a cytokine belonging to the Epidermal Growth Factor (EGF) superfamily, which also includes Epiregulin, Amphiregulin, Neuregulin 2-beta, and Transforming Growth Factor alpha.
	The precursor of Epigen produced in tissues has 154 amino acids, and shares the

characteristics of other members of EGF superfamily, including 3 disulfide bonds formed by 6 cysteines. Epigen is present in testis, heart, and liver, and it binds to EGF receptors with a much lower binding affinity than EGF. However, Epigen is more mitogenic than EGF. Epigen achieves its strong mitogenic potency by suppressing ligand-induced receptor inactivation. Unlike EGF, Epigen can also bind to EGF receptors in low pH conditions, helping its recycling. Therefore Epigen has anomalous potency due to its prolonged presence. Recombinant human Epigen (rhEpigen) produced in E. coli is a single non-glycosylated polypeptide chain containing 73 amino acids. A fully biologically active molecule, rhEpigen has a molecular mass of 8.1 kDa analyzed by reducing SDS-PAGE.

Synonyms: EPG, Epithelial mitogen

Molecular Weight:

8.1 kDa, observed by reducing SDS-PAGE.

Pathways:

RTK Signaling, EGFR Signaling Pathway

Application Details

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstituted in ddH2O at 100 μg/mL.
Buffer:	Lyophilized after extensive dialysis against PBS.
Storage:	-80 °C
Storage Comment:	Lyophilized recombinant human Epigen (rhEpigen) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rhEpigen remains stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.
Expiry Date:	6 months