

## TECHNICAL DATA SHEET

# Recombinant Human Epigen (Carrier-free)

Catalog Number: 21-7183

## RPx-Pro™ Recombinant Protein

### PRODUCT INFORMATION

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Recombinant Human Epigen (Carrier-free)

#### DESCRIPTION

Epigen is a member of the EGF superfamily of proteins that signals through the ErbB receptor-1. As are other members of the EGF superfamily, human Epigen is initially synthesized as a glycosylated 14.7 kDa transmembrane-bound precursor that is proteolytically cleaved from the plasma membrane. Epigen is mitogenic for fibroblasts and epithelial cells. Although Epigen has low binding affinity to EGF receptors, it has strong mitogenic potency due to its prolonged binding presence. Expression of Epigen has been detected in multiple tissues including testis, liver and heart. Transcript and protein expression have also been reported in cancer specimens of the breast, bladder, and prostate.

#### MOLECULAR MASS

Recombinant Human Epigen is a 7.9 kDa monomeric protein, containing 72 amino acid residues, which comprises the EGF-homologous portion of the Epigen precursor.

#### AMINO ACID SEQUENCE

AVTVTPPITA QQADNIEGPI ALKFSHLCLE DHNSYCPINGA CAFHHELEKA ICRCFTGYTG ERCEHLTLTS YA

#### SOURCE

E.coli

#### APPLICATIONS

Bioassay

#### PURITY

98 %

#### STORAGE

-20°C

#### PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

#### ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1EU/μg).

#### AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### CROSS REACTIVITY

Mouse

#### BIOACTIVITY

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.

#### RESEARCH AREAS

Cancer, Inflammation

#### RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

#### REFERENCES

Solvang HK, Frigessi A, Kaveh F, Riis ML, Lüders T, Bukholm IR, Kristensen VN and Andreassen BK. 2016. EURASIP J Bioinform Syst Biol. (1):6. Dahlhoff M, Frances D, Kloepper JE, Paus R, Schäfer M, Niemann C and Schneider MR. 2016. Mol Cell Biol. 34(16):3086-95.

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