

TECHNICAL DATA SHEET

# Recombinant Human EGFR (Carrier-free)

Catalog Number: 21-7103

## RPx-Pro™ Recombinant Protein

### PRODUCT INFORMATION

#### CONTENTS

Recombinant Human EGFR (Carrier-free)

#### DESCRIPTION

The EGF Receptor (EGFR) is one of the four members of the EGFR subfamily of receptor tyrosine kinases. It is a transmembrane glycoprotein expressed on the cell surface and is a receptor for EGF and at least six other structurally related ligands including amphiregulin, betacellulin and TGF- $\alpha$ . Binding of EGFR to one of these ligands induces receptor dimerization and tyrosine autophosphorylation, leading to cell proliferation. It is involved in regulation of other functions including differentiation, survival, motility and apoptosis. EGFR has been found to be overexpressed in many tumors.

#### MOLECULAR MASS

Recombinant soluble Human EGFR comprises the extracellular domain of EGFR and is 621 amino acids in length. Under reducing conditions it migrates at approximately 97.5 kDa by SDS-PAGE analysis.

#### AMINO ACID SEQUENCE

LEEKKVCQGT SNKLTQLGTF EDHFLSLQRM FNNCEVVLGN LEITYVQRNY DLSFLKTIQE VAGYVLIALN TVERIPLNENL QIIRGNMYYE  
 NSYALAVLSN YDANKTGLKE LPMRNLQEIL HGAVRFSNNP ALCNVESIQLW RDIVSSDFLS NMSMDFQNHG GSCQKCDPSC  
 PNGSCWGAGE ENCQKLTKII CAQQCSGRGR GKSPSDCCHN QCAAGCTGPR ESDCLVCRKF RDEATCKDTC PPLMLYNPTT  
 YQMDVNPEGK YSFGATCVKK CPRNYVVDH GSCVRACGAD SYEMEEDGVR KCKKCEGPCR KVCNGIGIGE FKDSLSINAT  
 NIKHFKNCTS ISGDLHILPV AFRGDSFHT PPLDPQELDI LKTVKEITGF LLIQAWPENR TDLHAFENLE IIRGRKQHG QFSLAVVSLN  
 ITSLGLRSLK EISDGDVIIS GNKNLCYANT INWKKLFGTS GQKTKIISNR GENCKATGQ VCHALCSPEG CWGPEPRDCV  
 SCRNVSRGRE CVDKCNLLEG EPREFVENSE CIQCHPECLP QAMNITCTGR GPDNCIQCAH YIDGPHCVKT CPAGVMGENN  
 TLVWKYADAG HVCHLCHPNC TYGCTGPGLE GCPTNGPKIP S

#### SOURCE

CHO cells

#### APPLICATIONS

Bioassay

#### PURITY

95 %

#### STORAGE

-20°C

#### PROTEIN CONTENT

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

#### ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/ $\mu$ g of protein (<1 EU/ $\mu$ g).

#### AUTHENTICITY

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

#### CROSS REACTIVITY

#### BIOACTIVITY

Testing in progress.

#### RESEARCH AREAS

Angiogenesis & Cardiovascular, Cancer, Differentiation, Inflammation, Neurobiology, Stem Cells, Wound Healing

#### RECONSTITUTION

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

#### REFERENCES

Xu YH, Ishii S, Clark AJL, Sullivan M, Wilson RK, Ma DP, Roe BA, Merlino GT and Pastan I. 1984. Nature. 309: 806-810. Yarden Y and Sliwkowski MX. 2001. Nat Rev Mol Cell Biol. 2(2): 127-137. Singh AB and Harris RC. 2005. Cell Signal. 17(10): 1183-1193. Shilo BZ. 2005. Development. 132: 4017-4027. Schneider MR and Wolf E. 2009. J Cell Physiol. 218(3): 460-466.

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