

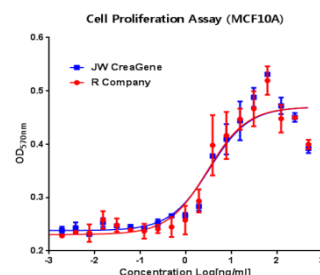
## DATA SHEET

### Product Information

<b>Product Name</b>	: <b>Recombinant Human Epidermal Growth Factor (rhEGF)</b>
<b>Synonyms</b>	: Pro-epidermal growth factor, Urogastrone
<b>Description</b>	: Epidermal growth factor (EGF) is a growth factor that stimulates cell growth, proliferation, and differentiation. Human EGF is a 6045 Da protein with 53 amino acid residues and three intramolecular disulfide bonds. EGF acts by binding with high affinity to EGFR on the cell surface. This stimulates ligand-induced dimerization, activating the intrinsic protein-tyrosine kinase activity of the receptor. The tyrosine kinase activity, in turn, initiates a signal transduction cascade that results in a variety of biochemical changes within the cell - a rise in intracellular calcium levels, increased glycolysis and protein synthesis, and increases in the expression of certain genes. (Ref. From Wikipedia)
<b>NCBI Accession No.</b>	: NM_001963.4
<b>Amino acid sequence</b>	: <b>MNSDSECLPSHDGYCLHDGVCMYIEALDKYACNCVVGYIGERCQYRDLKWWELR</b>
<b>Molecular Mass</b>	: 6.33 kDa (54 aa)
<b>Protein Tags</b>	: No tagging
<b>Source</b>	: <i>E. coli</i> .
<b>Cat. No.</b>	: HEGF-10, HEGF-25, HEGF-50, HEGF-100, HEGF-250, HEGF-500
<b>Storage</b>	: Should be at $\leq -70$ °C as undiluted aliquots of handy size. Avoid repeated freezing and thawing.
<b>Cross Reactivity</b>	: Mouse, Rat, Monkey, Rabbit, Pig, Cow, Hamster

### Quality Control

Test items	Specifications
<b>Appearance</b>	: Clear, colorless liquid
<b>Purity</b>	: Greater than 98 % by RP-HPLC and SDS-PAGE
<b>Specificity</b>	: Using Western blot, detection
<b>Concentration</b>	: 0.1 mg/ml, Bradford method
<b>Biological Activity</b>	: Determined by proliferation of MCF10A indicator cells. The ED50 is <4.0 ng/ml, corresponding to a specific activity of $> 3.0 \times 10^6$ EU/mg
<b>Endotoxin</b>	: Less than 1.0 EU/ $\mu$ g as determined by the LAL method
<b>Formulation</b>	: Phosphate buffered saline (pH 7.0~8.0) without preservative or carrier proteins.
<b>Stability</b>	: Stable for up to 12 months at -70 °C. Stable for a month at 4 °C.
<b>Sterility</b>	: Sterilized through a 0.2 $\mu$ m membrane filter and packaged aseptically. Culture for 2 weeks, no growth



**Manufacturer** : **JW CreaGene Inc.**  
 FL2, Jungang induspia V, 138-6, Sangdaewon-dong, Jungwon-gu, Seongnam-si,  
 Gyeonggi-do, South Korea (462-120)  
 Tel: 82-31-737-3310, Fax: 82-31-737-3301