

# Recombinant Human Epidermal Growth Factor

Human, Antigen (EGF)

Cat. No: DAG360

Lot.No: (See product label)

## PRODUCT INFORMATION

**Product Overview:** Recombinant human epidermal growth factor (hEGF) was expressed in *Pichia pastoris*. Single immunospecific band is at 5 kDa, and may appear as a doublet.

**Antigen Description:** Epidermal growth factor or EGF is a growth factor that plays an important role in the regulation of cell growth, proliferation, and differentiation by binding to its receptor EGFR. Human EGF is a 6045-Da protein with 53 amino acid residues and three intramolecular disulfide bonds.

**Form:** Purified, Liquid

**Source:** *Pichia pastoris*

**Purification:** ≥95% pure (SDS-PAGE). Purity compares with reference lot.

**Inactivation:** Not applicable.

**Applications:** Suitable for use in Western blot. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.

## REFERENCES

1. Cotran, Ramzi S.; Kumar, Vinay; Fausto, Nelson; Nelso Fausto; Robbins, Stanley L.; Abbas, Abul K. (2005). Robbins and Cotran pathologic basis of disease. St. Louis, Mo: Elsevier Saunders.
2. PDB 1a3p; Barnham KJ, Torres AM, Alewood D, Alewood PF, Domagala T, Nice EC, Norton RS (August 1998). "Role of the 6-20 disulfide bridge in the structure and activity of epidermal growth factor". *Protein Science* 7 (8): 1738–49.
3. Herbst RS (2004). "Review of epidermal growth factor receptor biology". *International Journal of Radiation Oncology, Biology, Physics* 59 (2 Suppl): 21–6.

## GENE INFORMATION

**Gene Name:** [EGF epidermal growth factor \[ \*Homo sapiens\* \]](#)

**Official Symbol:** EGF

**Synonyms:** EGF; epidermal growth factor; URG; HOMG4; pro-epidermal growth factor; beta-urogastrone; OTTHUMP00000162922; OTTHUMP00000219721; OTTHUMP00000219722; Urogastrone; epidermal growth factor (beta-urogastrone); Beta urogastrone

**GeneID:** [1950](#)

**mRNA Refseq:** [NM\\_001178130](#)

**Protein Refseq:** [NP\\_001171601](#)

**MIM:** [131530](#)

**UniProt ID:** P01133

**Chromosome Location:** 4q25

**Pathway:** Arf6 signaling events; Bladder cancer; Ceramide signaling pathway; Delta-Notch Signaling Pathway; Endocytosis; EGFR1 Signaling Pathway; Focal Adhesion; Formation of Platelet plug

**Function:** calcium ion binding; epidermal growth factor receptor binding; growth factor activity; protein binding; transmembrane receptor protein tyrosine kinase activator activity

## PACKAGING

**Concentration:** Lot specific (Coomassie® Plus)

**Buffer:** 0.025M Sodium Bicarbonate, 0.15M Sodium chloride, pH 7.0 to 8.0 at room temperature

**Preservative:** None

**Storage:** Store at –70°C or below. Aliquot to avoid multiple freeze/thaw cycles.