

Datasheet for ABIN7505501  
**EGF Protein (AA 22-154) (His tag)**



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## Overview

Quantity:	100 µg
Target:	EGF
Protein Characteristics:	AA 22-154
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EGF protein is labelled with His tag.

## Product Details

Sequence:	Gln 22-Leu 154
Characteristics:	A DNA sequence encoding the Rat Epidermal Growth Factor/EGF protein (P07522) (Gln 22-Leu 154) was expressed with N-His&C-His tag.
Purity:	> 95 % as determined by reducing SDS-PAGE.

## Target Details

Target:	EGF
Alternative Name:	Epidermal Growth Factor ( <a href="#">EGF Products</a> )
Background:	Abbreviation: EGF Target Synonym: Pro-Epidermal Growth Factor,EGF,Epidermal Growth Factor,Urogastrone Background: EGF is the founding member of the EGF-family of proteins. Members of this protein family have highly similar structural and functional characteristics. EGF contains 9 EGF-

## Target Details

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like domains and 9 LDL-receptor class B repeats. Human EGF is a 645-Da protein with 53 amino acid residues and three intramolecular disulfide bonds. As a low-molecular-weight polypeptide, EGF was first purified from the mouse submandibular gland, but since then it was found in many human tissues including submandibular gland, parotid gland. It can also be found in human platelets, macrophages, urine, saliva, milk, and plasma. EGF is a growth factor that stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. It results in cellular proliferation, differentiation, and survival. Salivary EGF, which seems also regulated by dietary inorganic iodine, also plays an important physiological role in the maintenance of oro-esophageal and gastric tissue integrity. EGF acts by binding with high affinity to epidermal growth factor receptor on the cell surface and stimulating 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 including the gene for EGFR - that ultimately lead to DNA synthesis and cell proliferation.

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Molecular Weight:	Calculated MW: 14.52 kDa Observed MW: 16 kDa
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UniProt:	<a href="#">P07522</a>
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Pathways:	<a href="#">NF-kappaB Signaling</a> , <a href="#">RTK Signaling</a> , <a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a> , <a href="#">Regulation of Carbohydrate Metabolic Process</a> , <a href="#">Hepatitis C</a> , <a href="#">Protein targeting to Nucleus</a> , <a href="#">Interaction of EGFR with phospholipase C-gamma</a> , <a href="#">Thromboxane A2 Receptor Signaling</a> , <a href="#">EGFR Downregulation</a>
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## Application Details

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Restrictions:	For Research Use only
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## Handling

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Format:	Lyophilized
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Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
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Storage:	4 °C,-20 °C,-80 °C
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Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.
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## Handling

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Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

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Expiry Date: 12 months