

Datasheet for 009-F01-C26-1000**rHuman EGF Protein****Overview**

Description:	Human Epidermal Growth Factor Recombinant Protein (Animal Free) - 009-F01-C26-1000
Item No.:	009-F01-C26-1000
Size:	1 mg
Applications:	Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Epidermal Growth Factor (EGF) is a growth factor that stimulates the proliferation of epithelial and epidermal cells. EGF family members are characterized by three intramolecular disulfide bonds and can bind to four different receptor tyrosine kinases known as EGFR/ErbB1, ErbB2, ErbB3, and ErbB4. EGF is overexpressed in multiple tumor cell lines and promotes resistance to chemotherapy and radiation treatments. Recombinant human EGF is a single, non-glycosylated protein containing 53 amino acids, with a molecular weight of 6.2 kDa.
Synonyms:	Urogastrone, URG
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	EGF
Purity/Specificity:	Epidermal Growth Factor (EDF) is produced with no animal-derived raw products, animal free equipment and animal free protocols. Purity was determined to be greater than 95% as determined by analysis by HPLC, UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-PAGE.
Relevant Links:	• UniProtKB - P01133

Application Details

Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Epidermal Growth Factor Recombinant Protein has been tested by biological activity and is suitable as a control for polyclonal or monoclonal anti-Epidermal Growth Factor in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein. Biologic Activity: The activity is determined by the dose-dependent proliferation of murine BALB/c 3T3 cells and is typically between 20-100 pg/mL.

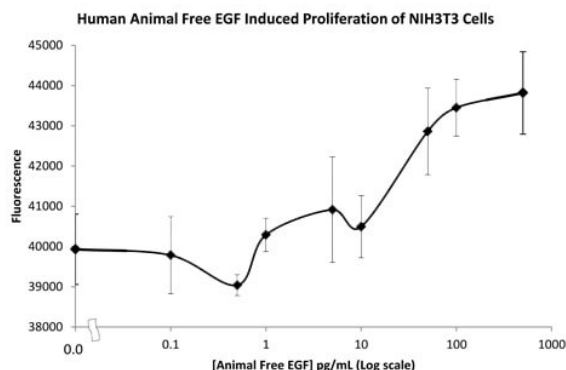
Formulation

Physical State:	Lyophilized
Concentration:	0.1 mg/mL by UV absorbance at 280 nm
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

Bioactivity of Human Epidermal Growth Factor Recombinant Protein. 3T3 cells were cultured with 0 to 1 ng/mL Human EGF. Cell proliferation was measured after 44 hours and the linear portion of the curve was used to calculate the ED50. The ED50 of Human EGF is 8.8-13.2 pg/mL. This value is comparable to the typical expected range of 20-100 pg/mL.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.