

Recombinant Human EGF(Cat.No.:C029)

Source: E.coli

Description: Recombinant Human Epidermal Growth Factor is produced by our E.coli expression

system and the target gene encoding Asn971-Arg1023 is expressed.

Accession: P01133

Known As: Pro-Epidermal Growth Factor; EGF; Epidermal Growth Factor; Urogastrone

Predicted Mol Mass: 6.2 KDa

Apparent Mol Mass: 11 KDa, reducing conditions

Endotoxin: < 0.01 EU/μg as determined by LAL test.

Formulation: Lyophilized from a 0.2 μm filtered solution of 20mM Tris,200mM

NaCl,4%Mannitol,pH 8.0.

Reconstitution: Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not

recommended to reconstitute to a concentration less than 100 $\mu g/ml$. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to

minimize freeze-thaw cycles.

Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at

the temperature listed below.

Storage: Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt.

Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at \leq -20°C for 3 months.

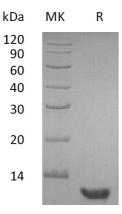
Background: Epidermal growth factor (EGF) is a small 53 amino acid residue long protein that

contains three disulfide bridges. It is a small mitogenic protein that is thought to be involved in mechanisms such as normal cell growth, oncogenesis, and wound healing. EGF stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. This protein shows both strong sequential and functional homology with human type-alpha transforming growth factor (hTGF

alpha), which is a competitor for EGF receptor sites.

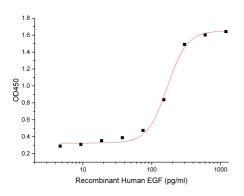
Purity-SDS-PAGE:





Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay:



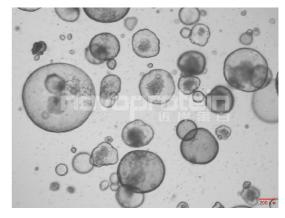
Measured in a cell proliferation assay using BALB/c 3T3 cells. The ED50 for this effect is 60-450 pg/ml (QC verified).



Mouse Colon organoids were cultured with EGF (Cat#C029), Wnt3a (Cat#C22R), Noggin (Cat#C028), and R-spondin 1 (Cat#CX83). The organoids showed good morphology.

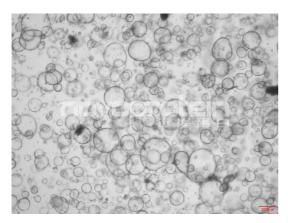


Mouse intestinal organoids were cultured with EGF (Cat#C029), Noggin (Cat#C028) and R-spondin 1 (Cat#CX83). The organoids showed good morphology and germination rate.

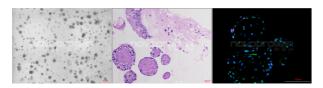


Mouse Gastric organoids were cultured with EGF (Cat#C029), Wnt3a (Cat#C22R), Noggin (Cat#C028), R-spondin 1 (Cat#CX83) and FGF-10 (Cat#CR11). The organoids showed good morphology.





Mouse bile duct organoids were cultured with EGF (Cat#C029) , R-spondin 1 (Cat#CX83) ,FGF-10 (Cat#CR11) and HGF (Cat#CJ72). The organoids showed good morphology.



Human breast cancer organoids were cultured with Wnt3a(Cat#C22R),Noggin (Cat#CB89),R-spondin 3 (Cat#C18C),KGF(Cat#CH73), FGF-10(Cat#CR11),EGF (Cat#C029)and NRG1-beta 1(Cat#753). DAPI (blue), Ki67(red) and ER(green).



Human intestinal organoids (ipsc source) were cultured with Activin A(Cat#C687) , BMP-4(Cat#CR93) , EGF (Cat#C029) , Wnt3a (Cat#C22R), Noggin (Cat#C028), R-spondin 1 (Cat#CX83) and FGF-4 (Cat#CR08) . The organoids showed good morphology.