

APA560Hu64 100µg
Active Epidermal Growth Factor (EGF)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Eukaryotic expression.

Host: 293F cell

Residues: Asn971~Arg1023

Tags: N-terminal His Tag and C-terminal Fc Region of Human IgG1

Purity: >95%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 5% Trehalose .

Original Concentration: 200µg/mL

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 4.5

Predicted Molecular Mass: 37.2kDa

Accurate Molecular Mass: 40kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the

protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

NSDSECLSHDGYCLHDGVCMYIEALDKYACNCVVGYIGERCQYRDLKWWELR

[ACTIVITY]

Epidermal Growth Factor (EGF) is the founding member of the EGF-family of proteins. Members of this protein family have highly similar structural and functional characteristics. Members of the EGF family are characterized by a shared structural motif, the EGF-like domain, which contains three intramolecular disulfide bonds that are formed by six similarly spaced, conserved cysteine residues. EGF is a growth factor that stimulates cell growth, proliferation, and differentiation by binding to its receptor EGFR.

To test the effect of EGF on cell proliferation, Balb/3T3 cells were seeded into triplicate wells of 96-well plates and allowed to attach overnight, then the medium was replaced with various concentrations of recombinant human EGF with serum-free standard DMEM. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 μ l of CCK-8 solution was added to each well of the plate, then measure the absorbance at 450 nm using a microplate reader after incubating the plate for 1-4 hours at 37 ° C. The dose-effect curve of EGF was shown in Figure 1.

It was obvious that EGF significantly increased cell viability of Balb/3T3 cells. The EC50 is 0.411 μ g/ml.

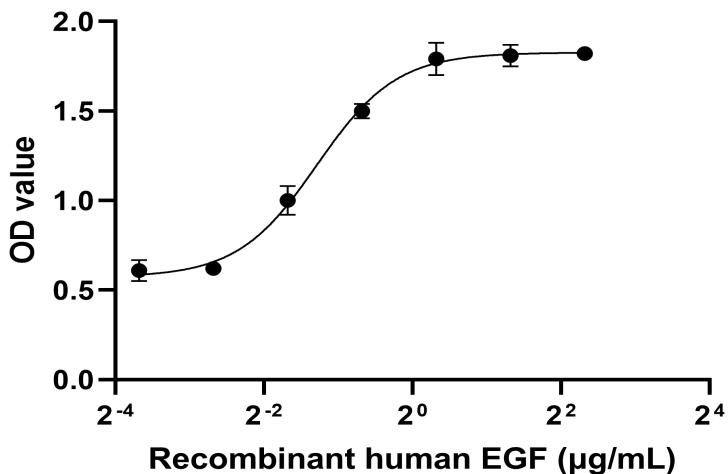


Figure1. The dose-effect curve of recombinant human EGF on Balb/3T3 cells

[IDENTIFICATION]

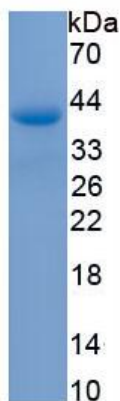


Figure 2. SDS-PAGE

Sample: Active recombinant EGF, Human

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.