

# Recombinant Mouse EREG Protein

Catalog No.: RP01880

## Sequence Information

|                   |                |
|-------------------|----------------|
| <b>Species</b>    | <b>Gene ID</b> |
| Mouse             | 13874          |
| <b>Swiss Prot</b> | <b>Tags</b>    |
| Q61521            | N-hFc          |

### Synonyms

Proepiregulin, Cleaved into:  
Epiregulin, EPR, Ereg

## Product Information

|               |                                  |
|---------------|----------------------------------|
| <b>Source</b> | <b>Purification</b>              |
| HEK293 cells  | ≥ 90% as determined by SDS-PAGE. |

### Calculated MW/Observed MW

31.36 kDa      35–40 kDa

### Endotoxin

< 0.1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1–0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Background

Epiregulin (EREG) is a member of the epidermal growth factor family. Epiregulin (EREG) can function as a ligand of EGFR (epidermal growth factor receptor), as well as a ligand of most members of the ERBB (v-erb-b2 oncogene homolog) family of tyrosine-kinase receptors. Epiregulin (EREG) exhibit bifunctional regulatory properties: it inhibit the growth of several epithelial tumor cells and stimulated the growth of fibroblasts and various other types of cells. Epiregulin (EREG) bound to the EGF receptors of epidermoid carcinoma A431 cells much more weakly than did EGF, but was nevertheless much more potent than EGF as a mitogen for rat primary hepatocytes and Balb/c 3T3 A31 fibroblasts. These findings suggest that epiregulin (EREG) plays important roles in regulating the growth of epithelial cells and fibroblasts by binding to receptors for EGF-related ligands. Epiregulin (EREG) is the broadest specificity EGF-like ligand so far characterized: not only does it stimulate homodimers of both ErbB-1 and ErbB-4, it also activates all possible heterodimeric ErbB complexes.

## Basic Information

### Description

Recombinant Mouse EREG Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val56-Leu101) of Mouse EREG (Accession #NP\_031976.1) fused with hFc tag at the N-terminus.

### Activity

Measured in a cell proliferation assay using Balb3T3 mouse fibroblast cells. The ED<sub>50</sub> for this effect is 140.58–562.31 ng/mL, corresponding to a specific activity of 1.78×10<sup>3</sup>~7.11×10<sup>3</sup> units/mg.

### Shipping

Lyophilized proteins are shipped at ambient temperature. Liquid proteins are shipped at frozen temperature with dry ice. Upon receipt, store it immediately at the temperature recommended below.

### Storage

Store at -20°C

### Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

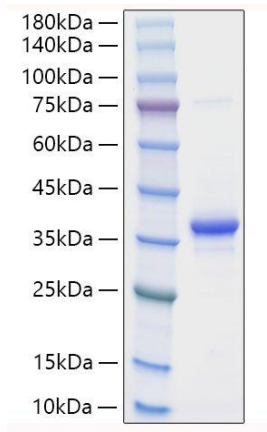
## Contact

☎ | 400-999-6126

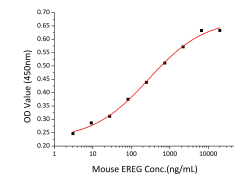
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## Validation Data



Recombinant Mouse EREG Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Mouse EREG stimulates cell proliferation assay using Balb3T3 mouse fibroblast cells. The ED<sub>50</sub> for this effect is 140.58-562.31 ng/mL, corresponding to a specific activity of  $1.78 \times 10^3 \sim 7.11 \times 10^3$  units/mg.