## PRODUCT DATA SHEET



Bioworld Technology,Inc.

# **Recombinant EGF, Mouse**

Catalog Number: BK0027-1mg Source: Escherichia coli. Quantity: 1mg

### **Description:**

Epidermal Growth Factor (EGF) was originally discovered in crude preparations of nerve growth factor prepared from mouse submaxillary glands as an activity that induced early eyelid opening, incisor eruption, hair growth inhibition, and stunting of growth when injected into newborn mice. EGF is a potent growth factor that stimulates the proliferation of various epidermal and epithelial cells. Additionally, EGF has been shown to inhibit gastric secretion, and to be involved in wound healing. EGF signals through a receptor known as c-erbB, which is a class I tyrosine kinase receptor. This receptor also binds with TGF-alpha and VGF (vaccinia virus growth factor). Recombinant mouse Epidermal Growth Factor (rmEGF) produced in E.coli is a single non-glycosylated polypeptide chain containing 54 amino acids. A fully biologically active molecule, rmEGF is obtained by proprietary chromatographic techniques at GenScript with a molecular mass of 6.2kDa analyzed by reducing SDS-PAGE.

# **Molecular Weight:**

6.2 kDa, observed by reducing SDS-PAGE.

## **Purity:**

> 95% by SDS-PAGE and HPLC analysis.

## **Biological Activity:**

ED50 < 0.1ng/ml, measured by a cell proliferation assay using BALB/c 3T3 cells, corresponding to a specific activity of >  $1.0 \times 10^7$  units/mg.

### **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

### **Formulation:**

Lyophilized after extensive dialysis against PBS.

### **AA Sequence:**

MNSYPGCPSSYDGYCLNGGVCM-HIESLDSYTCNCVIGYSGDRCQTRDLRWWELR

#### **Endotoxin:**

< 0.2 EU/µg, determined by LAL method.

### **Reconstitution:**

Reconstituted in ddH2O at 100 µg/ml.

#### Storages

Lyophilized recombinant mouse Epidermal Growth Factor (rmEGF) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rmEGF should be stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

### Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.