



## Technical Data Sheet

### Recombinant Murine Epidermal Growth Factor (rMu EGF)

#### *Murine 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).

Catalog Number:	RC236-15
Source:	<i>Escherichia coli</i> .
Molecular Weight:	6.0 kDa, a single non-glycosylated polypeptide chain containing 53 amino acids, including 3 intramolecular disulfide-bonds.
Quantity:	100ug/500ug/1000 $\mu$ g
Purity:	97% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED <sub>50</sub> as calculated by the dose-dependant proliferation of murine BALB/c 3T3 cells (measured by <sup>3</sup> H-thymidine uptake) is less than 0.1 ng/ml, corresponding to a specific activity of > 1 x 10 <sup>7</sup> units/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS, pH 7.4.
AA Sequence:	NSYPGCPSSY DGYCLNGGVC MHIESLDSYT CNCVIGYSGD RCQTRDLRWW ELR
Endotoxin:	Less than 1EU/ $\mu$ g of rmEGF as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq$ -20°C. Further dilutions should be made in appropriate buffered solutions.



# Bio Basic Inc.

A world leader in serving science

**Storage:**

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

**Usage:**

This material is offered by Bio Basic Inc for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.