ScienCell™ Research Laboratories

Recombinant Murine Epidermal Growth Factor (rmEGF)
Catalog Number: 125-04

Description	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).
Synonyms	Urogastrone, URG
AA Sequence	NSYPGCPSSY DGYCLNGGVC MHIESLDSYT CNCVIGYSGD RCQTRDLRWW ELR
Source	*Escherichia coli*
Molecular Weight	6.0 kDa, a single non-glycosylated polypeptide chain containing 53 amino acids, including 3 intramolecular disulfide-bonds.
Purity	> 96% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active. The ED_{50} is < 0.1ng/ml, as determined by the proliferation of murine BALB/c 3T3 cells, corresponding to a specific activity of > 1 x 10^7 units/ mg.
Physical Appearance	White lyophilized powder.
Formulation	Lyophilized from a 0.2μm filtered solution in PBS, pH 7.4.
Endotoxin	< 1EU/μg of growth factor as determined by LAL method.
Reconstitution	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
Storage	Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
Usage	This product is for research use only. It is not approved for use in humans, animals, or *in vitro* diagnostic procedures.