

# Datasheet: PMP89

Description:	RECOMBINANT MOUSE EGF
Name:	EGF
Format:	Rec. Protein
Product Type:	Recombinant Protein
Quantity:	1 mg

## **Product Details**

### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	-			
Functional Assays	•			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse		
Product Form	Purified recombinant protein – lyophilized		
Reconstitution	Reconstitute to 1.0 mg/ml by adding 1.0 ml $H_2O$ . Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. Do not vortex.		
Preparation	Purified recombinant EGF expressed in <i>E.coli</i>		
Preservative Stabilisers	None present		
Approx. Protein Concentrations	1.0 mg/ml after reconstitution		
External Database Links	UniProt: P01132 Related reagents  Entrez Gene:		

Related reagents

<u>13645</u> Egf

### **Product Information**

Epidermal Growth Factor (EGF) is a type I transmembrane protein expressed by a variety of cells, which acts as a potent stimulator and regulator of the proliferation of epidermal and epithelial cells, and is a key factor in cell survival.

EGF is a magnesiotropic hormone involved in the regulation of renal magnesium reabsorption via activation of the magnesium permeable channel TRPM6 (Muallem and Moe 2007).

The effects of EGF are initiated through tyrosine kinase activity, following the binding of EGF to the extracellular domain of the EGF receptor (EGFR), which results in the triggering of several signal transduction pathways, including the JAK/STAT and P13K/AKT pathways.

Protein Molecular Weight	6 kDa	
Activity	The ED <sub>50</sub> as determined by a cell proliferation assay using BALB/c 3T3 cells is $\leq$ 0.1 ng/ml, corresponding to a specific activity of $\geq$ 1 x 10 <sup>7</sup> units/mg	
Purity	>98% by SDS PAGE and HPLC analysis	
Further Reading	1. Muallem, S. & Moe, O.W. (2007) When EGF is offside, magnesium is wasted. <u>J Clin Invest. 117</u> (8): 2086-9.	
Storage	Prior to reconstitution store at -20°C. Following reconstitution store at -20°C. Storage in frost-free freezers is not recommended.  This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend microcentrifugation before use.	
Shelf Life	12 months from date of despatch	
Health And Safety Information	Material Safety Datasheet documentation #10268 available at: 10268: https://www.bio-rad-antibodies.com/uploads/MSDS/10268.pdf	
Regulatory	For research purposes only	

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