

## Datasheet: PMP89

<b>Description:</b>	RECOMBINANT MOUSE EGF
<b>Name:</b>	EGF
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified recombinant protein – lyophilized
<b>Reconstitution</b>	Reconstitute to 1.0 mg/ml by adding 1.0 ml H <sub>2</sub> O. 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.
<b>Preparation</b>	Purified recombinant EGF expressed in <i>E.coli</i>
<b>Source</b>	E.coli
<b>Preservative Stabilisers</b>	None present
<b>Approx. Protein Concentrations</b>	1.0 mg/ml after reconstitution
<b>External Database Links</b>	<b>UniProt:</b> <a href="https://www.uniprot.org/uniprot/P01132">P01132</a> <a href="#">Related reagents</a>

**Entrez Gene:**

[13645](#) [Egf](#) [Related reagents](#)

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<b>Product Information</b>	<p>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.</p> <p>EGF is a magnesiotropic hormone involved in the regulation of renal magnesium reabsorption via activation of the magnesium permeable channel TRPM6 (<a href="#">Muallem and Moe 2007</a>).</p> <p>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.</p>
<b>Protein Molecular Weight</b>	6 kDa
<b>Activity</b>	The ED <sub>50</sub> as determined by a cell proliferation assay using BALB/c 3T3 cells is ≤ 0.1 ng/ml, corresponding to a specific activity of ≥ 1 x 10 <sup>7</sup> units/mg
<b>Purity</b>	>98% by SDS PAGE and HPLC analysis
<b>References</b>	1. Kite, J. <i>et al.</i> (2021) Cell-to-cell transmission of HSV1 in human keratinocytes in the absence of the major entry receptor, nectin1. <a href="#">PLoS Pathog. 17 (9): e1009631.</a>
<b>Further Reading</b>	1. Muallem, S. & Moe, O.W. (2007) When EGF is offside, magnesium is wasted. <a href="#">J Clin Invest. 117 (8): 2086-9.</a>
<b>Storage</b>	<p>Prior to reconstitution store at -20°C. Following reconstitution store at -20°C.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>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.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10268 available at: <a href="https://www.bio-rad-antibodies.com/SDS/PMP89">https://www.bio-rad-antibodies.com/SDS/PMP89</a> 10268
<b>Regulatory</b>	For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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