

## Datasheet: PHP030A

**BATCH NUMBER 166898**

<b>Description:</b>	RECOMBINANT HUMAN EGF
<b>Name:</b>	EGF
<b>Other names:</b>	EPIDERMAL GROWTH FACTOR
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	0.5 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
ELISA	▪			0.2 - 0.4ng/well
Western Blotting	▪			1.5 - 3.0ng/lane
Functional Assays	▪			0.5 - 25ng/ml

Where this protein 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 protein for use in their own system using appropriate positive/negative controls.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Mouse</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	Purified recombinant protein - lyophilized
<b>Reconstitution</b>	<p>Reconstitute with 0.5ml distilled water</p> <p>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. For extended storage, the addition of 5% trehalose is recommended</p>
<b>Preparation</b>	Purified recombinant human EGF expressed in <i>E. coli</i>

Source	E.coli
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	< 0.1 ng/ug
Approx. Protein Concentrations	1.0 mg/ml after reconstitution.
External Database Links	<p><b>UniProt:</b>  <a href="#">P01133</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">1950</a>   EGF   <a href="#">Related reagents</a></p>
Product Information	<b>Recombinant human epidermal growth factor</b> is 6.2kDa globular protein composed of 53 amino acids. EGF is a polypeptide growth factor which stimulates the proliferation of a wide range of epidermal and epithelial cells.
Protein Molecular Weight	6.2 kD (53 Amino acid sequence)
Activity	1 x 10 <sup>7</sup> units/mg
Purity	>98% by SDS PAGE and HPLC analysis
ELISA	Recombinant human EGF may be used as the standard in ELISA applications with either a <a href="#">purified human EGF antibody</a> (AHP767) or a <a href="#">biotinylated human EGF antibody</a> (AHP767B).
Western Blotting	Recombinant human EGF may be used as the positive control for Western Blotting application with either a <a href="#">purified human EGF antibody</a> (AHP767) or a <a href="#">biotinylated human EGF antibody</a> (AHP767B)
References	<ol style="list-style-type: none"> <li>Tomlins, C. &amp; Storey, A. (2010) Cutaneous HPV5 E6 causes increased expression of Osteoprotegerin and Interleukin 6 which contribute to evasion of UV-induced apoptosis. <a href="#">Carcinogenesis. 31 (12): 2155-64.</a></li> <li>Wray, H. <i>et al.</i> (2012) α6 Integrin and CD44 enrich for a primary keratinocyte population that displays resistance to UV-induced apoptosis. <a href="#">PLoS One. 7 (10): e46968.</a></li> <li>Chen, W. <i>et al.</i> (2016) Tissue Kallikrein Inhibitors Based on the Sunflower Trypsin Inhibitor Scaffold - A Potential Therapeutic Intervention for Skin Diseases. <a href="#">PLoS One. 11 (11): e0166268.</a></li> <li>Zhang, X. <i>et al.</i> (2015) Wnt signaling regulates the stemness of lung cancer stem cells and its inhibitors exert anticancer effect on lung cancer SPC-A1 cells. <a href="#">Med Oncol. 32 (4): 95.</a></li> </ol>

5. Roth, K. *et al.* (2021) Clinically relevant aberrant Filip1l DNA methylation detected in a murine model of cutaneous squamous cell carcinoma. [EBioMedicine. 67: 103383.](#)
6. Inman, G.J. *et al.* (2018) The genomic landscape of cutaneous SCC reveals drivers and a novel azathioprine associated mutational signature. [Nat Commun. 9 \(1\): 3667.](#)
7. Aiderus, A. *et al.* (2021) Transposon mutagenesis identifies cooperating genetic drivers during keratinocyte transformation and cutaneous squamous cell carcinoma progression. [PLoS Genet. 17 \(8\): e1009094.](#)
8. Scemama, A. *et al.* (2023) Development of an *in vitro* microfluidic model to study the role of microenvironmental cells in oral cancer metastasis [F1000Research. 12: 439.](#)

<b>Storage</b>	<p>Prior to reconstitution store at -20°C. Following reconstitution store at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost free freezers is not recommended. 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>	Guaranteed for 3 months from the date of reconstitution or until the date of expiry, whichever comes first. Please see label for expiry date.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10527 available at: <a href="https://www.bio-rad-antibodies.com/SDS/PHP030A10527">https://www.bio-rad-antibodies.com/SDS/PHP030A10527</a>
<b>Regulatory</b>	For research purposes only

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
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