

## Datasheet: PHP030A

<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.

#### Target Species

Human

#### Species Cross Reactivity

Reacts with: Mouse

**N.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.

#### Product Form

Purified recombinant protein - lyophilized

#### Reconstitution

Reconstitute with 0.5ml distilled water

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

#### Preparation

Purified recombinant human EGF expressed in *E. coli*

#### Preservative

None present

## Stabilisers

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Carrier Free Yes

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Endotoxin Level < 0.1 ng/ug

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Approx. Protein Concentrations 1.0 mg/ml after reconstitution.

## External Database Links

### UniProt:

[P01133](#) [Related reagents](#)

### Entrez Gene:

[1950](#) EGF [Related reagents](#)

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**Product Information** **Recombinant human epidermal growth factor** 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.

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**Protein Molecular Weight** 6.2 kD (53 Amino acid sequence)

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**Activity** 1 x 10<sup>7</sup> units/mg

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**Purity** >98% by SDS PAGE and HPLC analysis

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**ELISA** Recombinant human EGF may be used as the standard in ELISA applications with either a [purified human EGF antibody](#) (AHP767) or a [biotinylated human EGF antibody](#) (AHP767B).

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**Western Blotting** Recombinant human EGF may be used as the positive control for Western Blotting application with either a [purified human EGF antibody](#) (AHP767) or a [biotinylated human EGF antibody](#) (AHP767B)

## References

1. Tomlins, C. & Storey, A. (2010) Cutaneous HPV5 E6 causes increased expression of Osteoprotegerin and Interleukin 6 which contribute to evasion of UV-induced apoptosis. [Carcinogenesis. 31 \(12\): 2155-64.](#)
2. Wray, H. *et al.* (2012) α6 Integrin and CD44 enrich for a primary keratinocyte population that displays resistance to UV-induced apoptosis. [PLoS One. 7 \(10\): e46968.](#)
3. Chen, W. *et al.* (2016) Tissue Kallikrein Inhibitors Based on the Sunflower Trypsin Inhibitor Scaffold - A Potential Therapeutic Intervention for Skin Diseases. [PLoS One. 11 \(11\): e0166268.](#)
4. Zhang, X. *et al.* (2015) Wnt signaling regulates the stemness of lung cancer stem cells and its inhibitors exert anticancer effect on lung cancer SPC-A1 cells. [Med Oncol. 32 \(4\): 95.](#)
5. Roth, K. *et al.* (2021) Clinically relevant aberrant Filip11 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.](#)

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<b>Storage</b>	Prior to reconstitution store at -20°C. Following reconstitution store at -20°C if preferred.  This product should be stored undiluted.  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.
<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: 10527: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10527.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10527.pdf</a>
<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)  
'M362326:200501'

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