

## Datasheet: PHP293

**BATCH NUMBER 164050**

<b>Description:</b>	RECOMBINANT HUMAN VEGF-A
<b>Name:</b>	VEGF-A
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	0.2 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).

	<b>Yes</b>	<b>No</b>	<b>Not Determined</b>	<b>Suggested Dilution</b>
ELISA	▪			

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>	Human
<b>Product Form</b>	Purified recombinant protein - lyophilized
<b>Reconstitution</b>	Centrifuge vial prior to reconstitution. Reconstitute to 0.5 mg/ml by adding 0.4 ml ddH <sub>2</sub> O. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Mix gently after reconstitution. Do not vortex.
<b>Preparation</b>	Recombinant protein expressed in <i>E. coli</i> and purified by affinity chromatography
<b>Buffer Solution</b>	20 mM Phosphate Buffer, 0.1 M Sodium Chloride
<b>Preservative Stabilisers</b>	1% Trehalose
<b>Approx. Protein Concentrations</b>	0.5 mg/ml after reconstitution
<b>External Database Links</b>	<b>UniProt:</b>

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<b>Product Information</b>	<b>Recombinant Human VEGF-A</b> <p>Vascular endothelial growth factor alpha forms a homodimer and is a potent stimulator of angiogenesis of both normal and cancerous cells. It acts as a regulator of vasculogenesis, angiogenesis and endothelial cell growth. VEGF-A is secreted by many different cell types such as endothelial cells (<a href="#">Nissen <i>et al.</i> 1998</a>), smooth muscle cells (<a href="#">Brogi <i>et al.</i> 1994</a>), neutrophils (<a href="#">Gaudry <i>et al.</i> 1997</a>), platelets (<a href="#">Banks <i>et al.</i> 1998</a>), macrophages and 60% of all tumours (<a href="#">Berse <i>et al.</i> 1992</a>).</p> <p>The sequence of this recombinant protein product is amino acid (aa) 27 - aa 141 + CDKPRR but deficient from aa 142-226, and it is closest to isoform 121. Isoform 121 and 111 lack exons 6 and 7, and for this reason neither of these isoforms bind to the extracellular matrix (<a href="#">Krilleke <i>et al.</i> 2017</a>). This product has been demonstrated for use, in a pharmacokinetic (PK) antigen capture ELISA with the monoclonal antibody drugs ranibizumab and bevacizumab using <a href="#">anti-ranibizumab antibodies</a> for detection.</p>
<b>Protein Molecular Weight</b>	Predicted 14 kDa. The apparent molecular mass of the human VEGF-A monomer is approximately 17 kDa determined by SDS-PAGE under reducing conditions, and 17 kDa (monomer) and 30 kDa (dimer) under non-reducing conditions.
<b>Purity</b>	≥90% determined by SDS-PAGE under reducing conditions and visualized by coomassie blue staining
<b>Amino Acid Sequence</b>	APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEY PDEIEYIFK PSCVPLMRCGGCCNDEGLE CVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCECRPKKDRARQEKC DKPRR
<b>Storage</b>	Prior to reconstitution store at -70°C. Following reconstitution store at -20°C.  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.
<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 #20395 available at: <a href="https://www.bio-rad-antibodies.com/SDS/PHP29320395">https://www.bio-rad-antibodies.com/SDS/PHP29320395</a>
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Useful Reagents

[HUMAN ANTI RANIBIZUMAB \(DRUG/TARGET COMPLEX\) \(HCA304\)](#)

[HUMAN ANTI RANIBIZUMAB \(HCA307\)](#)

**North & South** Tel: +1 800 265 7376

**Worldwide** Tel: +44 (0)1865 852 700

**Europe** Tel: +49 (0) 89 8090 95 21

**America** Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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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**Printed on 18 Jan 2024**

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