

# Datasheet: PHP042A

Description:	RECOMBINANT HUMAN INTERLEUKIN-2
Name:	IL-2
Format:	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
Quantity:	10 µg

## **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
ELISA	•			0.2 - 0.4ng/well
Western Blotting				1.5 - 3.0ng/lane
Functional Assays	-			0.1 - 2.0ng/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 product for use in their own system using appropriate positive/negative controls.

Target Species	Human	
Species Cross Reactivity	Reacts with: Cynomolgus monkey, Rhesus Monkey, Dolphin <b>N.B.</b> Antibody reactivity and working conditions may vary betwee reactivity is derived from testing within our laboratories, peer-repersonal communications from the originators. Please refer to refurther information.	viewed publications or
Product Form	Purified protein produced in <i>E. coli</i> - lyophilized	
Reconstitution	Reconstitute with 0.1ml 0.1M acetic acid  Care should be taken during reconstitution as the protein may a bottom of the vial. Bio-Rad recommend that the vial is gently mi	• •
Source	E.coli	
Buffer Solution	10mM Sodium citrate.	
Preservative	None present	

## Stabilisers

Carrier Free	Yes	
Endotoxin Level	< 0.1 ng/ug	
Approx. Protein Concentrations	Total protein concentration 0.1mg/ml after reconstitution.	
External Database Links	UniProt: P60568 Related reagents  Entrez Gene:	
	3558 IL2 Related reagents	
Product Information	<b>Recombinant human interleukin 2</b> is an <i>Escherichia coli</i> -derived recombinant protein corresponding to full-length mature human interleukin-2, a secreted peptide required for T-cell proliferation. This preparation has an ED50 of 0.1ng/ml as determined by the dose-dependent stimulation of the proliferation of murine CTLL-2 cells.	
Protein Molecular Weight	15.5kDa (134 Amino acid sequence)	
Activity	>1 x 10 <sup>7</sup> units/mg as determined by dose-dependent stimulation of CTLL-2 cells.	
Purity	>98% by SDS PAGE and HPLC analysis	
ELISA	This product may be used as a standard in ELISA applications with either <u>AHP1032</u> or <u>AHP1032B</u> .	
Western Blotting	This product may be used as a positive control in western blotting applications with either <a href="https://example.com/ahp1032"><u>AHP1032B</u></a> .	
References	<ol> <li>Akari, H. <i>et al.</i> (2000) Nef-induced major histocompatibility complex class I down-regulation is functionally dissociated from its virion incorporation, enhancement of viral infectivity, and CD4 down-regulation. J. Virol. 74 (6): 2907 - 2912.</li> <li>Vaughan, K. <i>et al.</i> (2007) A DNA vaccine against dolphin morbillivirus is immunogenic in bottlenose dolphins. Vet Immunol Immunopathol. 120: 260-6.</li> <li>Chan, P.K. <i>et al.</i> (2010) T-cell response to human papillomavirus type 58 L1, E6 and E7 peptides in women with cleared infection, cervical intraepithelial neoplasia and invasive cancer. Clin Vaccine Immunol. 17: 1315-21.</li> <li>Doi, N. <i>et al.</i> (2010) Growth ability in various macaque cell lines of HIV-1 with simian cell-tropism. J Med Invest. 57: 284-92.</li> <li>Ban, S.A. <i>et al.</i> (2014) Combined immunodeficiency evolving into predominant CD4+ lymphopenia caused by somatic chimerism in JAK3. J Clin Immunol. 34 (8): 941-53.</li> <li>Geoghegan, V. <i>et al.</i> (2015) Comprehensive identification of arginine methylation in primary T cells reveals regulatory roles in cell signalling. Nat Commun. 6: 6758.</li> <li>Yutani, S. <i>et al.</i> (2017) Feasibility study of personalized peptide vaccination for</li> </ol>	

hepatocellular carcinoma patients refractory to locoregional therapies. Cancer Sci. 108 (9):

8. Hirakawa, Y. et al. (2019) Immunological consequences following splenectomy in patients with liver cirrhosis. Exp Ther Med. 18 (1): 848-856.

Storage

Prior to reconstitution store at -20°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. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

Guaranteed for 3 months from the date of reconstitution or until the date of expiry, whichever comes first. Please see label for expiry date.

**Health And Safety** Information

Material Safety Datasheet documentation #10527 available at:

https://www.bio-rad-antibodies.com/SDS/PHP042A

10527

Regulatory

For research purposes only

## Related Products

#### **Recommended Useful Reagents**

RABBIT ANTI HUMAN INTERLEUKIN-2 (AHP1032) RABBIT ANTI HUMAN INTERLEUKIN-2:Biotin (AHP1032B)

America

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Fax: +1 919 878 3751

Email: antibody\_sales\_us@bio-rad.com

Email: antibody\_sales\_uk@bio-rad.com

Email: antibody\_sales\_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M420076:230706'

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