

Datasheet: PHP042

Description:	RECOMBINANT HUMAN INTERLEUKIN-2
Name:	IL-2
Format:	Rec. Protein
Product Type:	Recombinant Protein
Quantity:	50 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 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	▪			0.1ng/ml - 2.0ng/ml

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.

Target Species

Human

Species Cross Reactivity

Reacts with: Cynomolgus monkey, Rhesus Monkey, Dolphin
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 protein produced in *E. coli* - lyophilized

Reconstitution

Reconstitute with 0.5 ml 0.1M acetic acid. 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.

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 0.1 mg/ml after reconstitution

External Database Links

UniProt:

[P60568](#)

[Related reagents](#)

Entrez Gene:

[3558](#)

IL2

[Related reagents](#)

Product Information **Recombinant human interleukin 2** is an *Escherichia coli*-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 15.4kDa (134 Amino acid sequence)

Activity 1 x 10⁷ units/mg

Purity >98% by SDS PAGE and HPLC analysis

ELISA Recombinant Rat interleukin-2 may be used as a standard for ELISA applications with Rat anti Human IL-2 antibody, clone MQ1-17H12 ([MCA1553](#)).

Western Blotting Recombinant human IL-2 may be used as a positive control for Western Blotting applications.

References

1. Akari, H. *et al.* (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.](#)
2. Vaughan, K. *et al.* (2007) A DNA vaccine against dolphin morbillivirus is immunogenic in bottlenose dolphins. [Vet Immunol Immunopathol. 120: 260-6.](#)
3. Chan, P.K. *et al.* (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.](#)
4. Doi, N. *et al.* (2010) Growth ability in various macaque cell lines of HIV-1 with simian cell-tropism. [J Med Invest. 57: 284-92.](#)
5. Ban, S.A. *et al.* (2014) Combined immunodeficiency evolving into predominant CD4+ lymphopenia caused by somatic chimerism in JAK3. [J Clin Immunol. 34 \(8\): 941-53.](#)
6. Geoghegan, V. *et al.* (2015) Comprehensive identification of arginine methylation in primary T cells reveals regulatory roles in cell signalling. [Nat Commun. 6: 6758.](#)
7. Yutani, S. *et al.* (2017) Feasibility study of personalized peptide vaccination for

hepatocellular carcinoma patients refractory to locoregional therapies. [Cancer Sci. 108 \(9\): 1732-8.](#)

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/PHP04210527>

Regulatory

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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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