Recombinant Human Interleukin-2 (IL–2)

Catalog Number PHC0026 (10 µg), PHC0027 (40 µg), PHC0021 (100 µg), PHC0023 (1 mg)

Pub. No. MAN0004191 **Rev.** A.0

Product specifications

Lot number	See product label.
Molecular weight	15.5 kDa
Purity	>95% as determined by SDS PAGE analysis.
Biological activity	ED_{50} <0.500 ng/mL, determined by the dose dependent proliferation of mouse CTLL–2 cells. Determine the optimal concentration for each specific application using an initial dose response assay.
Formulation	Lyophilized, carrier-free.
Sterility	Filtered before lyophilization through a 0.22 micron sterile filter.
Endotoxin	<0.1 ng/µg
Production	Produced in *E. coli* and purified via gel filtration chromatography.
Reconstitution recommendation	Centrifuge the vial briefly, before opening to bring the contents to the bottom. Reconstitute the lyophilized protein in 100 mM acetic acid to 0.1–1.0 mg/mL to regain full activity. Apportion the reconstituted protein into working aliquots and store at ≤ –20°C. Make any further dilutions of the reconstituted protein in low endotoxin medium or buffered solution with FBS or tissue culture grade BSA.
Suggested working dilutions	The optimal concentration should be determined for each specific application.
Storage	Store the lyophilized protein at 2–8°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at ≤ –20°C (not in a frost-free freezer). Avoid repeated freeze-thaw cycles.
Expiration date	Expires one year from date of receipt when stored as instructed.
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References, continued	Kindt, TJ, Said, WA, Bowers, FS, Mahana, W, Zhao, TM, and Simpson, RM. (2000) Passage of human T-cell leukemia virus type-1 during progression to cutaneous T-cell lymphoma results in myelopathic disease in an HTLV-1 infection model. Microbes and Infection 2(10):1139–1146. Loparev, V, Parsons, J, Knight, J, Fanelli Panus, J, Ray, C, Buller, R, Pickup, D, and Esposito, J. (1998) A third distinct tumor necrosis factor receptor of orthopoxviruses. Proc. Nat'l. Acad. Sci. 95(7):3786–3791. Molldrem, JJ, Lee, PP, Kant, S, Wieder, E, Jiang, WD, Lu, SJ, Wang, CQ, and Davis, MM. (2003) Chronic myelogenous leukemia shapes host immunity by selective deletion of high-avidity leukemia-speciflic T cells. J. Clin. Invest. 111(5):639–647. Rajan, R, Vanderslice, R, Kapur, S, Lynch, J, Thompson, R, and Djakiew, D. (1996) Epidermal growth factor (EGF) promotes chemomigration of a human prostate tumor cell line, and EGF immunoreactive proteins are present at sites of metastasis in the stroma of lymph nodes and medullary bone. Prostate 28(1):1–9. Robey, FA, and Robert-Guroff, M. (2001) A defined conformational epitope from the C4 domain of HIV type 1 glycoprotein 120: Anti-cyclic C4 antibodies from HIV-positive donors magnify glycoprotein 120 suppression of interleukin 2 produced by T cells. Aids Research and Human Retroviruses 17(6):533–541. Stranick, KS, Zambas, DN, Uss, AS, Egan, RW, Billah, MM, and Umland, SP. (1997) Identification of transcription factor binding sites important in the regulation of the human interleukin-5 gene. J. Biol. Chem. 272(26):16453–16465. Wagers, AJ, Waters, CM, Stoolman, LM, and Kansas, GS. (1998) Interleukin 12 and interleukin 4 control T cell adhesion to endothelial selectins through opposite effects on alpha1, 3-fucosyltransferase VII gene expression. J. Exp. Med. 188(12):2225–2231. Weng, Y, Siciliano, SJ, Waldburger, KE, Sirotina-Meisher, A, Staruch, MJ, Daugherty, BL, Gould, SL, Springer, MS, and DeMartiono, JA. (1998) Binding and functional properties of recombinant and endogenous CXCR3 chemokine receptors. J. Biol. Chem. 273(29):18288–18291.

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