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Recombinant Human Interleukin–13 (IL–13)

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Catalog Number:	PHC0134	PHC0135	PHC0131	PHC0133
Quantity:	5µg	25 µg	100 µg	1 mg

Lot Number:	See product label.
Molecular Weight:	12.5 kDa
Purity:	>95% as determined by SDS–PAGE analysis.
Biological Activity:	ED_{50} range = 2.0–6.0 ng/mL, determined by the dose dependent proliferation of human TF–1 cells. The optimal concentration for each specific application should be determined by an initial dose response assay.
Formulation:	Lyophilized, carrier free.
Sterility:	Filtered prior to lyophilization through a 0.22 micron sterile filter.
Endotoxin:	<0.1 ng/µg
Production:	Recombinant human IL–13 is produced in *E. coli* and purified via sequential chromatography.
Reconstitution Recommendation:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Lyophilized hIL–13 should be reconstituted in sterile, deionized water to a concentration of 0.1–1.0 mg/mL to regain full activity. Stock solutions should be apportioned into working aliquots and stored at ≤ –20°C. Further dilutions should be made 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:	Lyophilized hIL–13 should be stored at 2°C to 8°C, preferably desiccated. Store reconstituted hIL–13 at ≤ –20°C (not in a frost-free freezer). Keep freeze-thaw cycles to a minimum.
Expiration Date:	Expires one year from date of receipt when stored as instructed.
References:	McKenzie, A.N., J.A. Culpepper, R. Waal Malefyt, F. Briere, J. Punnonen, G. Aversa, A. Sato, W. Dang, B.G. Cocks, S. Menon, J.E. de Vries, J. Banchereau, and G.R. Zurawski (1993) Interleukin 13, a T–cell-derived cytokine that regulates human and monocyte and B-cell function. Proc. Nat'l. Acad. Sci. USA 90:3735–3739. Izuhara, K., K. Arima, and S. Yasunaga (2002) IL–4 and IL–13: their pathological roles in allergic diseases and their potential in developing new therapies. Curr. Drug Targets Inflamm. Allergy 1:263–269. Chibana, K., Y. Ishii, T. Asakura, and T. Fukuda (2003) Up–regulation of cysteinyl leukotriene 1 receptor by IL–13 enables human lung fibroblasts to respond to leukotriene C4 and produce eotaxin. J. Immunol. 170:4290–4295. Xu, B., A. Battachearjee, B. Roy, H.M. Xu, D. Anthony, D.A. Frank, G.M. Feldman, and M.K. Cathcart (2003) Interleukin-13 induction of 15-lipoxygenase gene expression requires p38 mitogen-activated protein kinase–mediated serine 727 phosphorylation of Stat1 and Stat3. Mol. Cell. Biol. 23:3918–3928. Wynn, T.A. (2003) IL–13 effector functions. Annu. Rev. Immunol. 21:425–456. Terabe, M. J.M. Park, and J.A. Berzofsky (2004) Role of IL–13 in regulation of anti-tumor immunity and tumor growth. Cancer Immuno. Immunother. 53:79–85. Izuhara, K. and K. Arima (2004) Signal transduction of IL–13 and its role in the pathogenesis of bronchial asthma. Drugs News. Perspect. 17:91–98.

Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description
REF	Catalog Number
RUO	Research Use Only
	Use by
	Manufacturer
[–]	Without, does not contain
	Protect from light
	Directs the user to consult instructions for use (IFU), accompanying the product.

Symbol	Description
LOT	Batch code
IVD	In vitro diagnostic medical device
	Temperature limitation
EC REP	European Community authorized representative
[+]	With, contains
⚠	Consult accompanying documents

Limited Use Label License: Research Use Only

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For Research Use Only. Caution: Not for human or animal therapeutic or diagnostic use.

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