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Products	Human IL-5, research grade. Recombinant human interleukin 5.						
	<table> <tr> <th>Content in µg</th><th>Order no.</th></tr> <tr> <td>2</td><td>130-093-926</td></tr> <tr> <td>10</td><td>130-093-927</td></tr> </table>	Content in µg	Order no.	2	130-093-926	10	130-093-927
Content in µg	Order no.						
2	130-093-926						
10	130-093-927						
Biological activity	The ED ₅₀ is ≤0.2 ng/mL corresponding to an activity of ≥5×10 ⁶ U/mg. ▲ Note: The ED ₅₀ is determined by proliferation assay of human TF-1 cells.						
Primary structure	Two identical non-glycosylated disulfide-linked polypeptide chains with N-terminal methionine (116 amino acid residues each).						
Molecular mass	26.6 kDa (dimer).						
Source	Produced in <i>E. coli</i> .						
Product format	Lyophilized from a filtered (0.2 µm) buffer solution.						
Stabilizer	None.						
Purity	>97% as determined by SDS-PAGE analysis.						
Endotoxin level	Low endotoxin (<1.0 EU/µg cytokine) as determined by Limulus Amebocyte Lysate (LAL) assay.						
Storage	Lyophilized Human IL-5, research grade should be stored at -20 °C. The expiration date is indicated on the vial label. Upon reconstitution aliquots should be stored at -20 °C or below. Avoid repeated freeze-thaw cycles.						
Reconstitution	It is recommended to reconstitute lyophilized Human IL-5, research grade with deionized sterile-filtered water to a final concentration of 0.1–1.0 mg/mL in a minimal volume of 20 µL. Further dilutions should be prepared with 0.1% bovine serum albumin (BSA) or human serum albumin (HSA) in phosphate-buffered saline.						

1.1 Background information

Interleukin 5 (IL-5), also known as eosinophil differentiation factor (EDF) or eosinophil colony stimulating factor (Eo-CSF), belongs to the hematopoietic family of cytokines, together with IL-3 and GM-CSF, whose receptors share the common-cytokine-receptor β-chain. IL-5 is secreted by T helper cells, mast cells, and

eosinophils and mainly acts as a key hematopoietic growth factor for the proliferation and activation of eosinophils, but also promotes the secretion of immunoglobulins by B cells, and the generation of cytotoxic T cells. Through the activation of eosinophils, IL-5 mediates several allergic diseases, but it is also involved in parasitic infections and tumor development.

1.2 Applications

Human IL-5 can be used for a variety of applications including:

- Cultivation and differentiation of eosinophils.
- Investigation on allergies, parasitic infections, and tumors.

Optimal concentration for a specific application should be determined by a dose-response experiment.

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