

# Human IL-8

## premium grade

### Contents

#### 1. Description

##### 1.1 Background information

##### 1.2 Applications

#### 1. Description

<b>Products</b>	Human IL-8, premium grade. Recombinant human interleukin 8.										
	<table> <tr> <th>Content in µg</th><th>Order no.</th></tr> <tr> <td>10</td><td>130-122-357</td></tr> <tr> <td>25</td><td>130-122-359</td></tr> <tr> <td>100</td><td>130-122-360</td></tr> <tr> <td>1000</td><td>130-122-361</td></tr> </table>	Content in µg	Order no.	10	130-122-357	25	130-122-359	100	130-122-360	1000	130-122-361
Content in µg	Order no.										
10	130-122-357										
25	130-122-359										
100	130-122-360										
1000	130-122-361										
<b>Biological activity</b>	<p>The ED<sub>50</sub> is ≤1 ng/mL corresponding to an activity of ≥1×10<sup>6</sup> IU/mg. Lot-specific activities are stated in the Certificate of Analysis (<a href="http://www.miltenyibiotec.com/certificates">www.miltenyibiotec.com/certificates</a>).</p> <p>▲ <b>Note:</b> The ED<sub>50</sub> is determined by migration assay using neutrophil granulocytes. The migration assay was calibrated with the reference standard for human IL-8 (NIBSC code 89/520) provided by the National Institute for Biological Standards and Control.</p>										
<b>Primary structure</b>	Homodimeric, non-glycosylated polypeptide chain (72 amino acid residues).										
<b>Molecular mass</b>	8.4 kDa.										
<b>Source</b>	Produced in <i>E. coli</i> .										
<b>Product format</b>	Lyophilized from a filtered (0.2 µm) buffer solution.										
<b>Stabilizer</b>	Mannitol and trehalose.										
<b>Purity</b>	>95% as determined by SDS-PAGE analysis.										
<b>Endotoxin level</b>	Low endotoxin (<0.1 EU/µg cytokine) as determined by Limulus Amebocyte Lysate (LAL) assay.										
<b>Storage</b>	Lyophilized Human IL-8, premium 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.										
<b>Reconstitution</b>	It is recommended to reconstitute lyophilized Human IL-8, premium grade with deionized sterile-filtered water to a final concentration of 0.1–1.0 mg/mL in a minimal volume of 100 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 8 (IL-8), also known as CXCL8, is a pro-inflammatory molecule belonging to the CXC chemokine family. The precursor form of IL-8 is cleaved into several mature isoforms (including 72 aa and 77 aa) and is secreted by several type of cells, especially monocytes and endothelial cells, upon pro-inflammatory stimulation. IL-8 signals through the CXCR1 and CXCR2 receptors, chemoattracts and activates granulocytes, predominantly neutrophils, T cells, and plays also an angiogenic role. Overexpression of IL-8 can lead to epithelial damage and injury of the airway tissues.

#### 1.2 Applications

Human IL-8 can be used for a variety of applications, including:

- Study of leukocyte chemotaxis.
- Investigation of CXCR1 and CXCR2 signaling pathway.

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

Refer to [www.miltenyibiotec.com](http://www.miltenyibiotec.com) for all data sheets and protocols. Miltenyi Biotec provides technical support worldwide. Visit [www.miltenyibiotec.com](http://www.miltenyibiotec.com) for local Miltenyi Biotec Technical Support contact information.

### Legal notices

#### Limited product warranty

Miltenyi Biotec B.V. & Co. KG and/or its affiliate(s) warrant this product to be free from material defects in workmanship and materials and to conform substantially with Miltenyi Biotec's published specifications for the product at the time of order, under normal use and conditions in accordance with its applicable documentation, for a period beginning on the date of delivery of the product by Miltenyi Biotec or its authorized distributor and ending on the expiration date of the product's applicable shelf life stated on the product label, packaging or documentation (as applicable) or, in the absence thereof, ONE (1) YEAR from date of delivery ("Product Warranty"). Miltenyi Biotec's Product Warranty is provided subject to the warranty terms as set forth in Miltenyi Biotec's General Terms and Conditions for the Sale of Products and Services available on Miltenyi Biotec's website at [www.miltenyibiotec.com](http://www.miltenyibiotec.com), as in effect at the time of order ("Product Warranty"). Additional terms may apply. BY USE OF THIS PRODUCT, THE CUSTOMER AGREES TO BE BOUND BY THESE TERMS.

THE CUSTOMER IS SOLELY RESPONSIBLE FOR DETERMINING IF A PRODUCT IS SUITABLE FOR CUSTOMER'S PARTICULAR PURPOSE AND APPLICATION METHODS.

#### Technical information

The technical information, data, protocols, and other statements provided by Miltenyi Biotec in this document are based on information, tests, or experience which Miltenyi Biotec believes to be reliable, but the accuracy or completeness of such information is not guaranteed. Such technical information and data are intended for persons with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. Miltenyi Biotec shall not be liable for any technical or editorial errors or omissions contained herein.

All information and specifications are subject to change without prior notice. Please contact Miltenyi Biotec Technical Support or visit [www.miltenyibiotec.com](http://www.miltenyibiotec.com) for the most up-to-date information on Miltenyi Biotec products.

## Licenses

This product and/or its use may be covered by one or more pending or issued patents and/or may have certain limitations. Certain uses may be excluded by separate terms and conditions. Please contact your local Miltenyi Biotec representative or visit Miltenyi Biotec's website at [www.miltenyibiotec.com](http://www.miltenyibiotec.com) for more information.

The purchase of this product conveys to the customer the non-transferable right to use the purchased amount of the product in research conducted by the customer (whether the customer is an academic or for-profit entity). This product may not be further sold. Additional terms and conditions (including the terms of a Limited Use Label License) may apply.

CUSTOMER'S USE OF THIS PRODUCT MAY REQUIRE ADDITIONAL LICENSES DEPENDING ON THE SPECIFIC APPLICATION. THE CUSTOMER IS SOLELY RESPONSIBLE FOR DETERMINING FOR ITSELF WHETHER IT HAS ALL APPROPRIATE LICENSES IN PLACE. Miltenyi Biotec provides no warranty that customer's use of this product does not and will not infringe intellectual property rights owned by a third party. BY USE OF THIS PRODUCT, THE CUSTOMER AGREES TO BE BOUND BY THESE TERMS.

## Trademarks

The Miltenyi Biotec logo is a registered trademark or trademark of Miltenyi Biotec and/or its affiliates in various countries worldwide.

Copyright © 2021 Miltenyi Biotec and/or its affiliates. All rights reserved.