

#8796 Store at -20C

Human Interleukin-28B (hIL-28B/IFN-λ3)



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

MW (kDa):
21

UniProt ID:
#Q8IZI9

Entrez-Gene Id:
282617

Background

IL-28B is a member of the Interferon λ family of cytokines, which includes IL-29 and IL-28A (1). IL-28B is produced by a number of cell types and shares many functions with Type I Interferons (1-3). IL-28B exhibits anti-viral activities *in vitro* and *in vivo* (1,2). Investigators have found that IL-28B directly inhibits tumor cell proliferation and promotes anti-tumor immune responses *in vivo* (1,3). The IL-28 receptor is a heterodimer of the IL-28Rα and IL-10RI (1). IL-28B activates Stat1, Stat3, and Stat5 (1). IL-28Rα expression is limited to a few cell types, including plasmacytoid DC and epithelial cells (1).

Endotoxin

Less than 0.01 ng endotoxin/1 µg hIL-28B.

Purity

>98% as determined by SDS-PAGE of 6 µg reduced (+) and non-reduced (-) recombinant hIL-28B. All lots are greater than 98% pure.

Source / Purification

Recombinant human IL-28B (hIL-28B) Arg26-Val196 (Accession #NP_742151) was expressed in human 293 cells at Cell Signaling Technology.

Bioactivity

The bioactivity of recombinant hIL-28B was determined in a virus protection assay. The ED₅₀ of each lot is between 0.4-9 ng/ml.

Background

IL-28B is a member of the Interferon λ family of cytokines, which includes IL-29 and IL-28A (1). IL-28B is produced by a number of cell types and shares many functions with Type I Interferons (1-3). IL-28B exhibits anti-viral activities *in vitro* and *in vivo* (1,2). Investigators have found that IL-28B directly inhibits tumor cell proliferation and promotes anti-tumor immune responses *in vivo* (1,3). The IL-28 receptor is a heterodimer of the IL-28Rα and IL-10RI (1). IL-28B activates Stat1, Stat3, and Stat5 (1). IL-28Rα expression is limited to a few cell types, including plasmacytoid DC and epithelial cells (1).

Background References

1. Li, M. et al. (2009) *J Leukoc Biol* 86, 23-32.
2. Ank, N. et al. (2006) *J Virol* 80, 4501-9.
3. Numasaki, M. et al. (2007) *J Immunol* 178, 5086-98.

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with

other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.