InVitria Launches OptiLeukin 2: A Chemically Defined Recombinant IL-2 for Cell Therapy

Animal- and bacteria-free recombinant IL-2 enables safer, scalable immune cell expansion for CAR-T, NK, and iPSC-derived cell therapy workflows.

OptiLeukin™ 2 – 100 µg recombinant human interleukin-2 vial: Animal- and bacteria-origin-free IL-2 for immune cell expansion and clinical manufacturing.

JUNCTION CITY, KS, UNITED STATES, April 29, 2025 /EINPresswire.com/ -- InVitria Launches OptiLeukin™ 2: A Chemically Defined, Animal- and Bacteria-Free Recombinant IL-2 for Immune Cell Manufacturing

InVitria®, a leading provider of recombinant, chemically defined biomanufacturing and formulation components, today announced the launch of OptiLeukin™ 2, a high-purity, animal- and bacteria-free recombinant human interleukin-2 (IL-2) designed for immune cell expansion in research, clinical, and GMP biomanufacturing applications.

> OptiLeukin 2 delivers consistency, purity, and compliance for immune cell expansion — without the risks of serum or bacteria-origin raw materials."
>
> *Scott Deeter, CEO, InVitria*

Traditionally, IL-2 used in T and NK cell expansion is derived from E. coli or HEK293 systems, introducing risks of endotoxins, host cell proteins, and regulatory challenges. OptiLeukin 2 eliminates these concerns by offering a chemically defined, animal-origin-free and bacteria-origin-free alternative, optimized for consistent performance and regulatory compatibility in cell therapy, immunotherapy, and bioproduction workflows. OptiLeukin 2's activity is measured in reference to the NIBSC 1st International Standard for IL-2.

"With the introduction of OptiLeukin 2, we are providing a clean, consistent, and scalable IL-2 product that meets the growing regulatory and performance demands of advanced therapy developers," said Scott Deeter, CEO at InVitria.

A New Standard in Defined Cytokine Manufacturing
OptiLeukin 2 is engineered for immune cell expansion, including T cells, regulatory T cells (Tregs), tumor-infiltrating lymphocytes (TILs), γδ T cells, NK cells, and iPSC-derived immune cell workflows. It is delivered as a lyophilized powder with precise mass-based reconstitution, and its activity is measured relative to the NIBSC 1st International Standard for IL-2.

Key benefits include:

-Animal- and Bacteria-Free – Free of serum, endotoxin-producing hosts, and viral risk
-Chemically Defined – Enables reproducibility and eliminates variability common to E. coli or HEK-expressed IL-2
-High Potency & Bioactivity – Supports strong immune cell activation and proliferation
-GMP-Ready – Manufactured in a cGMP-compliant, ISO 9001-certified U.S. facility
-Flexible Format – Supplied as a lyophilized powder for easy integration into defined media
-Scalable Supply – Designed to meet the volume demands of clinical and commercial manufacturing
-Enabling Safer, Scalable Immune Cell Manufacturing

As cell therapy and immunotherapy platforms continue to advance, regulatory agencies are encouraging the use of chemically defined, animal-free raw materials to ensure consistency and reduce risk. OptiLeukin 2 empowers biomanufacturers to meet these expectations, improving performance, scalability, and long-term supply security.

Availability
OptiLeukin 2 is now available for order in 100 µg vial formats. It is ideal for integration into T cell expansion, CAR-T workflows, NK cell manufacturing, and stem cell-derived immune platforms.

For more information, visit www.invitria.com/optileukin-2 or contact info@invitria.com.

About InVitria
InVitria is a global leader in the development and manufacture of high-performance blood-free cell culture and recombinant protein products designed to improve biomanufacturing and facilitate faster approval of life-changing therapies. The company provides unparalleled high-performance solutions for elimination of human and animal serum-derived raw materials in clinical manufacturing and commercial production of cell and gene therapies, vaccines, regenerative medicine, and medical devices. InVitria adheres to the FDA and EMA regulations and offers cGMP and ISO compliant manufacturing capabilities scaled to meet growing global demand for chemically defined production of biologics.

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