

## Recombinant Human Interleukin-12 (rHu IL-12)

Lyophilized (20 µg) Cat. # AK9995-0020 | Lyophilized (100 µg) Cat. # AK9995-0100

P 1

### Product Description:

Akron's Recombinant Human Interleukin-12 (rHu IL-12) products are manufactured following relevant cGMP guidelines for ancillary materials. Akron's rHu IL-12 is a 75 kDa, glycosylated, heterogeneous dimer cytokine analog expressed in Yeast. The p40 chain contains 306 amino acids and the p35 chain contains 197 amino acids, for a total of 503 amino acids. The lyophilized product is packaged in vials. The dimeric nature of IL-12 is only shared by three other cytokines, all of which comprise the IL-12 family. *In vivo*, IL-12 is well known for stimulating the production of IFN- $\gamma$  in T cells and Natural Killer (NK) cells. It also enhances the effectiveness of cytotoxic T cells and NK cells, helps generate lymphokine-activated killer (LAK) cells, and induces proliferation of activated T cells and NK cells. Akron's cGMP-compliant rHu IL-12 can be used to help differentiate, proliferate, and stimulate helper T cells, cytotoxic T cells, NK cells, LAK cells, Dendritic Cells (DCs), and macrophages.

### Product Features:

#### Active Substance

- Negligible BSE/TSE risk from all media components
- Low Endotoxin (< 1 EU/µg)
- High Purity ( $\geq$  97%)

#### Manufacturing

- All raw materials are compliant, controlled, and traceable under Akron's Quality Management System (QMS)
- Yeast expression system
- Tag-free purification

#### Quality

- Relevant cGMP guidelines used in manufacture, testing, and release
- USP <1043>, Ancillary Materials for Cell, Gene, and Tissue-Engineered Products
- ISO 13485:2016, Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes
- ISO/TS 20399-1-3:2018, Biotechnology - Ancillary Materials Present During the Production of Cellular Therapeutic Products



## Recombinant Human Interleukin-12 (rHu IL-12)

Lyophilized (20 µg) Cat. # AK9995-0020 | Lyophilized (100 µg) Cat. # AK9995-0100

**P 2**

### Release Testing:

- Appearance
- Specific Activity
- Purity
- Bacterial Endotoxins

### Stability:

- 36-month shelf life
- Store at -20 °C
- Transport with cold packs

### Reconstitution:

Reconstitute the lyophilized product with 0.2 mL of sterile water. This reconstituted solution can be stored at 2-8 °C for one month and at -20 °C for three months without loss of activity. Avoid repeated freeze-thaw cycles.

### For Use Statement:

For research use or further manufacturing use in *ex vivo* cell therapy applications only. This product is not intended for direct *in vivo* use or for direct clinical use as a drug, therapeutic, biologic, or medical device.

### Related Products:

Catalog Number	Product Name	Size
AK9999-0025	Recombinant Human Interleukin-18 (rHu IL-18)	25 µg
AK9823-0040	Recombinant Human Interleukin-15 (rHu IL-15)	40 µg
AK8223-0100	Recombinant Human Interleukin-2 (rHu IL-2)	100 µg
AK9842-0040	Recombinant Human Interleukin-7 (rHu IL-7)	40 µg
AK9833-0040	Recombinant Human Interleukin-21 (rHu IL-21)	40 µg

For more information on our available products or for technical assistance, see contact info below.  
For contract orders under master supply agreement, please inquire.