

## Recombinant Human Interleukin-18 (rHu IL-18)

Lyophilized (25 µg) Cat. # AK9999-0025

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### Product Description:

Akron's Recombinant Human Interleukin-18 (rHu IL-18) is manufactured following relevant cGMP guidelines for ancillary materials. Akron's rHu IL-18 is a single chain, 18.3 kDa, cytokine analog expressed in Yeast, containing 157 amino acids. The lyophilized product is packaged in vials. *In vivo*, IL-18 is a proinflammatory cytokine with varied effects, influencing both innate and adaptive immunity and implicated in the mechanisms responsible for autoimmune disease. IL-18 was originally known as 'IFN- $\gamma$  inducing factor' and is widely known for its ability to co-stimulate the production of IFN- $\gamma$  in T cells and Natural Killer (NK) cells alongside IL-12 and IL-15. IL-18 is one of the 11 members of the Interleukin-1 superfamily, which all share structural homology and signal via a similar pathway. Akron's cGMP-compliant rHu IL-18 can be used to help differentiate, proliferate, and stimulate T cells, NK cells, Dendritic Cells (DCs), and macrophages.

### Product Features:

#### Active Substance

- Negligible BSE/TSE risk from all media components
- Low Endotoxin ( $\leq 1$  EU/ $\mu$ g)
- 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

### Release Testing:

- Appearance
- Biological Activity
- Purity
- Bacterial Endotoxins

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### 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 °C to 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
AK9995-0020	Recombinant Human Interleukin-12 (rHu IL-12)	20 µg
AK9995-0100	Recombinant Human Interleukin-12 (rHu IL-12)	100 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.