

**Synonym**

Interleukin-24,IL-24,Melanoma differentiation-associated gene 7 protein,MDA-7,Suppression of tumorigenicity 16 protein,IL24,MDA7,ST16

**Source**

Human IL-24 Protein, His Tag(IL4-H52H4) is expressed from human 293 cells (HEK293). It contains AA Gln 52 - Leu 206 (Accession # [Q13007-1](#)).

Predicted N-terminus: Gln 52

**Molecular Characterization**

|                                    |          |
|------------------------------------|----------|
| IL24(Gln 52 - Leu 206)<br>Q13007-1 | Poly-his |
|------------------------------------|----------|

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 20.0 kDa. The protein migrates as 30-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

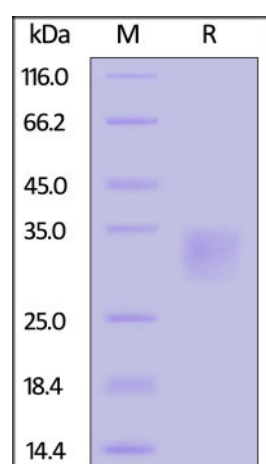
**Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

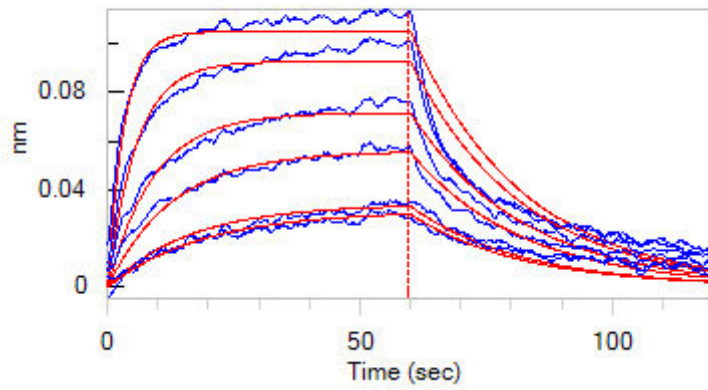
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Human IL-24 Protein, His Tag on SDS-PAGE under reducing (R) condition.

The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-BLI**



Loaded Human IL-22 R alpha 1 Protein, Fc Tag (Cat. No. IL1-H5258) on Protein A Biosensor, can bind Human IL-24 Protein, His Tag (Cat. No. IL4-H52H4) with an affinity constant of 1.71  $\mu$ M as determined in BLI assay (ForteBio Octet Red96e) (QC tested).

### Background

Interleukin-24 (IL-24, also known as melanoma differentiation-associated gene-7) belongs to the family of IL-10-related cytokines, which includes IL-10, -19, -20, -22, -24 and -26. Interleukin 24 signals through two heterodimeric receptors: IL-20R1/IL-20R2 and IL-22R1/IL-20R2. Upon binding to its receptors, IL-24 induces rapid activation of Stat-1 and Stat-3 transcription factors, which appear to play a role in cell survival and proliferation. Structurally and functionally, IL-24 is highly conserved across species. IL-24 has been shown to possess cancer-specific apoptosis-inducing activity, and has therefore been suggested as a potential anti-cancer agent.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.