

**IL-24/MDA-7, Human, Recombinant**

Cat. No. : PCK288

**General Information**

|                        |                                                                                                                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Synonyms</b>        | MDA-7 (Melanoma Differentiation-Associated gene 7 protein)                                                                                                                                                   |
| <b>Species</b>         | Human                                                                                                                                                                                                        |
| <b>Expression host</b> | E.coli                                                                                                                                                                                                       |
| <b>Sequence</b>        | MQEFHFGPCQVKGWVPQKLWEAFWAVKDTMQAQDNITSARLLQQEVLQNVSDAESCYLEVHT<br>LLEFYLKTVFKNYHNRTVEVRTLSFSTLANNFVLIVSQLQPSQENEMFSIRDSAHRRLFFRA<br>FKQLDVEAALTKALGEVDILLTWMQKFYKL with polyhistidine tag at the C-terminus. |
| <b>Accession</b>       | Q13007.1                                                                                                                                                                                                     |
| <b>Tag</b>             | His-tag at the C-terminus                                                                                                                                                                                    |
| <b>Mol mass</b>        | 19.10 kDa                                                                                                                                                                                                    |
| <b>Expiration date</b> | 12 months                                                                                                                                                                                                    |
| <b>Bio activity</b>    | Measure by its ability to chemoattract BaF3 cells transfected with human IL-20R alpha and IL-20R beta. The ED50 for this effect is < 100 pg/mL.                                                              |

**Product feature**

|                          |                                                                                                                                                                                                                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>            | > 95% as determined by SDS-PAGE. Ni-NTA chromatography.                                                                                                                                                                                                                                                                    |
| <b>Endotoxin (EU/μg)</b> | < 0.1                                                                                                                                                                                                                                                                                                                      |
| <b>Storage</b>           | Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months. |
| <b>Shipping</b>          | Ice bag                                                                                                                                                                                                                                                                                                                    |
| <b>Formulation</b>       | The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 8.0.                                                                                                                                                                                                                                    |
| <b>Reconstitution</b>    | It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.                                                                                                                  |

**Background**

Interleukin-24 (IL-24) is a cytokine belonging to the IL-10 family of cytokines that signals through two heterodimeric receptors: IL-20R1/IL-20R2 and IL-22R1/IL-20R2. This interleukin is also known as melanoma differentiation-associated 7 (mda-7) due to its discovery as a tumour suppressing protein. IL-24 appears to control in cell survival and proliferation by inducing rapid activation of particular transcription factors called STAT1 and STAT3. This cytokine is predominantly released by activated monocytes, macrophages and T helper 2 (Th2) cells and acts on non-haematopoietic tissues such as skin, lung and reproductive tissues. IL-24 performs important roles in wound healing, arthritis, psoriasis and cancer. Several studies have shown that cell death occurs in cancer cells/cell lines following exposure to IL-24. The gene for IL-24 is located on chromosome 1 in humans.

### SDS-PAGE

