

## Oncostatin M, Human, Recombinant

Cat. No. : PCK371

### General Information

|                        |   |
|------------------------|---|
| <b>Synonyms</b>        | Oncostatin M; oncostatin-M; OSM   |
| <b>Species</b>         | Human   |
| <b>Expression host</b> | HEK-293   |
| <b>Sequence</b>        | AAIGSCSKEYRVLLGQLQKQTDLMQDTSRLDPYIRIQGLDVPKLREHCRERPGAFPSE<br>ETLRGLGRRGFLQTLNATLGCVLHRLADLEQRLPKAQDLERSGLNIEDLEKLQMARPNIL<br>GLRNNIYCMAQLLDNSDTAEPTKAGRGASQPPTPTPASDAFQRKLEGCRFLHGYHRFM<br>HSVGRVFSKWGESPNRSRR       |
| <b>Accession</b>       | P13725  |
| <b>Mol mass</b>        | 25.7 kDa  |
| <b>Expiration date</b> | 12 months   |
| <b>Bio activity</b>    | Fully biologically active when compared to standard. Determined by the dose dependant proliferation of TF-1 cell line. ED50 is $\leq 0.2$ ng/mL, corresponding to a specific activity of $5.00 \times 10^6$ units/mg. |

### Product feature

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|-----------------------|--|
| <b>Purity</b>         | >95% as determined by SDS-PAGE. Ni-NTA chromatography.   |
| <b>Endotoxin</b>      | < 0.1 EU per 1 µg of the protein by the LAL method.  |
| <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>       | Ambient temperature or ice pack.   |
| <b>Formulation</b>    | The protein was lyophilized from a 0.2 µm filtered solution containing 1× PBS, pH8.0.  |
| <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

Oncostatin M (OSM) is a growth and differentiation factor that participates in the regulation of neurogenesis, osteogenesis and hematopoiesis. Produced by activated T cells, monocytes and Kaposi's sarcoma cells, OSM can exert both stimulatory and inhibitory effects on cell proliferation. It stimulates the proliferation of fibroblasts, smooth muscle cells and Kaposi's sarcoma cells, but inhibits the growth of some normal and tumor cell lines. It also promotes cytokine release (e.g. IL-6, GM-CSF and G-CSF) from endothelial cells, and enhances the expression of low-density lipoprotein receptors in hepatoma cells. OSM shares several structural and functional characteristics with LIF, IL-6, and CNTF. Human OSM is active on murine cells. Recombinant Human Oncostatin M is a 25.7 kDa protein, containing 227 amino acid residues (full length precursor).