

Recombinant Human IL-34 (Interleukin-34)

Product Description

IL-34 is a homodimeric cytokine that is expressed in a range of tissues that include spleen, heart, brain, liver, kidney, lung, ovary, thymus, testis, small intestine, prostate and colon. IL-34 is a ligand for colony-stimulating factor-1 receptor (CSF1R), which also binds to CSF-1. It specifically binds CD14+ monocytes, promotes survival and proliferation of human peripheral blood monocytes, and stimulates macrophage colony formation by human bone marrow cells. IL-34, like human CSF-1, stimulates phosphorylation of MAPK1/ERK2 and MAPK3/ERK1. Recombinant Human IL-34 is a 52.5 kDa homodimeric glycoprotein consisting of 460 amino acid residues, including a C-terminal His-Tag.

Typical Specifications

| | |
|--------------------------|--|
| Species | Human |
| Expression | HEK293 Cell Expressed |
| Purity | ≥95% |
| Endotoxin | <1.0 EU/μg |
| Molecular Mass | 52.5 kDa, homodimeric, glycoprotein |
| Formulation | 20 mM Sodium Citrate, pH 3.0 + 75mM NaCl |
| Country of Origin | USA |

Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

Activity Assay

Measured by its ability to induce secretion of MCP-1 from PBMCs.

AA Sequence

| | | |
|------------|------------|------------|
| NEPLEMWPLT | QNEECTVTGF | LRDKLQYRSR |
| LQYMKHYFPI | NYKISVPYEG | VFRIANVTRL |
| QRAQVSEREL | RYLWVLSLS | ATESVQDVLL |
| EGHPSWKYLQ | EVETLLNVQ | QGLTDVEVSP |
| QGLTDVEVSP | APGPNLKLVR | PKALLDNCFR |
| VMELLYCSCC | KQSSVLNWQD | CEVPSPQSCS |
| PEPSLQYAAT | QLYPPPPWSP | SPPHSTGVS |
| RPVRAQGEGL | LPHHHHHHHH | |

Reconstitution Buffer

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.

Storage

This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% HSA) and store in working aliquots at -20°C to -80°C.

Limited Use and Restrictions

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