

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	RYLWVLVSLS	ATESVQDVLL
EGHPSWKYLQ	EVETLLLNVQ	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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