

**TECHNICAL DATA SHEET**

# Recombinant Human IL-34 (Carrier-free)

Catalog Number: 21-8684

**RPx-Pro™ Recombinant Protein**  
PRODUCT INFORMATION

**CONTENTS**

Recombinant Human IL-34 (Carrier-free)

**DESCRIPTION**

IL-34 is secreted as a dimeric protein that is expressed in a variety of tissues, but is most abundant in the spleen. It shares the M-CSF Receptor, also known as CSF-1R and CD115, with CSF1 (also called M-CSF). IL-34 stimulates monocyte proliferation, promotes survival and proliferation of human peripheral blood monocytes, and stimulates macrophage colony formation by human bone marrow cells. It also stimulates phosphorylation of MAPK1/ERK2 and MAPK3/ERK1.

**MOLECULAR MASS**

Recombinant human IL-34 is a 52.5 kDa homodimeric glycoprotein consisting of 460 amino acid residues, including a C-terminal His-Tag.

**AMINO ACID SEQUENCE**

NEPLEMWPLT QNEECTVTGF LRDKLQYRSR LQYMKHYFPI NYKISVPYEG VFRIANVTRL QRAQVSEREL RYLWVLVSL  
ATESVQDVLV EGHPSWKYLQ EVETLLLNVQ QGLTDEVSP KVESVLSLLN APGPNLKLVR PKALLDNCFR VMELLYCSCC  
KQSSVLNWQD CEVPSQSCS PEPSLQYAAT QLYPPPPWSP SSPPHSTGSV RPVRAQGEGL LPHHHHHHHH

**SOURCE**

HEK293 cells

**APPLICATIONS**

Bioassay

**PURITY**

95 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Content Verified by UV Spectroscopy and/or SDS-PAGE

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

**BIOACTIVITY**

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

**RESEARCH AREAS**

Bone, Skeletal, Cartilage; Cancer; Immune System; Inflammation; Proliferation

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

**REFERENCES**

Wei S, Nandi S, Chitu V, Yeung YG, Yu W, Huang M, Williams LT, Lin H and Stanley ER. 2010. J Leukoc Biol. 88(3): 495-505. Lin H, Lee E, Hestir K, Leo C, Huang M, Bosch E, Halenbeck R, Wu G, Zhou A, Behrens D, Hollenbaugh D, Linnemann T, Qin M, Wong J, Chu K, Doberstein SK and Williams LT. 2008. Science. 320(5877): 807-811. Chen Z, Buki K, Vaaraniemi J, Gu G and Vaananen HK. 2011. PLoS One. 6(4):e18689.

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