

Active Recombinant Mouse Il34 protein, His-tagged

Cat. No. Il34-152M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Il34(Asn21-Pro235) fused with His tag at C-terminal was expressed in NS0.
Species	Mouse
Source	Mammalian Cells
ProteinLength	Asn21-Pro235
Description	Interleukin 34 (IL-34; also known as uncharacterized protein C16orf77 homolog) is a 39 kDa, secreted cytokine that belongs to no known cytokine family. Mouse IL-34 is synthesized as a 235 amino acid (aa) precursor with a 20 aa signal sequence and a 215 aa mature chain. The mature chain contains two potential sites for N-linked glycosylation. There are three isoforms for IL-34. Isoform 1 is the recombinant mouse IL-34 described in this insert. Isoform 2 has an 85 aa substitution for the final 101 aa's in isoform 1, and isoform 3 lacks Q81 in isoform 1. Mouse IL-34 is 71% identical to human IL-34 on the amino acid level. IL-34 is expressed in various tissues, including heart, brain, lung, liver, kidney, spleen, thymus, testes, ovary, small intestine, prostate, and colon, and it is most abundant in the spleen. The receptor for IL-34 is colony-stimulating factor 1 receptor (CSF-1R). IL-34 stimulates monocyte viability. In functional studies, IL-34, like CSF-1, the other ligand for CSF-1R, stimulated phosphorylation of extracellular signal-regulated kinase-1 and -2 (ERK1/2) in human monocytes. In addition, IL-34 promoted the formation of the colony-forming unit-macrophage (CFU-M), a macrophage progenitor, in human bone marrow cultures.

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Predicted N Terminal	Asn21
Form	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein.
Bio-activity	Measured in a cell proliferation assay using NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED50 for this effect is typically 10-40 ng/mL.
Molecular Mass	Predicted Molecular Mass: 25.4 kDa;SDS-PAGE: 35-40 kDa, reducing conditions.
Endotoxin	<0.01 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.12 months from date of receipt, -20 to -70 centigrade as supplied.1 month, 2 to 8 centigrade under sterile conditions after reconstitution.3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 100 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

GENE INFORMATION

Gene Name	IL34 interleukin 34 [<i>Mus musculus</i>]
Official Symbol	IL34
Synonyms	IL34; interleukin 34; interleukin-34; IL-34; AI593503; 2010004A03Rik;

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Gene ID	76527
mRNA Refseq	NM_001135100
Protein Refseq	NP_001128572
MIM	
UniProt ID	Q8R1R4
Chromosome Location	8; 8 E1
Function	cytokine activity; growth factor activity; macrophage colony-stimulating factor receptor binding; macrophage colony-stimulating factor receptor binding;

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