

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-34 in ELISAs. In direct ELISAs, no cross-reactivity with recombinant human IL-34 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 780310
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-34 Asn21-Pro235 Accession # Q8R1R4
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Neutralization Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Interleukin 34 (IL-34; also known as uncharacterized protein C16orf77 homolog) is a 39 kDa, secreted cytokine that belongs to no known cytokine family (1). Mouse IL-34 is synthesized as a 235 amino acid (aa) precursor with a 20 aa signal sequence and a 215 aa mature chain that contains two potential sites for N-linked glycosylation. There are three isoforms for IL-34. Isoform 1 (Q8R1R4-1) is the recombinant mouse IL-34 described in this insert. Isoform 2 (Q8R1R4-2) has an 85 aa substitution for the final 101 aa in isoform 1, and isoform 3 (Q8R1R4-3) lacks Q81 in isoform 1. Mouse IL-34 shares 71% aa sequence identity with human IL-34. 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 (1). The receptor for IL-34 is colony-stimulating factor 1 receptor (CSF-1R) (1). IL-34 stimulates monocyte viability (1). 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 (1). In addition, IL-34 promoted the formation of the colony-forming unit-macrophage (CFU-M), a macrophage progenitor, in human bone marrow cultures (1).

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