## BACKGROUND

The interleukins (ILs) are a broad family of well characterized cytokines, primarily of hematopoietic cell origin. They are secreted by immune cells (mainly macrophages, B-cells or T-cells) that regulate a wide range of immune system functions. The specific functions of different interleukins vary from the regulation of inflammatory and immune responses to the regulation of other interleukins. IL-34 (interleukin-34) is a 235 amino acid secreted mouse protein that belongs to the interleukin family of cytokines. Existing as a homodimer, IL-34 functions to promote the viability and differentiation of macrophages and monocytes and may also act as a ligand for c-Fms/CSF-1R, a colony-stimulating factor. Multiple alternatively spliced isoforms of IL-34 exist, all of which are encoded by a gene that maps to mouse chromosome 8.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: IL34 (human) mapping to 16q22.1; |l34 (mouse) mapping to 8 E 1 .

## SOURCE

IL-34 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of $\mathrm{IL}-34$ of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{glgG}$ in 1.0 ml of PBS with < $0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-243071 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA})$.

## APPLICATIONS

IL-34 (T-16) is recommended for detection of IL-34 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:1001:1000), immunofluorescence (starting dilution 1:50, dilution range 1:501:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:301:3000).
$\mathrm{IL}-34$ (T-16) is also recommended for detection of IL-34 in additional species, including canine, bovine and porcine.
Suitable for use as control antibody for IL-34 siRNA (h): sc-92990, IL-34 siRNA (m): sc-146220, IL-34 shRNA Plasmid (h): sc-92990-SH, IL-34 shRNA Plasmid (m): sc-146220-SH, IL-34 shRNA (h) Lentiviral Particles: sc-92990-V and IL-34 shRNA (m) Lentiviral Particles: sc-146220-V.
Molecular Weight of IL-34: 27 kDa .

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz MarkerTM compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz MarkerTM Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:1001:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {TM }}$ Mounting Medium: sc-24941.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


Satisfation Guaranteed

Try IL-34 (1D12E8): sc-517217, our highly recommended monoclonal alternative to IL-34 (T-16).

