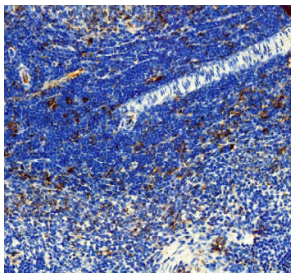
IL-3 Antibody / Hematopoietic Growth Factor Antibody (R30840)

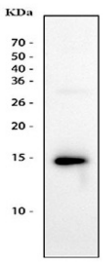
Catalog No.	Formulation	Size
R30840	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P08700
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This IL-3 antibody is available for research use only.



IL-3 Antibody in Rat Spleen IHC. Immunohistochemistry of FFPE rat spleen tissue using IL-3 Antibody demonstrates distinct brown staining in a subset of cells distributed throughout the splenic tissue, with predominantly cytoplasmic signal and comparatively little staining in surrounding cells. The localized cellular staining demonstrates detection of interleukin 3 by this Hematopoietic Growth Factor Antibody in rat spleen.



IL-3 Antibody Detects Recombinant Human Interleukin 3 WB. Western blot analysis of recombinant human IL-3 using IL-3 Antibody demonstrates a strong, discrete band at approximately 15-17 kDa, consistent with the expected migration range of the recombinant cytokine preparation. Minimal additional background is visible, producing a clean target signal. This result demonstrates detection of recombinant human interleukin 3 by this Hematopoietic Growth Factor Antibody under Western blot conditions.

Description

IL-3 Antibody recognizes interleukin 3, a secreted cytokine encoded by the IL3 gene that belongs to the hematopoietic growth factor family. IL-3 contributes to the survival, proliferation, and differentiation of hematopoietic progenitor cells and several mature immune-cell populations. Production of IL-3 is induced during immune activation, allowing this cytokine to help coordinate hematopoietic responses with changing immune demands.

IL-3 signals through a heterodimeric receptor consisting of the IL-3-specific alpha subunit IL3RA (CD123) and the common beta subunit CSF2RB (CD131). CSF2RB is also shared by the receptor systems for GM-CSF and IL-5. Assembly of the functional IL-3 receptor activates intracellular pathways including JAK-STAT, PI3K-AKT, and MAPKs, promoting cellular survival, proliferation, and differentiation in responsive hematopoietic populations.

IL-3 has broad biological effects on hematopoietic development and can influence progenitor cells as well as basophils, eosinophils, mast cells, monocytes, macrophages, dendritic cells, and other immune-cell populations. These activities connect IL-3 with hematopoiesis, inflammation, allergic responses, and immune regulation. Dysregulated IL-3 signaling has also been investigated in hematologic malignancies and other conditions involving abnormal survival or expansion of hematopoietic cells.

This rabbit polyclonal antibody was generated against an N-terminal amino acid sequence from human interleukin 3. As a Hematopoietic Growth Factor Antibody, it provides a reagent for investigating IL-3 and its relationship to cytokine-mediated regulation of blood-cell development and immune function. NSJ Bioreagents supplies this antibody for research use only.

An IL-3 Antibody can be used to investigate interleukin 3 expression and molecular mechanisms connecting cytokine signaling, hematopoietic cell development, inflammatory responses, and immune-cell regulation.

For a monoclonal clone with IHC and protein microarray specificity validation, see our Interleukin 3 Antibody IL3/4004 / IL3 Antibody page.

Application Notes

Variations in secondary/substrate sensitivities and test protocols may require the IL-3 antibody to be titrated for optimal performance.

Immunogen

An amino acid sequence from the N-terminus of human Interleukin-3 (KDGDWNEFRRKLTFYLKTLENA) was used as the immunogen for this IL-3 antibody.

Storage

After reconstitution, the IL-3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

IL3 antibody, IL-3 antibody, interleukin 3 antibody, interleukin-3 antibody, multipotent colony-stimulating factor antibody, multi-CSF antibody, mast cell growth factor antibody, MCGF antibody

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