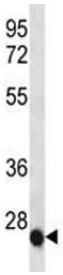
IL6 Antibody / BSF-2 Antibody (F42217)

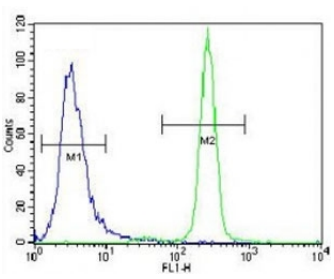
Catalog No.	Formulation	Size
F42217-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F42217-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

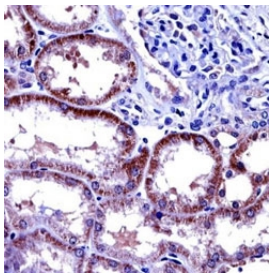
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P05231
Applications	Western blot: 1:1000 Flow Cytometry: 1:10-1:50 IHC (Paraffin): 1:10-1:50
Limitations	This IL6 Antibody / BSF-2 Antibody is available for research use only.



IL6 Antibody Detects IL-6 in Human NCI-H460 Lung Cancer Cells WB. Western blot analysis of human NCI-H460 non-small cell lung cancer cell lysate using IL6 Antibody shows a strong, discrete band at approximately 24-26 kDa, with little visible background. The observed migration is consistent with the expected size range of IL-6, which can migrate above its calculated molecular weight due to glycosylation. This clean single-band result demonstrates detection of IL-6, historically known as BSF-2, in NCI-H460 cell lysate.



IL6 Antibody Detection in Human NCI-H460 Lung Cancer Cells FACS. Flow cytometry analysis of human NCI-H460 non-small cell lung cancer cells using IL6 Antibody shows a pronounced rightward fluorescence shift in the antibody-stained population compared with the negative control. FITC-conjugated goat anti-rabbit IgG was used for detection. The strong separation between the two populations demonstrates detection of IL-6, also historically known as BSF-2, in NCI-H460 cells by flow cytometry.



IL6 Antibody Staining in Human Kidney IHC. Immunohistochemistry of formalin-fixed, paraffin-embedded human kidney tissue using IL6 Antibody shows prominent brown staining in renal tubular epithelial cells, with comparatively little staining in the glomerulus visible in the field. The staining is predominantly cytoplasmic and outlines numerous tubular structures, while hematoxylin counterstaining identifies the surrounding nuclei. This distinct tubular staining pattern demonstrates detection of IL-6/BSF-2 in human kidney tissue.

Description

IL6 Antibody recognizes interleukin 6 (IL-6), a secreted cytokine that plays important roles in inflammation, immune regulation, hematopoiesis, and the acute-phase response. Encoded by the IL6 gene, the protein was independently characterized through several biological activities and was historically known as B cell stimulatory factor 2 (BSF-2), interferon beta-2, and hepatocyte-stimulating factor. These early names reflect the diverse biological effects of IL-6 on immune cells and other tissues.

IL-6 initiates signaling by binding IL6R (CD126), followed by association with the signal-transducing receptor component gp130 (IL6ST/CD130). Formation of the receptor complex activates intracellular pathways including JAK-STAT, particularly STAT3, as well as MAPK and PI3K-AKT signaling. IL-6 can signal through membrane-bound IL6R or through soluble IL6R by trans-signaling, allowing the cytokine to influence cells that express gp130 but lack membrane-bound IL6R.

IL-6 contributes to B-cell differentiation, T-cell responses, hematopoietic regulation, and hepatic production of acute-phase proteins. Its production can increase rapidly following infection, tissue injury, and inflammatory stimulation. Persistent or dysregulated IL-6 activity is studied in chronic inflammation, autoimmune disorders, and cancer, making the cytokine an important subject for research into mechanisms connecting immune activation with disease-associated signaling.

This rabbit polyclonal antibody was generated against a peptide corresponding to amino acids 27-55 of human IL-6. As a BSF-2 Antibody, it provides a reagent for investigating the cytokine historically identified as B cell stimulatory factor 2 and its roles in inflammatory and immune signaling. NSJ Bioreagents supplies this antibody for research use only.

An IL6 Antibody can be used to investigate interleukin 6 expression and molecular mechanisms connecting cytokine signaling, immune activation, acute-phase responses, and inflammatory disease.

For additional validated antibodies targeting this important inflammatory cytokine, visit our IL6 Antibody / Pro-Inflammatory Cytokine Marker page featuring complementary reagents for studies of cytokine signaling, immune activation, and inflammation-associated disease processes.

Application Notes

Titration of the IL6 Antibody / BSF-2 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 27-55 from the human protein was used as the immunogen for this IL6 Antibody.

Storage

Aliquot the IL6 Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

IL6 antibody, IL-6 antibody, interleukin 6 antibody, interleukin-6 antibody, BSF-2 antibody, BSF2 antibody, B cell stimulatory factor 2 antibody, B-cell stimulatory factor 2 antibody, interferon beta-2 antibody, IFNB2 antibody, hepatocyte-stimulating factor antibody, HSF antibody, hybridoma growth factor antibody, hybridoma-plasmacytoma growth factor antibody

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