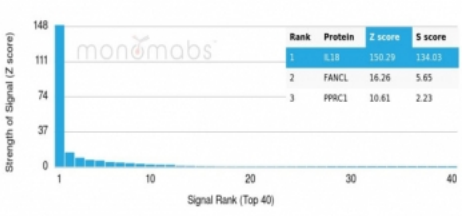
IL-18 Antibody IL18/4626 / IL18 Monoclonal Antibody [clone IL18/4626] (V4199)

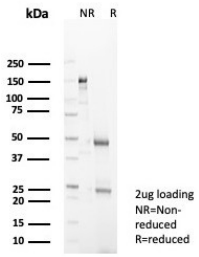
Catalog No.	Formulation	Size
V4199-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4199-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4199SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

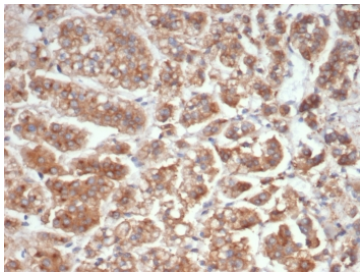
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	IL18/4626
Purity	Protein A/G affinity
UniProt	Q14116
Localization	Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT Western blot: 2-4ug/ml
Limitations	This IL-18 Antibody IL18/4626 / IL18 Monoclonal Antibody is available for research use only.



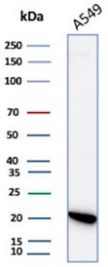
IL-18 Antibody IL18/4626 Protein Microarray Validated. Protein microarray analysis of IL-18 Antibody (clone IL18/4626) on a HuProt array containing more than 19,000 full-length human proteins shows IL-18 as the dominant target signal with strong separation from the next-ranked proteins. The Z-score represents the target signal in standard deviations above the array mean, while the S-score measures separation between IL-18 and the next-ranked protein. The pronounced target separation provides strong specificity evidence for this IL18 Monoclonal Antibody.



IL-18 Antibody IL18/4626 Purity and Integrity by SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free IL-18 Antibody (clone IL18/4626) shows an intact antibody migrating at approximately 150 kDa under non-reducing conditions. Under reducing conditions, distinct immunoglobulin heavy and light chains are visible at approximately 50 kDa and 25 kDa, respectively. The expected migration patterns under reducing and non-reducing conditions support the integrity and purity of this IL18 Monoclonal Antibody preparation.



IL-18 Antibody IL18/4626 Staining in Human Adrenal Gland IHC. Immunohistochemistry staining of FFPE human adrenal gland tissue using IL-18 Antibody (clone IL18/4626) shows widespread heterogeneous brown staining, with prominent cytoplasmic signal throughout many adrenal cells. HIER was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min followed by cooling before testing. The staining demonstrates detection of IL-18 in human adrenal gland using this IL18 Monoclonal Antibody.



IL-18 Antibody IL18/4626 Detects IL-18 in Human A549 Lung Carcinoma Cells WB. Western blot analysis of human A549 lung carcinoma cell lysate using IL-18 Antibody (clone IL18/4626) shows a strong, discrete band at approximately 20-22 kDa with minimal visible background. The observed molecular weight closely matches the predicted approximately 22 kDa size of the IL-18 precursor. The clean single-band result demonstrates detection of IL-18 in A549 cells using this IL18 Monoclonal Antibody.

Description

IL-18 Antibody IL18/4626 recognizes interleukin 18 (IL-18), a proinflammatory cytokine encoded by the IL18 gene and a member of the IL-1 cytokine family. IL-18 was originally identified as interferon gamma-inducing factor (IGIF) because of its ability to stimulate interferon gamma production. It participates in innate and adaptive immune responses and can influence the activity of natural killer cells, T lymphocytes, macrophages, and other immune-cell populations.

IL-18 is synthesized as an inactive precursor that requires proteolytic processing to generate the biologically active cytokine. Caspase-1 is an important mediator of this maturation process and links IL-18 production to inflammasome activation. Mature IL-18 signals through a heterodimeric receptor composed of IL18R1 and IL18RAP. Receptor engagement activates downstream signaling involving MyD88, IRAK proteins, TRAF6, and NF-kappaB, promoting transcriptional responses associated with inflammation and immune activation.

The biological effects of IL-18 depend strongly on the surrounding cytokine environment. In cooperation with IL-12, IL-18 can strongly enhance interferon gamma production and promote type 1 immune responses. IL-18 activity is also regulated extracellularly by IL-18 binding protein, which binds the cytokine and limits its interaction with the receptor. Dysregulated IL-18 production or signaling is studied in inflammatory and autoimmune conditions, infectious disease, metabolic disorders, and cancer. An IL18 Monoclonal Antibody can support research examining cytokine expression, inflammasome-associated processes, and mechanisms connecting innate and adaptive immunity.

Clone IL18/4626 is a mouse monoclonal antibody generated against a recombinant fragment within amino acids 1-193 of human IL-18. This IL18 Monoclonal Antibody provides a defined reagent for investigating IL-18 expression and complements studies focused on inflammatory cytokine signaling and immune regulation. NSJ Bioreagents supplies clone IL18/4626 for research use only.

An IL-18 Antibody can be used to investigate interleukin 18 expression and its relationship to inflammasome activity, interferon gamma production, inflammatory signaling, innate immunity, and adaptive immune responses.

Explore our Immunology Antibodies page for additional antibodies targeting cytokines and regulators involved in inflammatory signaling, innate immunity, and adaptive immune responses.

Application Notes

Optimal dilution of the IL-18 Antibody IL18/4626 / IL18 Monoclonal Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein (within amino acids 1-193) from the human protein was used as the immunogen for the IL-18 Antibody IL18/4626.

Storage

Aliquot the IL-18 Antibody IL18/4626 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

IL18 antibody, interleukin 18 antibody, interleukin-18 antibody, interferon gamma-inducing factor antibody, IGIF antibody, IL-1 gamma antibody

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