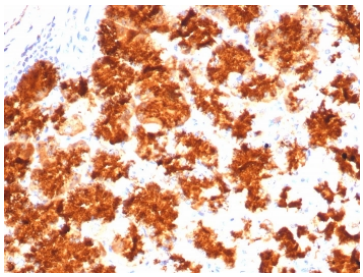
Interleukin-2 Antibody IL2/4983 / IL-2 Antibody [clone IL2/4983] (V5065)

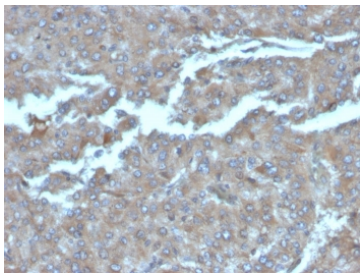
Catalog No.	Formulation	Size
V5065-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5065-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5065SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

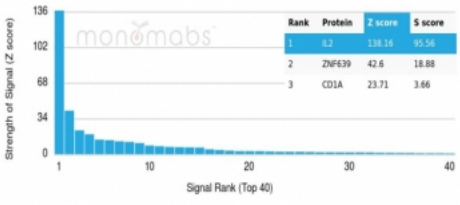
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	IL2/4983
Purity	Protein A/G affinity
UniProt	P60568
Localization	Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Interleukin-2 Antibody IL2/4983 / IL-2 Antibody is available for research use only.



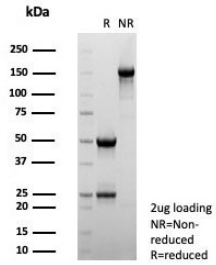
Interleukin-2 Antibody in Human Stomach IHC. Immunohistochemistry of FFPE human stomach tissue using Interleukin-2 Antibody demonstrates strong, widespread staining within the gastric mucosa, with prominent cytoplasmic signal. HIER was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min followed by cooling before staining. The robust tissue staining demonstrates detection of IL-2 by clone IL2/4983 under IHC conditions.



Interleukin-2 Antibody in Human Adrenal Gland IHC. Immunohistochemistry of FFPE human adrenal gland tissue using Interleukin-2 Antibody demonstrates diffuse weak-to-moderate cytoplasmic staining, with heterogeneous staining intensity across the tissue. HIER was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min followed by cooling before staining. The observed pattern demonstrates detection of IL-2 by clone IL2/4983 in human adrenal tissue.



Interleukin-2 Antibody IL2/4983 Protein Microarray Validated. HuProt protein microarray analysis of Interleukin-2 Antibody against more than 19,000 full-length human proteins identifies IL-2 as the highest-ranked target, with strong separation from the remaining proteins on the array. The Z-score represents signal strength in standard deviations above the array mean, while the S-score measures separation between the intended target and the next-highest signal; an S-score of at least 2.5 supports target specificity. The strong isolated IL-2 signal provides orthogonal specificity validation for this IL-2 Antibody.



Interleukin-2 Antibody IL2/4983 Purity and Integrity by SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free Interleukin-2 Antibody shows the expected intact IgG band near 150 kDa under non-reducing conditions and antibody heavy and light chains near 50 kDa and 25 kDa under reducing conditions. The banding pattern confirms the integrity and purity of clone IL2/4983.

Description

Interleukin-2 Antibody IL2/4983 recognizes interleukin 2 (IL-2), a cytokine encoded by the IL2 gene that plays a central role in immune-cell activation and homeostasis. IL-2 is produced primarily by activated T cells following antigenic or mitogenic stimulation and functions as an important regulator of adaptive immune responses. Through its effects on lymphocyte proliferation, differentiation, survival, and function, IL-2 contributes to coordination of both stimulatory and regulatory aspects of immunity.

IL-2 signals through the IL-2 receptor, which can consist of combinations of IL2RA (CD25), IL2RB (CD122), and the common gamma chain IL2RG (CD132). The high-affinity receptor contains all three subunits, while IL2RB and IL2RG form an intermediate-affinity receptor. Receptor engagement activates intracellular signaling pathways that include JAK1 and JAK3, STAT5, PI3K-AKT, and MAPK signaling, producing transcriptional and functional responses that vary with cell type and activation state.

Interleukin 2 has important functions in conventional T cells, regulatory T cells, and natural killer cells. Although IL-2 can promote proliferation of activated lymphocytes, it is also essential for the development, maintenance, and suppressive function of regulatory T cells. This combination of immunostimulatory and immunoregulatory activity makes IL-2 an important subject in studies of immune tolerance, host defense, autoimmunity, and cancer immunology.

Clone IL2/4983 is a mouse monoclonal antibody generated against a recombinant fragment within amino acids 1-153 of human IL-2. The antibody has also been evaluated on a HuProt protein microarray containing more than 19,000 full-length human proteins to assess target specificity. As an IL-2 Antibody, clone IL2/4983 provides a defined monoclonal reagent for investigating this important immunoregulatory cytokine. NSJ Bioreagents supplies IL2/4983 for research use only.

An Interleukin-2 Antibody can be used to investigate IL-2 expression and molecular mechanisms connecting cytokine

signaling, lymphocyte regulation, and immune responses.

Explore our Immunology Antibodies page for additional reagents targeting cytokines and regulators of lymphocyte signaling and immune responses.

Application Notes

Optimal dilution of the Interleukin-2 Antibody IL2/4983 / IL-2 Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-153) from the human protein was used as the immunogen for the Interleukin-2 Antibody IL2/4983.

Storage

Aliquot the Interleukin-2 Antibody IL2/4983 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

IL2 antibody, IL-2 antibody, interleukin 2 antibody, interleukin-2 antibody, T cell growth factor antibody, T-cell growth factor antibody, TCGF antibody, lymphokine antibody

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