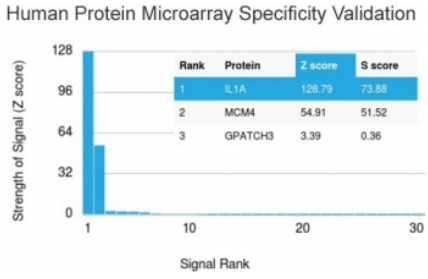
IL1A Antibody IL1A/3981 / IL-1A Antibody [clone IL1A/3981] (V8700)

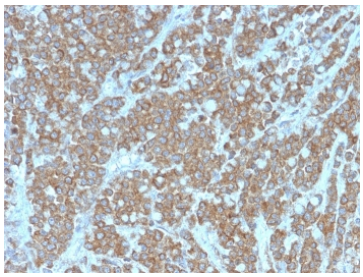
Catalog No.	Formulation	Size
V8700-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8700-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8700SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

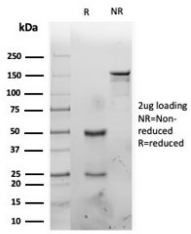
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	IL1A/3981
Purity	Protein G affinity chromatography
UniProt	P01583
Localization	Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This IL1A Antibody IL1A/3981 / IL-1A Antibody is available for research use only.



IL1A Antibody IL1A/3981 Protein Microarray Validated for IL1A Specificity. Protein Microarray Validated analysis of IL1A Antibody (clone IL1A/3981) on a HuProt microarray containing more than 19,000 full-length human proteins identifies IL1A as the highest-ranked target, with a Z-score of 96.79 and an S-score of 71.58. The Z-score represents signal strength in standard deviations above the mean signal across the array, while the S-score measures separation between the intended target and the next-ranked protein. The strong separation supports relative target specificity of this IL-1A Antibody for IL1A.



IL1A Antibody IL1A/3981 in Human Colon Carcinoma IHC. Immunohistochemistry of FFPE human colon carcinoma tissue using IL1A Antibody (clone IL1A/3981) demonstrates extensive, predominantly cytoplasmic brown staining within the tumor, with heterogeneous staining intensity across the section. Tissue sections underwent HIER by boiling in pH 9 10mM Tris with 1mM EDTA for 20 min followed by cooling before testing. The widespread cytoplasmic staining demonstrates detection of interleukin 1 alpha by this IL-1A Antibody in colon carcinoma tissue.



IL1A Antibody IL1A/3981 Purity by SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free IL1A Antibody (clone IL1A/3981) under reducing (R) and non-reducing (NR) conditions. The reduced preparation resolves into the expected immunoglobulin heavy and light chains at approximately 50 kDa and 25 kDa, respectively, while the non-reduced antibody migrates predominantly as intact IgG near 150 kDa. The gel confirms the integrity and purity of this IL-1A Antibody preparation.

Description

IL1A Antibody IL1A/3981 recognizes interleukin 1 alpha (IL-1 alpha), a cytokine encoded by the IL1A gene. IL1A belongs to the interleukin 1 cytokine family and functions as an important mediator of inflammatory and immune responses. The protein is synthesized as a precursor that is itself biologically active and can also undergo proteolytic processing to produce a mature form.

IL-1 alpha signals through interleukin 1 receptor type 1 (IL1R1), a receptor also utilized by IL-1 beta. Receptor activation initiates intracellular signaling pathways that include NF-kappaB and MAPK signaling, promoting expression of cytokines, chemokines, adhesion molecules, and other mediators involved in inflammation and immune-cell recruitment.

A distinctive feature of IL1A biology is its role as an early signal following cellular stress, damage, or necrosis. Preformed intracellular IL-1 alpha can become available to neighboring cells following loss of membrane integrity, contributing to the initiation of sterile inflammatory responses. IL1A is therefore widely studied in innate immunity, tissue injury, inflammatory signaling, host defense, and the relationship between inflammation and tumor biology.

Clone IL1A/3981 is a mouse monoclonal antibody generated against human IL1A. This defined monoclonal reagent provides researchers with a tool for investigating interleukin 1 alpha protein expression and its involvement in inflammatory signaling. The IL-1A Antibody designation reflects an established abbreviated name for the same IL1A-encoded cytokine. NSJ Bioreagents supplies IL1A/3981 for research use only.

An IL1A Antibody can be used to investigate interleukin 1 alpha expression and molecular processes involving cytokine signaling, innate immunity, cellular injury, and inflammatory responses.

For an additional monoclonal clone with protein microarray specificity validation, see our IL-1 alpha Antibody IL1A/3982 / Interleukin 1 Alpha Antibody page.

Application Notes

Optimal dilution of the IL1A Antibody IL1A/3981 / IL-1A Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 113-271 from the human protein was used as the immunogen for the IL1A Antibody IL1A/3981.

Storage

Store the IL1A Antibody IL1A/3981 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

IL1A antibody, IL-1 alpha antibody, IL1 alpha antibody, IL-1A antibody, interleukin 1 alpha antibody, interleukin-1 alpha antibody, IL-1 alpha precursor antibody, IL1A precursor antibody, hematopoietin 1 antibody, IL-1F1 antibody, interleukin-1 family member 1 antibody, preinterleukin 1 alpha antibody

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