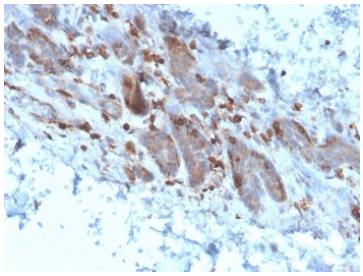
# IL-1 alpha Antibody IL1A/3982 / Interleukin 1 Alpha Antibody [clone IL1A/3982] (V8701)

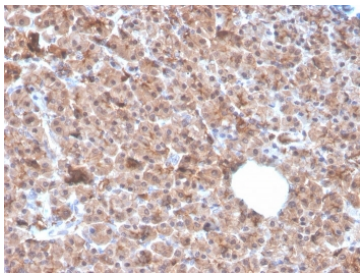
| Catalog No. | Formulation | Size |
|---|---|---|
| V8701-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V8701-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug |
| V8701SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |

## Bulk quote request

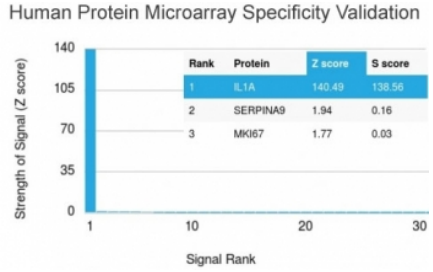
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG2b, kappa |
| **Clone Name** | IL1A/3982 |
| **Purity** | Protein G affinity chromatography |
| **UniProt** | P01583 |
| **Localization** | Secreted |
| **Applications** | Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT |
| **Limitations** | This IL-1 alpha Antibody IL1A/3982 / Interleukin 1 Alpha Antibody is available for research use only. |



IL-1 alpha Antibody IL1A/3982 in Human Colon Carcinoma IHC. Immunohistochemistry of FFPE human colon carcinoma tissue using IL-1 alpha Antibody (clone IL1A/3982) demonstrates distinct cytoplasmic staining in a population of tumor cells, 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 localized positive staining demonstrates detection of IL1A by this Interleukin 1 Alpha Antibody in colon carcinoma tissue.



IL-1 alpha Antibody IL1A/3982 in Human Pancreas IHC. Immunohistochemistry of FFPE human pancreas tissue using IL-1 alpha Antibody (clone IL1A/3982) demonstrates widespread cytoplasmic staining throughout the pancreatic parenchyma, with nuclei remaining predominantly counterstained blue. Tissue sections underwent HIER by boiling in pH 9 10mM Tris with 1mM EDTA for 20 min followed by cooling before testing. The staining demonstrates recognition of IL1A by this Interleukin 1 Alpha Antibody in pancreatic tissue.




IL-1 alpha Antibody IL1A/3982 Protein Microarray Validated for IL1A Specificity. Protein Microarray Validated analysis of IL-1 alpha Antibody (clone IL1A/3982) 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 104.09 and an S-score of 103.86. The Z-score represents signal strength in standard deviations above the mean signal generated across the array, while the S-score measures the difference between the intended target and the next-ranked protein. The exceptionally large separation supports strong relative target specificity of this Interleukin 1 Alpha Antibody for IL1A.

## Description

IL-1 alpha Antibody IL1A/3982 recognizes interleukin 1 alpha (IL-1 alpha), a cytokine encoded by the IL1A gene. IL1A is a member of the interleukin 1 family and participates in the regulation of inflammatory and immune responses. Unlike many classical secreted cytokines, IL-1 alpha is synthesized as a biologically active precursor that can function intracellularly, associate with the plasma membrane, or undergo proteolytic processing to generate a mature cytokine.

IL-1 alpha signals primarily through interleukin 1 receptor type 1 (IL1R1), which it shares with IL-1 beta. Receptor engagement promotes recruitment of accessory and signaling proteins that activate pathways including NF-kappaB and MAPK signaling. These responses can induce expression of additional cytokines, chemokines, adhesion molecules, and other mediators involved in inflammation and immune-cell recruitment.

IL1A can act as an early mediator of tissue responses to cellular stress and injury. Because precursor IL-1 alpha can be present in cells before release, cellular damage or necrosis can expose surrounding cells to biologically active IL-1 alpha and initiate local inflammatory signaling. IL1A has consequently been studied in innate immunity, sterile inflammation, tissue injury, inflammatory disease, and interactions between inflammatory signaling and tumor biology.

Clone IL1A/3982 is a mouse monoclonal antibody generated against a region within amino acids 113-271 of human IL1A. 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 Interleukin 1 Alpha Antibody, clone IL1A/3982 provides a defined monoclonal reagent for investigating this important inflammatory cytokine. NSJ Bioreagents supplies IL1A/3982 for research use only.

An IL-1 alpha Antibody can be used to investigate IL1A expression and the molecular mechanisms connecting cytokine signaling, innate immune responses, cellular injury, and inflammation.

Explore our Immunology Antibodies page for additional reagents targeting cytokines and proteins involved in immune and inflammatory signaling.

## Application Notes

Optimal dilution of the IL-1 alpha Antibody IL1A/3982 / Interleukin 1 Alpha 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 IL-1 alpha Antibody

IL1A/3982.

## Storage

Store the IL-1 alpha Antibody IL1A/3982 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, IL1 antibody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