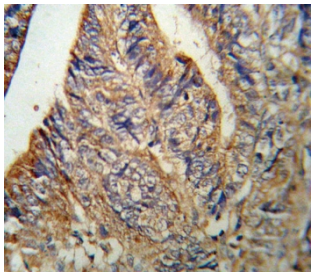
Interleukin-1 Receptor Antagonist Antibody / IL1RN Protein Antibody (F54851)

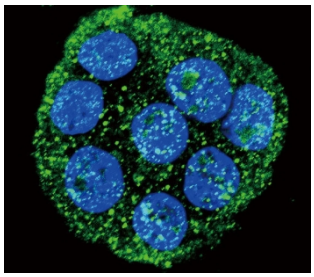
Catalog No.	Formulation	Size
F54851-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54851-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

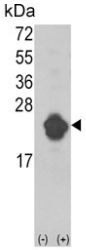
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P18510
Localization	Cytoplasmic
Applications	Flow cytometry: 1:10-1:50 (1x10e6 cells) Immunofluorescence: 1:10-1:50 Immunohistochemistry (FFPE): 1:10-1:50 Western blot: 1:500-1:1000
Limitations	This Interleukin-1 Receptor Antagonist Antibody / IL1RN Protein Antibody is available for research use only.



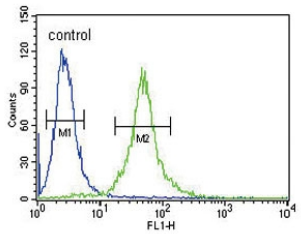
Interleukin-1 Receptor Antagonist Antibody in Human Colon Carcinoma IHC. Immunohistochemistry of FFPE human colon carcinoma tissue using Interleukin-1 Receptor Antagonist Antibody demonstrates prominent cytoplasmic staining within tumor cells, with heterogeneous staining intensity across the tissue. HIER was performed by steaming sections in pH 6 citrate buffer for 20 min followed by cooling before staining. The observed pattern demonstrates detection of interleukin 1 receptor antagonist by this IL1RN Protein Antibody in human colon carcinoma.



Interleukin-1 Receptor Antagonist Antibody in WiDr Colon Cancer Cells IF. Immunofluorescence staining of human WiDr colorectal adenocarcinoma cells using Interleukin-1 Receptor Antagonist Antibody demonstrates strong green cytoplasmic staining surrounding the DAPI-stained blue nuclei. The signal has a predominantly granular cytoplasmic distribution, with comparatively little fluorescence within the nuclei. This staining demonstrates cellular detection of interleukin 1 receptor antagonist by this IL1RN Protein Antibody.



Interleukin-1 Receptor Antagonist Antibody Detects IL1RN in Transfected 293 Cells WB. Western blot analysis of non-transfected (-) and IL1RN-transfected (+) human 293 cell lysates using Interleukin-1 Receptor Antagonist Antibody detects a distinct band at approximately 23-24 kDa in the transfected sample that is absent from the non-transfected control. The transfection-dependent signal provides strong evidence for target recognition by this IL1RN Protein Antibody under Western blot conditions.



Interleukin-1 Receptor Antagonist Antibody Detects IL1RN in HEK293 Cells FACS. Flow cytometry analysis of human HEK293 cells using Interleukin-1 Receptor Antagonist Antibody demonstrates a clear rightward fluorescence shift in the antibody-stained population (green) relative to the isotype control (blue), with strong separation between the populations. The distinct fluorescence shift demonstrates detection of interleukin 1 receptor antagonist by this IL1RN Protein Antibody in HEK293 cells.

Description

Interleukin-1 Receptor Antagonist Antibody recognizes IL1RN, an endogenous regulator of interleukin 1 signaling. Encoded by the IL1RN gene, interleukin 1 receptor antagonist belongs to the IL-1 cytokine family but differs functionally from the agonists IL-1 alpha and IL-1 beta. IL1RN binds to interleukin 1 receptors without initiating the same productive signaling response, allowing it to counteract IL-1-mediated inflammatory activity.

IL1RN competes with IL-1 alpha and IL-1 beta for binding to interleukin 1 receptor type 1 (IL1R1). Occupancy of the receptor by IL1RN limits agonist-driven signaling and can reduce downstream activation of pathways including NF-kappaB and MAPKs. This antagonistic mechanism contributes to regulation of the magnitude and duration of inflammatory responses and helps maintain a balance between proinflammatory cytokine activity and endogenous inhibitory mechanisms.

Multiple IL1RN isoforms are generated through alternative splicing, including secreted and intracellular forms. These proteins provide mechanisms for regulating IL-1 activity in different cellular environments. The relationship between IL1RN and IL-1 agonists has been studied in innate immunity, inflammatory and autoinflammatory disorders, tissue injury, host defense, and the resolution of inflammatory responses.

This rabbit polyclonal antibody was generated against a region of human IL1RN and provides a reagent for investigating interleukin 1 receptor antagonist protein expression. The IL1RN Protein Antibody designation emphasizes the gene symbol commonly used to identify the protein and distinguishes this reagent within the broader interleukin 1 signaling family. NSJ Bioreagents supplies this antibody for research use only.

An Interleukin-1 Receptor Antagonist Antibody can be used to investigate IL1RN expression and molecular mechanisms regulating interleukin 1 signaling, innate immune responses, and inflammation.

For a monoclonal clone with protein microarray specificity validation, see our IL1RN Antibody IL1RA/4716 / Interleukin-1

Receptor Antagonist Antibody page.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Interleukin-1 Receptor Antagonist Antibody / IL1RN Protein Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 100-129 from the human protein was used as the immunogen for the Interleukin-1 Receptor Antagonist Antibody.

Storage

Aliquot the Interleukin-1 Receptor Antagonist Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

IL1RN antibody, IL1RA antibody, IL-1RA antibody, IL-1RN antibody, interleukin 1 receptor antagonist antibody, interleukin-1 receptor antagonist antibody, IL1F3 antibody, interleukin 1 family member 3 antibody, IRAP antibody, ICIL-1RA antibody

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