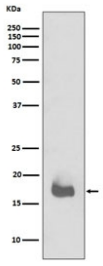
IL1B Antibody IBF-9 / IL-1 Beta Antibody [clone IBF-9] (RQ4973)

Catalog No.	Formulation	Size
RQ4973	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

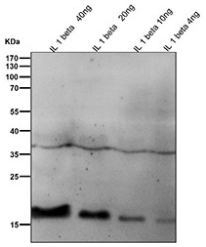
Recombinant RABBIT MONOCLONAL

Bulk quote request

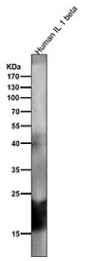
Availability	1-2 weeks
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	IBF-9
Purity	Affinity purified
UniProt	P01584
Applications	Western blot: 1:500
Limitations	This IL1B Antibody IBF-9 / IL-1 Beta Antibody is available for research use only.



IL1B Antibody IBF-9 Detects Recombinant Human IL1 Beta WB. Western blot analysis of recombinant human partial IL1 beta protein using IL1B Antibody IBF-9 detects a strong, discrete band at approximately 17-18 kDa with minimal background. The observed migration is consistent with the recombinant IL1B preparation used in this assay and demonstrates recognition of human IL1B by this IL-1 Beta Antibody under Western blot conditions.



IL1B Antibody IBF-9 Dilution Series with Recombinant Human IL1 Beta WB. Western blot analysis of recombinant human partial IL1 beta protein using IL1B Antibody IBF-9 at serial antibody dilutions demonstrates a prominent band at approximately 17-18 kDa across the tested conditions, with signal intensity decreasing as the antibody is diluted. The consistent migration of the principal band across the dilution series demonstrates detection of recombinant human IL1B by this IL-1 Beta Antibody.



IL1B Antibody IBF-9 Detects Recombinant Human IL1 Beta at High Dilution WB. Western blot analysis of recombinant human partial IL1 beta protein using IL1B Antibody IBF-9 at high dilution detects a discrete band at approximately 17-18 kDa. The figure provides additional dilution-based validation of recombinant human IL1B recognition by this IL-1 Beta Antibody under Western blot conditions.

Description

IL1B Antibody IBF-9 recognizes interleukin 1 beta (IL-1 beta), a potent proinflammatory cytokine encoded by the IL1B gene. IL1B belongs to the interleukin 1 cytokine family and functions as an important regulator of innate immune and inflammatory responses. It is initially synthesized as an inactive precursor, pro-IL-1 beta, which requires proteolytic processing to generate the biologically active mature cytokine.

Processing of pro-IL-1 beta is closely associated with inflammasome activation. Assembly of inflammasome complexes can promote activation of caspase 1, which cleaves the IL1B precursor to generate mature IL-1 beta. Following release from cells, IL-1 beta binds interleukin 1 receptor type 1 (IL1R1) and promotes signaling through pathways involving MyD88, IRAK proteins, NF-kappaB, and MAPKs.

IL1B is an important mediator of communication between immune cells and surrounding tissues. Its activity can promote leukocyte recruitment and the production of additional cytokines, chemokines, and other inflammatory mediators. IL-1 beta signaling has been extensively investigated in host defense, tissue injury, acute and chronic inflammation, autoinflammatory disease, metabolic inflammation, and cancer-associated inflammatory responses.

Clone IBF-9 is a recombinant rabbit monoclonal antibody generated against a synthetic peptide specific to human IL1B. The defined recombinant monoclonal format provides a reagent for investigating interleukin 1 beta protein expression and inflammatory signaling. The IL-1 Beta Antibody designation represents a widely used alternative form of the IL1B protein name. NSJ Bioreagents supplies clone IBF-9 for research use only.

An IL1B Antibody can be used to investigate interleukin 1 beta expression and molecular processes involving inflammasome activation, cytokine signaling, innate immunity, and inflammation.

For a complementary monoclonal clone with IHC and protein microarray specificity validation, see our IL1 beta Antibody IL1B/3993 / Interleukin 1 Beta Antibody page.

Application Notes

Optimal dilution of the IL1B Antibody IBF-9 / IL-1 Beta Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human IL1 beta / IL1B was used as the immunogen for the IL1B Antibody IBF-9.

Storage

Store the IL1B Antibody IBF-9 at -20oC.

Alternate Names

IL1B antibody, IL-1 beta antibody, interleukin 1 beta antibody, interleukin-1 beta antibody, IL1F2 antibody, interleukin 1 family member 2 antibody, catabolin antibody

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