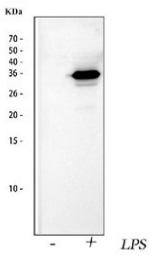
IL1 beta Antibody (R31457)

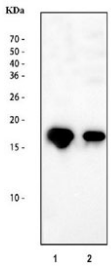
Catalog No.	Formulation	Size
R31457	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

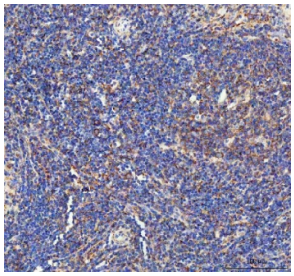
Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
Gene ID	24494
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml ELISA: 0.1-0.5ug/ml (rat protein tested)
Limitations	This IL1 beta antibody is available for research use only.



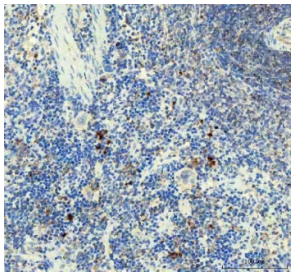
Western blot testing of lysate from mouse RAW264.7 cells untreated and treated with LPS using IL1 beta antibody. Predicted molecular weight ~31 kDa.



Western blot testing of recombinant rat protein loaded at 1) 10ng/lane and 2) 5 ng/lane with IL1 beta antibody. Predicted molecular weight ~31 kDa.



IHC staining of FFPE mouse spleen tissue with IL1 beta antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat spleen tissue with IL1 beta antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Interleukin-1beta (IL-1beta) is a potent stimulator of bone resorption whose gene is mapped to 2q14, and has been implicated in the pathogenesis of high bone turnover and osteoporosis. IL-1beta, a prominent microglia-derived cytokine, caused oligodendrocyte death in coculture with astrocytes and microglia, but not in pure culture of oligodendrocytes alone. It also can cause nuclear export of a specific NCOR corepressor complex, resulting in derepression of a specific subset of nuclear factor-kappa-B (NFKB)-regulated genes. Furthermore, Microenvironmental IL-1beta and, to a lesser extent, IL-1alpha are required for in vivo angiogenesis and invasiveness of different tumor cells. Additional, the cooperation of IL-1beta and PDGFB induces contractile-to-synthetic phenotype modulation of human aortic smooth muscle cells in culture. Moreover, the association with disease may be explained by the biologic properties of IL-1beta, which is an important proinflammatory cytokine and a powerful inhibitor of gastric acid secretion.

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

The stated application concentrations are suggested starting amounts. Titration of the IL1 beta antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Rat partial recombinant protein (AA 117-268) was used as the immunogen for this IL1 beta antibody.

Storage

After reconstitution, the IL1 beta antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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