

## Basic Information

<b>Product Name</b>	Anti-IL-1 beta/IL1B Antibody (Clone#OTI1A7)
<b>Gene Name</b>	IL1B
<b>Source</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Species Reactivity</b>	human
<b>Tested Application</b>	WB
<b>Contents</b>	PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
<b>Immunogen</b>	Full length human recombinant protein of human IL1B(NP_000567) produced in HEK293T cell.
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Observed MW</b>	30.6 kDa
<b>Dilution Ratios</b>	Western blot (WB):1:4000

## Storage

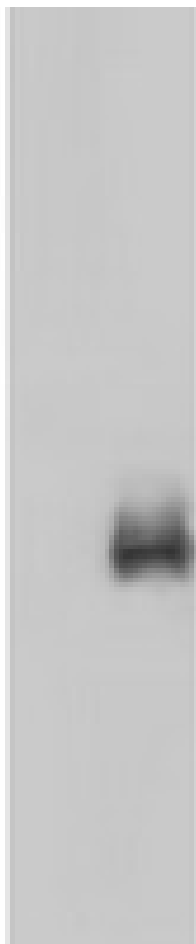
Stable for 12 months from date of receipt. Store at -20°C as received.

## Background Information

Interleukin-1 $\beta$  (IL-1 $\beta$ ) 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-1 $\beta$ , 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 (NF $\kappa$ B)-regulated genes. Furthermore, Microenvironmental IL-1 $\beta$  and, to a lesser extent, IL-1 $\alpha$  are required for in vivo angiogenesis and invasiveness of different tumor cells. Additionally, the cooperation of IL-1 $\beta$  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-1 $\beta$ , which is an important proinflammatory cytokine and a powerful inhibitor of gastric acid secretion.

## Selected Validation Data

170 —  
130 —  
100 —  
70 —  
55 —  
40 —  
35 —  
25 —  
15 —  
10 —



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY IL1B (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-IL1B.