

## Interleukin-1 beta (IL-1 beta) Antibody

Mouse Monoclonal Antibody [Clone IL1B/4651]

Catalog No	Format	Size
3553-MSM11-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3553-MSM11-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3553-MSM11-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

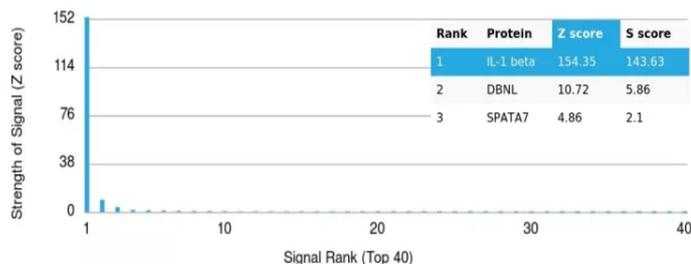
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

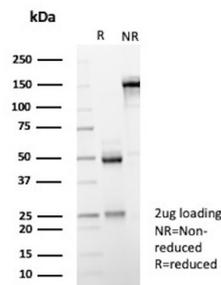
<b>Clone</b>	IL1B/4651
<b>Gene Name</b>	IL1B
<b>Immunogen</b>	Recombinant fragment (around aa100-269) of human IL1B protein (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1 / Kappa
<b>Mol. Weight of Antigen</b>	31kDa (proprotein); 17kDa (mature)
<b>Cellular Localization</b>	Cytoplasm. Extracellular (Secreted).
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	colon or liver tissue. LPS stimulated human peripheral blood mononuclear cells. Human adrenal gland

\*Optimal dilution for a specific application should be determined.

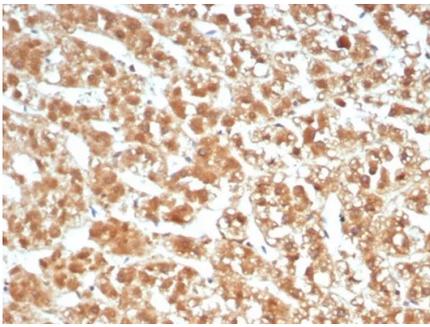
### Product Images for Interleukin-1 beta (IL-1 beta) Antibody



Analysis of Protein Array containing more than 19,000 full-length human proteins using Interleukin-1 Beta (IL-1B)-Monospecific Mouse Monoclonal Antibody (IL1B/4651). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



SDS-PAGE Analysis of Purified Interleukin-1 beta Mouse Monoclonal Antibody (IL1B/4651). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human adrenal gland stained with Interleukin-1 Beta (IL-1B) Mouse Monoclonal Antibody (IL1B/4651). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

### Specificity & Comments

Recognizes a protein of 17-31kDa, identified as interleukin 1beta. It shows no cross-reaction with interleukin 1alpha. Epitopes of MAb IL1B/463 and IL1B/4651 are different and provide a good pair for developing an ELISA. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by this cytokine in the central nervous system (CNS) is found to contribute to inflammatory pain hypersensitivity. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

AKT Signaling, Cardiovascular, Cytokine Signaling, Immunology, Infectious Disease, MAPK Signaling, Neuroinflammation