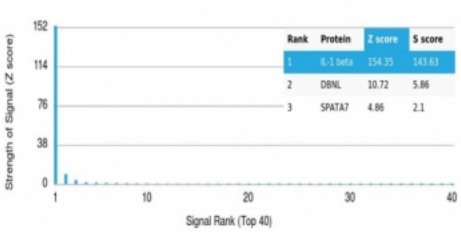
Interleukin-1 beta Antibody IL1B/4651 / IL1B Monoclonal Antibody [clone IL1B/4651] (V4912)

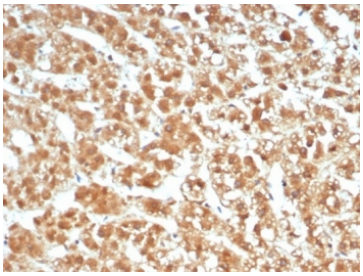
Catalog No.	Formulation	Size
V4912-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4912-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4912SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	IL1B/4651
Purity	Protein A/G affinity
UniProt	P01584
Localization	Cytoplasm, Extracellular (secreted)
Applications	ELISA (Order BSA-free format for coating) Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Interleukin-1 beta Antibody IL1B/4651 is available for research use only.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using Interleukin-1 beta antibody (clone IL1B/4651). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) 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(TM) 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 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.



Interleukin-1 beta Antibody IL1B/4651 Immunohistochemistry. IHC staining of FFPE human adrenal gland tissue with Interleukin-1 beta antibody (clone IL1B/4651). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Interleukin-1 beta Antibody IL1B/4651 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.

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 Interleukin-1 beta Antibody IL1B/4651 should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 100-269) from the human protein was used as the immunogen for the Interleukin-1 beta Antibody IL1B/4651.

Storage

Aliquot the Interleukin-1 beta Antibody IL1B/4651 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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