

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

Mouse Monoclonal Antibody [Clone IL1A/3982]

Catalog No	Format	Size
3552-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3552-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3552-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

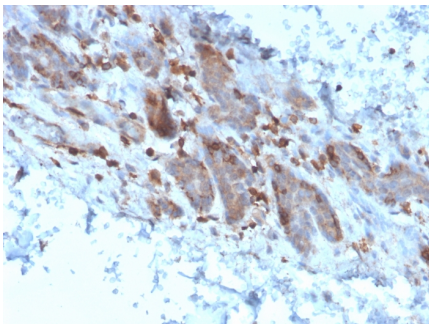
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

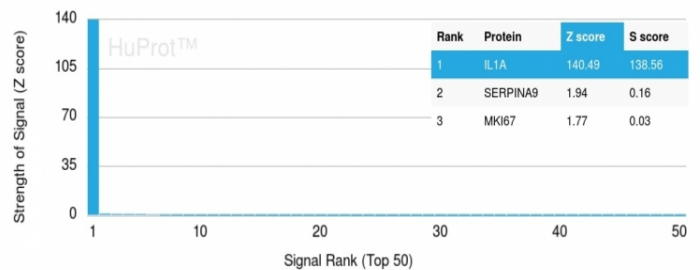
Clone	IL1A/3982
Gene Name	IL1A
Immunogen	Recombinant fragment (around aa 113-271) of human IL1A protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	33kDa (proprotein); 17kDa (mature)
Cellular Localization	Cytoplasm, Secreted
Species Reactivity	Human
Positive Control	HeLa cells. Human colon carcinoma tissue.

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

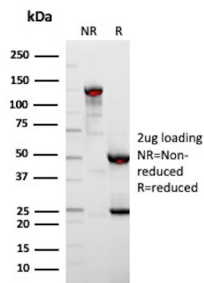
### Product Images for Interleukin-1 alpha (IL-1 alpha) Antibody



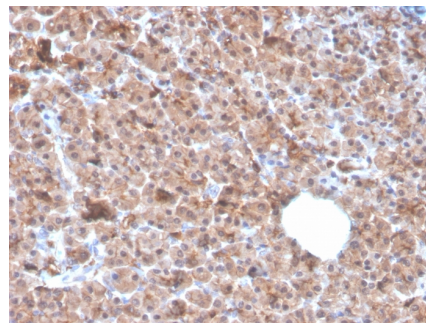
Formalin-fixed, paraffin-embedded human colon carcinoma stained with Interleukin-1 alpha (IL-1A) Mouse Monoclonal Antibody (IL1A/3982).



Analysis of Protein Array containing >19,000 full-length human proteins using Interleukin-1 alpha (IL-1A) Mouse Monoclonal Antibody (IL1A/3982). 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 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 IL-1A Mouse Monoclonal Antibody(IL1A/3982). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human pancreas stained with Interleukin-1 alpha (IL-1A) Mouse Monoclonal Antibody (IL1A/3982).

### Specificity & Comments

Two forms of interleukin-1, designated IL-1 $\alpha$  and IL-1 $\beta$ , have been described. Although encoded by distinct genes and exhibiting roughly only 25% sequence identity, IL-1 $\alpha$  and IL-1 $\beta$  bind to the same receptor and seem to elicit similar biological responses. IL-1 production is generally thought to be associated with inflammation, but it has also been shown to be expressed during kidney development, thymocyte differentiation and cartilage degradation. IL-1 plays a critical role in the regulation of immune response and inflammation, acting as an activator of T and B lymphocytes and natural killer (NK) cells. In T cells, IL-1 stimulates the production of IL-2 and selectively inhibits IL-4 expression. IL-1 induces B cell proliferation and maturation, and immunoglobulin synthesis. NK cells require IL-1 $\beta$  for production of the anti-pathogen IFN- $\gamma$ . IL-1 has also been implicated in several pathological conditions including rheumatoid arthritis, inflammatory bowel disease and atherosclerosis.

### 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, Endothelial Cell Marker, Immunology, Infectious Disease, MAPK Signaling, Neuroinflammation