

## IL-6 (Interleukin-6) / Interferon beta-2 (Hybridoma Growth Factor) Antibody

Mouse Monoclonal Antibody [Clone IL18/4622]

Catalog No	Format	Size
3606-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3606-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3606-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

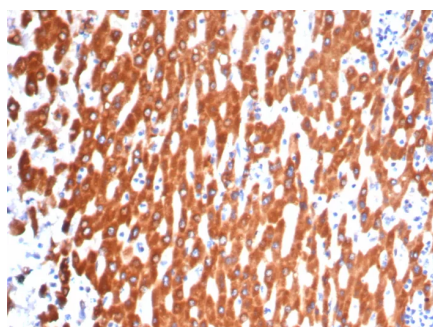
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

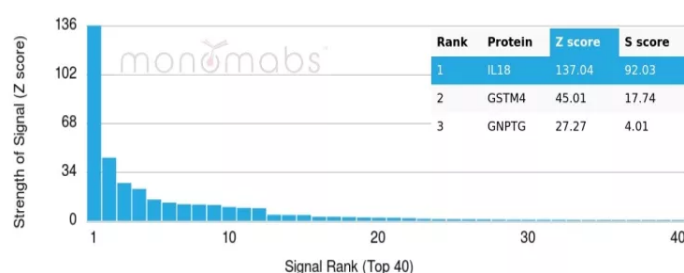
Clone	IL18/4622
Gene Name	IL18
Immunogen	Recombinant fragment (around aa1-193) of human IL-18 protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2 / Kappa
Mol. Weight of Antigen	18kDa
Cellular Localization	Secreted.
Species Reactivity	Human
Positive Control	A549 cells, Human heart or adrenal gland. Stimulated peritoneal macrophages.

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

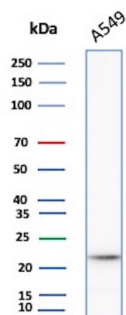
### Product Images for IL-6 (Interleukin-6) / Interferon beta-2 (Hybridoma Growth Factor) Antibody



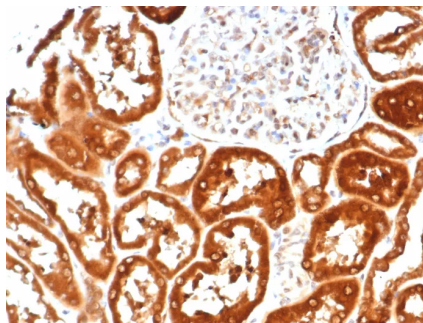
Formalin-fixed, paraffin-embedded human liver stained with IL-6 Mouse Monoclonal Antibody (IL18/4622) at 2ug/ml. HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



Analysis of Protein Array containing more than 19,000 full-length human proteins using IL-6-Monospecific Mouse Monoclonal Antibody (IL18/4622). 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.



Western blot analysis of A549 lysate using IL-18 Mouse Monoclonal Antibody (IL18/4622).



Formalin-fixed, paraffin-embedded human kidney stained with IL-18 Mouse Monoclonal Antibody (IL18/4622) at 2ug/ml. Inset: PBS instead of primary antibody; secondary only negative control.

## Specificity & Comments

Four structurally related IL-1 receptor ligands have been described. These include three agonists designated IL-1 $\alpha$ , IL-1 $\beta$  and IL-1 $\gamma$ /IL-18 and a specific receptor antagonist, IL-1R $\alpha$ . IL-1 $\alpha$  and IL-1 $\beta$  play critical roles in the regulation of the immune response and inflammation, serving as activators of T and B lymphocytes and NK (natural killer) cells. IL-18 (also referred to as IL-1 $\gamma$ ) has been shown to augment the secretion of IFN- $\gamma$  from T lymphocytes and increase NK cell activity in spleen cells. IL-18 exhibits 19% and 12% identity with IL-1 $\alpha$  and IL-1 $\beta$  respectively over the 12  $\beta$ -strands of the  $\beta$ -trefoil fold domain, which is a signature feature of the IL-1 family. The unusual leader sequence of IL-18 may be analogous to the IL-1 $\gamma$  pro-domain which must be cleaved by the serine protease ICE for optimal secretion and biological activity. Originally described as IGIF (IFN- $\gamma$ -inducing factor), IL-18 is induced by mouse liver subsequent to challenge with lipopolysaccharide (LPS).

## 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

Cardiovascular, Immunology, AKT Signaling, Cytokine Signaling, Infectious Disease, Nuclear Marker

## 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.