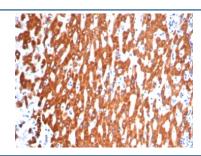


# IL-18 Antibody [clone IL18/4622] (V4197)

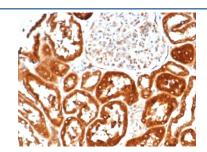
Catalog No.	Formulation	Size
V4197-100UG	0.2~mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4197-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4197SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

## **Bulk quote request**

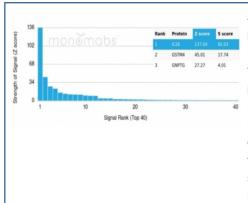
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	IL18/4622
Purity	Protein A/G affinity
UniProt	Q14116
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This IL-18 antibody is available for research use only.



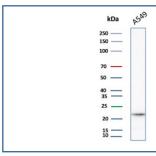
IHC staining of FFPE human liver tissue with IL-18 antibody (clone IL18/4622) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human kidney tissue with IL-18 antibody (clone IL18/4622) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using IL-18 antibody (clone IL18/4622). 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.



Western blot testing of human A549 cell lysate with IL-18 antibody. Predicted molecular weight ~22 kDa.

### Description

Four structurally related IL-1 receptor ligands have been described. These include three agonists designated IL-1Alpha, IL-1beta and IL-1gamma/IL-18 and a specific receptor antagonist, IL-1RAlpha. IL-1Alpha and IL-1beta 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-1gamma) 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-1Alpha and IL-1beta 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-1beta 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).

### **Application Notes**

Optimal dilution of the IL-18 antibody should be determined by the researcher.

#### **Immunogen**

A recombinant partial protein (within amino acids 1-193) from the human protein was used as the immunogen for the IL-18 antibody.

#### **Storage**

Aliquot the IL-18 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.