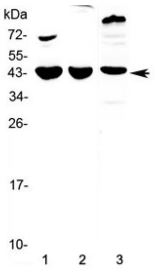
Il18bp Antibody / Il18 binding protein (RQ4148)

Catalog No.	Formulation	Size
RQ4148	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q9Z0M9
Applications	Western Blot: 0.5-1ug/ml ELISA (Capture): 0.1-0.5ug/ml
Limitations	This Il18bp antibody is available for research use only.



Western blot testing of 1) mouse heart, 2) mouse brain and 3) rat heart lysate with Il18bp antibody at 0.5ug/ml. Expected molecular weight: ~21 kDa unmodified and up to ~45 kDa glycosylated.

Description

Il18bp antibody targets Il18 binding protein, a secreted immunoregulatory protein encoded by the IL18BP gene that functions as a high-affinity endogenous inhibitor of the pro-inflammatory cytokine interleukin-18. Il18 binding protein is a member of the immunoglobulin superfamily and plays a central role in controlling IL18-mediated immune activation by sequestering free IL18 and preventing its interaction with the IL18 receptor complex.

Il18 binding protein is primarily produced by immune cells and epithelial cells and is secreted into the extracellular space

and circulation. Its expression is inducible by interferon gamma and other inflammatory stimuli, forming a negative feedback mechanism that limits excessive Th1 and natural killer cell responses. Through this regulatory activity, Il18 binding protein contributes to immune homeostasis and protection against cytokine-driven tissue damage. Il18bp antibody detection is therefore useful for studying cytokine regulation and inflammatory signaling pathways.

Functionally, Il18 binding protein neutralizes IL18 by forming a stable complex that blocks downstream signaling events such as interferon gamma production and cytotoxic lymphocyte activation. This interaction is critical for balancing host defense with immune tolerance. Il18bp antibody reagents support research into innate and adaptive immune regulation, particularly in contexts where IL18 activity must be tightly controlled to prevent pathological inflammation.

Altered expression of Il18 binding protein has been reported in a range of inflammatory and immune-mediated diseases. Reduced IL18BP activity has been linked to autoinflammatory syndromes and severe systemic inflammation, while elevated levels have been observed in chronic infections, autoimmune disorders, and certain malignancies as part of an immunosuppressive microenvironment. These disease associations highlight the relevance of Il18bp antibody-based detection in studies of inflammation, immune dysregulation, and cytokine signaling balance.

Il18bp antibody reagents are suitable for detecting Il18 binding protein expression and distribution in cell-based and tissue-based research models. These antibodies support investigations into cytokine neutralization mechanisms, immune checkpoint regulation, and disease-associated changes in inflammatory signaling networks.

Application Notes

Optimal dilution of the Il18bp antibody should be determined by the researcher.

Immunogen

A recombinant mouse partial protein corresponding to amino acids T29-A193 was used as the immunogen for the Il18bp antibody.

Storage

After reconstitution, the Il18bp antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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