

## IL-18BP (A-17): sc-9463

### BACKGROUND

IL-18 (also referred to as IL-1 $\gamma$ ) has been shown to augment the secretion of IFN- $\gamma$  from T lymphocytes and to 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 $\beta$  pro-domain, which must be cleaved by the serine protease ICE for optimal secretion and biological activity. IL-18, which was originally described as IGIF (IFN- $\gamma$ -inducing factor), IL-18 is induced in mouse liver subsequent to challenge with lipopolysaccharide (LPS). IL-18 binding protein (IL-18BP) functions as an inhibitor of the early Th1 response by binding to IL-18 and inhibiting IFN- $\gamma$  production. IL-18BP is a member of the immunoglobulin superfamily and shares some homology to IL-1RII.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: Il18bp (mouse) mapping to 7 E3.

### SOURCE

IL-18BP (A-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IL-18BP of mouse origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9463 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### STORAGE

Store at 4 $^{\circ}$  C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### APPLICATIONS

IL-18BP (A-17) is recommended for detection of IL-18BP of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-18BP siRNA (m): sc-77389, IL-18BP shRNA Plasmid (m): sc-77389-SH and IL-18BP shRNA (m) Lentiviral Particles: sc-77389-V.

Molecular Weight of glycosylated IL-18BP isoforms: 35-45 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



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Try **IL-18BP (PL-B12): sc-134364**, our highly recommended monoclonal alternative to IL-18BP (A-17).