

IL-18BP (D-14): sc-9461

BACKGROUND

IL-18 (also referred to as IL-1 γ) has been shown to augment the secretion of IFN- γ from T lymphocytes and to increase NK cell activity in spleen cells. IL-18 exhibits 19% and 12% identity with IL-1 α and IL-1 β , respectively, over the 12 β -strands of the β -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 β 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- γ -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- γ 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 (human) mapping to 11q13.4; Il18bp (mouse) mapping to 7 E3.

SOURCE

IL-18BP (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IL-18BP of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-9461 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

IL-18BP (D-14) is recommended for detection of IL-18BP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 (h): sc-105566, IL-18BP siRNA (m): sc-77389, IL-18BP shRNA Plasmid (h): sc-105566-SH, IL-18BP shRNA Plasmid (m): sc-77389-SH, IL-18BP shRNA (h) Lentiviral Particles: sc-105566-V and IL-18BP shRNA (m) Lentiviral Particles: sc-77389-V.

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

Positive Controls: K-562 whole cell lysate: sc-2203 or MCF7 whole cell lysate: sc-2206.

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **IL-18BP (PL-B12): sc-134364**, our highly recommended monoclonal alternative to IL-18BP (D-14).