

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-18 BPα in ELISAs. In sandwich immunoassays, less than 0.2% cross-reactivity with recombinant human (rh) IL-18, recombinant mouse (rm) IL-18 BPc and rmlL-18 BPd is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 136031
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-18 BPα Thr31-Gly194 (predicted) Accession # O95998
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Interleukin 18 binding protein (IL-18 BP) is a secreted glycoprotein, which functions as an IL-18 antagonist by binding to IL-18 and blocking its biological activity. IL-18 BP bears no amino acid sequence homology to the membrane-associated IL-18 and IL-1 receptor proteins. The gene for human IL-18 BP has been localized to chromosome 11q13. It encodes for at least four isoforms by alternative splicing. The IL-18 BP isoforms a and c each contain one immunoglobulin (Ig)-like C2-type domain while isoforms b and d lack a complete Ig domain. The complete Ig domain has been shown to be essential to the binding and neutralizing properties of the binding proteins. Two isoforms of mouse IL18 BP (c and d) containing the complete Ig domain have also been isolated and shown to neutralize IL-18 bioactivity. Human and mouse IL-18 BPs share approximately 61% amino acid sequence identity. Several poxviruses also encode proteins with sequence similarity to the human and mouse IL-18 BP. Viral IL-18 BPs have been shown to bind and inhibit IL-18 responses and may be involved in modulating host immune responses. The expression of IL-18 BP is markedly upregulated by IFN-γ, suggesting that IL-18 activity is modulated by a negative feedback mechanism mediated by IL-18 BP.

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