

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-18 R β in Western blots. In Western blots, approximately 25% cross-reactivity with recombinant human (rh) IL-18 R β is observed, 10% cross-reactivity with rhIL-1 R9 is observed, and less than 2% cross-reactivity with recombinant mouse (rm) IL-1 R8, recombinant rat IL-1 R6, rhIL-1 R3, rmlIL-1 R1, rmlIL-1 RII, and rmlIL-18 R is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-18 R β /IL-1 R7 Phe20-Glu356 Accession # Q9Z2B1
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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.

	Recommended Concentration	Sample
Western Blot	0.1 μ g/mL	Recombinant Mouse IL-18 R β /IL-1 R7

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

IL-18, originally described as an interferon- γ inducing factor (IGIF), is a member of the IL-1 family of cytokines that has multiple immunoregulatory functions. It has potent IFN- γ inducing activities and plays a key role in the activation of T helper type 1 (Th1) responses. The functional IL-18 receptor complex consists of two components, the IL-18R α (IL-1 R5) and IL-18R β (also termed IL-1 R7 and AcPL) subunits. Both subunits are members of the IL-1 receptor superfamily. Although IL-18R α by itself binds IL-18 with low-affinity and IL-18R β does not bind IL-18 in vitro, co-expression of IL-18R α and IL-18R β is required for high-affinity binding and IL-18 responsiveness. Human IL-18R β cDNA encodes a 599 amino acid (aa) residue precursor type I membrane protein with a aa signal peptide, a aa extracellular region containing three immunoglobulin-like domains, a single transmembrane domain and a 222 aa cytoplasmic domain. Human and mouse IL-18 R β share 65% aa sequence identity. The expression of IL-18R β parallels that of IL-18R α and is detected in numerous tissues including lung, spleen, leukocytes and colon.

References:

1. Born, T.L. et al. (1998) J. Biol. Chem. 273:29445.
2. Okamura, H. et al. (2000) in Cytokine Reference, Vol. 2:1605, Academic Press.