

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-18 R α /IL-1 R5 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-1 R1, rhIL-1 R2, rhIL-1 R3, rhIL-1 R4, rhIL-1 R6, rhIL-1 R7, rhIL-1 R8, rhIL-1 R9, or rhSIGIRR is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 70614
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-18 R α /IL-1 R5 Glu20-Arg329 Accession # Q13478
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

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	1 μ g/mL	Recombinant Human IL-18 R α /IL-1 R5 Fc Chimera (Catalog # 816-LR)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

Interleukin 18 (IL-18) is a member of the IL-1 family of cytokines and shares numerous immunoregulatory functions with IL-12. The functional IL-18 receptor complex is composed of two subunits designated IL-18 R α (also termed IL-1 R5 and IL-1 Rrp) and IL-18 R β (also termed IL-1 R7 and AcPL). Both IL-18 R α and IL-18 R β belong to the IL-1 receptor superfamily. Although IL-18 R by itself binds IL-18 with low affinity and IL-18 R β does not bind IL-18 *in vitro*, co-expression of IL-18 R α and IL-18 R β is required for high affinity binding and IL-18 responsiveness. Human IL-18 R cDNA encodes a 541 amino acid (aa) precursor type I membrane protein with a hydrophobic signal, an extracellular domain comprised of three immunoglobulin-like domains, a transmembrane domain and a cytoplasmic region of approximately 200 aa. Human and mouse IL-18 R share 65% amino acid sequence homology. IL-18 R is widely expressed in numerous tissues including spleen, thymus, leukocyte, liver, lung, heart, small and large intestine, prostate and placenta.

References:

1. Parnet, P. *et al.* (1996) J. Biol. Chem. **271**:3967.
2. Torigoe, K. *et al.* (1997) J. Biol. Chem. **272**:25737.
3. Born, T.L. *et al.* (1998) J. Biol. Chem. **273**:29445.