Human IL-6R alpha Biotinylated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF227

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-6R alpha in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant human (rh) IL-6, recombinant mouse IL-6, recombinant porcine IL-6, and rhgp130 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*S. frugiperda* insect ovarian cell line Sf 21-derived recombinant human IL-6R alpha Leu20-Asp358 Accession # P08887
Formulation	Lyophilized from a 0.2 μm 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 µg/mL	Recombinant Human IL-6R alpha (Catalog # 227-SR)
Human IL-6R alpha Sandwich Immunoassay		**Reagent**
ELISA Capture	2-8 µg/mL	Human IL-6R alpha Antibody (Catalog # MAB227)
ELISA Capture	2-8 µg/mL	Human IL-6R alpha Antibody (Catalog # MAB227R)
ELISA Detection	0.1-0.4 µg/mL	Human IL-6R alpha Biotinylated Antibody (Catalog # BAF227)
Standard		Recombinant Human IL-6R alpha (Catalog # 227-SR)

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	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 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

The multifunctional factor interleukin 6 (IL-6) exerts its activities through binding to a high-affinity receptor complex consisting of two membrane glycoproteins: an 80 kDa component receptor that binds IL-6 with low affinity (IL-6 Rα) and a signal-transducing component of 130 kDa (gp130) that does not bind IL-6 by itself, but is required for high-affinity binding of IL-6 by the complex. Both components of the receptor complex, IL-6 Rα and gp130 have been cloned, sequenced, and expressed (1-4).

A soluble form of the IL-6 Rα has been found in the urine of healthy adult humans (5). This soluble receptor apparently arises from proteolytic cleavage of membrane-bound IL-6 Rα. No naturally-occurring mRNA encoding a truncated form of the IL-6 Rα has been reported. Soluble forms of human and murine IL-6 Rαs have been constructed, however, by insertion of termination codons into the regions of the IL-6 Rα cDNAs encoding the external portions of the receptors and prior to the transmembrane domains. These soluble receptors have been expressed in COS-7 and CHO cells and have been shown to bind to IL-6 in solution and to augment the activity of IL-6 as a result of the binding of the IL-6/IL-6 Rα complex to membrane-bound gp130 (6, 7).

References:

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4. Schooltink *et al.* (1991) Eur. J. Biochem. **277**:659.
5. Novick *et al.* (1989) J. Exp. Med. **170**:1409.
6. Yasukawa *et al.* (1990) J. Biochem. **108**:673.
7. Saito *et al.* (1991) J. Immunology **147**:168.

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