Mouse IL-20 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1204

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-20 in direct ELISAs and the Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant human IL-20 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse IL-20 Leu25-Leu176 Accession # Q9JKV9
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

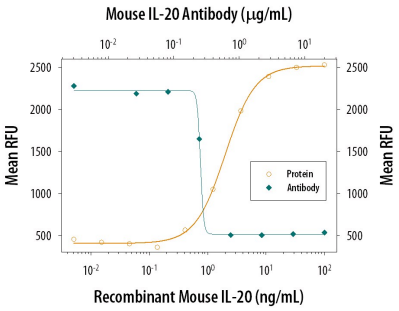
APPLICATIONS

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 Mouse IL-20 (Catalog # 1204-ML)
Neutralization	Measured by its ability to neutralize IL-20-induced proliferation in the BaF3 mouse pro-B cell line co-transfected with human IL-20 Rα and IL-20 Rβ. The Neutralization Dose (ND_{50}) is typically 0.2-0.6 µg/mL in the presence of 10 ng/mL Recombinant Mouse IL-20.	

DATA

Neutralization



Cell Proliferation Induced by IL-20 and Neutralization by Mouse IL-20 Antibody. Recombinant Mouse IL-20 (Catalog # 1204-ML) stimulates proliferation in the BaF3 mouse pro-B cell line co-transfected with human IL-20 Rα and IL-20 Rβ in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Mouse IL-20 (10 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse IL-20 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1204). The ND_{50} is typically 0.2-0.6 µg/mL.

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.

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BACKGROUND

Mouse Interleukin 20 (IL-20) was identified by searching sequence databases for translated sequences with a signal sequence and amphipathic helices found in helical cytokines. Based on the human molecule, mouse IL-20 was discovered in a skin library. Mouse IL-20 is synthesized as a 176 amino acid (aa) precursor that contains a 24 aa signal sequence and a 152 aa mature segment. There are no N-linked glycosylation sites and it is doubtful that the native molecule is glycosylated. Although IL-20 is a distant member of the IL-10 family, it functions as a monomer. IL-20 shares less than 40% aa sequence identity with other IL-10 family members. Mouse and human IL-20 are 77% aa identical in the mature segment. IL-20 production has been found in skin and trachea. In particular, activated keratinocytes and, possibly, monocytes are reported to express IL-20. There are two heterodimeric receptor complexes for IL-20. The first complex is composed of IL-20 Rα and IL-20 Rβ. The second complex is composed of IL-22 R and IL-20 Rβ. Whereas the IL-22 R/IL-20 Rβ complex is shared with IL-24/mda-7, the IL-20 Rα/IL-20 Rβ complex is shared with both IL-19 and IL-24. Little is known about the function of IL-20. It is reported to induce the proliferation of multipotential hematopoietic progenitor cells, direct the differentiation and expansion of keratinocytes, and promote the release of proinflammatory mediators in keratinocytes and other IL-20 receptor expressing cells (1-6).

References:

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2. Liu, L. *et al.* (2003) Blood **102**:3206.
3. Rich, B.E. and T.S. Kupper (2001) Curr. Biol. **11**:R531.
4. Pestka, S. *et al.* (2004) Annu. Rev. Immunol. **22**:929.
5. Dumoutier, L. (2001) J. Immunol. **167**:3545.
6. Romer, J. (2003) J. Invest. Dermatol. **121**:1306.