

**DESCRIPTION**

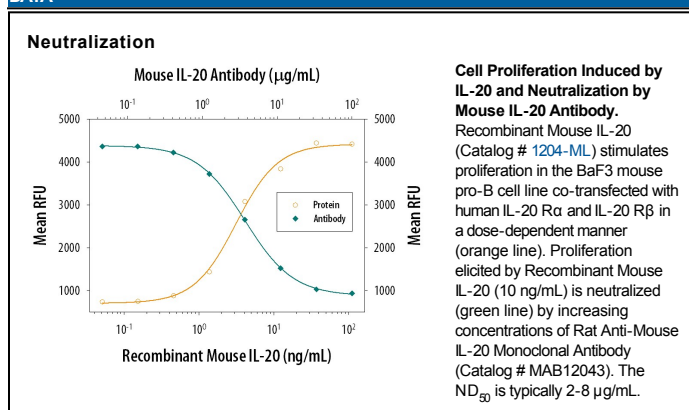
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse IL-20 in direct ELISAs.
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # 380605
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse IL-20 Leu25-Leu176 Accession # Q9JKV9.1
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm 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.

**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<sub>50</sub>) is typically 2-8 µg/mL in the presence of 10 ng/mL Recombinant Mouse IL-20.

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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 R $\alpha$  and IL-20 R $\beta$ . The second complex is composed of IL-22 R and IL-20 R $\beta$ . Whereas the IL-22 R/IL-20 R $\beta$  complex is shared with IL-24/mda-7, the IL-20 R $\alpha$ /IL-20 R $\beta$  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 pro-inflammatory mediators in keratinocytes and other IL-20 receptor expressing cells (1-6).

**References:**

1. Blumberg, H. *et al.* (2001) *Cell* **104**:9.
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.