

**DESCRIPTION**

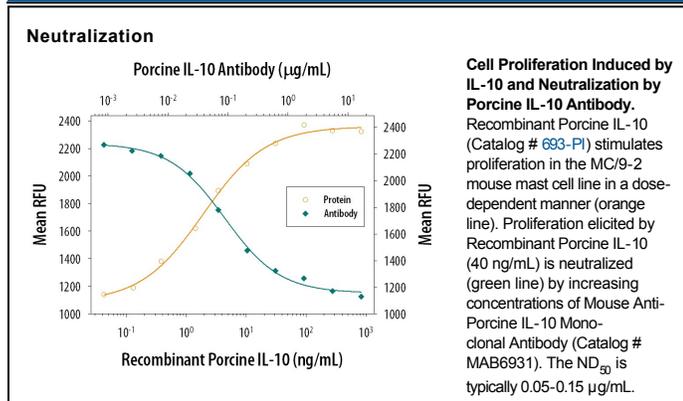
<b>Species Reactivity</b>	Porcine
<b>Specificity</b>	Detects porcine IL-10 in direct ELISAs. In direct ELISAs, 25-50% cross-reactivity with recombinant feline IL-10, recombinant canine IL-10, and recombinant guinea pig IL-10 is observed, approximately 10% cross-reactivity with recombinant human IL-10 is observed, less than 5% cross-reactivity with recombinant cotton rat IL-10 is observed, and no cross-reactivity with recombinant equine IL-10, recombinant mouse IL-10, recombinant rat IL-10, or recombinant viral IL-10 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 148801
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant porcine IL-10 Ser19-Asn175 Accession # Q29055
<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-10-induced proliferation in the MC/9-2 mouse mast cell line. Thompson-Snipes, L. *et al.* (1991) *J. Exp. Med.* **173**:507. The Neutralization Dose (ND<sub>50</sub>) is typically 0.05-0.15 µg/mL in the presence of 40 ng/mL Recombinant Porcine IL-10.

**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**

IL-10, initially designated cytokine synthesis inhibitory factor (CSIF), was originally identified as a product of murine T helper 2 (Th2) clones that inhibited the cytokine production by Th1 clones which are dependent upon stimulation with antigen in the presence of antigen presenting cells (APC). Murine IL-10 is produced by Th2 cells, activated fetal thymocytes, macrophages, keratinocytes, and LY-1<sup>+</sup> (CD5<sup>+</sup>) and normal B cells. Human IL-10 has cross-species activities and is active on mouse cells. Murine IL-10 is species-specific and does not act on human cells. Porcine IL-10 shares 71% and 78% amino acid sequence identity with mouse and human IL-10, respectively. IL-10 is a pleiotropic cytokine that can exert either immunostimulatory or immunosuppressive effects on a variety of cell types. It is a potent immunosuppressant of macrophage functions. *In vitro*, IL-10 can inhibit the accessory function and antigen-presenting capacity of monocytes by, among other effects, down-regulating class II MHC expression. Thus, IL-10 can inhibit monocyte/macrophage-dependent, antigen stimulated cytokine synthesis (especially IFN-γ) by human PBMNC and NK, and mouse Th1 cells. Additionally, IL-10 is a potent inhibitor of monocyte/macrophage activation and its resultant cytotoxic effects. As an immunostimulatory cytokine, IL-10 can act on B cells to enhance their viability, cell proliferation, Ig secretion, and class II MHC expression. Aside from B lymphocytes, IL-10 is also a growth co-stimulator for thymocytes and mast cells, as well as an enhancer of cytotoxic T cell development.

**References:**

1. Moore, K.W. *et al.* (1993) *Annu. Rev. Immunol.* **11**:165.