

## 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.       |
| <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<br>Ser19-Asn175<br>Accession # Q29055                                                                                                                                                                                     |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## 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 PBMC 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.

## PRODUCT SPECIFIC NOTICES

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