

# Product Data Sheet

## Alexa Fluor® 647 anti-mouse IL-22

**Catalog # / Size:** 516406 / 100 tests

**Clone:** Poly5164

**Isotype:** Polyclonal Goat IgG

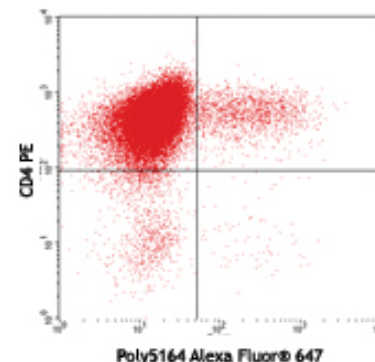
**Immunogen:** Recombinant mouse IL-22

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



*PMA/ionomycin-stimulated (5 hours)  
Th17 polarized CD4+ T cells (day 3)  
from C57BL/6 mouse lymph nodes  
surface stained with mouse CD4  
(GK1.5) PE, then intracellular stained  
with Poly5164 Alexa Fluor® 647.*

## Applications:

**Applications:** ICFC - *Quality tested*

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**Description:** IL-22 is a cytokine structurally related to IL-10. Mouse IL-22 consists of 179 amino acids and has a predicted molecular weight of 20 kD. It is secreted primarily by Th17, Th1, Th2, lymphoid tissue inducer cells (LTi), and subsets of natural killer cells. It has been reported that aryl hydrocarbon receptor (AhR) expression is essential for the production of IL-22 by TCRγδ T cells. AhR activation increases Th17 polarization and induces IL-22 production. IL-22 functions by engaging the heterodimeric IL-22 receptor (IL-22R) complex, consisting of two receptor subunits, IL-22R1 and IL-10Rβ. IL-22 acts on nonhematopoietic tissue cells, such as epithelial cells of the digestive and respiratory systems and keratinocytes of the skin. IL-22 is involved in inflammatory processes such as dermal inflammation, psoriasis, inflammatory bowel disease, hepatitis, and crohn's disease. Moreover, it plays a critical role in mucosal immunity and wound healing process.

**Antigen References:**

1. Martin B, *et al.* 2009. *Immunity* 31:321.
2. Liang SC, *et al.* 2006. *J. Exp. Med.* 203:2271.
3. Veldhoen M, *et al.* 2008. *J. Exp. Med.* 206:43.
4. Zheng Y, *et al.* 2007. *Nature* 445:648.
5. Dumoutier L, *et al.* 2000. *J Immunol.* 164:1814.
6. Wolk K, *et al.* 2007. *J Immunol.* 178:5973.

**Related Products:**

Product	Clone	Application
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Alexa Fluor® 647 Goat IgG Isotype Ctrl	Poly24030	ICFC, FC



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.