## **Product Data Sheet**

## PE anti-human IL-22

Catalog # / Size: 2433515 / 25 tests

2433520 / 100 tests

**Clone:** 2G12A41

**Isotype:** Mouse IgG2a, κ

Immunogen: Full length recombinant protein

expressed in E. Coli

Reactivity: Human

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and

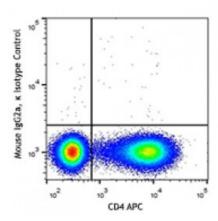
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



## **Applications:**

**Applications:** Flow Cytometry

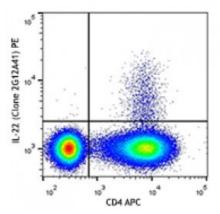
Recommended

**Usage:** 

Each lot of this antibody is quality control tested by intracelluar

immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for

each application.



PMA/ionomycin stimulated (six hours in the presence of monensin) human peripheral blood mononuclear cells were stained with CD4 APC, fixed, permeabilized, and stained with IL-22 (clone 2G12A41) PE (top image) or mouse IgG2a, κ PE isotype control (bo

**Description:** IL-22 is a cytokine that is structurally related to IL-10. Originally identified as a

murine gene induced by IL-9 in T and mast cells, IL-22 was initially designated ILTIF, also known as the IL-10-related T cell-derived inducible factor. IL-22 belongs to a family of cytokines with limited homology specifically to IL-10, IL-19, IL-20, IL-24, IL-26, the IFN-λs, IL-28A, IL-28B, and IL-29. Human IL-22 shares 79% amino acid identity with murine IL-22 and 25% identity with human IL-10. IL-22 biological activity is initiated by binding to a cell surface complex composed of IL-22R1 and IL-10R2 receptor chains. Its activity is further regulated through interactions with the soluble binding protein, IL-22BP, which shares sequence similarity with an extracellular region of IL-22R1 (sIL-22R1). Both chains of the IL-22R complex belong to the class II cytokine receptor family. Two types of IL-22 binding

receptors have been discovered: a membrane-bound receptor and a soluble receptor that are encoded by different genes. IL-22 is produced by Th17 cells and Th22 cells. The use of Iscove's Modified Dulbecco's Medium (IMDM) will result in better *in vitro* Th17 polarization. It plays a critical role in mucosal immunity in addition to the deregulated inflammation observed in autoimmune diseases.

## Antigen References:

- 1. Nagalakshmi ML, et al. 2004. Int. Immunopharmacol. 5:679.
- 2. Kebir H,, et al. 2007. Nat. Med. 13:1173.
- 3. Gu Y, et al. 2008. Eur. J. Immunol. 38:1807.
- 4. Pene Y, et al. 20