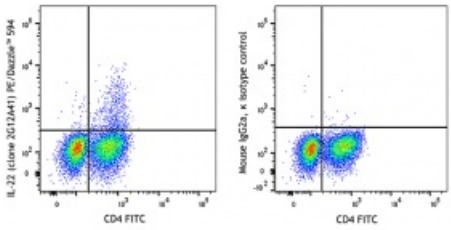
SONY

Product Data Sheet

PE/Dazzle™ 594 anti-human IL-22

Catalog # / Size:	2433575 / 25 tests 2433580 / 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/Dazzle™ 594 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)
Concentration:	Lot-specific



Human PBMCs were stimulated with PMA and Ionomycin in the presence of Brefeldin A for 6 hours. Cells were surface stained with anti-human CD4 FITC. After fixation and permeabilization cells were stained with anti-human IL-22 (clone 2G12A41) PE/Dazzle™ 594 (left) or mouse IgG2a, κ PE/Dazzle™ 594 isotype control (right).

Applications:

Applications:	Intracellular Staining for Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

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:

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3. Gu Y, *et al.* 2008. *Eur. J. Immunol.* 38:1807.
4. Pene Y, *et al.* 2008. *J. Immunol.* 180:7423.
5. Dumotier L, *et al.* 2000. *J. Immune* 164:1814.
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8. Chung Y, *et al.* 2006. *Cell Res.* 11:902.
9. Trifari S, *et al.* 2009. *Nat. Immunol.* 10:864.