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## AM26003PP-N Monoclonal Antibody to T Cell Receptor (TCR) alpha/beta - PerCP

Quantity: 100 Tests

Background: The antigen-specific T cell receptor (TCR) is composed of either alpha and beta

subunit, or gamma and delta subunit. Majority of T cells present in the blood, lymph and secondary lymphoid organs express TCR alpha/beta heterodimers, whereas the T cells expressing TCR gamma/delta heterodimers are localized mainly in epithelial tissues and at the sites of infection. The subunits of TCR heterodimers are covalently bonded and in the endoplasmic reticulum they associate with CD3 subunits to form functional TCR-CD3 complex. Lack of expression of any of the chains is sufficient to

stop cell surface expression.

Host / Isotype: Mouse / IgG1

Clone: IP26

Format: State: Liquid purified lg fraction

**Buffer System:** Phosphate buffered saline (PBS)

Preservatives: 15 mM sodium azide

**Stabilizers:** 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) **Label:** PerCP – Conjugated with Peridinin-chlorophyll-protein complex (PerCP) under optimum conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use.

Applications: Flow Cytometry analysis of human blood cells using 10 μl reagent / 100 μl of whole

blood or 10<sup>6</sup> cells in a suspension.

The content of a vial (1 ml) is sufficient for 100 tests.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody recognizes a monomorphic determinant of TCR alpha/beta, the

dominant subtype of T cell receptor expressed in human peripheral blood.

Species Reactivity: Tested: Human

Storage: Store undiluted at 2-8°C. DO NOT FREEZE!

This products is photosensitive and should be protected from light.

Shelf life: one year from despatch.

General Readings: 1. von Boehmer H: T cell development and selection in the thymus. Bone Marrow

Transplant. 1992;9 Suppl 1:46-8. 2. Levelt CN, Wang B, Ehrfeld A, Terhorst C, Eichmann K: Regulation of T cell receptor (TCR)-beta locus allelic exclusion and initiation of TCR-alpha locus rearrangement in immature thymocytes by signaling through the CD3 complex. Eur J Immunol. 1995 May;25(5):1257-61. 3. Michie AM, Zúñiga-Pflücker JC: Regulation of thymocyte differentiation: pre-TCR signals and beta-selection. Semin Immunol. 2002 Oct;14(5):311-23. 4. Croxford AL, Akilli-Ozturk O, Rieux-Laucat F, Förster I, Waisman A, Buch T: MHC-restricted T cell receptor signaling is required for alpha beta TCR replacement of the pre T cell receptor. Eur J Immunol. 2008 Feb;38(2):391-9. 5. Huet D, Bagot M, Loyaux D, Capdevielle J, Conraux L, Ferrara P, Bensussan A, Marie-Cardine A: SC5 mAb represents a unique tool for the detection



of extracellular vimentin as a specific marker of Sezary cells. J Immunol. 2006 Jan 1;176(1):652-9. 6. Ortonne N, Huet D, Gaudez C, Marie-Cardine A, Schiavon V, Bagot M, Musette P, Bensussan A: Significance of circulating T-cell clones in Sezary syndrome. Blood. 2006 May 15;107(10):4030-8. 7. Chentouf M, Ghannam S, Bès C, Troadec S, Cérutti M, Chardès T: Recombinant anti-CD4 antibody 13B8.2 blocks membrane-proximal events by excluding the Zap70 molecule and downstream targets SLP-76, PLC gamma 1, and Vav-1 from the CD4-segregated Brij 98 detergent-resistant raft domains. J Immunol. 2007 Jul 1;179(1):409-20. Sullivan BM, Coscoy L: Downregulation of the T-cell receptor complex and impairment of T-cell activation by human herpesvirus 6 u24 protein. J Virol. 2008 Jan;82(2):602-8. 8. Kuttruff S, Koch S, Kelp A, Pawelec G, Rammensee HG, Steinle A: NKp80 defines and stimulates a reactive subset of CD8 T cells. Blood. 2009 Jan 8;113(2):358-69.