The CD127 antigen is the human IL-7 receptor α chain. CD127 is found on normal B cell precursors but not on mature B lymphocytes. It is also expressed by the majority of T lymphocytes, a subset of monocytes and a subset of CD34+ cells. CD127 associates with CD132 (IL-2Rγ) to form the high affinity IL-7 receptor. Receptor expression is down-regulated following T cell activation.

CD127 is also a biomarker for human Regulatory T cell subsets (CD25+ CD127low/neg). Tregs show a more dim CD127 expression than other CD4+ T cells or are even negative for CD127. In contrast, CD25 expression of Tregs is the brightest among T cells.

Antigen Characteristics

Other Name: IL-7Rα
Gene Location: 5p13
Gene Name: IL-7R
Molecular Weight: 75 – 80 kDa

The R34.34 monoclonal antibody (mAb) reacts with normal B cell precursors (BCP) but not with mature B cells. It also reacts with T lymphocytes, with a subpopulation of monocytes from peripheral blood and with a subset of CD34+ cells. MAb R34.34 was assigned to the CD127 cluster of differentiation at the 6th HLDA Workshop on Human Leucocyte Differentiation Antigens in Kobe, Japan, in 1996.

Antibody Characteristics

Specificity: Human
Clone: R34.34
Isotype: IgG1 mouse


References

Pandrau-Garcia D, de Saint-Vin B, Saeland S, Renard N, Ho S, Moreau L, Banchereau J, Galzi JP. Growth inhibitory and agonistic signals of Interleukin-7 (IL7) can be mediated through the CD127 IL-7 receptor. 1994, Blood, 83, 3613-3619.


ASR: Analyte Specific Reagent. Analytical and performance characteristics are not established.

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