

## Monoclonal Antibody to T Cell Receptor (TCR) Va 24 - Biotin

|                                      |   |
|--------------------------------------|---|
| <b>Alternate names:</b>              | TCR V alpha-24  |
| <b>Catalog No.:</b>                  | AM05096BT-N   |
| <b>Quantity:</b>                     | 0.1 mg  |
| <b>Background:</b>                   | A population of mature CD4 CD8 double-negative T cells that expresses an invariant V alpha 24-J alpha Q TCR has been identified in humans; the majority of these cells appear to express V beta 11. A closely related invariant TCR alpha chain is also expressed by a population of NK1+ murine T cells, but these cells may be either CD4+ or double negative.  |
| <b>Host / Isotype:</b>               | Mouse / IgG1  |
| <b>Recommended Isotype Controls:</b> | SM10B (for use in human samples)  |
| <b>Clone:</b>                        | C15   |
| <b>Immunogen:</b>                    | Human T-Cell clone  |
| <b>Format:</b>                       | <b>State:</b> Lyophilized purified Ig<br><b>Purification:</b> Ion exchange chromatography<br><b>Buffer System:</b> PBS containing 1mg/ml BSA<br><b>Label:</b> Biotin<br><b>Reconstitution:</b> Restore with 0.5ml distilled water   |
| <b>Applications:</b>                 | T-cell repertoire studies<br>Fluorescent microscopy or flow cytometry: 2µg/5x10e5 cells/tests.<br>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.  |
| <b>Specificity:</b>                  | This antibody reacts to variable alpha-24 chain of the T cell receptor also called TCRAV24S1 according to the nomenclature from Arden et al. V-alpha-24 is a single membered subfamily (IGRa02 sequence). The antibody has been described in; it was characterized on human T cell clones and by extensive cell sorting followed by molecular biology analysis. V-alpha-24 has been shown to be expanded in a clonal fashion in the CD3+ CD8- CD4- cell population in PBL of several donors. The specificity of this antibody has been studied at the First Human TcR Monoclonal Antibody Workshop in San Francisco in 1995.<br><b>Species:</b> Human.<br>Other species not tested. |

**Storage:**

Prior to reconstitution store at 2-8°C.  
Following reconstitution store the antibody at -20°C.  
The addition of 0.1% (w/v) sodium azide is recommended for storage of the reconstituted form for up to one month at 2-8°C.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:**

1. Arden, B., et al., (1995), Human T cell receptor variable gene segment families, Immunogenetics, 42, 455 - 500.
2. Roman-Roman, S., et al., (1991), Studies of the human T-cell receptor alpha/beta variable region genes I. Identification of 7 additional V-alpha subfamilies and 14 J-alpha gene segments,, Eur. J. Immunol., 21, 927 - 933.
3. Padovan, E., et al., (1993), Expression of two T-cell receptor alpha chains: Dual receptor T cells, Science, 262, 422 - 424.
4. Dellabona, P., et al., (1994), An invariant V-alpha-24-J-Alpha Q/V-beta-11 T-cell receptor is expressed in all individuals by clonally expanded CD4-8-T cells, J. Exp. Med., 180, 1171 - 1176.
5. Posnett, D.N., et al., (1996), First human TcR monoclonal antibody workshop, The Immunologist, 4, 1, 5 - 8.