

Monoclonal Antibody to Cytotoxic Effector T Cells (NK cells) - Purified

Catalog No.:	BM2210
Quantity:	0.2 mg
Concentration:	0.2 mg/ml (prior to lyophilization)
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	C1.7
Immunogen:	Cultured human NK-cells.
Format:	State: Lyophilized purified Ig fraction. Buffer System: PBS with 1 mg/ml BSA as stabilizer and without preservatives. Reconstitution: Restore with 1 ml of distilled water.
Applications:	Flow Cytometry or Fluorescent Microscopy: 2 µg antibody 5x10 ⁵ cells/test or 100 µl whole blood This antibody can be used as NK marker in the CD3 population and as marker of cytotoxic effector Cells in the CD3+ CD8+ population. Cell-mediated cytotoxicity Assays: In antibody-redirected lysis assays, FcγR1 P815x2 Cells were used as targets and tests were performed in microtiter plates (10 ⁴ cells/well). 0.1 µg/ml of mAb C1.7 was used for induced NK cell-mediated cytotoxicity. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The C1.7 monoclonal antibody recognizes a 38 kDa novel cell surface signal transduction molecule (p38) found on all human NK-cells. It induces a granule independent killing mechanism by NK effector cells. It is also found on gamma 8 TCR T-cells and approximately half of peripheral alpha/beta TCR CD8+ T-cells. It is not found on B-, CD4+ T-, or naïve CD8+ T-cells. Upon activation, most CD8+ T-cells become C1.7 positive. However, a small but significant minority of CD8+ T-cells remain C1.7 negative. This subset is associated with lower cytotoxic activity, lower gamma IFN production and high IL4/IL10 production. Therefore, this mAb may be useful in defining subsets of CD8+ T-cells and studying a novel cytotoxic mechanism on NK-cells.
Storage:	Store lyophilized product at 2-8°C. After reconstitution, aliquot and store at -20°C. Avoid multiple freeze/thaw cycles. Addition of 0.09% (w/v) sodium azide is recommended for storage of the reconstituted form. Shelf life: one year from despatch.

General Readings: 1. Valiante NM, Trinchieri G. Identification of a novel signal transduction surface molecule on human cytotoxic lymphocytes. J Exp Med. 1993 Oct 1;178(4):1397-406. PubMed PMID: 8376943.