

## Monoclonal anti- human CD244(2B4)/Biotin\*

**mAb name/Clone:** ANC244.8/ 8F7  
**Isotype:** Mouse IgG1k  
**Immunogen:** Recombinant soluble CD244

**CATALOG#:** 239-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** CD244 (2B4, SLAMF4) is a 66 kD member of the CD2/SLAM related receptor family (SRR). It is expressed on NK (3), Tcell subsets, monocytes and eosinophils(4). It is expressed at high levels on Leukemia initiating cells, and plays a role in their proliferative potential (5). In mice there are two transcription variants, a long form and a short form of CD244 each of which have distinct signaling properties. In humans, only the long form is expressed. Decreased CD244 expression on monocytes of SLE patients correlated (negatively) with autoantibody titer(2). CD244 mediated function in immune response can vary greatly dependant on the context of its ligation. Antibody ANC244.8 binds to recombinant CD244-muIg (cat #544-020) in EIA, and to cell surface CD244 on human PBL in FACS. ANC244.8 binds to a CD244 epitope that is distinct from the binding sites of clone ANC2B4/3B12 (cat #259-020). *It blocks binding of clone C1.7.*

**References:** 1) Boles KS, Mathew PA, et al. (1999) *Tissue Antigens* 54(1): 27-34. 2) Mak A, AM Fairhurst, et al. (2017) *Clinical Rheumatology* 37(3): 811-816. doi.org/10.1007/s10067-017-3698-2. 3) Vacca P, MC Mingarri, et al. (2006) *Blood* 108: 4078-4085. 4) Munitz A, Levi-Schaffer F, et al. (2005) *J Immunol* 174(1): 110-118. 5) Zhang F, Zheng J, et al. (2017) *Haematologica* Doi: 10.3324/haematol.2016.151555.

**STORAGE CONDITIONS:** Store at 2 - 5°C. Freeze/thawing not recommended.

**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to >95% mouse immunoglobulin by SDS-PAGE (<1% bovine immunoglobulin), and reacted with NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

**PERFORMANCE:** Five x 10<sup>5</sup> ficoll prepared human PBMC were washed and incubated 45 minutes on ice with 80 µl of anti-CD244(ANC244.8)/Biotin at a concentration of 5 µg/ml. Cells were washed twice and incubated with 2<sup>o</sup> reagent Streptavidin/R-Phycoerythrin (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS using a lymphoid gate. A 32% sub population of the cells stained positive with a mean shift of 1.31 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog #278-030). Binding was blocked when cells were pre incubated 10 minutes with anti-CD244 antibody (Catalog #239-020).

\* **Research Use Only. Not for use in Diagnostic procedures.**

**Binding of anti-CD244/Biotin  
+SA/PE to human PBL**

