

PERFORMANCE DATA SHEET

1915

Monoclonal anti-human CD244(2B4)/R-PE *

mAb name/Clone: ANC244.8/ 8F7

Isotype: Mouse IgG1k

Immunogen: Recombinant soluble CD244

CATALOG#: 239-050

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6µl of concentrated stock per 5 x 10⁵-cell test)

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. Do not freeze! Protect from light.

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, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Protein A purified antibody from tissue culture supernatant was conjugated to R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at 500 µg/ml with an A₅₆₅/A₂₈₀ ratio of 3.01.

PERFORMANCE: Five x 10⁵ ficoll prepared human PBMC were washed and pre incubated 10 minutes with 20ul of human IgG at a concentration of 300 µg/ml (to reduce non specific binding) after which they were incubated 45 minutes on ice with 80 µl of anti-CD244/R-PE at a dilution factor of 1:50 (10 µg/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 2.34 log₁₀ fluorescent units when compared to a Mouse IgG1/R-PE negative control (Catalog #278-050). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD244 (clone ANC244.8/8F7) antibody (Catalog #239-020).

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

Binding of anti-CD244/PE to human PBMC

