

**PERFORMANCE DATA SHEET**  
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**Monoclonal anti-human CD49d (VLA-4)/Biotin\***

**mAb name/Clone:** BU49  
**Isotype:** Mouse IgG1  
**Immunogen:** Human peripheral myeloma cells

**CATALOG#:** 200-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Human CD49d molecules are integrin  $\alpha 4$  chains that are expressed as heterodimers with CD29 ( $\beta 1$  integrin) or ( $\beta 7$  integrin) and function as adhesion receptors. CD49d/CD29 is mainly expressed on thymocytes and B cells with increased expression on activated T cells. The ligands for CD49d/CD29 include VCAM-1 and fibronectin. Antibody BU49 recognizes the CD49d molecule of about 145 kd.

**References:** Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 1617-1618.  
T. Sato, (1995) J Immunol **155**: 2938-2947.

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

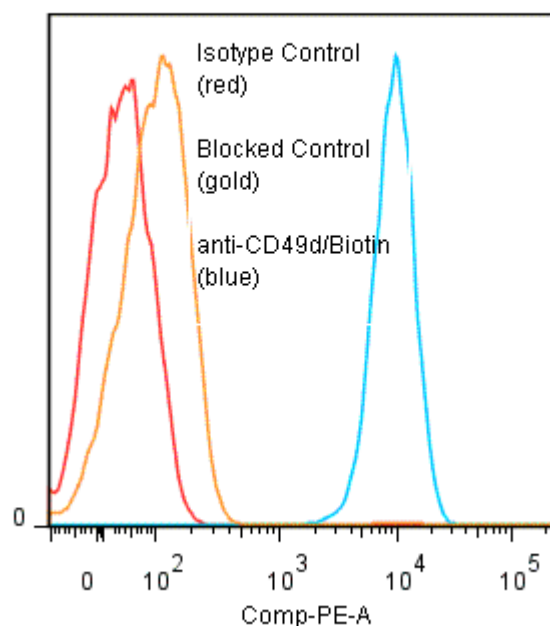
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**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> cultured HPB-MLT cells were washed and incubated 45 minutes on ice with 80 µl of anti-CD49d/Biotin at a concentration of 5 µg/ml. Cells were then washed twice and incubated 45 minutes with 2<sup>o</sup> reagent Streptavidin R-Phycoerythrin (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 2.52 log<sub>10</sub> fluorescent when compared to a Mouse IgG1/Biotin negative control (Catalog # 278-030). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD49d antibody (Catalog #200-020).

**Binding of anti-CD49d/Biotin +SA/PE to human HPB-MLT cells**



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