

Reference Guide

Examples of Cell Types Successfully Labeled with PKH Dyes

CGLDIL	MINI67
MIDCLARET	P7458
MIDI26	PCLDIL
MIDI67	PKH26GL
MINCLARET	PKH26PCL
MINI26	PKH67GL

Cell Type	References
Hematopoietic cells (CD34+ stem cells, CFU-s, progenitor cells, culture initiating cells)	7 , 18-20 , 26 , 30 , 36 , 47 , 59 , 91 , 109 , 133
Immune cells (lymphocytes, monocytes, macrophages, thymocytes, splenocytes, cytotoxic or autoimmune effector cells, dendritic cells)	1 , 6 , 14 , 15 , 27 , 28 , 31 , 34 , 35 , 44 , 51 , 66 , 74 , 93 , 94 , 99 , 111 , 129 , 131 , 136 , 137 , 139 , 145 , 148 , 155
Other blood and/or bone marrow cells (erythrocytes, neutrophils, platelets, stromal cells)	37-39 , 52 , 68 , 95 , 108 , 115 , 117 , 135 , 185
Cultured cells and/or cell lines (tumor cells and cell lines, smooth muscle cells, hybridomas, T-cell lines and clones)	2-5 , 9 , 10 , 23 , 28 , 29 , 33 , 85 , 96 , 125 , 127 , 138 , 163 , 166
Embryonic cells	9 , 28 , 29 , 33
Endothelial cells	46 , 88 , 120 , 161
Epithelial cells	11 , 78 , 126
Neurons	41 , 82 , 116
Bacteria, parasites	12 , 25 , 56 , 71 , 86 , 113
Other "bioparticles" (viruses, protoplasts, phytoplankton, erythrocyte ghosts, fluorocarbon emulsions)	103 , 114 , 140 , 150

Adapted from: Poon R.Y., B.M. Ohlsson-Wilhelm, C. B. Bagwell, and K.A. Muirhead. "Use of PKH Membrane Intercalating Dyes to Monitor Cell Trafficking and Function" in *In Living Color: Flow Cytometry and Cell Sorting Protocols* (R.A. Diamond and S. DeMaggio, eds.), Springer Verlag, in press, 1998.

Examples of Cell Functions Monitored Using PKH Dyes

Function	References
In vitro	
Drug sensitivity/resistance	2 , 3 , 74 , 163
Differentiation	1 , 11 , 33 , 70 , 80 , 107 , 137
Proliferation	1-3 , 16 , 18 , 30 , 36 , 58 , 62 , 78 , 91-93 , 124 , 125 , 133
Conjugate formation, adhesion, and/or fusion	1-3 , 12 , 34 , 60 , 64 , 85 , 103 , 109 , 136 , 137
Cytotoxicity, immunotherapy	10 , 28 , 44 , 73 , 93 , 105
Phagocytosis	21 , 25 , 34 , 37 , 38 , 44 , 113 , 117 , 166
Cell-cell communication	1 , 5 , 45 , 60 , 138
In vivo	
Migration, homing, engraftment	6 , 7 , 15 , 31 , 32 , 35 , 47 , 50 , 51 , 59 , 66 , 81 , 99 , 111 , 116 , 128 , 129 , 145 , 155 , 172 , 207
Recirculation, cellular lifetime	94 , 150 , 200 , 207 , 208
Proliferation, growth control	29 , 126 , 130
Differentiation, embryogenesis	4 , 9 , 29 , 87 , 126 , 130 , 148
Adhesion	69 , 46 , 196
Blood flow assessment	68
Cytotoxicity, immunotherapy	32 , 127 , 139 , 157
Immunity/antigen presentation	6 , 14 , 15 , 31 , 81 , 115

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Product Ordering

Order these products at SigmaAldrich.com.

Description	Cat. No.
Diluent C for General Membrane Labeling Distributed for Phanos Technologies	CGLDIL
CellVue® Claret Far Red Fluorescent Cell Linker Midi Kit for General Membrane Labeling Distributed for Phanos Technologies	MIDCLARET
PKH26 Red Fluorescent Cell Linker Midi Kit for General Cell Membrane Labeling Distributed for Phanos Technologies	MIDI26
PKH67 Green Fluorescent Cell Linker Midi Kit for General Cell Membrane Labeling Distributed for Phanos Technologies	MIDI67
CellVue® Claret Far Red Fluorescent Cell Linker Mini Kit for General Membrane Labeling Distributed for Phanos Technologies	MINCLARET
PKH26 Red Fluorescent Cell Linker Mini Kit for General Cell Membrane Labeling Distributed for Phanos Technologies	MINI26
PKH67 Green Fluorescent Cell Linker Mini Kit for General Cell Membrane Labeling Distributed for Phanos Technologies	MINI67
PKH26 Reference Microbeads	P7458
Diluent B for Phagocytic cell labeling Distributed for Phanos Technologies	PCLDIL
PKH26 Red Fluorescent Cell Linker Kit for General Cell Membrane Labeling Distributed for Phanos Technologies	PKH26GL
PKH26 Red Fluorescent Cell Linker Kit for Phagocytic Cell Labeling Distributed for Phanos Technologies	PKH26PCL
PKH67 Green Fluorescent Cell Linker Kit for General Cell Membrane Labeling Distributed for Phanos Technologies	PKH67GL

References

1. Allsopp CE, Nicholls SJ, Langhorne J: A flow cytometric method to assess antigen-specific proliferative responses of different subpopulations of fresh and cryopreserved human peripheral blood mononuclear cells. *J Immunol Methods* 1998; 214: 175-186
2. Boutonnat J, Muirhead K, Barbier M, Mousseau M, Ronot X, Seigneurin D: The use of PKH26 to study proliferation of chemoresistant leukemic sublines. *Anticancer Res.*; in press (1998).
3. Boutonnat J, Barbier M, Seigneurin D, Muirhead KA: The Use of PKH26 and 67 for Cell Proliferation Assessment in Chemosensitive and Chemoresistant Cells. *Microscopy and Analysis*; in press, (November, 1998).
4. Bellincampi LD, Closkey RF, Prasad R, Zawadsky JP, Dunn MG: Viability of fibroblast-seeded ligament analogs after autogenous implantation. *J Orthop Res* 1998; 16: 414-420.
5. Imaizumi K, Hasegawa Y, Kawabe T, et al: Bystander tumoricidal effect and gap junctional communication in lung cancer cell lines. *Am.J.Respir.Cell Mol.Biol.* 1998; 18: 205-212.
6. Kempf VA, Bohn E, Noll A, Bielfeldt C, Autenrieth IB: In vivo tracking and protective properties of Yersinia-specific intestinal T cells. *Clin Exp Immunol* 1998; 113: 429-437.
7. Luens KM, Travis MA, Chen BP, Hill BL, Scollay R, Murray LJ: Thrombopoietin, kit ligand, and flk2/flt3 ligand together induce increased numbers of primitive hematopoietic progenitors from human CD34+Thy-1+Lin- cells with preserved ability to engraft SCID-hu bone. *Blood* 1998; 91: 1206-1215.
8. Matsunaga T, Kato T, Miyazaki H, Ogawa M: Thrombopoietin promotes the survival of murine hematopoietic long-term reconstituting cells: comparison with the effects of FLT3/FLK-2 ligand and interleukin-6. *Blood* 1998; 92: 452-461.
9. Mochizuki A, Wada N, Ide H, Iwasa Y: Cell-cell adhesion in limb-formation, estimated from photographs of cell sorting experiments based on a spatial stochastic model. *Dev Dyn* 1998; 211: 204-214.
10. Muirhead K, Foxx K, Palini A, Stregevsky E, Ohlsson-Wilhelm B, Waxdal M: A "Stat" Non-Isotopic NK Cytotoxicity Assay Using Cryopreserved Target Cells. *Cytometry* 1998; Supplement 9: 101-102 (Abstract).
11. Okamoto M, Ito M, Owaribe K: Difference between dorsal and ventral iris in lens producing potency in normal lens regeneration is maintained after dissociation and reaggregation of cells from the adult newt, *Cynops pyrrhogaster*. *Dev Growth Differ* 1998; 40: 11-18
12. Pacheco-Soares C, De Souza W: Redistribution of parasite and host cell membrane components during *Toxoplasma gondii* invasion. *Cell Struct Funct* 1998; 23: 159-168.
13. Poon RY, Ohlsson-Wilhelm BM, Bagwell CB, Muirhead KA: Use of PKH Membrane Intercalating Dyes to Monitor Cell Trafficking and Function. In *In Living Color: Flow Cytometry and Cell Sorting Protocols* (RA Diamond, S DeMaggio, eds.), Springer Verlag; in press, 1998.
14. Porcu P, Gaddy J, Broxmeyer HE: Alloantigen-induced unresponsiveness in cord blood T lymphocytes is associated with defective activation of Ras. *Proc Natl Acad Sci USA* 1998; 95: 4538-4543.
15. Prendergast RA, Iliff CE, Coskuncan NM, Caspi RR, Sartani G, Tarrant TK, Luty GA, McLeod DS: T cell traffic and the inflammatory response in experimental autoimmune uveoretinitis. *Invest Ophthalmol Vis Sci* 1998; 39: 754-762.
16. Ronot X, and K.A. Muirhead: Contraintes d'Analyse de la Cellule Vivante. In *Dynamique de la Cellule Vivante* (A Privat, X Ronot, eds.); in press, 1998.
17. Shahabuddin M, Gayle M, Zieler H, Laughinghouse A: Plasmodium gallinaceum: fluorescent staining of zygotes and ookinetes to study malaria parasites in mosquito. *Exp Parasitol* 1998; 88: 79-84.
18. Traycoff CM, Orazi A, Ladd AC, Rice S, McMahl J, Srouf EF: Proliferation-induced decline of primitive hematopoietic progenitor cell activity is coupled with an increase in apoptosis of ex vivo expanded CD34+ cells. *Exp.Hematol.* 1998; 26: 53-62.
19. Veena P, Traycoff CM, Williams DA, McMahl J, Rice S, Cornetta K, Srouf EF: Delayed targeting of cytokine-nonresponsive human bone marrow CD34(+) cells with retrovirus-mediated gene transfer enhances transduction efficiency and long-term expression of transduced genes. *Blood* 1998; 91: 3693-3701.
20. Yui J, Chiu CP, Lansdorp PM: Telomerase activity in candidate stem cells from fetal liver and adult bone marrow. *Blood* 1998; 91: 3255-3262.

21. Bratosin D, Mazurier J, Tissier JP, et al: Molecular mechanisms of erythrophagocytosis. Characterization of the senescent erythrocytes that are phagocytized by macrophages. *C.R.Acad.Sci.III.* 1997; 320: 811-818.
22. Bratosin D, Mazurier J, Slomianny C, Aminoff D, Montreuil J: Molecular mechanisms of erythrophagocytosis: flow cytometric quantitation of in vitro erythrocyte phagocytosis by macrophages. *Cytometry* 1997; 30: 269-274.
23. Foty RA, Steinberg MS: Measurement of tumor cell cohesion and suppression of invasion by E- or P-cadherin. *Cancer Res.* 1997; 57: 5033-5036.
24. Fox, D. Optimizing fluorescent labeling of endothelial cells for tracking during long term studies of autologous transplantation. 5-21-1997. Chicago, IL. 9-97. (Abstract) Ref Type: Conference Proceeding
25. Gomis SM, Godson DL, Beskorwayne T, Wobeser GA, Potter AA: Modulation of phagocytic function of bovine mononuclear phagocytes by *Haemophilus somnus*. *Microb.Pathog.* 1997; 22: 13-21.
26. Gothot A, Pyatt R, McMahel J, Rice S, Srour EF: Functional heterogeneity of human CD34(+) cells isolated in subcompartments of the G0 /G1 phase of the cell cycle. *Blood* 1997; 90: 4384-4393.
27. Johnsson C, Festin R, Tufveson G, Totterman TH: Ex vivo PKH26-labelling of lymphocytes for studies of cell migration in vivo. *Scand.J.Immunol.* 1997; 45: 511-514.
28. Kaneda R, Iwabuchi K, Onoe K: Dissociation of Fas-mediated cytotoxicity and FasL expression in a cytotoxic CD4+ T-cell clone. Comparative analysis of Fas-mediated cytotoxicity between a T-hybridoma and a T-cell clone. *Immunol. Lett.* 1997; 55: 53-60.
29. Kanki JP, Ho RK: The development of the posterior body in zebrafish. *Development* 1997; 124: 881-893.
30. Ladd AC, Pyatt R, Gothot A, et al: Orderly process of sequential cytokine stimulation is required for activation and maximal proliferation of primitive human bone marrow CD34+ hematopoietic progenitor cells residing in G0. *Blood* 1997; 90: 658-668.
31. Lu Y, Bigger JE, Thomas CA, Atherton SS: Adoptive transfer of murine cytomegalovirus-immune lymph node cells prevents retinitis in T-cell-depleted mice. *Invest.Ophthalmol. Vis.Sci.* 1997; 38: 301-310.
32. Ogawa M, Tsutsui T, Zou JP, et al: Enhanced induction of very late antigen 4/lymphocyte function- associated antigen 1-dependent T-cell migration to tumor sites following administration of interleukin 12. *Cancer Res.* 1997.
33. Pin CL, Merrifield PA: Regionalized expression of myosin isoforms in heterotypic myotubes formed from embryonic and fetal rat myoblasts in vitro. *Dev.Dyn.* 1997; 208: 420-431.
34. Pricop L, Salmon JE, Edberg JC, Beavis AJ: Flow cytometric quantitation of attachment and phagocytosis in phenotypically-defined subpopulations of cells using PKH26-labeled Fc gamma R-specific probes. *J.Immunol. Methods* 1997; 205: 55-65.
35. Rosenblatt-Velin N, Arrighi JF, Dietrich PY, Schnuriger V, Masouye I, Hauser C: Transformed and nontransformed human T lymphocytes migrate to skin in a chimeric human skin/SCID mouse model. *J.Invest.Dermatol.* 1997; 109: 744-750.
36. Veena P, Cornetta K, Davidson A, et al: Preferential sequestration in vitro of BCR/ABL negative hematopoietic progenitor cells among cytokine nonresponsive CML marrow CD34+ cells. *Bone Marrow Transplant.* 1997; 19: 1213-1221.
37. Wallace PK, Keler T, Coleman K, et al: Humanized mAb H22 binds the human high affinity Fc receptor for IgG (FcgammaRI), blocks phagocytosis, and modulates receptor expression. *J.Leukoc.Biol.* 1997; 62: 469-479.
38. Wallace PK, Keler T, Guyre PM, Fanger MW: Fc gamma RI blockade and modulation for immunotherapy. *Cancer Immunol. Immunother.* 1997; 45: 137-141.
39. Albertine KH, Gee MH, Yarnall SE, Slezak SE: In vivo labeling of neutrophils using a fluorescent cell linker. *J Leuk Biol* 1996; 59: 631-638. (Abstract)
40. Andrade W, Seabrook TJ, Johnston MG, Hay JB: The use of the lipophilic fluorochrome CM-DiI for tracking the migration of lymphocytes. *J Immunol Methods* 1996; 194: 181-189.
41. Betarbet R, Zigova T, Bakay RA, Luskin MB: Migration patterns of neonatal subventricular zone progenitor cells transplanted into the neonatal striatum. *Cell Transplant.* 1996; 5: 165-178.
42. Carpenter DC, Fletcher RC, Lorinc R, et al: Evaluation of antigen induced proliferation in mice vaccinated with oral influenza vaccine. *Cytometry* 1996; Suppl 8, Abstr IH115: 91-91. (Abstract)

43. Dooley DC, Xiao M, Wickramasinghe RS, Oppenlander BK, Castino F: A novel inexpensive technique for the removal of breast cancer cells from mobilized peripheral blood stem cell products. *Blood* 1996; 88 Abstr 995: 252a-252a. (Abstract)
44. Ely P, Wallace PK, Givan AL, Graziano RF, Guyre PM, Fanger MW: Bispecific-armed, interferon gamma-primed macrophage-mediated phagocytosis of malignant non-Hodgkin's lymphoma. *Blood* 1996; 87: 3813-3821.
45. Farkas, D. L. Bone marrow transplant facilitating cells - tracking and characterization by optical imaging. Fisher, G. W. Schmidt G. Pillai M. Ildstad S. Abstract of presentation at the TISSUE ENGINEERING SOCIETY Inaugural TES Meeting, Orlando FL, December 13-15, 1996, 70. Orlando, FL. (Abstract)
46. Ford JW, Welling TH, Stanley JC, Messina LM: PKH26 and 125I-PKH95: characterization and efficacy as labels for in vitro and in vivo endothelial cell localization and tracking. *J.Surg.Res.* 1996; 62: 23-28.
47. Hendriks PJ, Martens CM, Hagenbeek A, Keij JF, Visser JW: Homing of fluorescently labeled murine hematopoietic stem cells. *Exp.Hematol.* 1996; 24: 129-140.
48. Hernit-Grant CS, Macklis JD: Embryonic neurons transplanted to regions of targeted photolytic cell death in adult mouse somatosensory cortex re-form specific callosal projections. *Exp.Neurol.* 1996; 139: 131-142.
49. Kitson R, Baker M, Muirhead K, et al: A novel drug delivery system using IL-2 activated NK cells and Zyn-linked doxorubicin. *Proc.Am.Assoc.Cancer Res.* 1996; 37 Abstract 2050: 301-301.(Abstract)
50. Lacerda JF, Ladanyi M, Louie DC, Fernandez JM, Papadopoulos EB, O'Reilly RJ: Human Epstein-Barr virus (EBV)-specific cytotoxic T lymphocytes home preferentially to and induce selective regressions of autologous EBV- induced B cell lymphoproliferations in xenografted C.B-17 scid/scid mice [published erratum appears in *J Exp Med* 1996 Sep 1;184(3):1199]. *J.Exp.Med.* 1996; 183: 1215-1228.
51. Lehner T, Wang Y, Cranage M, et al: Protective mucosal immunity elicited by targeted iliac lymph node immunization with a subunit SIV envelope and core vaccine in macaques. *Nature Medicine* 1996; 2 (7): 767-775.
52. Michelson AD, Barnard MR, Hechtman HB, et al: In vivo tracking of platelets: circulating degranulated platelets rapidly lose surface P-selectin but continue to circulate and function. *Proc.Natl.Acad.Sci.U.S.A.* 1996; 93: 11877-11882.
53. Nilsson SK, Hulspas R, Weier HU, Quesenberry PJ: In situ detection of individual transplanted bone marrow cells using FISH on sections of paraffin-embedded whole murine femurs. *J.Histochem.Cytochem.* 1996; 44: 1069-1074.
54. O'Gorman MRG: Beyond tritiated thymidine: flow-cytometric assays for the evaluation of lymphocyte activation/proliferation. *Clin Immunol Newsletter* 1996; 16: 164-172.
55. Olt G, Satyaswaroop P, Miller J, Baker M, Ohlsson-Wilhelm B: Prevention of in vitro adhesion of ovarian cancer cells to peritoneum predicts effectiveness of agents in vivo. *Proc.Am.Assoc.Cancer Res.* 1996; 37 Abstract 2066: 304-304. (Abstract)
56. Redman CA, Kusel JR: Distribution and biophysical properties of fluorescent lipids on the surface of adult *Schistosoma mansoni*. *Parasitology* 1996; 113: 137-143.
57. Rosenzweig M, Marks DF, Zhu H, et al: In vitro T lymphopoiesis of human and rhesus CD34+ progenitor cells. *Blood* 1996; 87: 4040-4048.
58. Srouf EF, Bregni M, Traycoff CM, et al: Long-term hematopoietic culture-initiating cells are more abundant in mobilized peripheral blood grafts than in bone marrow but have a more limited ex vivo expansion potential. *Blood Cells Mol.Dis.* 1996; 22: 68-81.
59. Traycoff CM, Cornetta K, Yoder MC, Davidson A, Srouf EF: Ex vivo expansion of murine hematopoietic progenitor cells generates classes of expanded cells possessing different levels of bone marrow repopulating potential. *Exp.Hematol.* 1996; 24: 299-306.
60. Verfaillie CM, Catanzaro P: Direct contact with stroma inhibits proliferation of human long-term culture initiating cells. *Leukemia* 1996; 10: 498-504.
61. Vink H, Duling BR: Identification of distinct luminal domains for macromolecules, erythrocytes, and leukocytes within mammalian capillaries. *Circ.Res.* 1996; 79: 581-589.
62. Young JC, Varma A, DiGiusto D, Backer MP: Retention of quiescent hematopoietic cells with high proliferative potential during ex vivo stem cell culture. *Blood* 1996; 87: 545-556.

63. Zigova T, Betarbet R, Soteris BJ, Brock S, Bakay RA, Luskin MB: A comparison of the patterns of migration and the destinations of homotopically transplanted neonatal subventricular zone cells and heterotopically transplanted telencephalic ventricular zone cells. *Dev.Biol.* 1996; 173: 459-474.
64. Ashley DM, Bol SJ, Tucker DP, Waugh CM, Kannourakis G: Flow cytometric analysis of intercellular adhesion between B- cell precursor acute lymphoblastic leukemic cells and bone marrow stromal cells. *Leukemia* 1995; 9: 58-67.
65. Ashley DM, Bol SJ, Kannourakis G: Viable bone marrow stromal cells are required for the in vitro survival of B-cell precursor acute lymphoblastic leukemic cells. *Leuk Res* 1995; 19: 113-120.
66. Audran R, Collet B, Moisan A, Toujas L: Fate of mouse macrophages radiolabeled with PKH-95 and injected intravenously. *Nucl Med Biol* 1995; 22: 817-821.
67. Berardi AC, Wang A, Levine, Lopez P, Scadden DT: Functional isolation and characterization of human hematopoietic stem cells. *Science* 1995; 267: 104-108.
68. Ben-Nun J, Nemet P: Intraocular pressure and blood flow of the optic disk: a fluorescent blood cell angiography study. *Surv.Ophthalmol.* 1995; 39 Suppl 1:S33-9: S33-S39
69. Broome, J. R. Spinal cord hemorrhage in short-latency neurological decompression illness coincides with early recompression. Dick, Jr. E. J. Axley M. J. Dutka A. J. 1998. Naval Medical Research Institute, Bethesda, MD 20889-5602. (Abstract only; publication source unknown)
70. Chang IK, Yoshiki A, Kusakabe M, et al: Germ line chimera produced by transfer of cultured chick primordial germ cells. *Cell Biol.Int.* 1995; 19: 569-576.
71. Chung JD, Conner S, Stephanopoulos G: Flow cytometric study of differentiating cultures of *Bacillus subtilis*. *Cytometry* 1995; 20: 324-333.
72. Duprey SP, McKenney SL, DiGiorgio SM, et al: A novel method for oligonucleotide delivery. *FASEB J.* 1995; 9, A409: (Abstract)
73. Flieger D, Gruber R, Schlimok G, Reiter C, Pantel K, Riethmuller G: A novel non-radioactive cellular cytotoxicity test based on the differential assessment of living and killed target and effector cells. *J.Immunol.Methods* 1995; 180: 1-13.
74. Gonokami Y, Konno SI, Kurokawa M, Adachi M: Effect of methotrexate on asthmatic reaction in sensitized guinea pigs. *Int.Arch.Allergy Immunol.* 1995; 106: 410-415.
75. Heiligenhaus A, Jayaraman S, Soukiasian S, Dorf M, Foster CS: [Glycoprotein D (5-23) specific Th2-T-cell line induces HSV-1 keratitis]. *Ophthalmologie.* 1995; 92: 484-491.
76. Johann S, Blumel G, Lipp M, Forster R: A versatile flow cytometry-based assay for the determination of short- and long-term natural killer cell activity. *J.Immunol.Methods* 1995; 185: 209-216.
77. Kemp RB: Cytotoxicity in an anchorage-independent fibroblast cell line measured by a combination of fluorescent dyes. *Methods Mol.Biol.* 1995; 43:211-8: 211-218.
78. Maines JZ, Sunnarborg A, Rogers LM, Mandavilli A, Spielmann R, Boyd FT: Positive selection of growth-inhibitory genes. *Cell Growth Differ.* 1995; 6: 665-671.
79. Modha J, Kusel JR, Kennedy MW: A role for second messengers in the control of activation-associated modification of the surface of *Trichinella spiralis* infective larvae. *Mol.Biochem.Parasitol.* 1995; 72: 141-148.
80. Moreno-Mendoza N, Herrera-Munoz J, Merchant-Larios H: Limb bud mesenchyme permits seminiferous cord formation in the mouse fetal testis but subsequent testosterone output is markedly affected by the sex of the donor stromal tissue. *Dev.Biol.* 1995; 169: 51-56.
81. Morikawa Y, Tohya K, Ishida H, Matsuura N, Kakudo K: Different migration patterns of antigen-presenting cells correlate with Th1/Th2-type responses in mice. *Immunology* 1995; 85: 575-581.
82. Rivas RJ, Hatten ME: Motility and cytoskeletal organization of migrating cerebellar granule neurons. *J.Neurosci.* 1995; 15: 981-989.
83. Savidge TC, Smith MW, James PS: A confocal microscopical analysis of Peyer's patch membranous (M) cell and lymphocyte interactions in the scid mouse. *Adv.Exp.Med.Biol.* 1995; 371A:243-5: 243-245.
84. Sheen VL, Macklis JD: Targeted neocortical cell death in adult mice guides migration and differentiation of transplanted embryonic neurons. *J.Neurosci.* 1995; 15: 8378-8392.
85. Spotl L, Sarti A, Dierich MP, Most J: Cell membrane labeling with fluorescent dyes for the demonstration of cytokine-induced fusion between monocytes and tumor cells. *Cytometry* 1995; 21: 160-169.

86. Taguchi H, Osaki T, Yamaguchi H, Kamiya S: Flow cytometric analysis using lipophilic dye PKH-2 for adhesion of *Vibrio cholerae* to Intestine 407 cells. *Microbiol.Immunol.* 1995; 39: 891-894.
87. Takezawa R, Watanabe Y, Akaike T: Direct evidence of macrophage differentiation from bone marrow cells in the liver: a possible origin of Kupffer cells. *J.Biochem.(Tokyo.)* 1995; 118: 1175-1183.
88. Thomas GA, Lelkes PI, Chick DM, et al: Skeletal muscle ventricles seeded with autogenous endothelium. *ASAIO.J.* 1995; 41: 204-211.
89. Thomas GA, Lelkes PI, Isoda S, et al: Endothelial cell-lined skeletal muscle ventricles in circulation. *J.Thorac.Cardiovasc.Surg.* 1995; 109: 66-73.
90. Traycoff CM, Kosak ST, Grigsby S, Srour EF: Evaluation of ex vivo expansion potential of cord blood and bone marrow hematopoietic progenitor cells using cell tracking and limiting dilution analysis. *Blood* 1995; 85: 2059-2068.
91. Verfaillie CM, Miller JS: A novel single-cell proliferation assay shows that long-term culture- initiating cell (LTC-IC) maintenance over time results from the extensive proliferation of a small fraction of LTC-IC. *Blood* 1995; 86: 2137-2145.
92. Yamamura Y, Rodrigues N, Schwartz A, Eylar E, Yano N: Anti-CD4 cytotoxic T lymphocyte (CTL) activity in HIV+ patients: flow cytometric analysis. *Cellular and Molecular Biology* 1995; 41, Suppl 1: S133-S144
93. Yamamura Y, Rodriguez N, Schwartz A, Eylar E, Bagwell B, Yano N: A new flow cytometric method for quantitative assessment of lymphocyte mitogenic potentials. *Cell Mol.Biol. (Noisy.-le.-grand.)* 1995; 41 Suppl 1:S121-32: S121-S132
94. Young AJ, Hay JB: Rapid turnover of the recirculating lymphocyte pool in vivo. *Int.Immunol.* 1995; 7: 1607-1615.
95. Ashley DM, Bol SJ, Kannourakis G: Human bone marrow stromal cell contact and soluble factors have different effects on the survival and proliferation of paediatric B- lineage acute lymphoblastic leukaemic blasts. *Leuk.Res.* 1994; 18: 337-346.
96. Ashley DM, Bol SJ, Kannourakis G: Measurement of the growth parameters of precursor B-acute lymphoblastic leukaemic cells in co-culture with bone marrow stromal cells; detection of two cd10 positive populations with different proliferative capacities and survival. *Leuk.Res.* 1994; 18: 37-48.
97. Backman K, Guyre PM: Gamma-interferon inhibits Fc receptor II-mediated phagocytosis of tumor cells by human macrophages. *Cancer Res.* 1994; 54: 2456-2461.
98. Baker M, Ohlsson-Whilhelm B, Carpenter B, Lorinc R, Gray B, Muirhead K: Linkage of Therapeutics to Lipophilic Agents (Zyn-Linkers) enhances Biological Activity and Binds Tumor Cells In-Vivo. *Proceedings of the Amer.Assoc.Cancer Res.* 1994; 35: 418-418.(Abstract)
99. Beavis AJ, Pennline KJ: Tracking of murine spleen cells in vivo: detection of PKH26-labeled cells in the pancreas of non-obese diabetic (NOD) mice. *J.Immunol.Methods* 1994; 170: 57-65.
100. Bridges CG, Brennan TM, Taylor DL, McPherson M, Tyms AS: The prevention of cell adhesion and the cell-to-cell spread of HIV-1 in vitro by the alpha-glucosidase 1 inhibitor, 6-O-butanoyl castanospermine (MDL 28574). *Antiviral Research* 1994; 25: 169-175.
101. Consigny PM, Miller KT: Drug delivery into the arterial wall: a time-course study with use of a lipophilic dye. *J.Vasc.Interv.Radiol.* 1994; 5: 731-737.
102. DeRose V, Robbins RA, Snider RM, et al: Substance P increases neutrophil adhesion to bronchial epithelial cells. *J.Immunol* 1994; 1339-1346.
103. Dimitrov DS, Blumenthal R: Photoinactivation and kinetics of membrane fusion mediated by the human immunodeficiency virus type 1 envelope glycoprotein. *J.Virol.* 1994; 68: 1956-1961.
104. Doucette R, Devon R: Media that support the growth and differentiation of oligodendrocytes do not induce olfactory ensheathing cells to express a myelinating phenotype. *Glia* 1994; 10: 296-310.
105. Hatam L, Schuval S, Bonagura VR: Flow cytometric analysis of natural killer cell function as a clinical assay. *Cytometry* 1994; 16: 59-68.
106. Iannone MA, Wolberg G: A flow cytometric method to determine binding of the CD11b/CD18 ligand C3bi to human neutrophils. *Cytometry* 1994; Suppl 7,79C (Abstr): 30-30. (Abstract)
107. Ide H, Wada N, Uchiyama K: Sorting out of cells from different parts and stages of the chick limb bud. *Dev.Biol.* 1994; 162: 71-76.
108. Kowalsky RJ, Taylor KK, McMahan DK, et al: A stable radiolabel for fresh and dried platelets. *Blood* 1994; 84 Abstr 1278: 323a-323a. (Abstract)

109. Leavesley DI, Oliver JM, Swart BW, Berndt MC, Haylock DN, Simmons PJ: Signals from platelet/endothelial cell adhesion molecule enhance the adhesive activity of the very late antigen-4 integrin of human CD34+ hemopoietic progenitor cells. *J.Immunol.* 1994; 153: 4673-4683.
110. Messina LM, Ekhterae D, Whitehill TA, et al: Transplantation of lac-Z-transduced microvascular endothelial cells into the skeletal muscle capillary bed of the rat hindlimb occurs independent of the duration of femoral artery occlusion after injection of cells. *J.Surg.Res.* 1994; 57: 661-666.
111. Mikecz K, Glant TT: Migration and homing of lymphocytes to lymphoid and synovial tissues in proteoglycan-induced murine arthritis. *Arthritis Rheum.* 1994; 37: 1395-1403.
112. Petersen KG, Khalaf AN, Naithani V, Fabry M, Gattner H: Insulin as a target antigen in autoimmune diabetes: a natural repertoire as the source of antibody response. *Acta Diabetol.* 1994; 31: 66-72.
113. Raybourne RB, Bunning VK: Bacterium-host cell interactions at the cellular level: fluorescent labeling of bacteria and analysis of short-term bacterium-phagocyte interaction by flow cytometry. *Infect.Immun.* 1994; 62: 665-672.
114. Smith D, Kornbrust E, Lane T: Phagocytosis of a fluorescently labeled perflubron emulsion by a human monocyte cell line. *Art, Cells, Blood subs. and immob. Art, Cells, Blood Substances and Immobilization Biotech* 1994; 22 (4): 1215-1221.
115. Tamaki K, Saitoh A, Gaspari AA, Yasaka N, Furue M: Migration of Thy-1+ dendritic epidermal cells (Thy-1+DEC): Ly48 and TNF- alpha are responsible for the migration of Thy-1+DEC to the epidermis. *J.Invest.Dermatol.* 1994; 103: 290-294.
116. Trumble TE, Parvin D: Cell viability and migration in nerve isografts and allografts. *J.Reconstr.Microsurg.* 1994; 10: 27-34.
117. Van Amersfoort ES, Van Strijp JA: Evaluation of a flow cytometric fluorescence quenching assay of phagocytosis of sensitized sheep erythrocytes by polymorphonuclear leukocytes. *Cytometry* 1994; 17: 294-301.
118. Van de Langerijt AG, Volsen SG, Hicks CA, Craig PJ, Billingham ME, Van den Berg WB: Cell migration studies in the adoptive transfer of adjuvant arthritis in the Lewis rat. *Immunology* 1994; 81: 414-419.
119. Wada N, Ide H: Sorting out of limb bud cells in monolayer culture. *Int.J.Dev.Biol.* 1994; 38: 351-356.
120. Williams SK, Kleinert LB, Rose D, McKenney S: Origin of endothelial cells that line expanded polytetrafluorethylene vascular grafts soded with cells from microvascularized fat. *J.Vasc.Surg.* 1994; 19: 594-604.
121. Zhang Y, Yasumizu R, Sugiura K, et al: Fate of allogeneic or syngeneic cells in intravenous or portal vein injection: possible explanation for the mechanism of tolerance induction by portal vein injection. *Eur.J.Immunol.* 1994; 24: 1558-1565.
122. Adachi M, Konno S, Gonokami Y, Kobayashi H: [Studies on biphasic animal model of asthma-lymphocytes and eosinophils]. *Nippon.Kyobu.Shikkan.Gakkai.Zasshi.* 1993; 31 Suppl:185-90: 185-190.
123. Ashley DM, Bol SJ, Waugh C, Kannourakis G: A novel approach to the measurement of different in vitro leukaemic cell growth parameters: the use of PKH GL fluorescent probes. *Leuk.Res.* 1993; 17: 873-882.
124. Bennett S, Por SB, Cooley MA, Breit SN: In vitro replication dynamics of human culture-derived macrophages in a long-term serum-free system. *J Immunol* 1993; 150: 2364-2371.
125. Boyd FT: Identification of growth inhibited cells by retention of a lipophilic fluorescent dye. *Cell Growth Differ* 1993; 4: 777-784.
126. Coleman WB, Wennerberg AE, Smith GJ, Grisham JW: Regulation of the differentiation of diploid and some aneuploid rat liver epithelial (stemlike) cells by the hepatic microenvironment. *Am.J.Pathol.* 1993; 142: 1373-1382.
127. Freeman S, Abboud C, Whartenby K, et al: The "Bystander Effect": Tumor Regression When a Fraction of the Tumor Mass is Genetically Modified. *Cancer Research* 1993; 53: 5274-5283.
128. Greenwood JD, Croy BA: A study on the engraftment and trafficking of bovine peripheral blood leukocytes in severe combined immunodeficient mice. *Vet.Immunol.Immunopathol.* 1993; 38: 21-44.
129. Khalaf AN, Wolff-Vorbeck G, Bross K, Kerp L, Petersen KG: In vivo labelling of the spleen with a red-fluorescent cell dye. *J.Immunol.Methods* 1993; 165: 121-125.

130. Kraft DL, Weissman IL, Waller EK: Differentiation of CD3-4-8- human fetal thymocytes in vivo: characterization of a CD3-4+8- intermediate. *J.Exp.Med.* 1993; 178: 265-277.
131. Ladel CH, Kaufmann SH, Bamberger U: Localisation of human peripheral blood leukocytes after transfer to C.B- 17 scid/scid mice. *Immunol.Lett.* 1993; 38: 63-68.
132. Lansdorp PM: In vitro properties of purified human stem cell candidates. *J.Hematother.* 1993; 2: 329-332.
133. Lansdorp PM, Dragowska W, Mayani H: Ontogeny-related changes in proliferative potential of human hematopoietic cells. *J.Exp.Med.* 1993; 178: 787-791.
134. Lansdorp PM, Dragowska W: Maintenance of hematopoiesis in serum-free bone marrow cultures involves sequential recruitment of quiescent progenitors. *Exp.Hematol.* 1993; 21: 1321-1327.
135. Ma X, Weyrich A, Lefer D, et al: Monoclonal Antibody to L-Selectin Attenuates Neutrophil Accumulation and Protects Ischemic Reperfused Cat Myocardium. *Circulation* 1993; 88: 649-658.
136. Rosenman S, Ganji A, Tedder T, Gallatin W: Syn-capping of Human T Lymphocyte Adhesion/activation Molecules and their Redistribution During Interaction with Endothelial Cells. *J.Leukocyte Bio.* 1993; 53: 1-10.
137. Toda S, Yonemitsu N, Minami Y, Sugihara H: Plural cells organize thyroid follicles through aggregation and linkage in collagen gel culture of porcine follicle cells. *Endocrinology* 1993; 133: 914-920.
138. Tomasetto C, Neveu MJ, Daley J, Horan PK, Sager R: Specificity of gap junction communication among human mammary cells and connexin transfectants in culture. *J.Cell Biol.* 1993; 122: 157-167.
139. Wallace PK, Palmer LD, Perry-Lalley D, et al: Mechanisms of adoptive immunotherapy: improved methods for in vivo tracking of tumor-infiltrating lymphocytes and lymphokine-activated killer cells. *Cancer Res.* 1993; 53: 2358-2367.
140. Ward G, Miller L, Dvorak J: The Origin of Parasitophorous Vacuole Membrane Lipids in Malaria- infected Erythrocytes. *J.Cell Sci* 1993; 106: 237-248.
141. Albertine K, Gee M, Yarnall S, Slezak S: In-Vivo Labelling of Neutrophils (PMN's) in Sheep with PKH26-PCL Fluorescent Phagocytic Cell Linker. *Am.Rev.Resp.Dis.* 1992; 145: A606-A606
142. Arndt P, Garratty G: Measuring Interactions of Monocytes with IgG Sensitized RBCs Using Flow Cytometry. *Transfusion* 1992; 32: 21s-21s. (Abstract)
143. Ben-Nun J, Alder V, Thompson D, Constable IJ: Flow patterns of blood cells in the retinal capillaries. *Retinal capillary flow patterns.* *Int.Ophthalmol.* 1992; 16: 81-89.
144. Champagne M, Amin S, Civin C: CD34 Positive Selection (PS) is Effective for Cancer Purging and Purging Efficacy (PE) can be Calculated from Clinically Measurable Parameters. *Blood* 1992; 80: 1232a-1232a.(Abstract)
145. Constant SL, Wilson R: In-Vivo Lymphocyte Responses in the Draining of Lymph Nodes of Mice Exposed to *Schistosoma mansoni*: Preferential Proliferation of TCells is Central to the Induction of Protective Immunity. *Cellular Immunity* 1992; 139: 1-17.
146. Cucci TL, Yentsch CM, Sandvik R: PKH-2 as an Indicator of Phytoplankton Division Rates: Problems with Variability. *Signal and Noise* 1992; 1: 2-3.
147. Festin R: Differential membrane labelling of human lymphocyte subsets by PKH-2 examined by multiparameter flow cytometry. A possible correlation between lipid composition of cellular membranes and functional properties? *J.Immunol.Methods* 1992; 154: 47-53.
148. Hugo P, Kappler J, Godfrey D, Marrack P: A Cell Line that can Induce Thymocyte Positive Selection. *Nature* 1992; 360: 679-681.
149. Messina L, Podrazik R, Whitehill T, et al: Adhesion and Incorporation fo lacZ-transduced Endothelial Cells into the Intact Capillary Wall in the Rat. *Proc.Nal.Acad.Sci.* 1992; 89: 12018-12022.
150. Schlegel RA, Lumley-Sapanski K, Williamson P: Single cell analysis of factors increasing the survival of resealed erythrocytes in the circulation of mice. *Adv.Exp.Med.Biol.* 1992; 326:133-8: 133-138.
151. Weyrich A, Ma X, Lefer A: The Role of L-Arginine in Ameliorating Reperfusion Injury After Myocardial Ischemia in the Cat. *Circulation* 1992; 86: 279-288.
152. Wilbanks GA, Streilein JW: Macrophages capable of inducing anterior chamber associated immune deviation demonstrate spleen-seeking migratory properties. *Reg.Immunol.* 1992; 4: 130-137.
153. Wilm C, Fritzscht B: Ipsilateral Retinal Projections into the Tectum during Regeneration of the Optic Nerve in the Cichlid Fish *Haplochromis burtoni*: A Dil Study in Fixed Tissue. *J.Neurobio.* 1992; 23: 692-707.

154. Young A, Hay J: Subset-Specific Tracking of Hemopoietic Cells In-Vivo. *The FASEB J.* 1992; 6: 4-4.(Abstract)
155. Zeine R, Owens T: Direct demonstration of the infiltration of murine central nervous system by Pgp-1/CD44high CD45RB(low) CD4+ T cells that induce experimental allergic encephalomyelitis. *J.Neuroimmunol.* 1992; 40: 57-69.
156. Aminoff D, Goldstein I, Supina E: Sequential Desialylation of Glycophorin in the In-Vivo Aging of Erythrocytes. *Int'l Sympos.on Glycoconjugates* 1991; (Abstract)
157. Basse P, Herberman RB, Nannmark U, et al: Accumulation of adoptively transferred adherent, lymphokine-activated killer cells in murine metastases. *J.Exp.Med.* 1991; 174: 479-488.
158. Bender J, Lum L: Tracking of Labeled Cell Populations Within Proliferating Mixtures using the Zynaxis PKH 26 Dye. *Cytometry Supp* 1991; 5: 74-74.(Abstract)
159. Brooks K, Palmer L, Jensen B, Gavin E, Muirhead K: A Radioiodinated Lipophilic Probe for Quantitative In-Vivo Cell Tracking. *Cytometry Supp.* 1991; 5: 86-86.(Abstract)
160. Cucci T, Yentsch C, Sandvik R: Determination of Generation and Division Rates in Phytoplankton. *Cytometry Supp* 1991; 5: 83-83.(Abstract)
161. Dailey S, Rose D, Carabasi A, Ahlswede K, Williams S: Origin of Cells that Line Damaged Native Blood Vessels Following Endothelial Cell Transplantation. *American Journal of Surgery* 1991; 162: 107-110.
162. Downing TW, Garner DL, Ericsson SA, Redelman D: Metabolic toxicity of fluorescent stains on thawed cryopreserved bovine sperm cells. *J.Histochem.Cytochem.* 1991; 39: 485-489.
163. Embleton MJ, Charleston A, Affleck K: Efficacy and selectivity of monoclonal-antibody-targeted drugs and free methotrexate in fluorescence-labelled mixed tumor-cell monolayer cultures and multicellular spheroids. *Int.J.Cancer* 1991; 49: 566-572.
164. Gray B, Troutner D, Brooks K, et al: Synthesis and evaluation of a radioiodinated lipophilic probe for in vivo cell tracking. *Soc.of Nuclear Medicine 38th Annual Meeting* 1991; (Abstract)
165. Hendrikx PJ, Martens A, Hogeweg-platenburg M, Visser J: New Stable Dyes for Cell Tracking Studies. *Cytometry Supp.* 1991; 5: 83-83. (Abstract)
166. Munn D, McBride M, Cheung N: Role of Low-Affinity Fc Receptors in Antibody-dependent Tumor Cell Phagocytosis by Human Monocyte-derived Macrophages. *Cancer Research* 1991; 51: 1117-1123.
167. Palmer L, Wallace P, Muirhead K, Horan P, Yan J: The Redistribution of Tumor Infiltrating Lymphocytes in Mice Following Adoptive Immunotherapy. *The FASEB J.* 1991; 5: 4-4. (Abstract)
168. Parrish, D. The Tracking of Xenogeneic Mononuclear Cells in the SCID Mouse. 1991. (GENERIC) Ref Type: Thesis/Dissertation
169. Rajakumar N, Nause C, Elisevich K, Flumerfelt B: Use of Lipophilic Dyes to Label Neural Grafts. *Third EBRO World Cong.of Neuroscience* 1991; (Abstract)
170. Read EJ, Cardine LL, Yu MY: Flow cytometric detection of human red cells labeled with a fluorescent membrane label: potential application to in vivo survival studies. *Transfusion* 1991; 31: 502-508.
171. Read MS, Bode AP, Reddick RL: Studies with Dried and Rehydrated Platelets for Transfusion Products. *The FASEB J.* 1991; 5: 4-4. (Abstract)
172. Samlowski WE, Robertson BA, Draper BK, Prystas E, McGregor JR: Effects of supravital fluorochromes used to analyze the in vivo homing of murine lymphocytes on cellular function. *J.Immunol.Methods* 1991; 144: 101-115.
173. Savidge T, Smith M, James P: A confocal microscopical analysis of Peyer's patch membranous (M) cell and lymphocyte interactions in the scid mouse. *J Cell Biol* 1991; Abstr: (Abstract)
174. Slezak S, Kopia B, Horan P: Use of Fluorescent Cell Linkers for Cell Mediated Drug Delivery. *Cytometry Supp.* 1991; 5: 51-51.
175. Slezak S, Muirhead K: Radioactive Cell Membrane Labeling. *Nature* 1991; 352: 261-262.
176. Slezak SE, Muirhead KA: Radioactive cell membrane labelling. *Nature* 1991; 352: 261-262.
177. Teare GF, Horan PK, Slezak SE, Smith C, Hay JB: Long-term tracking of lymphocytes in vivo: the migration of PKH-labeled lymphocytes. *Cell Immunol.* 1991; 134: 157-170.
178. Troutner D, Brookes K, Baidoo D, Lever S, Gray B, Muirhead K: Radiolabeled Lipophilic Probes as Agents for Cell Membrane Labeling and Cell Trafficking Studies. *Int'l Sympos.on Nuclear Imaging* 1991; (Abstract)

179. Young A, Teare G, Hay J: The Use of PKH26 and PKH2 Fluorescent Dyes for Long term Lymphocyte Tracking in Sheep. *Europ.Workshop Bio.and Mole.Mechan.of Lymph.Traffic* 1991; (Abstract)
180. Young A, Spalding H, Teare G, Chan J, Hay J: The Use of PKH2 and PKH26 Fluorescent Dyes to Study Lymphocyte Traffic Through the Liver. *Canadian Soc.for Immun.* 1991; (Abstract)
181. Zhu D, Kidder G, Naus C: Coculture of Glioma Cells with Connexin43-Transfected Cells: Effects on Proliferation and Morphology. *J.Cell Biol.* 1991; 115: 191a-191a.(Abstract)
182. Basse P, Herberman R, Wasserman K, Goldfarb R: Route of administration Influences Accumulation of Adherent Lymphokines Activated (A-LAK) Cells Within Murine Lung and Liver Metastases. *Clin.and Exp.Metastasis* 1990; 8: 92-92. (Abstract)
183. Downing TW, Garner DL, Ericsson SA, Redelman D: Alteration of sperm metabolism by fluorescent viability stains. *Cytometry* 1990; Suppl 4: 41-41. (Abstract)
184. Hay J, Teare G, Smith C: The Continuous Analysis of Lymphocyte Traffic Over Periods of Several Weeks. *Cytometry Supp.* 1990; 4: 37-37. (Abstract)
185. Horan PK, Melnicoff MJ, Jensen BD, Slezak SE: Fluorescent cell labeling for in vivo and in vitro cell tracking. *Methods Cell Biol.* 1990; 33: 469-90: 469-490.
186. Jensen B, Schmitt T, Slezak S: Labeling of Mammalian Cells for In-Vivo Cell Tracking by a Fluorescence Method. *Prog.Clin.Biol.Res.* 1990; 355: 199-207.
187. Jensen B: Measurement of the Intracellular Membrane Pool Which is Accessible to the Plasma Membrane through Cycling in Smooth Muscle. *Cytometry Supp* 1990; 4: 62-62. (Abstract)
188. Lord E, Blieden T, Frelinger J: Adoptive Immunotherapy of a Class I Negative Murine Tumor with Specific Cytolytic T Cell Clones. 1990; (UnPub)
189. Munn D, Cheung N: Phagocytosis of Tumor Cells by Human Monocytes Cultured in Recombinant Macrophage Colony-Stimulating Factor. *J.Exp.Med.* 1990; 172: 231-237.
190. Raybourne R, Bunning V: Flow Microfluorimetric (fmf) Analysis of Bacterial Phagocytosis By J77aA.1 Macrophages. *The FASEB J* 1990; 5: A1351-A1351(Abstract)
191. Schmitt T, Slezak S, Jensen B, Muirhead K, Horan P: In-Vitro Applications of a New "Red" Cell Linker Compound: Investigation of Cell-Linker Retention and Applications to Cell Growth and Cell Mediated Cytotoxicity. *Cytometry Supp.* 1990; 4: 105-105. (Abstract)
192. Sorette M, Clark M: Direct In-Vivo Observations of Partial Phagocytosis of Animal Red Cells Coated with Human Anti-alpha-galactosyl IgG. *Blood* 1990; 76: 391a-391a. (Abstract)
193. Visser J, Hogeweg-platenburg M, Mulder D: The Homing of Hemopoietic Stem Cells after Transplantation into Lethally Irradiated Mice. *Cytometry Supp* 1990; 4: 38-38. (Abstract)
194. Wallace P, Horan P, Yang J: Murine Tumor Infiltrating Lymphocyte Tracking; Utilization of a Red Fluorescent Lipophilic Compound. *Proceed.of the Amer.Assoc.for Cancer Res.* 1990; 31: 271-271.
195. Yates R, Jensen B: A Fluorescence Method for the Measurement of the Circulating Lifetimes of Multiple Blood Elements. *Cytometry Supp* 1990; 4: 105-105.(Abstract)
196. Yuan Y, Fleming B: A Method for Labeling Rat Neutrophils with a Fluorescent Dye for Intravital Microvascular Studies. *Microvascular Res.* 1990; 40: 218-229.
197. Horan P, Slezak S: Stable Cell Membrane Labelling. *Nature* 1989; 340: 167-168.
198. Jensen B: Measurement of Cycling among Plasma Membrane and Intracellular Membrane Compartments in Smooth Muscle Cells. *J.Cell Biol.* 1989; 109: 207a-207a.(Abstract)
199. Melnicoff MJ, Horan PK, Morahan PS: Kinetics of changes in peritoneal cell populations following acute inflammation. *Cell Immunol.* 1989; 118: 178-191.
200. Slezak S, Horan P: Fluorescent In-Vivo Tracking of Hematopoietic Cells. Part I. Technical Consideration. *Blood* 1989; 74, No 6: 2172-2177.
201. Slezak SE, Horan PK: Cell-mediated cytotoxicity. A highly sensitive and informative flow cytometric assay. *J.Immunol.Methods* 1989; 117: 205-214.
202. Horan P, Slezak S, Jensen B: In-Vivo Tracking of Fluorescent Labeled Cells. *Cytometry Supp* 1988; 2: 4-4. (Abstract)
203. Horan P, Breslin E, Slezak S: In-Vivo Red Cell and Platelet Tracking. *Cytometry Supp* 1988; 2: 12-12. (Abstract)
204. Horan P, Slezak S, Jensen B: Cellular Proliferation History by Fluorescent Analysis. *Cytometry Supp* 1988; 2: 38-38. (Abstract)

-
205. Jensen B, Horan P, Poste G: Fluorescent Analysis of the Cellular Growth Rate in Adherent Cell Systems. Cytometry Supp 1988; 2: 39-39. (Abstract)
206. Melnicoff MJ, Horan PK, Morahan PS: Population Kinetics of Peritoneal Macrophages Following Thioglycolate Induced Inflammation. Cytometry Supp 1988; 2: 20-20. (Abstract)
207. Melnicoff MJ, Morahan PS, Jensen BD, Breslin EW, Horan PK: In-Vivo Labeling of Resident Peritoneal Macrophages. J.Leukocyte Biol. 1988; 43: 387-397.
208. Melnicoff MJ, Horan PK, Breslin EW, Morahan PS: Maintenance of peritoneal macrophages in the steady state. J.Leukoc.Biol. 1988; 44: 367-375.
209. Slezak S, Horan P: Cell Mediated Cytotoxicity: A Highly Sensitive And Quantitative Fluorescent Single Cell Assay. Cytometry Supp 1988; 2: 60-60. (Abstract)
210. Slezak S, Horan P: In-Vivo tracking of Hematopoietic Cells. Cytometry 1988; 2: 60-60. (Abstract)

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