

## **References for Products 22001 to 22017**

1. Zibek S, Stett A, Koltay P, Hu M, Zengerle R, Nisch W, Stelzle M. (2006) Localized functional chemical stimulation of TE 671 cells cultured on nanoporous membrane by calcein and acetylcholine. *Biophys J.*
2. Klesius PH, Evans JJ, Shoemaker CA, Pasnik DJ. (2006) A vaccination and challenge model using calcein marked fish. *Fish Shellfish Immunol.*, 20, 20.
3. Bratosin D, Mitrofan L, Palii C, Estaquier J, Montreuil J. (2005) Novel fluorescence assay using calcein-AM for the determination of human erythrocyte viability and aging. *Cytometry A*, 66, 78.
4. Schoonen WG, Westerink WM, de Roos JA, Debiton E. (2005) Cytotoxic effects of 100 reference compounds on Hep G2 and HeLa cells and of 60 compounds on ECC-1 and CHO cells. I mechanistic assays on ROS, glutathione depletion and calcein uptake. *Toxicol In Vitro*, 19, 505.
5. Uggeri J, Gatti R, Belletti S, Scandroglio R, Corradini R, Rotoli BM, Orlandini G. (2004) Calcein-AM is a detector of intracellular oxidative activity. *Histochem Cell Biol*, 122, 499.
6. Mueller H, Kassack MU, Wiese M. (2004) Comparison of the usefulness of the MTT, ATP, and calcein assays to predict the potency of cytotoxic agents in various human cancer cell lines. *J Biomol Screen*, 9, 506.
7. Iwanowicz LR, Densmore CL, Ottinger CA. (2004) Calcein AM release-based cytotoxic cell assay for fish leucocytes. *Fish Shellfish Immunol*, 16, 127.
8. Tokudome Y, Sugibayashi K. (2003) The synergic effects of various electrolytes and electroporation on the in vitro skin permeation of calcein. *J Control Release*, 92, 93.
9. Goto T, Kajiwara H, Yoshinari M, Fukuhara E, Kobayashi S, Tanaka T. (2003) In vitro assay of mineralized-tissue formation on titanium using fluorescent staining with calcein blue. *Biomaterials*, 24, 3885.
10. Hasinoff BB. (2003) The intracellular iron sensor calcein is catalytically oxidatively degraded by iron(II) in a hydrogen peroxide-dependent reaction. *J Inorg Biochem*, 95, 157.
11. Ali A, Zhang Q, Dai J, Huang X. (2003) Calcein as a fluorescent iron chemosensor for the determination of low molecular weight iron in biological fluids. *Biometals*, 16, 285.
12. Begu S, Devoisselle JM, Mordon S. (2002) Noninvasive fluorescent study in situ and in real time of glucose effects on the pharmacokinetic of calcein. *J Biomed Opt*, 7, 609.
13. Jones RA, Smail A, Wilson MR. (2002) Detecting mitochondrial permeability transition by confocal imaging of intact cells pinocytically loaded with calcein. *Eur J Biochem*, 269, 3990.
14. Du SJ, Frenkel V, Kindschi G, Zohar Y. (2001) Visualizing normal and defective bone development in zebrafish embryos using the fluorescent chromophore calcein. *Dev Biol*, 238, 239.
15. Zhu Z. (2001) Determination of nucleic acids using calcein-neodymium complex as a fluorescence probe. *Anal Sci*, 17, 1375.
16. Neri S, Mariani E, Meneghetti A, Cattini L, Facchini A. (2001) Calcein-acetyoxymethyl cytotoxicity assay: standardization of a method allowing additional analyses on recovered effector cells and supernatants. *Clin Diagn Lab Immunol*, 8, 1131.
17. Sloan WD, Uttamalai M. (2001) A fibre-optic calcium ion sensor using a calcein derivative. *Luminescence*, 16, 179.
18. Olson DP, Taylor BJ, Ivy SP. (2001) Detection of MRP functional activity: calcein AM but not BCECF AM as a Multidrug Resistance-related Protein (MRP1) substrate. *Cytometry*, 46, 105.
19. Li HB, Chen F. (2000) A highly sensitive fluorimetric method for the determination of fluoride in biological material with Al<sup>3+</sup>-calcein complex. *Fresenius J Anal Chem*, 368, 501.
20. Karaszi E, Jakab K, Homolya L, Szakacs G, Hollo Z, Telek B, Kiss A, Rejto L, Nahajevszky S, Sarkadi B, Kappelmayer J. (2001) Calcein assay for multidrug resistance

- reliably predicts therapy response and survival rate in acute myeloid leukaemia. *Br J Haematol*, 112, 308.
21. Eneroth A, Astrom E, Hoogstraate J, Schrenk D, Conrad S, Kauffmann HM, Gjellan K. (2001) Evaluation of a vincristine resistant Caco-2 cell line for use in a calcein AM extrusion screening assay for P-glycoprotein interaction. *Eur J Pharm Sci*, 12, 205.
  22. Liminga G, Martinsson P, Jonsson B, Nygren P, Larsson R. (2000) Apoptosis induced by calcein acetoxymethyl ester in the human histiocytic lymphoma cell line U-937 GTB. *Biochem Pharmacol*, 60, 1751.
  23. Beghetto C, Renken C, Eriksson O, Jori G, Bernardi P, Ricchelli F. (2000) Implications of the generation of reactive oxygen species by photoactivated calcein for mitochondrial studies. *Eur J Biochem*, 267, 5585.
  24. Picard V, Govoni G, Jabado N, Gros P. (2000) Nramp 2 (DCT1/DMT1) expressed at the plasma membrane transports iron and other divalent cations into a calcein-accessible cytoplasmic pool. *J Biol Chem*, 275, 35738.
  25. Hale LV, Ma YF, Santerre RF. (2000) Semi-quantitative fluorescence analysis of calcein binding as a measurement of in vitro mineralization. *Calcif Tissue Int*, 67, 80.
  26. Sugita M, Hirono C, Tanaka S, Nakahari T, Imai Y, Kanno Y, Shiba Y. (2000) Visualization of the secretory process involved in Ca<sup>2+</sup>-activated fluid secretion from rat submandibular glands using the fluorescent dye, calcein. *Eur J Cell Biol*, 79, 182.
  27. Memoli A, Palermi LG, Travagli V, Alhaique F. (1999) Effects of surfactants on the spectral behaviour of calcein (II): a method of evaluation. *J Pharm Biomed Anal*, 19, 627.
  28. Sugita M, Hirono C, Furuya K, Yamagishi S, Kanno Y, Shiba Y. (2000) cAMP-Dependent potentiation of the Ca(2+)-activated release of the anionic fluorescent dye, calcein, from rat parotid acinar cells. *Eur J Pharmacol*, 388, 227.
  29. Asaumi J, Kawasaki S, Kuroda M, Takeda Y, Kishi K, Hiraki Y. (1999) Intracellular accumulation and retention of calcein in Ehrlich ascites tumor cells and their adriamycin-resistant strain. *Anticancer Res*, 19, 4311.
  30. Fu FN, Singh BR. (1999) Calcein permeability of liposomes mediated by type A botulinum neurotoxin and its light and heavy chains. *J Protein Chem*, 18, 701.
  31. Liminga G, Jonsson B, Nygren P, Larsson R. (1999) On the mechanism underlying calcein-induced cytotoxicity. *Eur J Pharmacol*, 383, 321.
  32. Katsu T. (1999) Application of calcein-loaded liposomes for the determination of membrane channel size. *Biol Pharm Bull*, 22, 978.
  33. Legrand O, Simonin G, Perrot JY, Zittoun R, Marie JP. (1999) Both Pgp and MRP1 activities using calcein-AM contribute to drug resistance in AML. *Adv Exp Med Biol*, 457, 161.
  34. Jarvis CR, Lilge L, Vipond GJ, Andrew RD. (1999) Interpretation of intrinsic optical signals and calcein fluorescence during acute excitotoxic insult in the hippocampal slice. *Neuroimage*, 10, 357.
  35. Thomas F, Serratrice G, Beguin C, Aman ES, Pierre JL, Fontecave M, Laulhere JP. (1999) Calcein as a fluorescent probe for ferric iron. Application to iron nutrition in plant cells. *J Biol Chem*, 274, 13375.
  36. Wigler PW. (1999) PSC833, cyclosporin A, and dexamfetamine effects on cellular calcein retention and inhibition of the multidrug resistance pump in human leukemic lymphoblasts. *Biochem Biophys Res Commun*, 257, 410.
  37. Petronilli V, Miotto G, Canton M, Brini M, Colonna R, Bernardi P, Di Lisa F. (1999) Transient and long-lasting openings of the mitochondrial permeability transition pore can be monitored directly in intact cells by changes in mitochondrial calcein fluorescence. *Biophys J*, 76, 725.
  38. Gatti R, Belletti S, Orlandini G, Bussolati O, Dall'Asta V, Gazzola GC. (1998) Comparison of annexin V and calcein-AM as early vital markers of apoptosis in adherent cells by confocal laser microscopy. *J Histochem Cytochem*, 46, 895.
  39. Legrand O, Simonin G, Perrot JY, Zittoun R, Marie JP. (1998) Pgp and MRP activities using calcein-AM are prognostic factors in adult acute myeloid leukemia patients. *Blood*, 91, 4480.

40. Essodaigui M, Broxterman HJ, Garnier-Suillerot A. (1998) Kinetic analysis of calcein and calcein-acetoxymethyl ester efflux mediated by the multidrug resistance protein and P-glycoprotein. *Biochemistry*, 37, 2243.
41. van Hooijdonk CA, Colbers RM, Piek J, van Erp PE. (1997) Demonstration of an Na<sup>+</sup>/H<sup>+</sup> exchanger in mouse keratinocytes measured by the novel pH-sensitive fluorochrome SNARF-calcein. *Cell Prolif*, 30, 351.
42. Kono K, Igawa T, Takagishi T. (1997) Cytoplasmic delivery of calcein mediated by liposomes modified with a pH-sensitive poly(ethylene glycol) derivative. *Biochim Biophys Acta*, 1325, 143.
43. Mou L, Lu Y, Zhang C. (1997) [Fluorometric determination of trace Shachongdan with calcein-Pd2+]. *Guang Pu Xue Yu Guang Pu Fen Xi*, 17, 41.
44. Decherchi P, Cochard P, Gauthier P. (1997) Dual staining assessment of Schwann cell viability within whole peripheral nerves using calcein-AM and ethidium homodimer. *J Neurosci Methods*, 71, 205.
45. Fujita T, Yamada H, Fukuzumi M, Nishimaki A, Yamamoto A, Muranishi S. (1997) Calcein is excreted from the intestinal mucosal cell membrane by the active transport system. *Life Sci*, 60, 307.
46. Tiberghien F, Loor F. (1996) Ranking of P-glycoprotein substrates and inhibitors by a calcein-AM fluorometry screening assay. *Anticancer Drugs*, 7, 568.
47. De Gendt CM, De Clerck LS, Bridts CH, Stevens WJ. (1996) The use of calcein acetoxymethyl ester (AM)-labelled polymorphonuclear cells in a polycarbonate filter chemotaxis assay. *Clin Chim Acta*, 249, 189.
48. Jonsson B, Liminga G, Csoka K, Fridborg H, Dhar S, Nygren P, Larsson R. (1996) Cytotoxic activity of calcein acetoxymethyl ester (Calcein/AM) on primary cultures of human haematological and solid tumours. *Eur J Cancer*, 32A, 883.
49. Versantvoort CH, Bagrij T, Wright KA, Twentyman PR. (1995) On the relationship between the probenecid-sensitive transport of daunorubicin or calcein and the glutathione status of cells overexpressing the multidrug resistance-associated protein (MRP). *Int J Cancer*, 63, 855.
50. Liminga G, Nygren P, Dhar S, Nilsson K, Larsson R. (1995) Cytotoxic effect of calcein acetoxymethyl ester on human tumor cell lines: drug delivery by intracellular trapping. *Anticancer Drugs*, 6, 578.
51. Feller N, Broxterman HJ, Wahrer DC, Pinedo HM. (1995) ATP-dependent efflux of calcein by the multidrug resistance protein (MRP): no inhibition by intracellular glutathione depletion. *FEBS Lett*, 368, 385.
52. Zhou Y, Marcus EM, Haugland RP, Opas M. (1995) Use of a new fluorescent probe, seminaphthofluorescein-calcein, for determination of intracellular pH by simultaneous dual-emission imaging laser scanning confocal microscopy. *J Cell Physiol*, 164, 9.
53. Sugita M, Shiba Y, Furuya K, Yamagishi S, Kanno Y. (1995) Involvement of intracellular calcium ions in the release of the fluorescent dye calcein by cholinergic and alpha-adrenergic agonists from rat parotid acinar cells. *Pflugers Arch*, 429, 555.
54. Braut-Boucher F, Pichon J, Rat P, Adolphe M, Aubery M, Font J. (1995) A non-isotopic, highly sensitive, fluorimetric, cell-cell adhesion microplate assay using calcein AM-labeled lymphocytes. *J Immunol Methods*, 178, 41.
55. Qi XR, Maitani Y, Nagai T. (1995) Rates of systemic degradation and reticuloendothelial system uptake of calcein in the dipalmitoylphosphatidylcholine liposomes with soybean-derived sterols in mice. *Pharm Res*, 12, 49.
56. Turner RT. (1994) Cancellous bone turnover in growing rats: time-dependent changes in association between calcein label and osteoblasts. *J Bone Miner Res*, 9, 1419.
57. Golshani MR, Khoobehi B, Peyman GA, Aras C. (1994) Calcein fluorophotometry in streptozocin-induced diabetic rats. *Ophthalmic Surg*, 25, 526.
58. Lichtenfels R, Biddison WE, Schulz H, Vogt AB, Martin R. (1994) CARE-LASS (calcein-release-assay), an improved fluorescence-based test system to measure cytotoxic T lymphocyte activity. *J Immunol Methods*, 172, 227.
59. Liminga G, Nygren P, Larsson R. (1994) Microfluorometric evaluation of calcein acetoxymethyl ester as a probe for P-glycoprotein-mediated resistance: effects of

- cyclosporin A and its nonimmunosuppressive analogue SDZ PSC 833. *Exp Cell Res*, 212, 291.
60. Padanilam JT, Bischof JC, Lee RC, Cravalho EG, Tompkins RG, Yarmush ML, Toner M. (1994) Effectiveness of poloxamer 188 in arresting calcein leakage from thermally damaged isolated skeletal muscle cells. *Ann N Y Acad Sci*, 720, 111.
61. Hollo Z, Homolya L, Davis CW, Sarkadi B. (1994) Calcein accumulation as a fluorometric functional assay of the multidrug transporter. *Biochim Biophys Acta*, 1191, 384.
62. Memoli A, Palermi LG, Travagli V, Alhaique F. (1994) Effects of surfactants on the spectral behaviour of calcein. *J Pharm Biomed Anal*, 12, 307.
63. Ono A, Yamaguchi M, Horikoshi I, Shintani T, Ueno M. (1994) Calcein release from temperature-sensitive liposome with or without stirring. *Biol Pharm Bull*, 17, 166.
64. Wang XM, Terasaki PI, Rankin GW, Jr., Chia D, Zhong HP, Hardy S. (1993) A new microcellular cytotoxicity test based on calcein AM release. *Hum Immunol*, 37, 264.
65. Golshani MR, Khoobehi B, Peyman GA. (1993) Calcein: a new dye for evaluation of the blood-retinal barrier by fluorophotometry. *Int Ophthalmol*, 17, 349.
66. Stuart AJ, Smith DA. (1992) Use of the fluorochromes xylene orange, calcein green, and tetracycline to document bone deposition and remodeling in healing fractures in chickens. *Avian Dis*, 36, 447.
67. Weston SA, Parish CR. (1992) Calcein: a novel marker for lymphocytes which enter lymph nodes. *Cytometry*, 13, 739.
68. Oncel M, Khoobehi B, Peyman GA. (1990) Calcein angiography: a preliminary report on an experimental dye. *Int Ophthalmol*, 14, 245.
69. Fang T, Naguib KS, Peyman GA, Khoobehi B. (1990) Comparative study of three fluorescent dyes for angiography: sodium fluorescein, carboxyfluorescein, and calcein. *Ophthalmic Surg*, 21, 250.
70. Matsuzaki K, Harada M, Handa T, Funakoshi S, Fujii N, Yajima H, Miyajima K. (1989) Magainin 1-induced leakage of entrapped calcein out of negatively-charged lipid vesicles. *Biochim Biophys Acta*, 981, 130.
71. Menestrina G. (1988) Escherichia coli hemolysin permeabilizes small unilamellar vesicles loaded with calcein by a single-hit mechanism. *FEBS Lett*, 232, 217.
72. Matsoukas KA, Demertzis MA. (1988) Fluorimetric determination of calcium in serum with calcein blue. *Analyst*, 113, 251.
73. Kayalar C, Duzgunes N. (1986) Membrane action of colicin E1: detection by the release of carboxyfluorescein and calcein from liposomes. *Biochim Biophys Acta*, 860, 51.
74. Bartzatt RL, Volsky DJ. (1984) Determination of the internal volume of reconstituted sendai virus envelopes by quenching of calcein fluorescence. *Biosci Rep*, 4, 551.
75. Howells GR, Green D, Sontag W. (1984) A comparison of the distribution of 239-Pu and calcein in the illium of the female CBA mouse. *Radiat Environ Biophys*, 23, 127.
76. Svalastoga E, Reimann I, Nielsen K. (1983) A method for quantitative assessment of bone formation using double labelling with tetracycline and calcein. An experimental study in the navicular bone of the horse. *Nord Vet Med*, 35, 180.
77. Fukazawa H, Kawarada T, Sakamoto T. (1979) [An experimental study for the improvement on the method of administration of Dotite Calcein for labeling to the hard tissues (author's transl)]. *Nippon Kyosei Shika Gakkai Zasshi*, 38, 222.
78. Rasmussen P. (1975) Effect of oxytetracycline and purified calcein (DCAF) on the apposition and mineralization of rat incisor dentin. *Scand J Dent Res*, 83, 233.
79. Bandrowski JF, Benson CL. (1972) Investigation of the use of calcein in the ultramicro fluorimetric determination of calcium in serum. *Clin Chem*, 18, 1411.
80. von Jurgenson HB. (1971) [Histological calcium determination using the metal indicators murexide, calcon and calcein]. *Histochemie*, 28, 23.
81. Rahn BA, Perren SM. (1970) Calcein blue as a fluorescent label in bone. *Experientia*, 26, 519.
82. Klass CS. (1962) The use of the indicator calcein, and its fluorescence, in a rapid, ultramicro titration of serum calcium. *Am J Clin Pathol*, 37, 655.
83. Klass CS. (1962) The use of the indicator calcein, and its fluorescence, in a rapid, ultramicro titration of serum calcium. *Tech Bull Regist Med Technol*, 32, 77.

84. Herrmann RG. (1958) Adaptation of calcein titration method for calcium determination in tissues without ashing. *Proc Soc Exp Biol Med*, 99, 777.
85. Langendorf H. (1958) [Direct complexometric calcium determination in serum with calcein as indicator.]. *Klin Wochenschr*, 36, 829.