

References for Products 13457 to 13459

1. An L, Liu L, Wang S. (2009) Label-free, homogeneous, and fluorescence "turn-on" detection of protease using conjugated polyelectrolytes. *Biomacromolecules*, 10, 454.
2. Bodenreider C, Beer D, Keller TH, Sonntag S, Wen D, Yap L, Yau YH, Shochat SG, Huang D, Zhou T, Caflisch A, Su XC, Ozawa K, Otting G, Vasudevan SG, Lescar J, Lim SP. (2009) A fluorescence quenching assay to discriminate between specific and nonspecific inhibitors of dengue virus protease. *Anal Biochem*, 395, 195.
3. Doering K, Meder G, Hinnenberger M, Woelcke J, Mayr LM, Hassiepen U. (2009) A fluorescence lifetime-based assay for protease inhibitor profiling on human kallikrein 7. *J Biomol Screen*, 14, 1.
4. Mizukami S, Takikawa R, Sugihara F, Shirakawa M, Kikuchi K. (2009) Dual-function probe to detect protease activity for fluorescence measurement and 19F MRI. *Angew Chem Int Ed Engl*, 48, 3641.
5. Nakata H, Ohtsuki T, Sisido M. (2009) A protease inhibitor discovery method using fluorescence correlation spectroscopy with position-specific labeled protein substrates. *Anal Biochem*, 390, 121.
6. Sabariego R, Picazo F, Domingo B, Franco S, Martinez MA, Llopis J. (2009) Fluorescence resonance energy transfer-based assay for characterization of hepatitis C virus NS3-4A protease activity in live cells. *Antimicrob Agents Chemother*, 53, 728.
7. Sheth RA, Upadhyay R, Stangenberg L, Sheth R, Weissleder R, Mahmood U. (2009) Improved detection of ovarian cancer metastases by intraoperative quantitative fluorescence protease imaging in a pre-clinical model. *Gynecol Oncol*, 112, 616.
8. Tsai MT, Cheng YH, Liu YN, Liao NC, Lu WW, Kung SH. (2009) Real-time monitoring of human enterovirus (HEV)-infected cells and anti-HEV 3C protease potency by fluorescence resonance energy transfer. *Antimicrob Agents Chemother*, 53, 748.
9. Wang X, Guo J, Wang J, Li S, Sun L, Lu J. (2009) [Prokaryotic expression and identification of dual-fluorescence fusion proteins of small ubiquitin-like modifier and sentrin-specific protease]. *Sheng Wu Gong Cheng Xue Bao*, 25, 701.
10. Zhang L, Xu Q, Xing D, Gao C, Xiong H. (2009) Real-time detection of caspase-3-like protease activation in vivo using fluorescence resonance energy transfer during plant programmed cell death induced by ultraviolet C overexposure. *Plant Physiol*, 150, 1773.
11. Lee S, Cha EJ, Park K, Lee SY, Hong JK, Sun IC, Kim SY, Choi K, Kwon IC, Kim K, Ahn CH. (2008) A near-infrared-fluorescence-quenched gold-nanoparticle imaging probe for in vivo drug screening and protease activity determination. *Angew Chem Int Ed Engl*, 47, 2804.
12. Lorenz H, Hailey DW, Lippincott-Schwartz J. (2008) Addressing membrane protein topology using the fluorescence protease protection (FPP) assay. *Methods Mol Biol*, 440, 227.
13. Mao SS, DiMuzio J, McHale C, Burlein C, Olsen D, Carroll SS. (2008) A time-resolved, internally quenched fluorescence assay to characterize inhibition of hepatitis C virus nonstructural protein 3-4A protease at low enzyme concentrations. *Anal Biochem*, 373, 1.
14. Mizukami S, Tonai K, Kaneko M, Kikuchi K. (2008) Lanthanide-based protease activity sensors for time-resolved fluorescence measurements. *J Am Chem Soc*, 130, 14376.
15. Hsu YY, Liu YN, Wang W, Kao FJ, Kung SH. (2007) In vivo dynamics of enterovirus protease revealed by fluorescence resonance energy transfer (FRET) based on a novel FRET pair. *Biochem Biophys Res Commun*, 353, 939.
16. Jaffer FA, Kim DE, Quinti L, Tung CH, Aikawa E, Pande AN, Kohler RH, Shi GP, Libby P, Weissleder R. (2007) Optical visualization of cathepsin K activity in atherosclerosis with a novel, protease-activatable fluorescence sensor. *Circulation*, 115, 2292.
17. Kimura RH, Steenblock ER, Camarero JA. (2007) Development of a cell-based fluorescence resonance energy transfer reporter for *Bacillus anthracis* lethal factor protease. *Anal Biochem*, 369, 60.

18. Konstantinidis AK, Richardson PL, Kurtz KA, Tripathi R, Chen CM, Huang P, Randolph J, Towne D, Donnelly J, Warrior U, Middleton T, Kati WM. (2007) Longer wavelength fluorescence resonance energy transfer decapeptide substrates for hepatitis C virus NS3 protease. *Anal Biochem*, 368, 156.
19. Martin SF, Hattersley N, Samuel ID, Hay RT, Tatham MH. (2007) A fluorescence-resonance-energy-transfer-based protease activity assay and its use to monitor paralog-specific small ubiquitin-like modifier processing. *Anal Biochem*, 363, 83.
20. Swanson R, Raghavendra MP, Zhang W, Froelich C, Gettins PG, Olson ST. (2007) Serine and cysteine proteases are translocated to similar extents upon formation of covalent complexes with serpins. Fluorescence perturbation and fluorescence resonance energy transfer mapping of the protease binding site in CrmA complexes with granzyme B and caspase-1. *J Biol Chem*, 282, 2305.
21. Verbesselt R, Van Wijngaerden E, de Hoon J. (2007) Simultaneous determination of 8 HIV protease inhibitors in human plasma by isocratic high-performance liquid chromatography with combined use of UV and fluorescence detection: amprenavir, indinavir, atazanavir, ritonavir, lopinavir, saquinavir, nelfinavir and M8-nelfinavir metabolite. *J Chromatogr B Analyt Technol Biomed Life Sci*, 845, 51.
22. Chen L, Chen S, Gui C, Shen J, Shen X, Jiang H. (2006) Discovering severe acute respiratory syndrome coronavirus 3CL protease inhibitors: virtual screening, surface plasmon resonance, and fluorescence resonance energy transfer assays. *J Biomol Screen*, 11, 915.
23. Funovics MA, Alencar H, Montet X, Weissleder R, Mahmood U. (2006) Simultaneous fluorescence imaging of protease expression and vascularity during murine colonoscopy for colonic lesion characterization. *Gastrointest Endosc*, 64, 589.
24. Hamill P, Hudson D, Kao RY, Chow P, Raj M, Xu H, Richer MJ, Jean F. (2006) Development of a red-shifted fluorescence-based assay for SARS-coronavirus 3CL protease: identification of a novel class of anti-SARS agents from the tropical marine sponge *Axinella corrugata*. *Biol Chem*, 387, 1063.
25. Hennig A, Roth D, Enderle T, Nau WM. (2006) Nanosecond time-resolved fluorescence protease assays. *Chembiochem*, 7, 733.
26. Kim JH, Shin HJ, Cho H, Kwak SM, Kim TS, Kang JY, Yang EG. (2006) A microfluidic protease activity assay based on the detection of fluorescence polarization. *Anal Chim Acta*, 577, 171.
27. Lorenz H, Hailey DW, Lippincott-Schwartz J. (2006) Fluorescence protease protection of GFP chimeras to reveal protein topology and subcellular localization. *Nat Methods*, 3, 205.
28. Lorenz H, Hailey DW, Wunder C, Lippincott-Schwartz J. (2006) The fluorescence protease protection (FPP) assay to determine protein localization and membrane topology. *Nat Protoc*, 1, 276.
29. Thomas DA, Francis P, Smith C, Ratcliffe S, Ede NJ, Kay C, Wayne G, Martin SL, Moore K, Amour A, Hooper NM. (2006) A broad-spectrum fluorescence-based peptide library for the rapid identification of protease substrates. *Proteomics*, 6, 2112.
30. Zhang L, Lawson HL, Harish VC, Huff JD, Knovich MA, Owen J. (2006) Creation of a recombinant peptide substrate for fluorescence resonance energy transfer-based protease assays. *Anal Biochem*, 358, 298.
31. Berthelot T, Talbot JC, Lain G, Deleris G, Latxague L. (2005) Synthesis of N epsilon-(7-diethylaminocoumarin-3-carboxyl)- and N epsilon-(7-methoxycoumarin-3-carboxyl)-L-Fmoc lysine as tools for protease cleavage detection by fluorescence. *J Pept Sci*, 11, 153.
32. Chen S, Chen LL, Luo HB, Sun T, Chen J, Ye F, Cai JH, Shen JK, Shen X, Jiang HL. (2005) Enzymatic activity characterization of SARS coronavirus 3C-like protease by fluorescence resonance energy transfer technique. *Acta Pharmacol Sin*, 26, 99.
33. Eggeling C, Jager S, Winkler D, Kask P. (2005) Comparison of different fluorescence fluctuation methods for their use in FRET assays: monitoring a protease reaction. *Curr Pharm Biotechnol*, 6, 351.

34. Kainmuller EK, Olle EP, Bannwarth W. (2005) Synthesis of a new pair of fluorescence resonance energy transfer donor and acceptor dyes and its use in a protease assay. *Chem Commun (Camb)*, 5459.
35. Kohl T, Haustein E, Schwille P. (2005) Determining protease activity in vivo by fluorescence cross-correlation analysis. *Biophys J*, 89, 2770.
36. Kuang WF, Chow LP, Wu MH, Hwang LH. (2005) Mutational and inhibitive analysis of SARS coronavirus 3C-like protease by fluorescence resonance energy transfer-based assays. *Biochem Biophys Res Commun*, 331, 1554.
37. Sudo K, Yamaji K, Kawamura K, Nishijima T, Kojima N, Aibe K, Shimotohno K, Shimizu Y. (2005) High-throughput screening of low molecular weight NS3-NS4A protease inhibitors using a fluorescence resonance energy transfer substrate. *Antivir Chem Chemother*, 16, 385.
38. Kao RY, To AP, Ng LW, Tsui WH, Lee TS, Tsoi HW, Yuen KY. (2004) Characterization of SARS-CoV main protease and identification of biologically active small molecule inhibitors using a continuous fluorescence-based assay. *FEBS Lett*, 576, 325.
39. Marme N, Knemeyer JP, Wolfrum J, Sauer M. (2004) Highly sensitive protease assay using fluorescence quenching of peptide probes based on photoinduced electron transfer. *Angew Chem Int Ed Engl*, 43, 3798.
40. Pinto MR, Schanze KS. (2004) Amplified fluorescence sensing of protease activity with conjugated polyelectrolytes. *Proc Natl Acad Sci U S A*, 101, 7505.
41. Lee EH, Kim CS, Cho JB, Ahn KJ, Kim KH. (2003) Measurement of protease activity of live *Uronema marinum* (Ciliata: Scuticociliatida) by fluorescence polarization. *Dis Aquat Organ*, 54, 85.
42. Turek-Etienne TC, Small EC, Soh SC, Xin TA, Gaitonde PV, Barrabee EB, Hart RF, Bryant RW. (2003) Evaluation of fluorescent compound interference in 4 fluorescence polarization assays: 2 kinases, 1 protease, and 1 phosphatase. *J Biomol Screen*, 8, 176.
43. Cummings RT, Salowe SP, Cunningham BR, Wiltsie J, Park YW, Sonatore LM, Wisniewski D, Douglas CM, Hermes JD, Scolnick EM. (2002) A peptide-based fluorescence resonance energy transfer assay for *Bacillus anthracis* lethal factor protease. *Proc Natl Acad Sci U S A*, 99, 6603.
44. Ntziachristos V, Tung CH, Bremer C, Weissleder R. (2002) Fluorescence molecular tomography resolves protease activity in vivo. *Nat Med*, 8, 757.
45. Simeonov A, Bi X, Nikiforov TT. (2002) Enzyme assays by fluorescence polarization in the presence of polyarginine: study of kinase, phosphatase, and protease reactions. *Anal Biochem*, 304, 193.
46. Lindsten K, Uhlikova T, Konvalinka J, Masucci MG, Dantuma NP. (2001) Cell-based fluorescence assay for human immunodeficiency virus type 1 protease activity. *Antimicrob Agents Chemother*, 45, 2616.
47. Murza A, Sanchez-Cortes S, Garcia-Ramos JV. (2001) Surface-enhanced Raman and steady fluorescence study of interaction between antitumoral drug 9-aminoacridine and trypsin-like protease related to metastasis processes, guanidinobenzoate. *Biopolymers*, 62, 85.
48. Fattori D, Urbani A, Brunetti M, Ingenito R, Pessi A, Prendergast K, Narjes F, Matassa VG, De Francesco R, Steinkuhler C. (2000) Probing the active site of the hepatitis C virus serine protease by fluorescence resonance energy transfer. *J Biol Chem*, 275, 15106.
49. Ozer I, Simsek H. (2000) Fluorescence monitoring of the conformational change in alpha 2-macroglobulin induced by trypsin under second-order conditions: the macroglobulin acts both as a substrate and a competitive inhibitor of the protease. *J Enzyme Inhib*, 15, 101.
50. Uchikoba T, Yonezawa H, Arima K, Kaneda M. (2000) Detection of protease activity with a fluorescence-labelled peptide substrate on a TLC plate. *Biosci Biotechnol Biochem*, 64, 1285.
51. Cummings RT, McGovern HM, Zheng S, Park YW, Hermes JD. (1999) Use of a phosphotyrosine-antibody pair as a general detection method in homogeneous time-resolved fluorescence: application to human immunodeficiency viral protease. *Anal Biochem*, 269, 79.

52. Kim H, Jung YK, Kwon YK, Park SH. (1999) Assignment of apoptotic protease activating factor-1 gene (APAF1) to human chromosome band 12q23 by fluorescence in situ hybridization. *Cytogenet Cell Genet*, 87, 252.
53. Rose MJ, Merschman SA, Woolf EJ, Matuszewski BK. (1999) Determination of L-756 423, a novel HIV protease inhibitor, in human plasma and urine using high-performance liquid chromatography with fluorescence detection. *J Chromatogr B Biomed Sci Appl*, 732, 425.
54. St Hilaire PM, Willert M, Juliano MA, Juliano L, Meldal M. (1999) Fluorescence-quenched solid phase combinatorial libraries in the characterization of cysteine protease substrate specificity. *J Comb Chem*, 1, 509.
55. Kungl AJ, Visser NV, van Hoek A, Visser AJ, Billich A, Schilk A, Gstach H, Auer M. (1998) Time-resolved fluorescence anisotropy of HIV-1 protease inhibitor complexes correlates with inhibitory activity. *Biochemistry*, 37, 2778.
56. Flesch G, Mann C, Degen PH. (1997) Quantitative determination of CGP 61755, a protease inhibitor, in plasma and urine by high-performance liquid chromatography and fluorescence detection. *J Chromatogr B Biomed Sci Appl*, 696, 123.
57. Jones LJ, Upson RH, Haugland RP, Panchuk-Voloshina N, Zhou M. (1997) Quenched BODIPY dye-labeled casein substrates for the assay of protease activity by direct fluorescence measurement. *Anal Biochem*, 251, 144.
58. Levine LM, Michener ML, Toth MV, Holwerda BC. (1997) Measurement of specific protease activity utilizing fluorescence polarization. *Anal Biochem*, 247, 83.
59. Packard BZ, Toptygin DD, Komoriya A, Brand L. (1997) Characterization of fluorescence quenching in bifluorophoric protease substrates. *Biophys Chem*, 67, 167.
60. Schade SZ, Jolley ME, Sarauer BJ, Simonson LG. (1996) BODIPY-alpha-casein, a pH-independent protein substrate for protease assays using fluorescence polarization. *Anal Biochem*, 243, 1.
61. Voss EW, Jr., Workman CJ, Mummert ME. (1996) Detection of protease activity using a fluorescence-enhancement globular substrate. *Biotechniques*, 20, 286.
62. Chen FT. (1995) Characterization of protease-catalyzed hydrolysis of cyanine-labeled angiotensin using capillary electrophoresis with laser-induced fluorescence detection. *Anal Biochem*, 225, 341.
63. Holskin BP, Bukhtiyarova M, Dunn BM, Baur P, de Chastonay J, Pennington MW. (1995) A continuous fluorescence-based assay of human cytomegalovirus protease using a peptide substrate. *Anal Biochem*, 227, 148.
64. Reif OW, Freitag R. (1995) Studies of complexes between proteases, substrates and the protease inhibitor alpha 2-macroglobulin using capillary electrophoresis with laser-induced fluorescence detection. *J Chromatogr A*, 716, 363.
65. Bolger R, Checovich W. (1994) A new protease activity assay using fluorescence polarization. *Biotechniques*, 17, 585.
66. Flesch G, Mann C, Boss E, Lang M, Degen PH, Dieterle W. (1994) Quantitative determination of CGP 53,437, a new HIV protease inhibitor, in plasma by high-performance liquid chromatography and fluorescence detection. *J Chromatogr B Biomed Appl*, 657, 155.
67. Manetta JV, Lai MH, Osborne HE, Dee A, Margolin N, Sportsman JR, Vlahos CJ, Yan SB, Heath WF. (1992) Design and implementation of a particle concentration fluorescence method for the detection of HIV-1 protease inhibitors. *Anal Biochem*, 202, 10.
68. Chao WF, Kai M, Ohkura Y. (1990) High-performance liquid chromatographic determination of a cysteine protease inhibitor and its ethyl ester in mouse serum and muscle by pre-column fluorescence derivatization. *J Chromatogr*, 526, 77.
69. Geohegan KF, Spencer RW, Danley DE, Contillo LG, Jr., Andrews GC. (1990) Fluorescence-based continuous assay for the aspartyl protease of human immunodeficiency virus-1. *FEBS Lett*, 262, 119.
70. Katz ML, Shanker MJ. (1989) Development of lipofuscin-like fluorescence in the retinal pigment epithelium in response to protease inhibitor treatment. *Mech Ageing Dev*, 49, 23.

71. Peters K, Batz O, Hohne WE, Fittkau S. (1984) [Thermitase--a thermostable serine protease. VI. Kinetic and fluorescence studies on the interaction of the enzymes with dansylated peptide chloromethylketones]. *Biomed Biochim Acta*, 43, 909.
72. Karp MT, Suominen AI, Hemmila I, Mantsala PI. (1983) Time-resolved europium fluorescence in enzyme activity measurements: a sensitive protease assay. *J Appl Biochem*, 5, 399.
73. Straight DL, McKee PA. (1983) Intrinsic fluorescence analyses of structure-function relationships during alpha 2-macroglobulin-protease reactions. *Ann N Y Acad Sci*, 421, 125.
74. Glaser CB, Brodrick JW, Drechsel D, Karic L, Graceffo M, Largman C. (1982) Fluorescence polarization studies on the interaction of active site modified chymotrypsins with alpha1-protease inhibitor. *Biochemistry*, 21, 556.
75. Stauber WT, Ong SH. (1982) Fluorescence demonstration of a cathepsin H-like protease in cardiac, skeletal and vascular smooth muscles. *Histochem J*, 14, 585.
76. Straight DL, McKee PA. (1982) Effect of protease binding by alpha 2-macroglobulin on intrinsic fluorescence. *Biochemistry*, 21, 4550.
77. Surinrut P, Svasti J, Surarit R. (1981) Improved purification and fluorescence changes upon activation of human seminal plasma acidic protease proenzyme. *Biochim Biophys Acta*, 659, 38.
78. Grandi C, Dalzoppo D, Vita C, Fontana A. (1980) Fluorescence properties of neutral protease from *Bacillus subtilis*. *Int J Pept Protein Res*, 15, 430.
79. Kanazawa H. (1978) Acid proteases. II. Fluorescence study of the interaction of *Cladosporium* acid protease with glycyl-DL-norleucine methyl ester in the presence of cupric ions. *J Biochem*, 83, 665.
80. Jori G, Genov N. (1973) Fluorescence studies of the bacterial protease E-30-3. *Int J Pept Protein Res*, 5, 171.