

Title (en)  
COMPOSITIONS FOR THE DETECTION OF ENZYME ACTIVITY IN BIOLOGICAL SAMPLES AND METHODS OF USE THEREOF

Title (de)  
ZUSAMMENSETZUNGEN FÜR DEN NACHWEIS VON ENZYMAKTIVITÄT IN BIOLOGISCHEN PROBEN UND ENTSPRECHENDE VERFAHREN

Title (fr)  
COMPOSITIONS POUR LA DETECTION DE L'ACTIVITE ENZYMATIQUE DANS DES ECHANTILLONS BIOLOGIQUES ET LEURS PROCEDES D'UTILISATIONS

Publication  
**EP 1214445 A4 20070124 (EN)**

Application  
**EP 00961782 A 20000911**

Priority  
• US 0024882 W 20000911  
• US 39401999 A 19990910

Abstract (en)  
[origin: WO0118238A1] The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone conjugated to two fluorophores such that the fluorophores are located opposite sides of a cleavage site. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity fluorescent signal at a visible wavelength. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biological samples, in particular in frozen tissue sections. Thus this invention also provides for methods of detecting protease activity <i>in situ</i> in frozen sections.

IPC 1-7  
**C12Q 1/37**; **G01N 21/00**; **G01N 21/76**; **A61K 38/00**

IPC 8 full level  
**G01N 33/531** (2006.01); **C09K 11/07** (2006.01); **C12Q 1/02** (2006.01); **C12Q 1/37** (2006.01); **G01N 33/533** (2006.01)

CPC (source: EP)  
**C12Q 1/37** (2013.01); **G01N 33/533** (2013.01); **G01N 2333/96425** (2013.01)

Citation (search report)  
• [DXY] WO 9837226 A1 19980827 - ONCOIMMUNIN INC [US], et al  
• [PA] WO 0004914 A1 20000203 - CYTOVIA INC [US], et al  
• [Y] WANG G T ET AL: "A continuous fluorescence assay of renin activity.", ANALYTICAL BIOCHEMISTRY. 1 MAY 1993, vol. 210, no. 2, 1 May 1993 (1993-05-01), pages 351 - 359, XP002406820, ISSN: 0003-2697  
• [Y] MATAYOSHI E D ET AL: "NOVEL FLUOROGENIC SUBSTRATES FOR ASSAYING RETROVIRAL PROTEASES BY RESONANCE ENERGY TRANSFER", SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,, US, vol. 24, 23 February 1990 (1990-02-23), pages 954 - 958, XP002056345, ISSN: 0036-8075  
• [A] TOTH M V ET AL: "A SIMPLE CONTINUOUS FLUOROMETRIC ASSAY FOR HIV PROTEASE", INTERNATIONAL JOURNAL OF PEPTIDE AND PROTEIN RESEARCH, MUNKSGAARD, COPENHAGEN, DK, vol. 36, no. 6, 1990, pages 544 - 550, XP001160870, ISSN: 0367-8377  
• See references of WO 0118238A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 0118238 A1 20010315**; AU 7368800 A 20010410; CA 2384021 A1 20010315; EP 1214445 A1 20020619; EP 1214445 A4 20070124; JP 2003508080 A 20030304

DOCDB simple family (application)  
**US 0024882 W 20000911**; AU 7368800 A 20000911; CA 2384021 A 20000911; EP 00961782 A 20000911; JP 2001521773 A 20000911