

Title (en)

SCREENING OF HYDROLASE LIBRARIES FOR ENANTIOSELECTIVE ENZYMES

Title (de)

SIEBUNG DER HYDROLASEBIBLIOTHEKEN FÜR ENANTIOSELECTIVE ENZYME

Title (fr)

VISUALISATION DE REACTIONS CATALYSEES PAR DES ENZYMES UTILISANT DES INDICATEURS DE PH: CRIBLAGE RAPIDE DE BIBLIOTHEQUES D'HYDROLASES POUR DETECTER DES ENZYMES ENANTIOSELECTIVES

Publication

**EP 1095163 A2 20010502 (EN)**

Application

**EP 99935446 A 19990707**

Priority

- US 9915400 W 19990707
- US 9188098 P 19980707
- US 12570899 P 19990323

Abstract (en)

[origin: WO0001842A2] The use of pH indicators to monitor enzyme-catalyzed reactions is described. The formation of acid following an enzyme-mediated reaction, such as hydrolysis, causes a drop in the pH that can be visualized by a change in the color of the indicator-containing solution. Preferred indicators are those showing a color transition within the operational pH range of the enzyme. Using the present system, the enantioselectivity of enzymes such as lipases and esterases can be estimated using single isomers under the same conditions and comparing the color turnover for each one. The method is also useful for application to the hierarchical screening of a library of enzymes.

IPC 1-7

**C12Q 1/34**; **C12Q 1/37**; **C12Q 1/44**; **C12N 15/12**

IPC 8 full level

**C12N 9/18** (2006.01); **C12N 15/10** (2006.01); **C12Q 1/34** (2006.01); **C12Q 1/37** (2006.01); **C12Q 1/44** (2006.01)

CPC (source: EP)

**C12N 9/18** (2013.01); **C12N 15/1034** (2013.01); **C12Q 1/34** (2013.01); **C12Q 1/37** (2013.01); **C12Q 1/44** (2013.01)

Citation (search report)

See references of WO 0001842A2

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 0001842 A2 20000113**; **WO 0001842 A3 20000504**; **WO 0001842 A8 20000608**; AU 5092499 A 20000124; CA 2332638 A1 20000113; EP 1095163 A2 20010502

DOCDB simple family (application)

**US 9915400 W 19990707**; AU 5092499 A 19990707; CA 2332638 A 19990707; EP 99935446 A 19990707