

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

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Application
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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.

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