

Title (en)
METHOD OF CATALYZING STEREOCHEMICAL REACTIONS

Publication
EP 0431060 A4 19910925 (EN)

Application
EP 89910248 A 19890825

Priority
US 23730588 A 19880826

Abstract (en)
[origin: WO9002192A1] A method for increasing the rate of a chemical reaction involving conversion of at least one reactant to at least one product which comprises contacting the reactant with at least one appropriate monoclonal antibody to the reactant under suitable conditions permitting formation of a complex between the monoclonal antibody and the reactant, conversion of the reactant to the product and release of the product from the complex, the monoclonal antibody being characterized by a $K > 1$, where $K = k_r/k_p$, k_r is the affinity constant of the monoclonal antibody for the reactant and k_p is the affinity constant of the monoclonal antibody for the product, by an $r_1 > r_0$, where r_1 is the rate of formation of the complex between the antibody and the reactant and where r_0 is the rate of the chemical reaction in the absence of monoclonal antibody, by an $r_2 > r_0$, where r_2 is the rate of the conversion of the complexed reactant to the complexed product and by an $r_3 > r_0$, where r_3 is the rate of release of the product from the complex.

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Citation (search report)

- [X] WO 8502414 A1 19850606 - IGEN INC [US]
- [XP] WO 8809380 A1 19881201 - SCRIPPS CLINIC RES [US]
- [X] JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol. 110, no. 16, 3rd August 1988, pages 5593-5594, American Chemical Society; D. HILVERT et al.: "Stereospecific claisen rearrangement catalyzed by an antibody"
- See references of WO 9002192A1

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