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(54) Title: ASSAY METHODS FOR STATE-DEPENDENT CALCIUM CHANNEL AGONISTS/ANTAGONISTS

(57) Abstract: Methods of identifying activators and inhibitors of voltage-gated ion channels are provided in which the methods employ cells transfected with a voltage-gated ion channel of interest and a corollary channel to control the membrane potential of the cells by changing extracellular ion concentration. This allows for more convenient, more precise experimental manipulation of these transitions, and, coupled with efficient methods of detecting the result of ion flux through the channels, provides methods that are especially suitable for high throughput screening.



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# INTERNATIONAL SEARCH REPORT

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(7) : C12N 5/00 US CL : 435/325, 4 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 435/325, 4  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,962,477 A (MAK et al) 05 October 1999 (05.10.1999), see entire document.	1-14
A	US 5,043,457 A (LEE) 27 August 1991 (27.08.1991), see entire document.	1-14
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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