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(54) Title: DETECTING CELL MEMBRANE PROTEIN ENDOCYTOSIS

(57) Abstract: Methods and reagents are provided for determining endocytosis, using a cell expressing an externally polypeptide labeled cell membrane receptor, and as a reagent an antibody to said label conjugated to a fragment of an enzyme fragment complementation pair. Compounds are tested for their effect on endocytosis by complexing the reagent with said cells, adding the test compound at any time in relation to the complexing, allowing any endocytosis to occur, proteolytically degrading external enzyme fragment, adding protease inhibitor and the complementary member of the enzyme fragment complementation pair and substrate. The product provides a detectable signal related to the amount of endocytosis that occurred. The method is readily automated as all steps can occur in a single vessel without separations and washings.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/35783

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| A. CLASSIFICATION OF SUBJECT MATTER IPC: G01N 33/535(2006.01) C12Q 1/34(2006.01) USPC: 435/7.2,7.21,7.6,18,962 According to International Patent Classification (IPC) or to both national classification and IPC | | |
| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 435/7.2,7.21,7.6,18,962 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Please See Continuation Sheet Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| A --- X | US 6,759,206 B1 (RUBIN et al) 06 July 2004. See column 5, lines 49-51 and column 29, lines 25-67. | 1-9 ----- 10 |
| A,E --- X,E | US 2005/0136488 A1 (HORECKA et al) 23 June 2005. See paragraphs [0029]-[0036], [0041]-[0043], [0056]-[0071] and [0077]. | 1-9 ----- 10 |
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| Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P O Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201 | Authorized officer David A. Saunders, PhD Telephone No. 571-272-0507 | |

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Continuation of B. FIELDS SEARCHED Item 2:

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