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(54) Title: A METHOD OF IDENTIFYING CFTR-BINDING COMPOUNDS USEFUL FOR ACTIVATING CHLORIDE CONDUCTANCE IN ANIMAL CELLS

(57) Abstract

The present invention provides a method of identifying CFTR-binding compounds for treating cells having a reduced apical Cl^- conductance, such as cystic fibrosis cells. This identification method involves the use of polypeptide Iα, which constitutes a portion of the CFTR protein. The present invention also provides a method of treating CF cells by contacting cells having a reduced apical Cl^- conductance with a therapeutically effective quantity of a compound selected by the present inventive identification method. Preferred compounds for such treatment have little or no affinity for adenosine cell receptors. The present invention provides novel compounds useful in practicing the present inventive method, as well as pharmaceutical compositions containing such compounds.