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(54) Title: MUTANT BORDETELLA STRAINS AND METHODS FOR USE

(57) Abstract: A method of reducing or preventing the development of airway inflammation in a subject includes the step of infecting the respiratory tract of a subject an amount of a composition including a pharmaceutically acceptable carrier and live attenuated pertactin-deficient Bordetella bacteria sufficient to colonize the respiratory tract of the subject. The step of infecting the subject with the live attenuated pertactin-deficient Bordetella bacteria results in reduction or prevention of the development of airway inflammation in the subject.



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