

ABSTRACT

The invention is generally directed to methods of promoting normal respiratory tract airflow in patients with restricted airflow and ciliary
5 clearance caused by the presence of pathological airway contents, and particularly mucoid contents. Actin-binding proteins are administered into the respiratory tract of a patient with a pathological respiratory condition involving the presence of such contents. The
10 actin-binding protein binds to actin polymers in the contents and decreases the viscosity. The actin-binding proteins also prevent actin from binding to exogenous or endogenous DNase I, thus increasing the degradation of DNA polymers in the contents.