



(51) International Patent Classification:

A61K 31/7008 (2006.01) C07K 14/79 (2006.01)
A61K 31/7012 (2006.01) C12N 9/36 (2006.01)
A61K 38/40 (2006.01)

(21) International Application Number:

PCT/US2017/019535

(22) International Filing Date:

24 February 2017 (24.02.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/299,775 25 February 2016 (25.02.2016) US

(71) Applicant: **APPLIED BIOLOGICAL LABORATOR-
IES, INC.** [US/US]; 760 Parkside Avenue, Room 317,
Brooklyn, NY 11226 (US).

(72) Inventor: **LATEFI, Nazlie**; 160 Chambers Street, Apt. 3,
New York, NY 10007 (US).

(74) Agent: **BALL, Jonathan, D.**; Greenberg Traurig, LLP,
200 Park Avenue, 38th Fl., New York, NY 10166 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN,
KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA,
MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG,
NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS,
RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY,
TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ,
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: COMPOSITIONS AND METHODS FOR PROTECTING AGAINST AIRBORNE PATHOGENS AND IRRITANTS

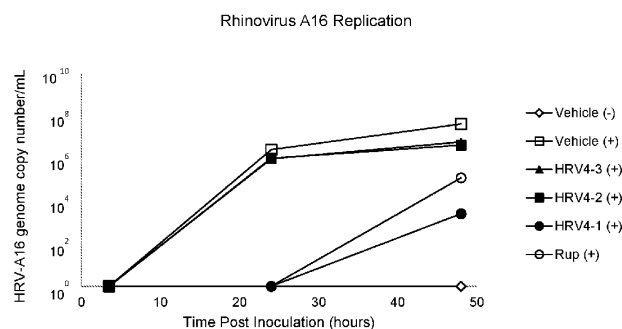


FIG. 17

(57) Abstract: The present disclosure features methods and compositions for enhancing the ability of the respiratory membranes to filter airborne pathogens and protect a subject from respiratory infections that result from inhalation of such pathogens. In particular, the disclosure provides antimicrobial compositions that prevent and treat respiratory infections caused by bacteria, fungi, and viruses.