



- (51) International Patent Classification:
C12N 1/00 (2006.01) *A61K 38/00* (2006.01)
- (21) International Application Number:
PCT/EP2015/054131
- (22) International Filing Date:
27 February 2015 (27.02.2015)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/946,372 28 February 2014 (28.02.2014) US
- (71) Applicant: **BAYER ANIMAL HEALTH GMBH**
[DE/DE]; 51368 Leverkusen (DE).
- (72) Inventors: **EICKER, Andrea**; Ruckes 101, 41238
Mönchengladbach (DE). **WEHLMANN, Hermann**; Mas-
tweg 3a, 42349 Wuppertal (DE). **MUNNES, Marc**; Am
Schimmelskämpchen 14, 40699 Erkrath-Hochdahl (DE).
SCHAUER, Romina; 15607 W 90th Street, Lenexa, Kan-
sas 66219 (US). **ABRAHAM, Albert**; 14805 West 72nd
Street, Shawnee, Kansas 66216 (US). **WEISS, Christian**;
Imbach 27, 51381 Leverkusen (DE). **FELDHUES, Elisa-
beth**; Sauerbruchstr. 18, 51465 Bergisch Gladbach (DE).
- (74) Agent: **BIP PATENTS**; c/o Bayer Intellectual Property
GmbH, Alfred-Nobel-Str. 10, 40789 Monheim am Rhein
(DE).

- (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, 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, KN, KP, KR,
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))
- with sequence listing part of description (Rule 5.2(a))

(54) Title: IMMUNOSTIMULATORY PLASMIDS

(57) Abstract: The present invention relates to immunomodulator compositions and methods of use as well as methods of making. The immunomodulator compositions comprise immunostimulatory plasmids, or DNA sequence, capable of eliciting an immune response in a recipient subject. Further, the immunostimulatory plasmids, or DNA sequence, do not contain antibiotic resistance coding sequence to help reduce the potential of horizontal transfer of antibiotic resistance in a population.

