

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
09 December 2021 (09.12.2021)



(10) International Publication Number
WO 2021/247672 A1

(51) International Patent Classification:

C12N 15/90 (2006.01) C12N 15/85 (2006.01)
C12N 15/63 (2006.01)

(21) International Application Number:

PCT/US2021/035404

(22) International Filing Date:

02 June 2021 (02.06.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/033,514 02 June 2020 (02.06.2020) US
63/033,516 02 June 2020 (02.06.2020) US

(71) Applicant: CATALENT PHARMA SOLUTIONS, LLC
[US/US]; 14 Schoolhouse Road, Somerset, New Jersey
08873 (US).

(72) Inventors: BLECK, Gregory, T.; c/o Catalent Pharma So-
lutions, LLC, 14 Schoolhouse Road, Somerset, New Jersey
08873 (US). KRAVITZ, Rachel, H.; c/o Catalent Pharma
Solutions, LLC, 14 Schoolhouse Road, Somerset, New Jer-
sey 08873 (US). HALL, Chad, A.; c/o Catalent Pharma So-
lutions, LLC, 14 Schoolhouse Road, Somerset, New Jersey
08873 (US).

(74) Agent: JONES, J., Mitchell; Casimir Jones, S.C., 2275
Deming Way, Suite 310, Middleton, Wisconsin 53562
(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, IT, JO, 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, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))
- with sequence listing part of description (Rule 5.2(a))

(54) Title: NUCLEIC ACID CONSTRUCTS FOR PROTEIN MANUFACTURE

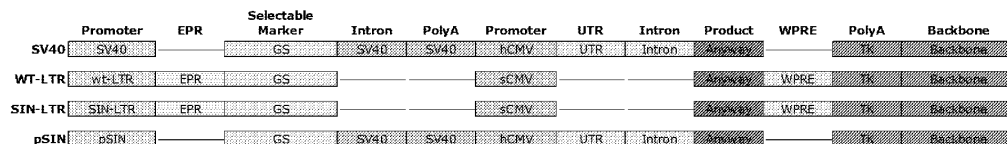


FIG. 1

(57) Abstract: The present invention relates to nucleic acid constructs and their use to develop host cell lines for production of a protein of interest, and in particular to nucleic acid constructs which allow for improved selection to develop high-producing cell lines.



WO 2021/247672 A1