



(51) International Patent Classification:

A23L 13/00 (2016.01) A23J 3/14 (2006.01)
C12N 5/00 (2006.01)

(21) International Application Number:

PCT/US2023/065934

(22) International Filing Date:

19 April 2023 (19.04.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/332,554 19 April 2022 (19.04.2022) US
63/356,716 29 June 2022 (29.06.2022) US

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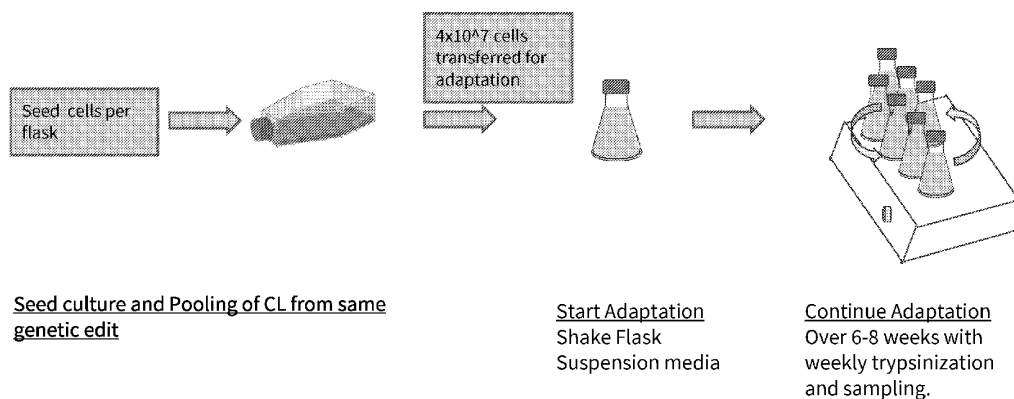
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, 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,

(54) Title: ENGINEERED BOVINE CELL LINES FOR SUSPENSION CULTURE

FIG. 1

Adaptation workflow and media



(57) Abstract: The present disclosure provides genetically modified cell lines comprising i) reduced protein activity of one or more of PTEN, CASP3, CASP8, CDH1, ITGB1, RB1, IGFBP4, p21, p27, p16, and p18; ii) increased protein activity of SRC; iii) increased protein activity of TERT; and/or iv) reduced protein activity of p53. Further provided are cell-based meat products comprising an ingredient derived from such genetically modified cell lines. The disclosure relates to culturing myogenic cells in suspension state. Methods of generating such cell lines, cell culture and preparation of corresponding cell-based meat products are also provided herein.

[Continued on next page]

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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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))*