



(51) International Patent Classification:

G01N 33/542 (2006.01) G01N 33/574 (2006.01)

G01N 33/573 (2006.01)

(21) International Application Number:

PCT/PL2022/050088

(22) International Filing Date:

05 December 2022 (05.12.2022)

(25) Filing Language:

Polish

(26) Publication Language:

English

(30) Priority Data:

P.439760 07 December 2021 (07.12.2021) PL

(71) Applicant: URTESTE S.A. [PL/PL]; Ul. Starodworska 1, 80-137 Gdańsk (PL).

(72) Inventors: LESNER, Adam; Ul. Zielone Wzgórze 35, 83-330 Pępowo (PL). GRUBA, Natalia; Ul. Bursztynowa 16, 84-242 Kęłowo (PL).

(74) Agent: KAWCZYŃSKA, Marta; Ul. Bluszczańska 73, 00-712 Warszawa (PL).

(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, 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.

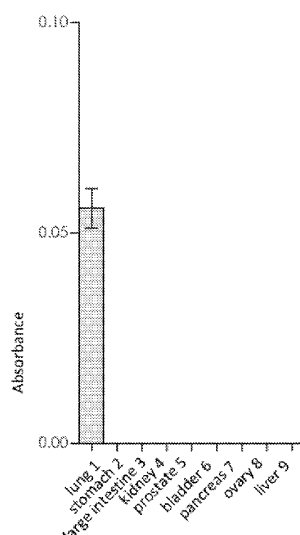
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, 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).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

(54) Title: FRET ENZYMATIC SUBSTRATE AND USES THEREOF IN LUNG CANCER.

Fig. 3



(57) Abstract: The invention relates to a novel chemical compound - a diagnostic marker for use in medicine, more specifically in cancer diagnosis, in particular the diagnosis of lung cancer. The invention also relates to an in vitro method for detecting enzymatic activity present in a subject's body fluid, in particular derived from lung cancer cells, using the compound. The invention further relates to an in vitro method for diagnosing lung cancer using the compound, a kit comprising the compound and use of the compound for the detection of enzymatic activity specific to lung cancer and use of the compound for the diagnosis of lung cancer. The invention also relates to the compound for use as a diagnostic marker of lung cancer and a method for the treatment of lung cancer comprising a step of carrying out the method for the diagnosis of lung cancer as defined above using the compound.

Published:

- *with international search report (Art. 21(3))*
- *with amended claims (Art. 19(1))*
- *with sequence listing part of description (Rule 5.2(a))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*