

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2020/260309 A1

(43) International Publication Date
30 December 2020 (30.12.2020)

(51) International Patent Classification:

C12Q 1/37 (2006.01) *A61K 49/00* (2006.01)
C07K 5/12 (2006.01) *C07K 5/103* (2006.01)
G01N 33/574 (2006.01)

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).

(21) International Application Number:

PCT/EP2020/067542

(22) International Filing Date:

23 June 2020 (23.06.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

P.430348	24 June 2019 (24.06.2019)	PL
20150093.1	02 January 2020 (02.01.2020)	EP
20166354.9	27 March 2020 (27.03.2020)	EP

Published:

- with international search report (Art. 21(3))
- with amended claims (Art. 19(1))
- with sequence listing part of description (Rule 5.2(a))

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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, 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, 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,

(54) Title: NOVEL DIAGNOSTIC MARKER FOR PANCREATIC CANCER

(57) Abstract: The invention provides a compound characterized by formula (I): X1-Thr-Thr-Ala-Arg-X2, wherein cleavage of the compound into a fragment 1 comprising X1 and a fragment 2 comprising X2 generates a detectable signal. The invention further provides an *in vitro* method for detecting protease activity in a subject's body fluid, comprising contacting the body fluid with the compound of the invention and detecting a signal, wherein the body fluid may comprise a hydrolytic enzyme derived from pancreatic cancer cells. Furthermore, the invention provides a kit comprising the compound of the invention and a measurement buffer. In addition, the invention provides the use of the compound, the *in vitro* method or the kit of the invention for the detection of pancreatic cancer, or for monitoring a subject that is suspected of having pancreatic cancer, has an increased risk of developing pancreatic cancer, or has had pancreatic cancer. The invention also provides the use of the compound of the invention in a method of treating pancreatic cancer, the method comprising carrying out the *in vitro* method for detecting protease activity in a subject's body fluid, and treating pancreatic cancer in a subject for which protease activity, has been detected.

WO 2020/260309 A1