

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
25 October 2018 (25.10.2018)



(10) International Publication Number
WO 2018/193084 A1

(51) International Patent Classification:

A61K 45/06 (2006.01) A61P 35/00 (2006.01)
G01N 33/00 (2006.01) A61P 35/02 (2006.01)
A61K 31/7064 (2006.01) A61K 31/00 (2006.01)
A61K 31/7088 (2006.01) A61K 38/00 (2006.01)
A61K 31/713 (2006.01) A61K 38/19 (2006.01)

(21) International Application Number:

PCT/EP2018/060172

(22) International Filing Date:

20 April 2018 (20.04.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

17167295.9 20 April 2017 (20.04.2017) EP

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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, 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))
- 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: INTRACELLULAR KINASE ASSOCIATED WITH RESISTANCE AGAINST ANTI-TUMOUR IMMUNE
RESPONSES, AND USES THEREOF

(57) Abstract: The invention is based on the surprising finding that SIK3 is associated with resistance against anti-tumour immune responses. In particular, the invention provides methods for treating proliferative diseases using inhibitors of SIK3, especially nucleic acid or small molecule inhibitors of SIK3. Also provided are methods of sensitising cells involved with a proliferative disorder against the cytotoxic effect of certain pro-inflammatory signalling pathways, and/or to kill such cells and/or methods for treating proliferative diseases, using a SIK3 inhibitor together with ligands or agonists of such signalling pathways. Other methods provided by the invention include those involving SIK3 inhibitors to enhance or overcome certain side effects associated with treatments that utilise such signalling pathways, as well as diagnostic, prognostic and monitoring methods and kits based on the detection of SIK3 in a sample obtained from a subject, and screening methods useful for identifying or characterising inhibitors of SIK3.



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