

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 14247-525-228	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2020/031067	International filing date (<i>day/month/year</i>) 1 May 2020 (01-05-2020)	(Earliest) Priority Date (<i>day/month/year</i>) 3 May 2019 (03-05-2019)
Applicant SUTRO BIOPHARMA, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of:

- ☒ the international application in the language in which it was filed
☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6**bis**(a)).

c. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (see Box No III)

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant
☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☒ the text is approved as submitted by the applicant
☐ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 1
☒ as suggested by the applicant
☐ as selected by this Authority, because the applicant failed to suggest a figure
☐ as selected by this Authority, because this figure better characterizes the invention
b. ☐ none of the figures is to be published with the abstract

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2020/031067

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.c of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of a sequence listing:
- a. ☒ forming part of the international application as filed:
- ☒ in the form of an Annex C/ST.25 text file.
- ☐ on paper or in the form of an image file.
- b. ☐ furnished together with the international application under PCT Rule 13~~ter~~.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
- c. ☐ furnished subsequent to the international filing date for the purposes of international search only:
- ☐ in the form of an Annex C/ST.25 text file (Rule 13~~ter~~.1(a)).
- ☐ on paper or in the form of an image file (Rule 13~~ter~~.1(b) and Administrative Instructions, Section 713).
2. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2020/031067

A. CLASSIFICATION OF SUBJECT MATTER

INV. C07K16/28 A61K31/00 A61K39/395 A61K47/06 A61P35/00
A61P35/02 A61K47/68
ADD. A61K39/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C07K A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2014/089335 A2 (AMGEN INC [US]) 12 June 2014 (2014-06-12) page 149, line 10 - line 12 page 155; table 5 page 157, line 6 - line 10 page 159 - page 161; example 6 page 161, line 10 - line 12 example 9 page 180, line 14 - line 15 ----- -/-	1-32



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

20 July 2020

Date of mailing of the international search report

24/07/2020

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Malamoussi, A

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2020/031067

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2019/040152 A1 (KINNEER KRISTA [US] ET AL) 7 February 2019 (2019-02-07) abstract paragraph [0076] figure 1 example 4 figure 2 example 5 figure 4 table 3	1-32
Y	----- WO 2015/166073 A1 (MAX DELBRÜCK CT FÜR MOLEKULARE MEDIZIN [DE]) 5 November 2015 (2015-11-05) page 18, line 11 - line 28 page 29, line 3 - line 17 page 43, line 15 - line 19 figures 1, 10	1-32
Y	----- WO 2017/132617 A1 (SUTRO BIOPHARMA INC [US]) 3 August 2017 (2017-08-03) cited in the application paragraph [00526] page 177; table 2 page 179; table 3 page 181, paragraph 00547 paragraph [0092]	1-32
Y	----- US 2019/083641 A1 (STAFFORD RYAN [US] ET AL) 21 March 2019 (2019-03-21) paragraph [0461] page 73 table 5 paragraph [0466] table 16 examples 10-12 table 14 paragraph [0474] -----	1-32

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2020/031067

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2014089335	A2	12-06-2014	AR 093867 A1 24-06-2015
		AU 2013355172 A1 11-06-2015	
		BR 112015012933 A2 12-09-2017	
		CA 2894257 A1 12-06-2014	
		CL 2015001507 A1 18-12-2015	
		CN 105143263 A 09-12-2015	
		EA 201591091 A1 29-02-2016	
		EP 2928922 A2 14-10-2015	
		HK 1212711 A1 17-06-2016	
		JP 6437922 B2 12-12-2018	
		JP 2016500256 A 12-01-2016	
		JP 2019031510 A 28-02-2019	
		KR 20150093744 A 18-08-2015	
		MX 363320 B 20-03-2019	
		PE 20151146 A1 21-08-2015	
		PH 12015501284 A1 24-08-2015	
		SG 11201504248W A 29-06-2015	
		TN 2015000247 A1 03-10-2016	
		TW 201425336 A 01-07-2014	
		US 2015344583 A1 03-12-2015	
		UY 35173 A 30-05-2014	
		WO 2014089335 A2 12-06-2014	
		ZA 201504023 B 28-04-2016	
US 2019040152	A1	07-02-2019	AU 2018311503 A1 05-03-2020
		CA 3070539 A1 07-02-2019	
		CN 110997721 A 10-04-2020	
		CO 2020000772 A2 31-01-2020	
		CR 20200100 A 09-05-2020	
		EP 3661963 A1 10-06-2020	
		KR 20200035066 A 01-04-2020	
		SG 11202000499R A 27-02-2020	
		TW 201920286 A 01-06-2019	
		US 2019040152 A1 07-02-2019	
		WO 2019025983 A1 07-02-2019	
WO 2015166073	A1	05-11-2015	AU 2015254526 A1 10-11-2016
		BR 112016024546 A2 23-01-2018	
		CA 2944962 A1 05-11-2015	
		CN 106661109 A 10-05-2017	
		EP 3137500 A1 08-03-2017	
		JP 2017515470 A 15-06-2017	
		KR 20170062419 A 07-06-2017	
		SG 11201608415Q A 29-11-2016	
		UA 121031 C2 25-03-2020	
		US 2017166649 A1 15-06-2017	
		US 2019112382 A1 18-04-2019	
		WO 2015166073 A1 05-11-2015	
WO 2017132617	A1	03-08-2017	AU 2017212739 A1 26-07-2018
		BR 112018015238 A2 18-12-2018	
		CA 3011455 A1 03-08-2017	
		CN 109069664 A 21-12-2018	
		EP 3407917 A1 05-12-2018	
		JP 2019506385 A 07-03-2019	
		KR 20180104106 A 19-09-2018	
		RU 2018130757 A 27-02-2020	
		SG 11201806419R A 30-08-2018	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2020/031067

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		US 2019144546 A1	16-05-2019
		WO 2017132615 A1	03-08-2017
		WO 2017132617 A1	03-08-2017

US 2019083641	A1	21-03-2019	
		AU 2018333945 A1	26-03-2020
		CA 3075087 A1	21-03-2019
		EP 3684814 A1	29-07-2020
		KR 20200051802 A	13-05-2020
		SG 11202002310U A	29-04-2020
		US 2019083641 A1	21-03-2019
		US 2020147229 A1	14-05-2020
		WO 2019055909 A1	21-03-2019
		WO 2019055931 A1	21-03-2019
