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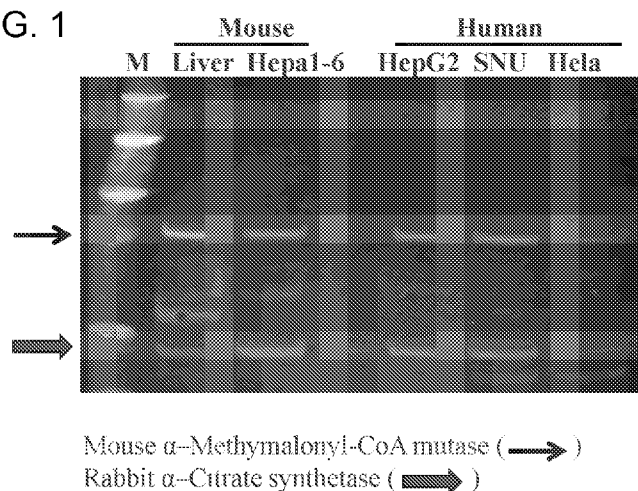
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(54) Title: POLYNUCLEOTIDES ENCODING METHYLMALONYLCOA MUTASE AND COMPOSITION CONTAINING THEM

FIG. 1



(57) Abstract: The disclosure relates to polynucleotides comprising an open reading frame of linked nucleosides encoding human methylmalonyl-CoA mutase precursor, human methylmalonyl-CoA mutase (MCM) mature form, or functional fragments thereof. In some embodiments, the disclosure includes methods of treating methylmalonic acidemia in a subject in need thereof comprising administering a polynucleotide sequence encoding an MCM polypeptide.

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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER INV. A61K38/52 A61K9/127 C12N9/90 C12N15/52 A61P3/00 A61P43/00 ADD.		
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) A61K C12N 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, CHEM ABS Data, BIOSIS, 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 2016/172574 A2 (THE UNITED STATES OF AMERICA) 27 October 2016 (2016-10-27) the whole document -----	1-29
Y	WO 2013/086373 A1 (ALNYLAM INC.) 13 June 2013 (2013-06-13) the whole document -----	1-29
X,P	WO 2017/106799 A1 (MODERNATX) 22 June 2017 (2017-06-22) the whole document -----	1-20
Y	WO 2013/151666 A2 (MODERNA THERAPEUTICS) 10 October 2013 (2013-10-10) the whole document -----	1-29
☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.		
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Date of the actual completion of the international search 29 November 2018		Date of mailing of the international search report 21/12/2018
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 Masturzo, Pietro

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2016172574 A2	27-10-2016	EP 3285812 A2	28-02-2018
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		WO 2013151666 A2	10-10-2013

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2018/037343

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)).
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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: