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(71) Applicant: **BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM** [US/US]; 210 West 7th Street, Austin, Texas 78701 (US).

(72) Inventors: **BASAR, Rafet**; c/o U.T.M.D. Anderson Cancer Center, Stem Cell Transplantation & Cell Therapy, 1515 Holcombe Blvd., Unit # 0065, Houston, Texas 77030 (US).  
**SHPALL, Elizabeth**; c/o U.T.M.D. Anderson Cancer Center, Stem Cell Transplantation & Cell Therapy, 1515 Hol-

combe Blvd., Unit # 0065, Houston, Texas 77030 (US).  
**REZVANI, Katy**; c/o U.T.M.D. Anderson Cancer Center, Stem Cell Transplantation & Cell Therapy, 1515 Holcombe Blvd., Unit # 0065, Houston, Texas 77030 (US).

(74) Agent: **MELISSA SISTRUNK**; Norton Rose Fulbright US LLP, 1301 McKinney Suite 5100, Houston, Texas 77010 (US).

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(54) Title: MULTIPLEX GENOME EDITING OF IMMUNE CELLS TO ENHANCE FUNCTIONALITY AND RESISTANCE TO SUPPRESSIVE ENVIRONMENT

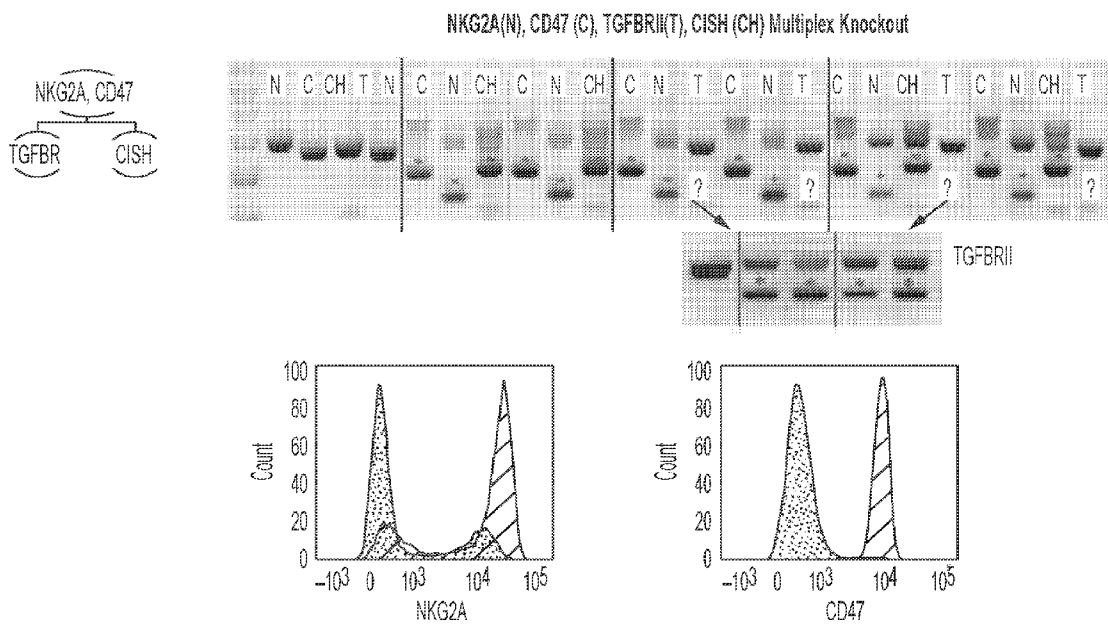


FIG. 1

(57) Abstract: Provided herein are methods for producing immune cells with disruption of multiple genes. Further provided are methods for inserting a chimeric antigen receptor at a gene locus of an immune cell.

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,  
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**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. C12N15/10 C12N5/10 C12N15/86 A61K35/17 A61P35/00  
 C12N5/078 C12N9/22  
 ADD.  
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**B. FIELDS SEARCHED**  
 Minimum documentation searched (classification system followed by classification symbols)  
 A61K C40B 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, BIOSIS, EMBASE, FSTA, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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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	"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
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  20 May 2020	Date of mailing of the international search report  29/05/2020
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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  Ripaud, Leslie
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International application No  
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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International application No PCT/US2019/063641
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