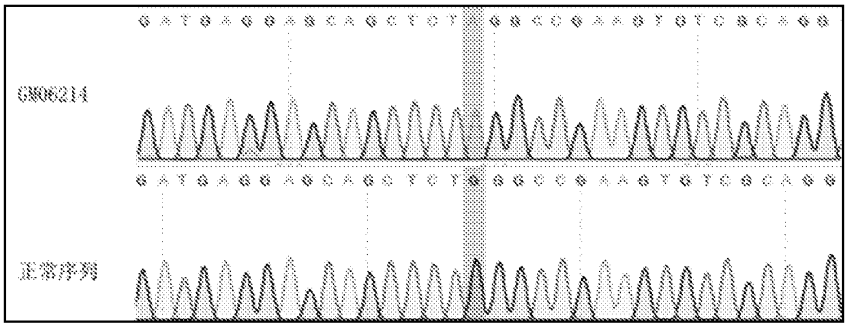
GM06214
正常序列

图 1

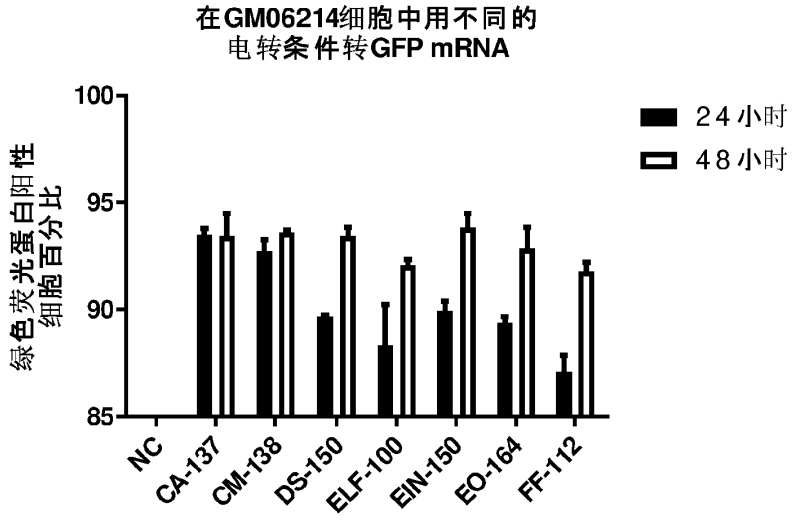
在GM06214细胞中用不同的
电转条件转GFP mRNA
绿色荧光蛋白阳性
细胞百分比
100
95
90
85
24小时
48小时
NC
CA-137
CM-138
DS-150
ELF-100
EIN-150
EO-164
FF-112

图 2

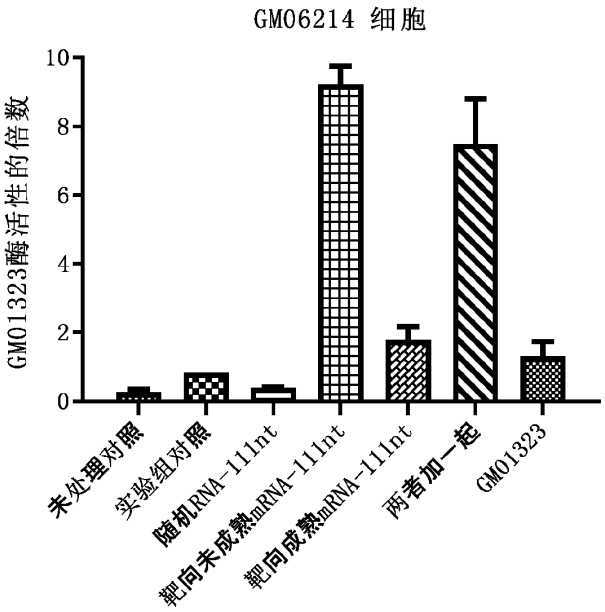
GM06214 细胞
GM01323酶活性的倍数
10
8
6
4
2
0
未处理对照
实验组对照
随机RNA-111nt
靶向未成熟mRNA-111nt
靶向成熟mRNA-111nt
两者加一起
GM01323

图 3A

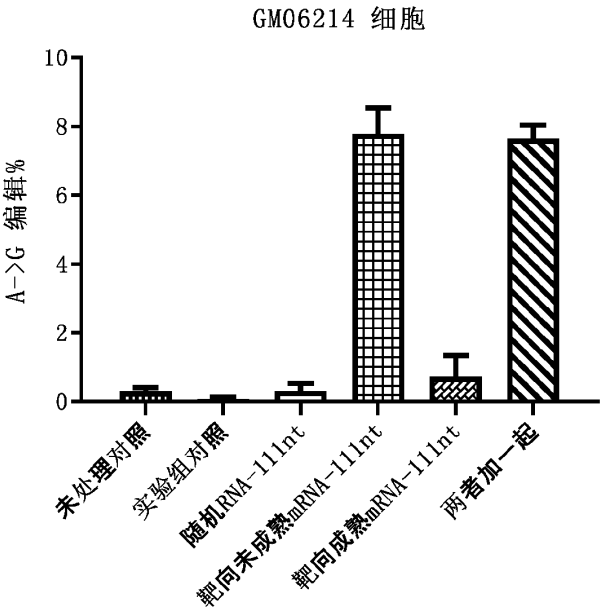
GM06214 细胞
A->G 编辑%
10
8
6
4
2
0
未处理对照
实验组对照
随机RNA-111nt
靶向未成熟mRNA-111nt
靶向成熟mRNA-111nt
两者加一起

图 3B

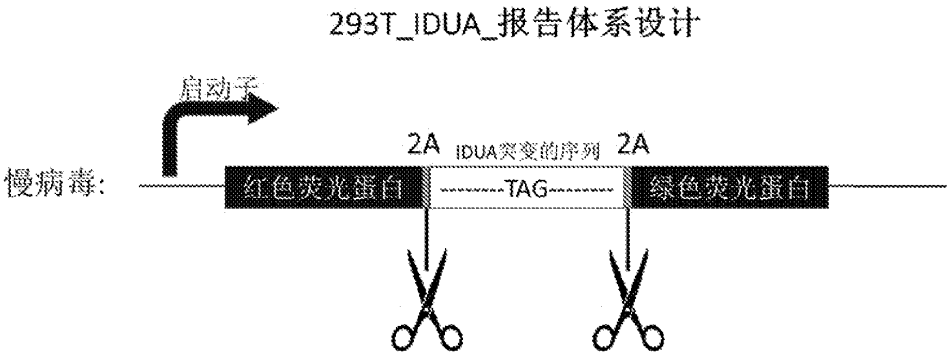
293T_IDUA_报告体系设计
启动子
慢病毒:
2A
IDUA突变的序列
2A
红色荧光蛋白
--------TAG--------
绿色荧光蛋白

图 4A

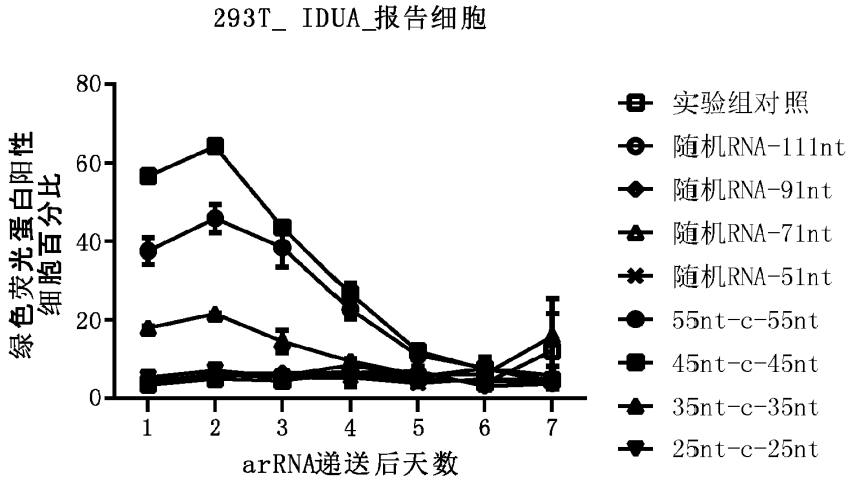
293T_ IDUA_报告细胞
绿色荧光蛋白阳性细胞百分比
80
60
40
20
0
1
2
3
4
5
6
7
arRNA递送后天数
实验组对照
随机RNA-111nt
随机RNA-91nt
随机RNA-71nt
随机RNA-51nt
55nt-c-55nt
45nt-c-45nt
35nt-c-35nt
25nt-c-25nt

图 4B

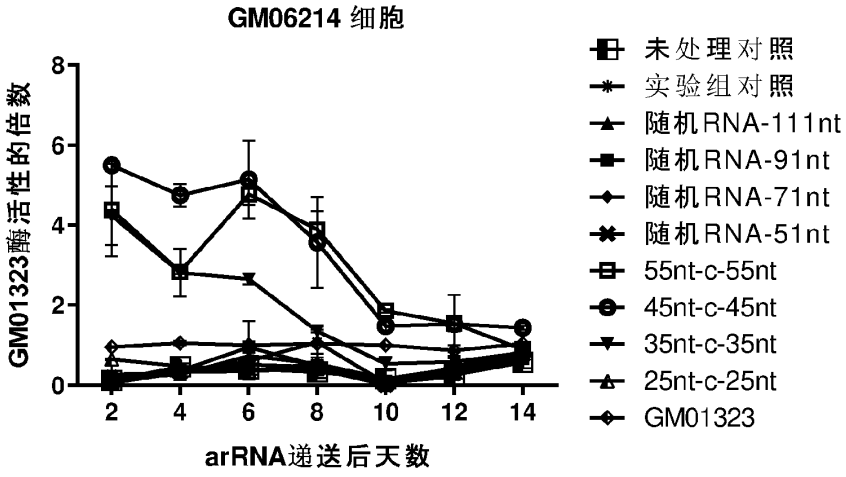
GM06214 细胞
GM01323酶活性的倍数
arRNA递送后天数
未处理对照
实验组对照
随机RNA-111nt
随机RNA-91nt
随机RNA-71nt
随机RNA-51nt
55nt-c-55nt
45nt-c-45nt
35nt-c-35nt
25nt-c-25nt
GM01323

图 5A

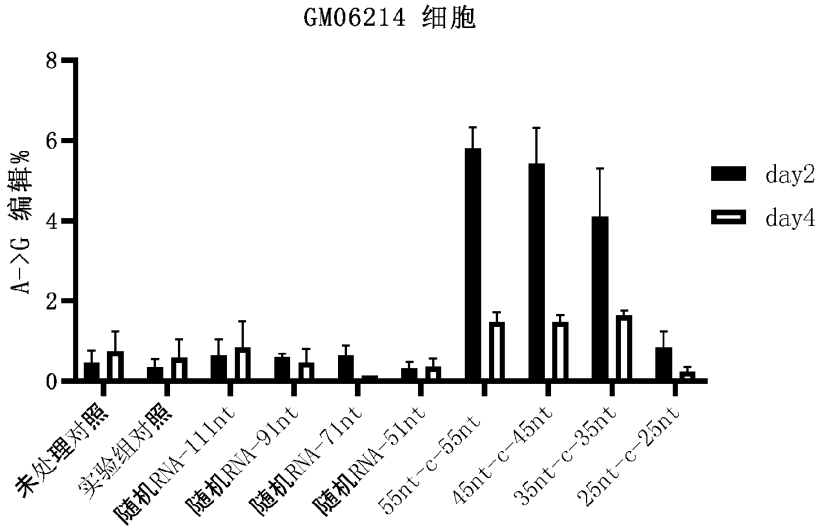
GM06214 细胞
A->G 编辑%
day2
day4
未处理对照
实验组对照
随机RNA-111nt
随机RNA-91nt
随机RNA-71nt
随机RNA-51nt
55nt-c-55nt
45nt-c-45nt
35nt-c-35nt
25nt-c-25nt

图 5B

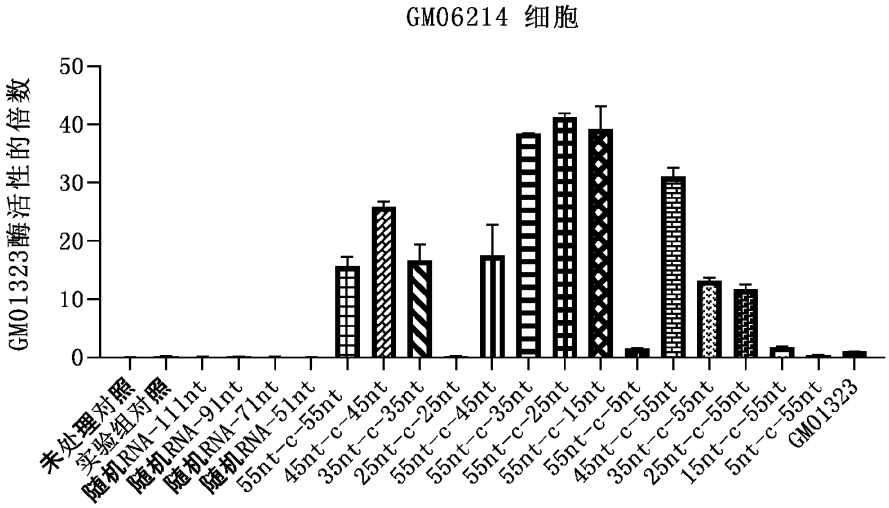
GM06214 细胞
GM01323酶活性的倍数
50
40
30
20
10
0
未处理对照
实验组对照
随机RNA-111nt
随机RNA-91nt
随机RNA-71nt
随机RNA-51nt
55nt-c-55nt
45nt-c-45nt
35nt-c-35nt
25nt-c-25nt
55nt-c-45nt
55nt-c-35nt
55nt-c-25nt
55nt-c-15nt
55nt-c-5nt
45nt-c-55nt
35nt-c-55nt
25nt-c-55nt
15nt-c-55nt
5nt-c-55nt
GM01323

图 6

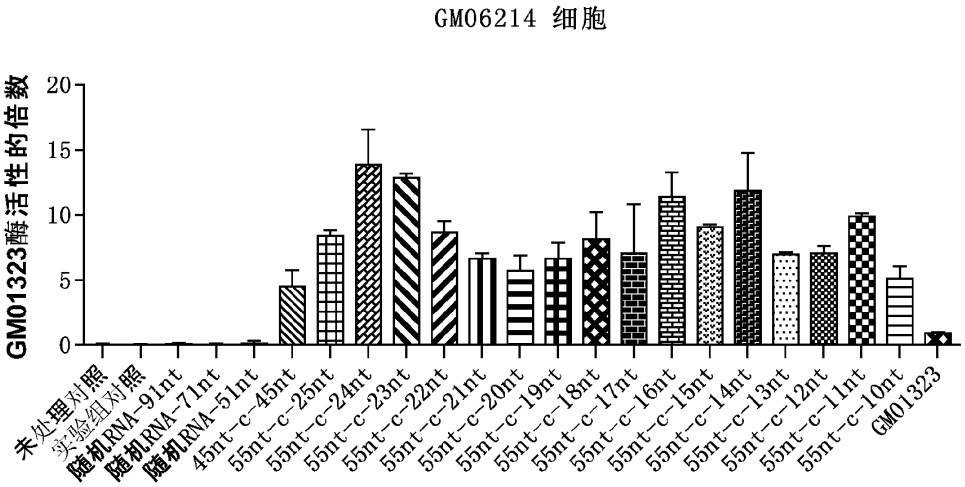
GM06214 细胞
GM01323酶活性的倍数
20
15
10
5
0
未处理对照
实验组对照
随机RNA-91nt
随机RNA-71nt
随机RNA-51nt
45nt-c-45nt
55nt-c-25nt
55nt-c-24nt
55nt-c-23nt
55nt-c-22nt
55nt-c-21nt
55nt-c-20nt
55nt-c-19nt
55nt-c-18nt
55nt-c-17nt
55nt-c-16nt
55nt-c-15nt
55nt-c-14nt
55nt-c-13nt
55nt-c-12nt
55nt-c-11nt
55nt-c-10nt
GM01323

图 7A

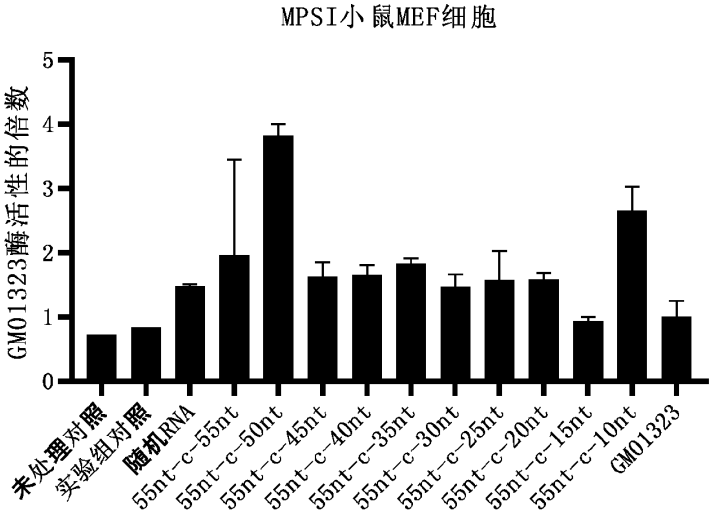
MPSI小鼠MEF细胞
GM01323酶活性的倍数
0
1
2
3
4
5
未处理对照
实验组对照
随机RNA
55nt-c-55nt
55nt-c-50nt
55nt-c-45nt
55nt-c-40nt
55nt-c-35nt
55nt-c-30nt
55nt-c-25nt
55nt-c-20nt
55nt-c-15nt
55nt-c-10nt
GM01323

图 7B

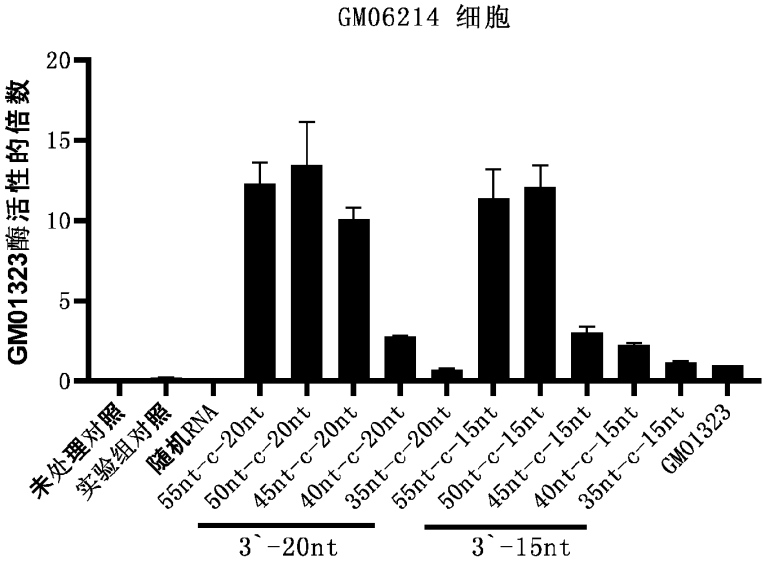
GM06214 细胞
GM01323酶活性的倍数
0
5
10
15
20
未处理对照
实验组对照
随机RNA
55nt-c-20nt
50nt-c-20nt
45nt-c-20nt
40nt-c-20nt
35nt-c-20nt
55nt-c-15nt
50nt-c-15nt
45nt-c-15nt
40nt-c-15nt
35nt-c-15nt
GM01323
3`-20nt
3`-15nt

图 8A

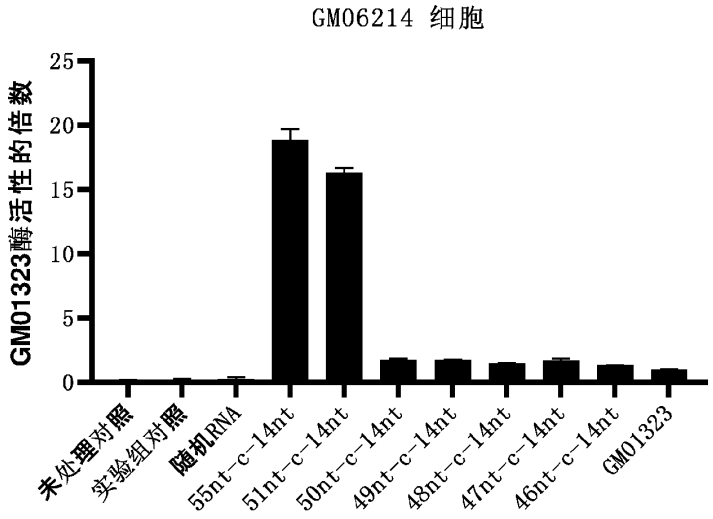
GM06214 细胞
GM01323酶活性的倍数
25
20
15
10
5
0
未处理对照
实验组对照
随机RNA
55nt-c-14nt
51nt-c-14nt
50nt-c-14nt
49nt-c-14nt
48nt-c-14nt
47nt-c-14nt
46nt-c-14nt
GM01323

图 8B

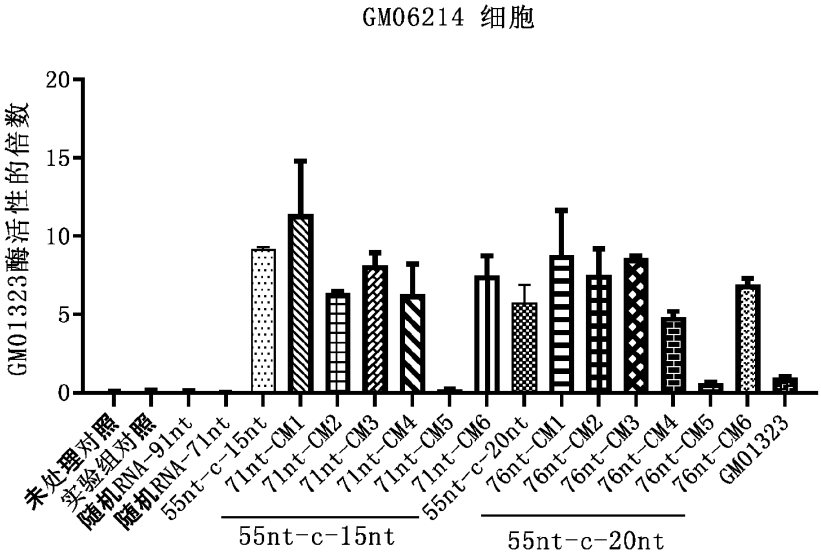
GM06214 细胞
GM01323酶活性的倍数
20
15
10
5
0
未处理对照
实验组对照
随机RNA-91nt
随机RNA-71nt
55nt-c-15nt
71nt-CM1
71nt-CM2
71nt-CM3
71nt-CM4
71nt-CM5
71nt-CM6
55nt-c-20nt
76nt-CM1
76nt-CM2
76nt-CM3
76nt-CM4
76nt-CM5
76nt-CM6
GM01323
55nt-c-15nt
55nt-c-20nt

图 9

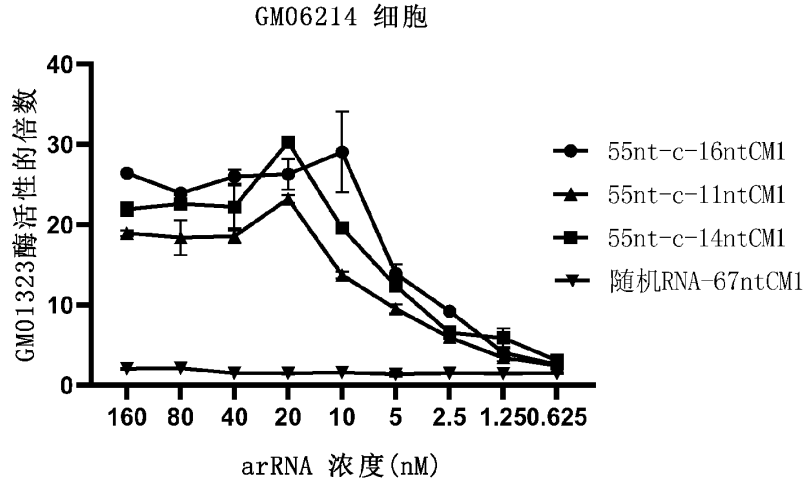
GM06214 细胞
GM01323酶活性的倍数
40
30
20
10
0
160 80 40 20 10 5 2.5 1.250.625
arRNA 浓度(nM)
55nt-c-16ntCM1
55nt-c-11ntCM1
55nt-c-14ntCM1
随机RNA-67ntCM1

图 10A

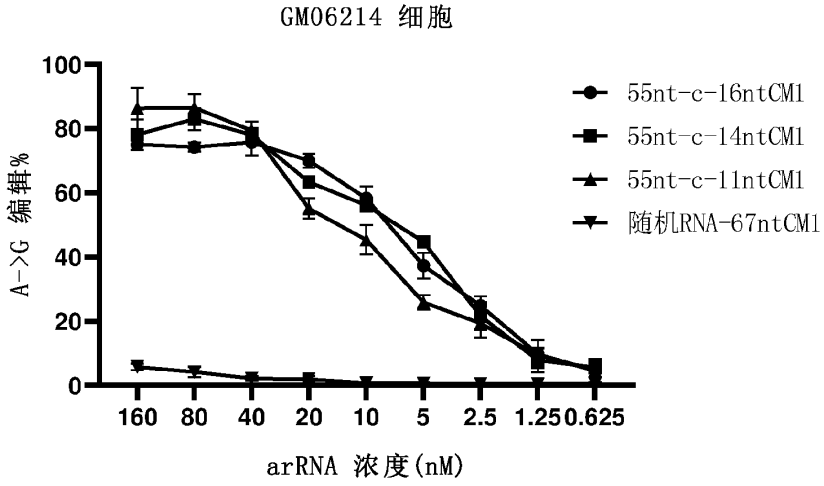
GM06214 细胞
A->G 编辑%
100
80
60
40
20
0
160 80 40 20 10 5 2.5 1.250.625
arRNA 浓度(nM)
55nt-c-16ntCM1
55nt-c-14ntCM1
55nt-c-11ntCM1
随机RNA-67ntCM1

图 10B

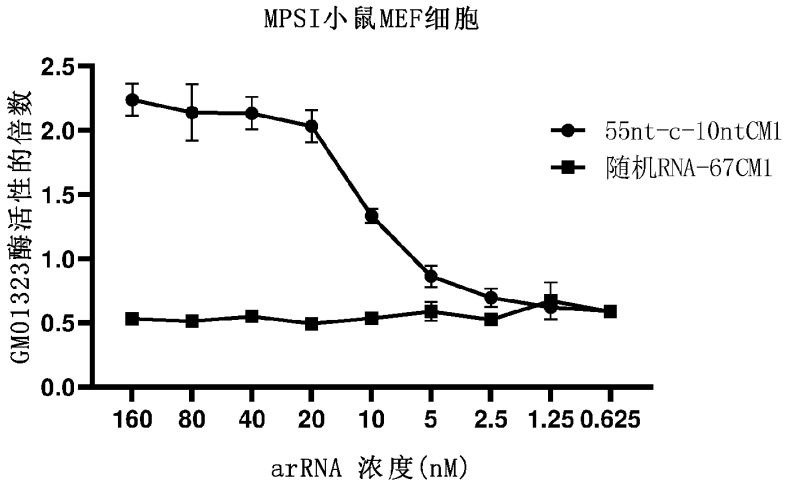
MPSI小鼠MEF细胞
GM01323酶活性的倍数
2.5
2.0
1.5
1.0
0.5
0.0
160 80 40 20 10 5 2.5 1.25 0.625
arRNA 浓度(nM)
55nt-c-10ntCM1
随机RNA-67CM1

图 10C

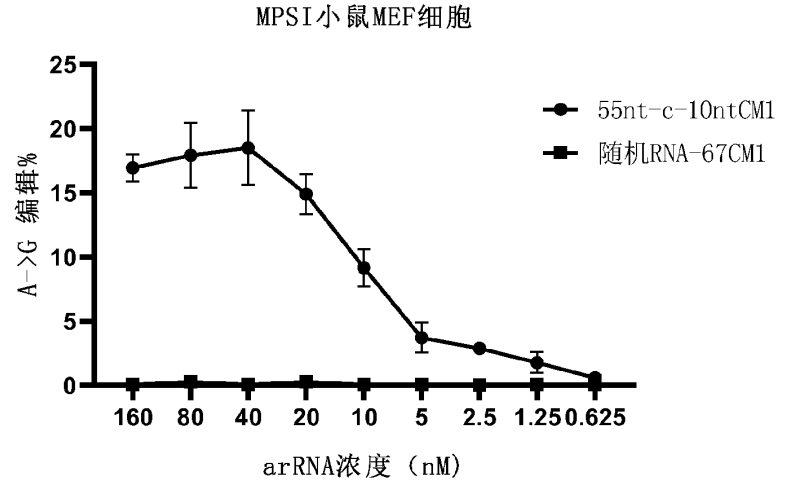
MPSI小鼠MEF细胞
A->G 编辑%
25
20
15
10
5
0
160 80 40 20 10 5 2.5 1.25 0.625
arRNA浓度 (nM)
55nt-c-10ntCM1
随机RNA-67CM1

图 10D

GM06214 细胞

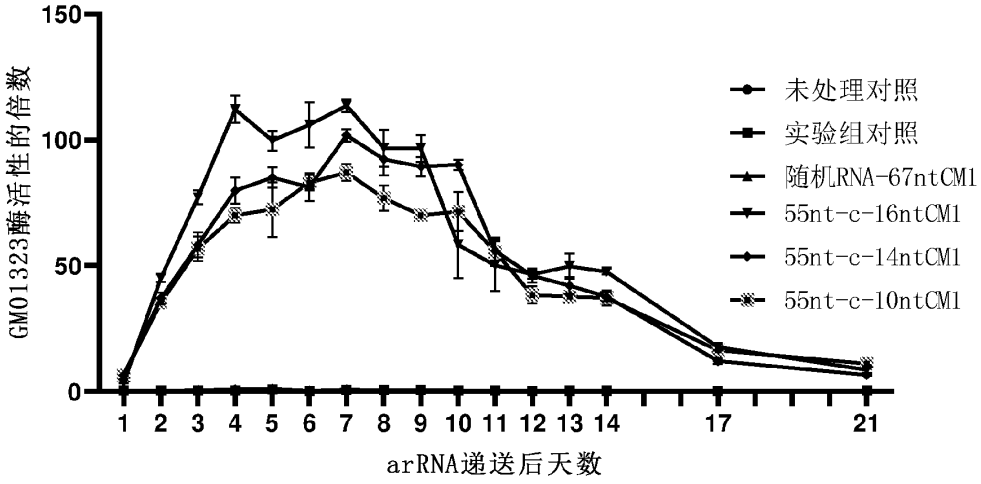

图 11A

GM06214 细胞

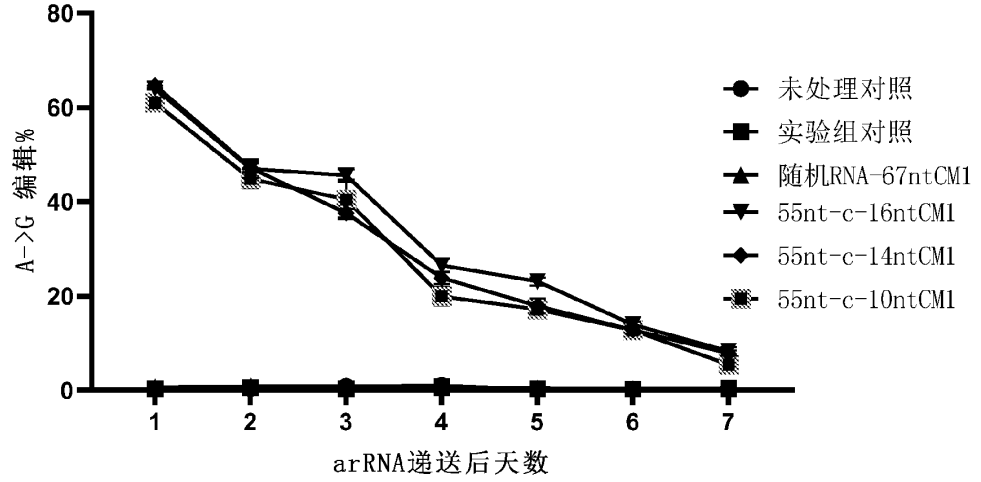

图 11B

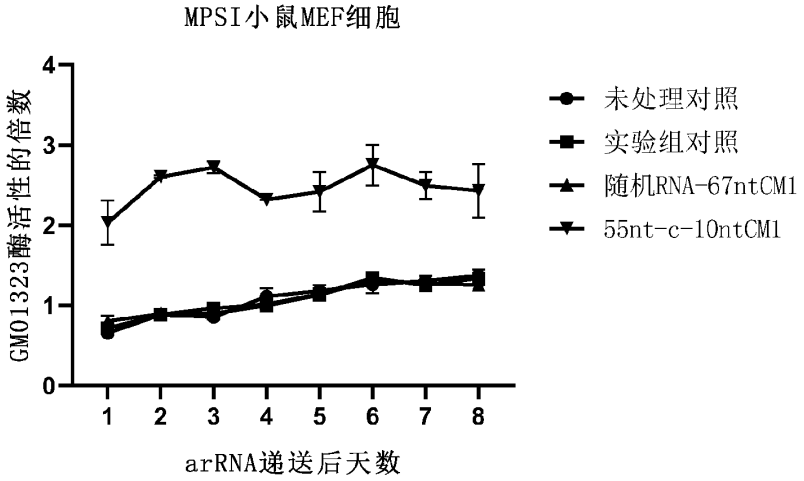
MPSI小鼠MEF细胞
GM01323酶活性的倍数
0
1
2
3
4
1
2
3
4
5
6
7
8
arRNA递送后天数
未处理对照
实验组对照
随机RNA-67ntCM1
55nt-c-10ntCM1

图 11C

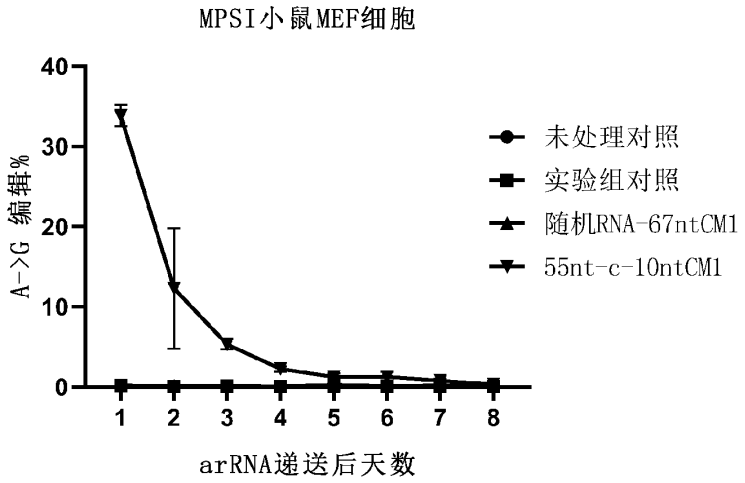
MPSI小鼠MEF细胞
A->G 编辑%
0
10
20
30
40
1
2
3
4
5
6
7
8
arRNA递送后天数
未处理对照
实验组对照
随机RNA-67ntCM1
55nt-c-10ntCM1

图 11D

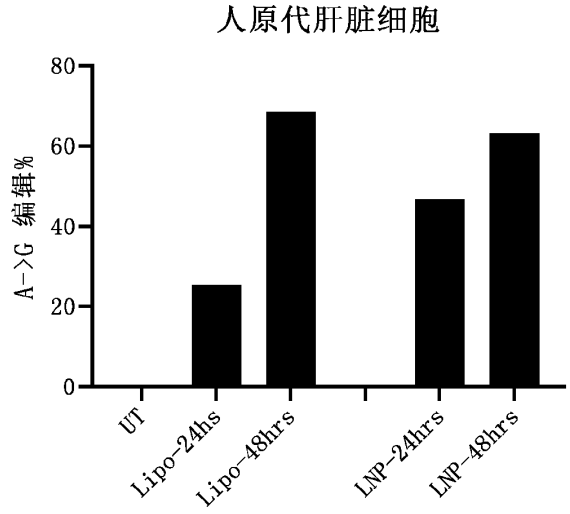
人原代肝脏细胞
A->G 编辑%
80
60
40
20
0
UT
Lipo-24hs
Lipo-48hrs
LNP-24hrs
LNP-48hrs

图 12A

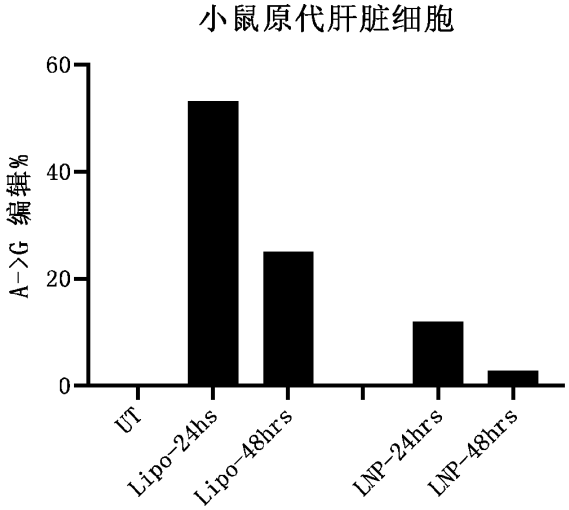
小鼠原代肝脏细胞
A->G 编辑%
60
40
20
0
UT
Lipo-24hs
Lipo-48hrs
LNP-24hrs
LNP-48hrs

图 12B

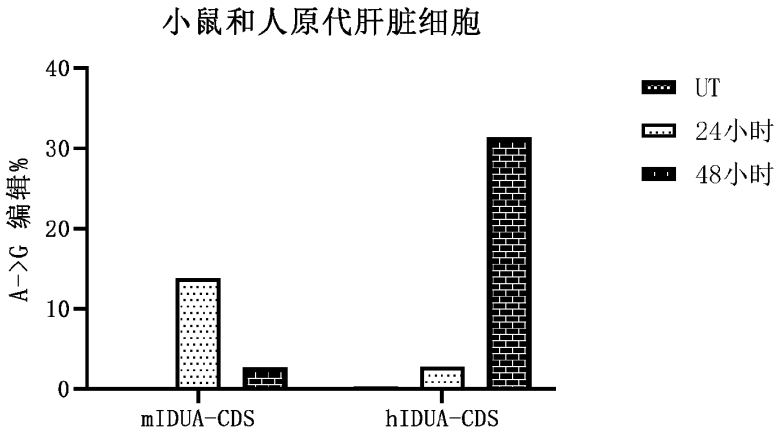
小鼠和人原代肝脏细胞
A->G 编辑%
40
30
20
10
0
mIDUA-CDS
hIDUA-CDS
UT
24小时
48小时

图 13

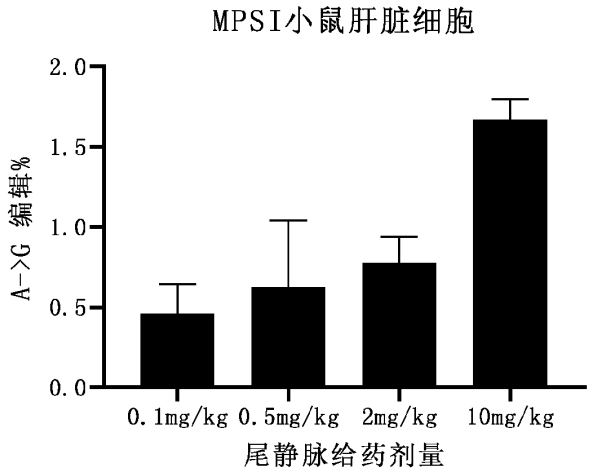
MPSI小鼠肝脏细胞
A->G 编辑%
2.0
1.5
1.0
0.5
0.0
0.1mg/kg
0.5mg/kg
2mg/kg
10mg/kg
尾静脉给药剂量

图 14