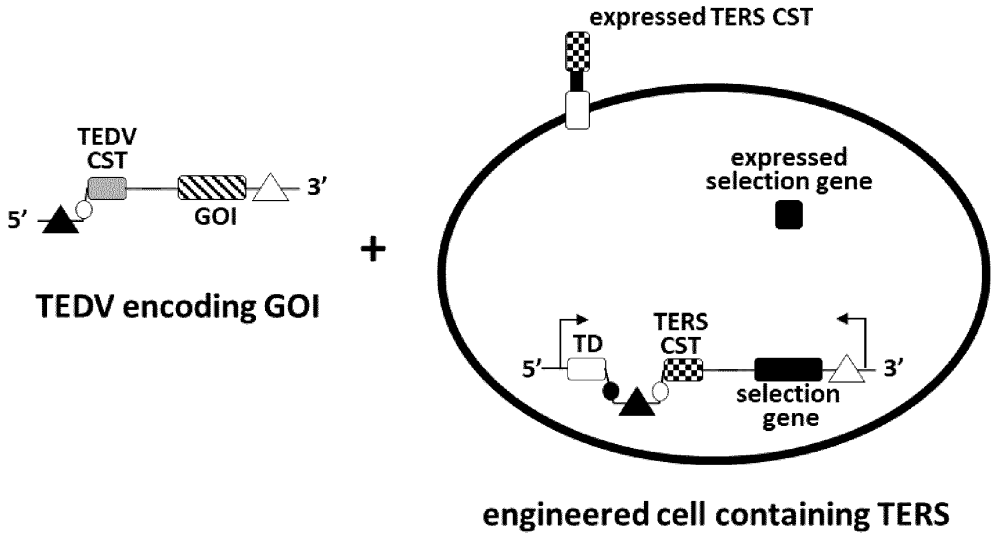
Figure 1


TEDV
CST
5'
3'
GOI
TEDV encoding GOI
+
expressed TERS CST
expressed
selection gene
TD
TERS
CST
5'
3'
selection
gene
engineered cell containing TERS

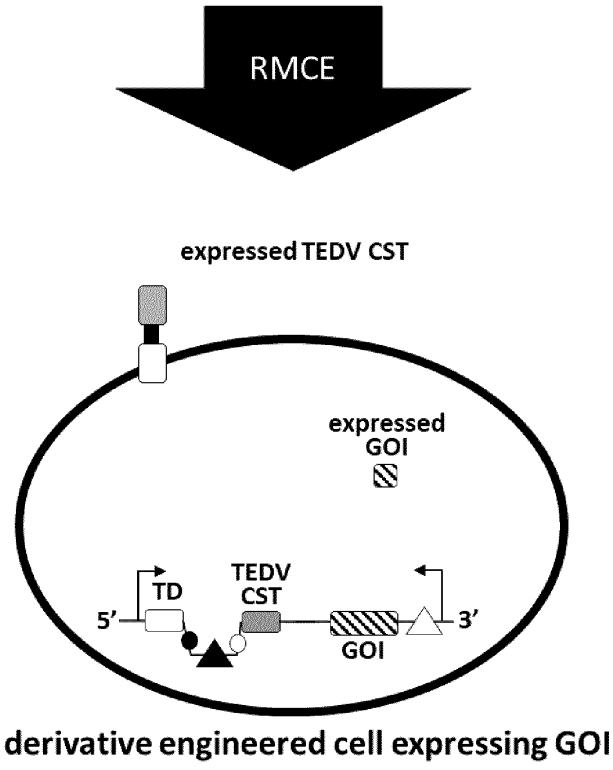
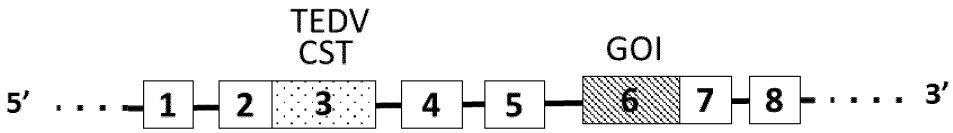
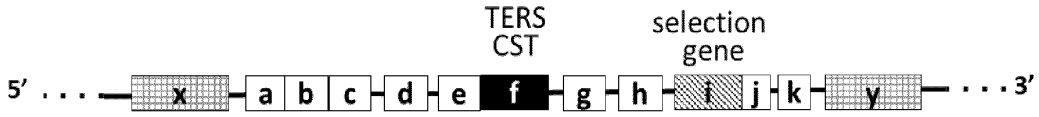

RMCE
expressed TEDV CST
expressed
GOI
TD
TEDV
CST
5'
3'
GOI
derivative engineered cell expressing GOI

Figure 2



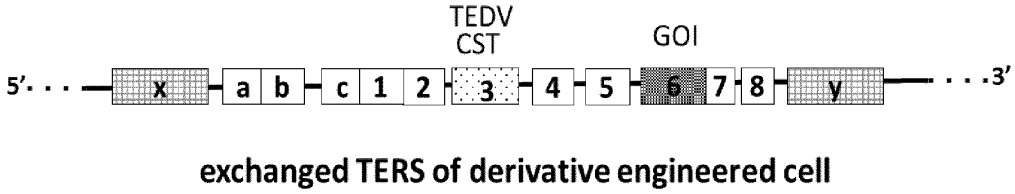
TEDV

Figure 3



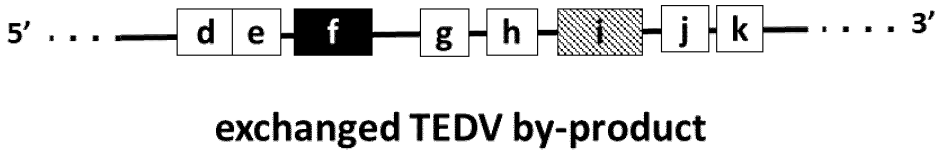
TERS

Figure 4



exchanged TERS of derivative engineered cell

Figure 5



exchanged TEDV by-product

Figure 6

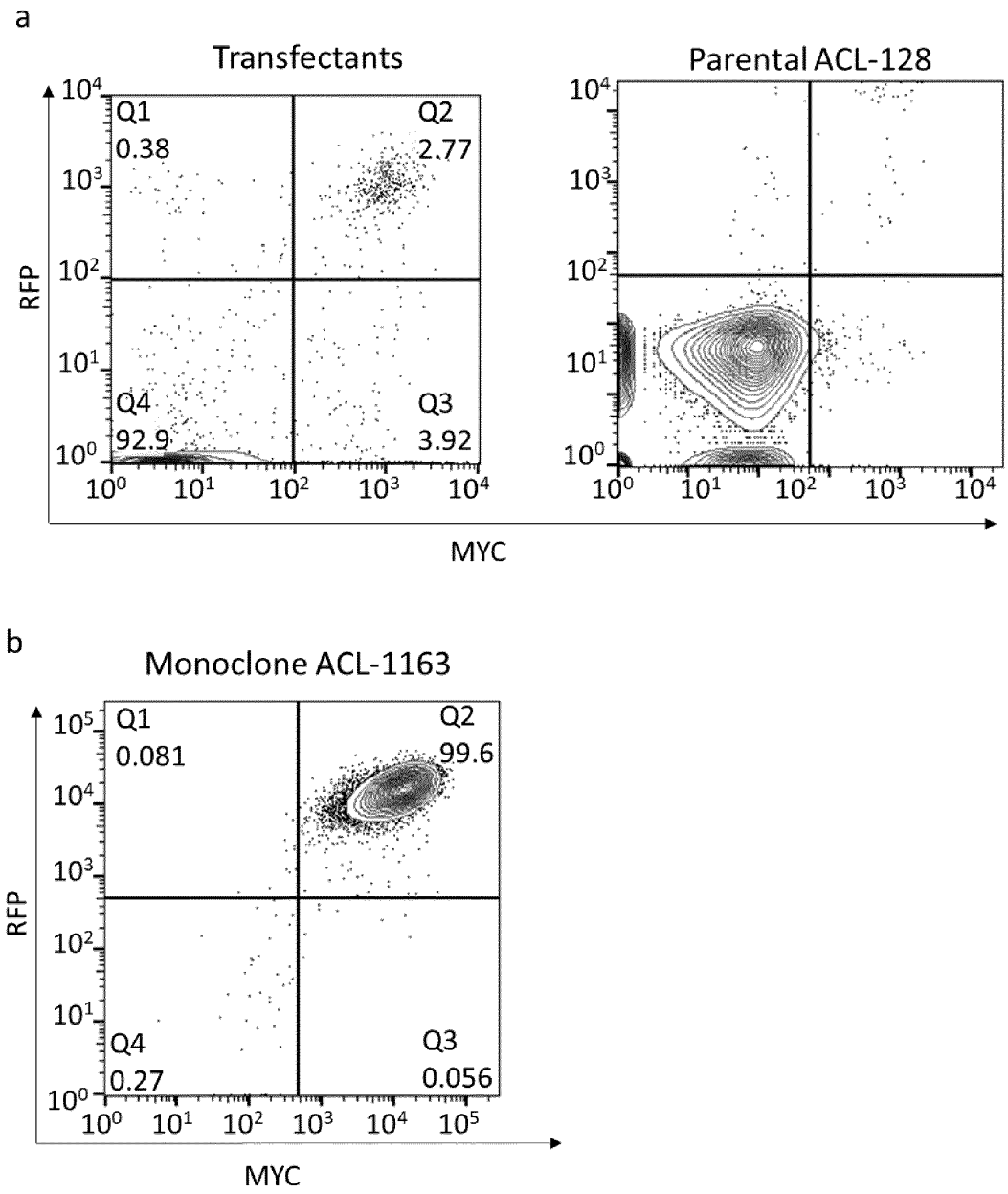
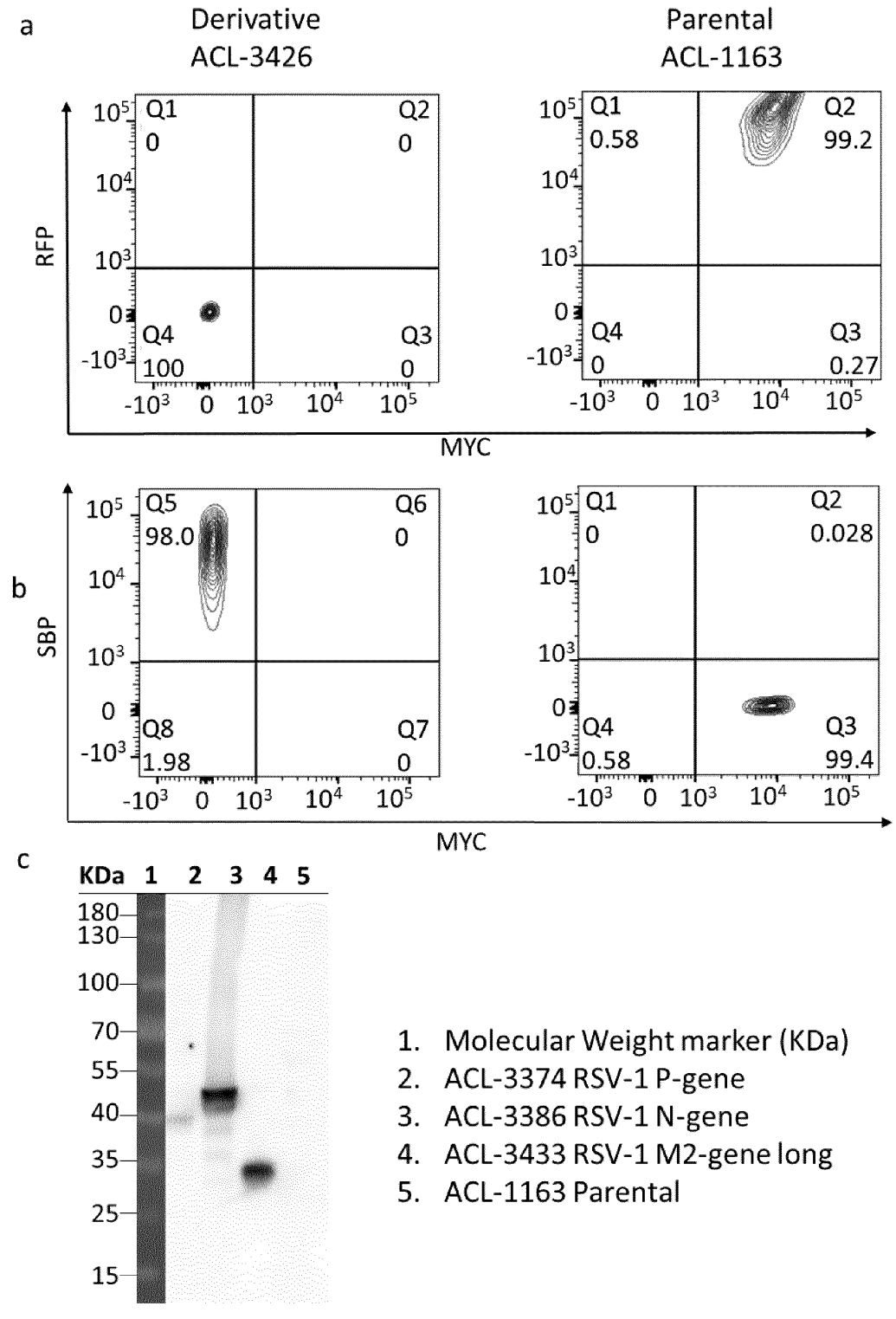

a
Transfectants
Parental ACL-128
Q1
0.38
Q2
2.77
Q4
92.9
Q3
3.92
RFP
MYC
b
Monoclone ACL-1163
Q1
0.081
Q2
99.6
Q4
0.27
Q3
0.056
RFP
MYC

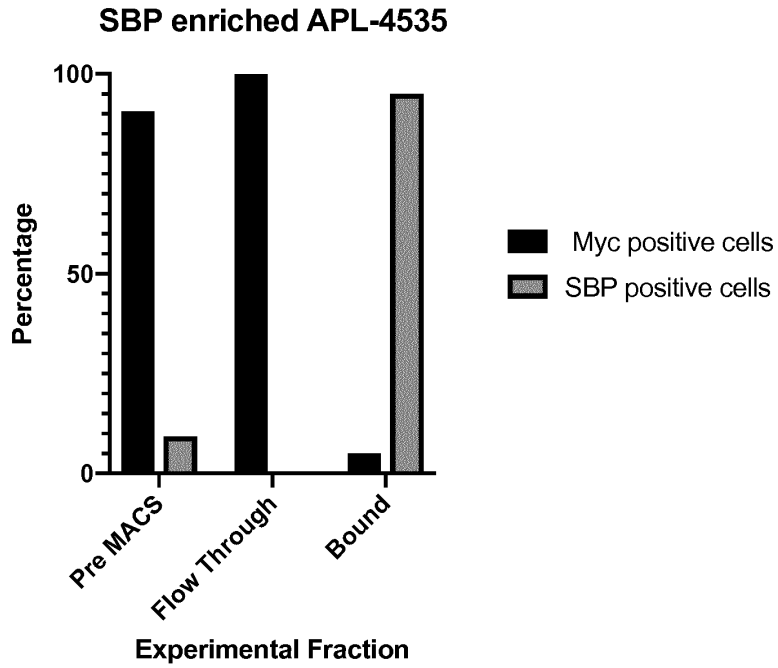
Figure 7



1. Molecular Weight marker (KDa)
2. ACL-3374 RSV-1 P-gene
3. ACL-3386 RSV-1 N-gene
4. ACL-3433 RSV-1 M2-gene long
5. ACL-1163 Parental

Figure 8

a


SBP enriched APL-4535
100
50
0
Percentage
Pre MACS
Flow Through
Bound
Experimental Fraction
Myc positive cells
SBP positive cells

b

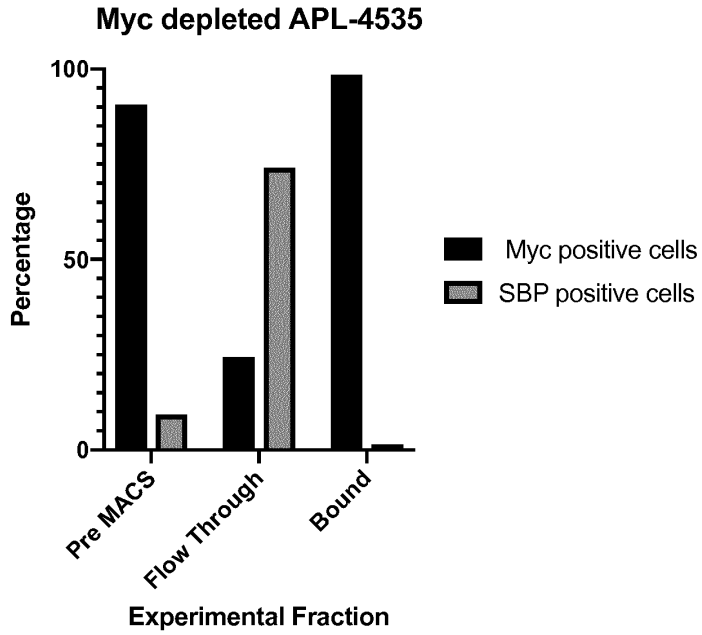

Myc depleted APL-4535
100
50
0
Percentage
Pre MACS
Flow Through
Bound
Experimental Fraction
Myc positive cells
SBP positive cells

Figure 8

c

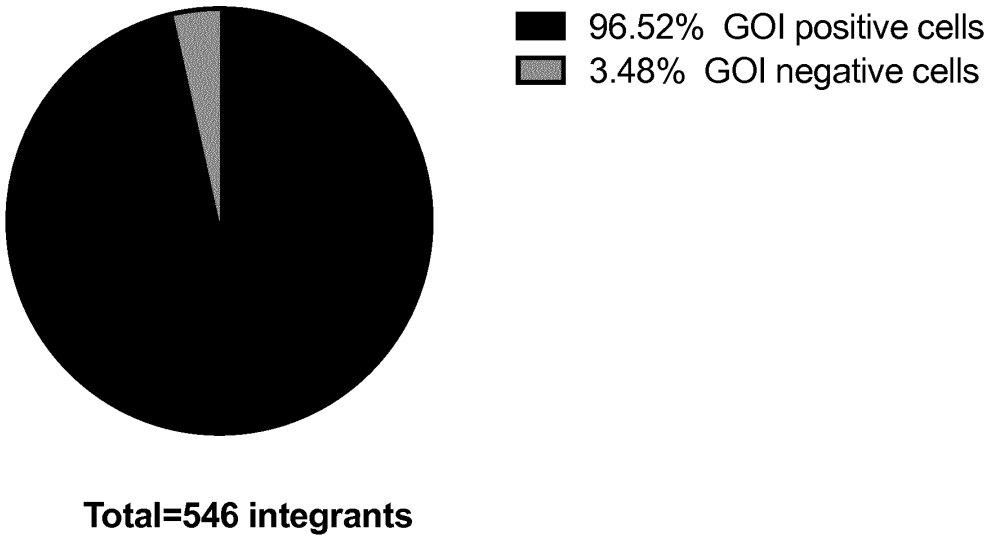

96.52% GOI positive cells
3.48% GOI negative cells
Total=546 integrants

Figure 9

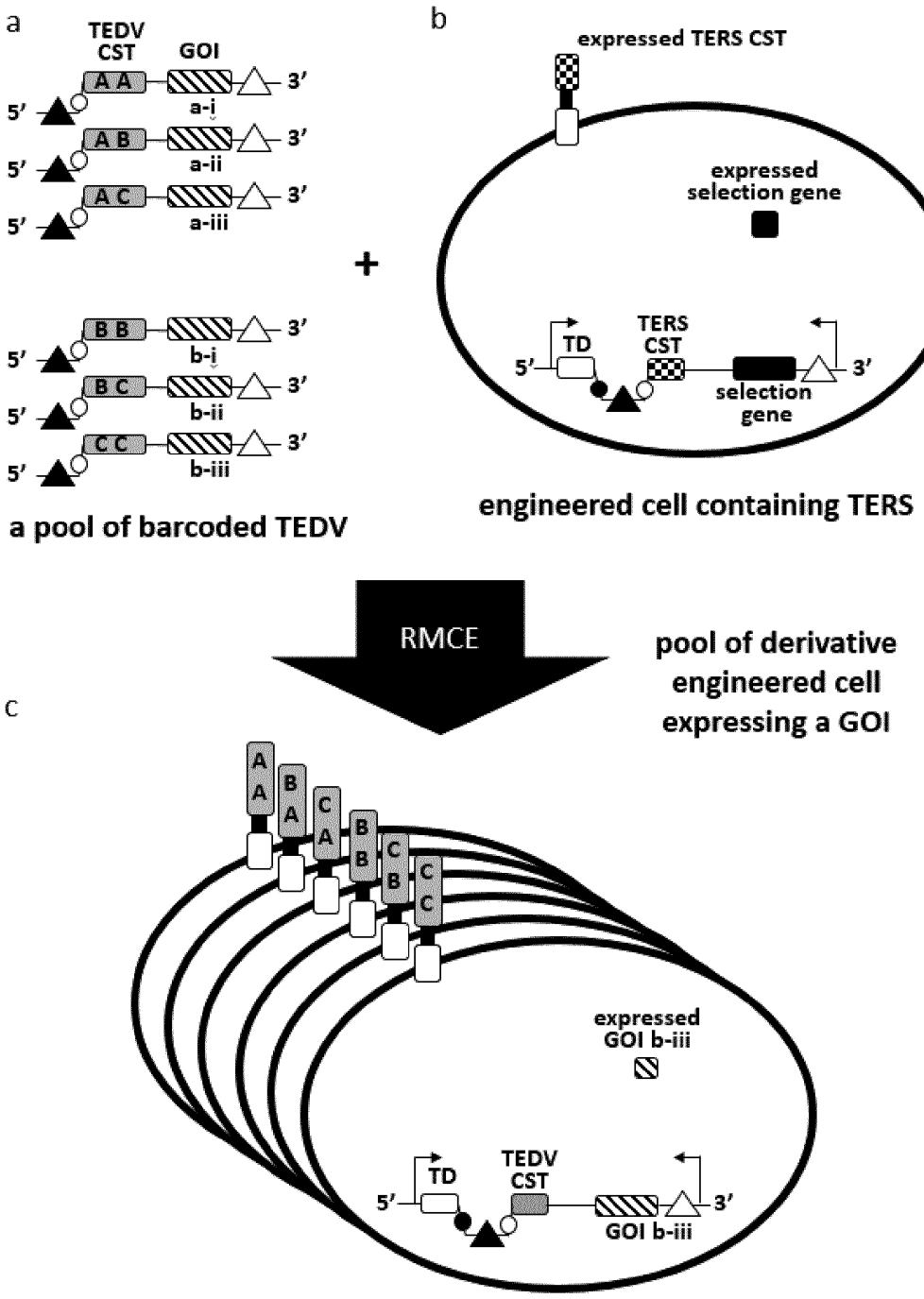
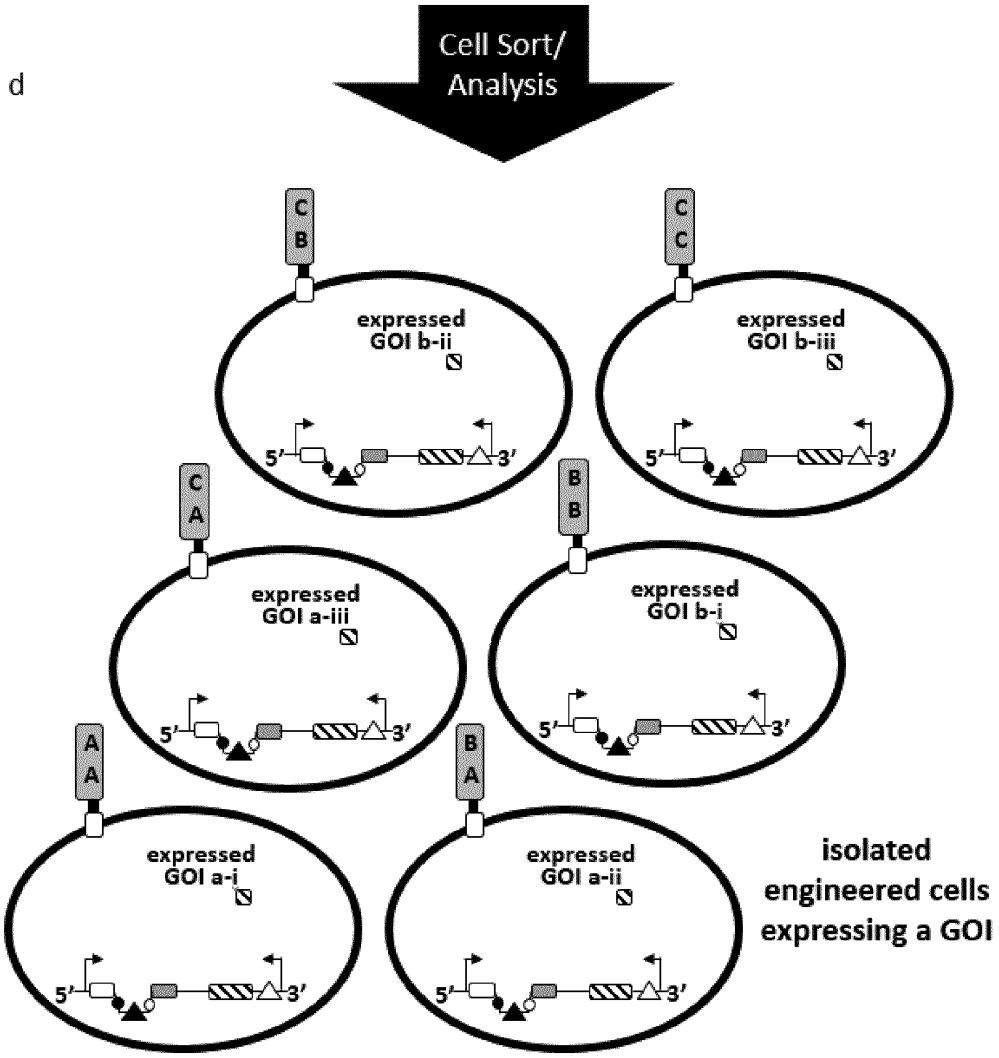

a
TEDV
CST
GOI
A A
a-i
A B
a-ii
A C
a-iii
5′
3′
B B
b-i
B C
b-ii
C C
b-iii
a pool of barcoded TEDV
b
expressed TERS CST
expressed
selection gene
TD
TERS
CST
selection
gene
engineered cell containing TERS
RMCE
pool of derivative
engineered cell
expressing a GOI
c
expressed
GOI b-iii
TEDV
CST
GOI b-iii

Figure 9

d



e

	MFI of Live Cells			% Cells in Positive Gate		
Sample	FLAG	MYC	HA	FLAG	MYC	HA
HEK - Barcoded	15529	834	591	98.7	93.5	72.7
HEK - Empty Vector	31	48	122	0.1	0.1	0.2
Jurkat - Barcoded	11300	3273	573	76.0	87.0	63.9
Jurkat - Empty Vector	32	57	106	0.3	5.0	0.3