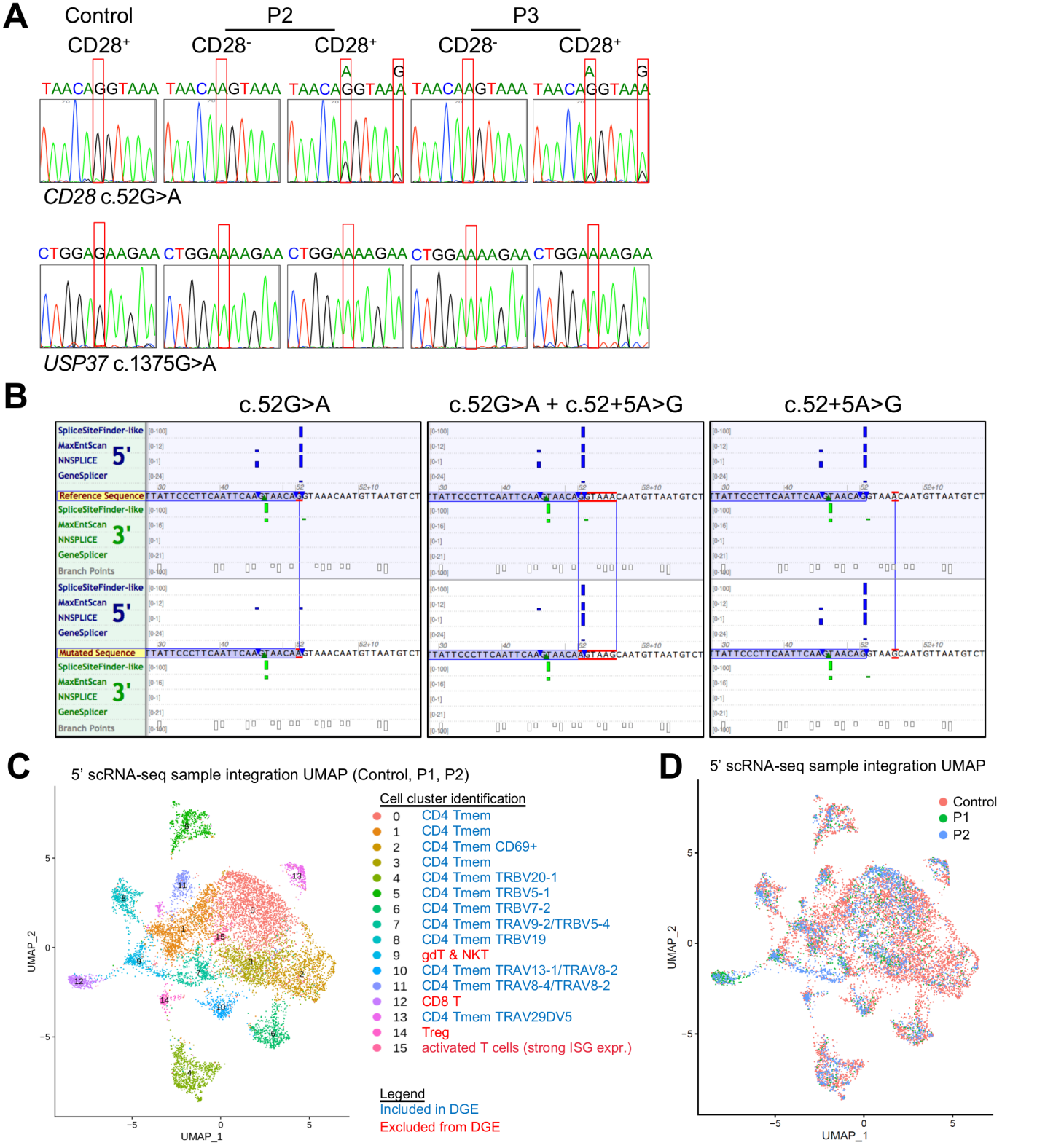
A
Control
P2
P3
CD28+
CD28-
CD28+
CD28-
CD28+
TAACAGGTAAA
TAACAAGTAAA
TAACAGGTAAA
TAACAAGTAAA
TAACAGGTAAA
A
G
A
G
CD28 c.52G>A
CTGGAGAAGAA
CTGGAAAAGAA
CTGGAAAAGAA
CTGGAAAAGAA
CTGGAAAAGAA
USP37 c.1375G>A
B
c.52G>A
c.52G>A + c.52+5A>G
c.52+5A>G
SpliceSiteFinder-like
MaxEntScan
NNSPLICE
GeneSplicer
5'
3'
Reference Sequence
Mutated Sequence
Branch Points
C
5' scRNA-seq sample integration UMAP (Control, P1, P2)
Cell cluster identification
0 CD4 Tmem
1 CD4 Tmem
2 CD4 Tmem CD69+
3 CD4 Tmem
4 CD4 Tmem TRBV20-1
5 CD4 Tmem TRBV5-1
6 CD4 Tmem TRBV7-2
7 CD4 Tmem TRAV9-2/TRBV5-4
8 CD4 Tmem TRBV19
9 gdT & NKT
10 CD4 Tmem TRAV13-1/TRAV8-2
11 CD4 Tmem TRAV8-4/TRAV8-2
12 CD8 T
13 CD4 Tmem TRAV29DV5
14 Treg
15 activated T cells (strong ISG expr.)
Legend
Included in DGE
Excluded from DGE
UMAP_1
UMAP_2
D
5' scRNA-seq sample integration UMAP
Control
P1
P2
UMAP_1
UMAP_2