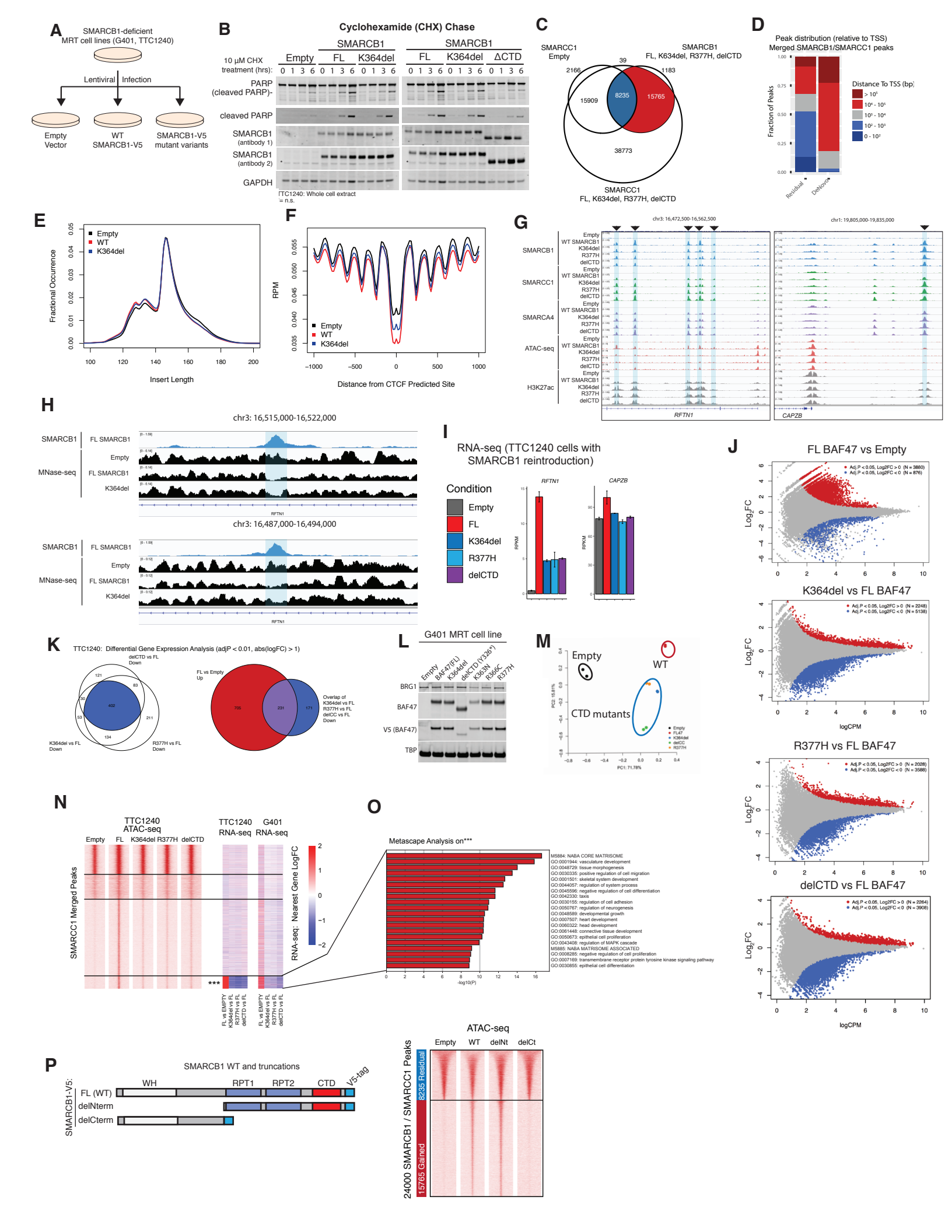
A
SMARCB1-deficient MRT cell lines (G401, TTC1240)
Lentiviral Infection
Empty Vector
WT SMARCB1-V5
SMARCB1-V5 mutant variants
B
Cyclohexamide (CHX) Chase
SMARCB1
Empty
FL
K364del
ΔCTD
10 μM CHX treatment (hrs):
PARP (cleaved PARP)
cleaved PARP
SMARCB1 (antibody 1)
SMARCB1 (antibody 2)
GAPDH
TTC1240: Whole cell extract
= n.s.
C
SMARCC1 Empty
SMARCB1 FL, K634del, R377H, delCTD
SMARCC1 FL, K634del, R377H, delCTD
2166
39
1183
15909
8235
15765
38773
D
Peak distribution (relative to TSS)
Merged SMARCB1/SMARCC1 peaks
Fraction of Peaks
Distance To TSS (bp)
Residual
Deltoro
E
Empty
WT
K364del
Fractional Occurrence
Insert Length
F
RPM
Empty
WT
K364del
Distance from CTCF Predicted Site
G
chr3: 16,472,500-16,562,500
chr1: 19,805,000-19,835,000
SMARCB1
SMARCC1
SMARCA4
ATAC-seq
H3K27ac
Empty
WT SMARCB1
K364del
R377H
delCTD
RFTN1
CAPZB
H
chr3: 16,515,000-16,522,000
chr3: 16,487,000-16,494,000
SMARCB1
MNase-seq
FL SMARCB1
Empty
K364del
RFTN1
I
RNA-seq (TTC1240 cells with SMARCB1 reintroduction)
Condition
Empty
FL
K364del
R377H
delCTD
RFTN1
CAPZB
RPKM
J
FL BAF47 vs Empty
K364del vs FL BAF47
R377H vs FL BAF47
delCTD vs FL BAF47
Log2FC
logCPM
K
TTC1240: Differential Gene Expression Analysis (adjP < 0.01, abs(logFC) > 1)
delCTD vs FL Down
FL vs Empty Up
K364del vs FL Down
R377H vs FL Down
Overlap of K364del vs FL R377H vs FL delCC vs FL Down
L
G401 MRT cell line
Empty
BAF47(FL)
K364del
delCTD (Y326*)
K363N
R366C
R377H
BRG1
BAF47
V5 (BAF47)
TBP
M
Empty
WT
CTD mutants
PC1: 71.78%
N
TTC1240 ATAC-seq
TTC1240 RNA-seq
G401 RNA-seq
Empty
FL
K364del
R377H
delCTD
SMARCC1 Merged Peaks
RNA-seq: Nearest Gene LogFC
O
Metascape Analysis on***
-log10(P)
P
SMARCB1 WT and truncations
SMARCB1-V5:
FL (WT)
delNterm
delCterm
WH
RPT1
RPT2
CTD
V5-tag
ATAC-seq
Empty
WT
delNt
delCt
8235 Residual
15765 Gained
24000 SMARCB1 / SMARCC1 Peaks