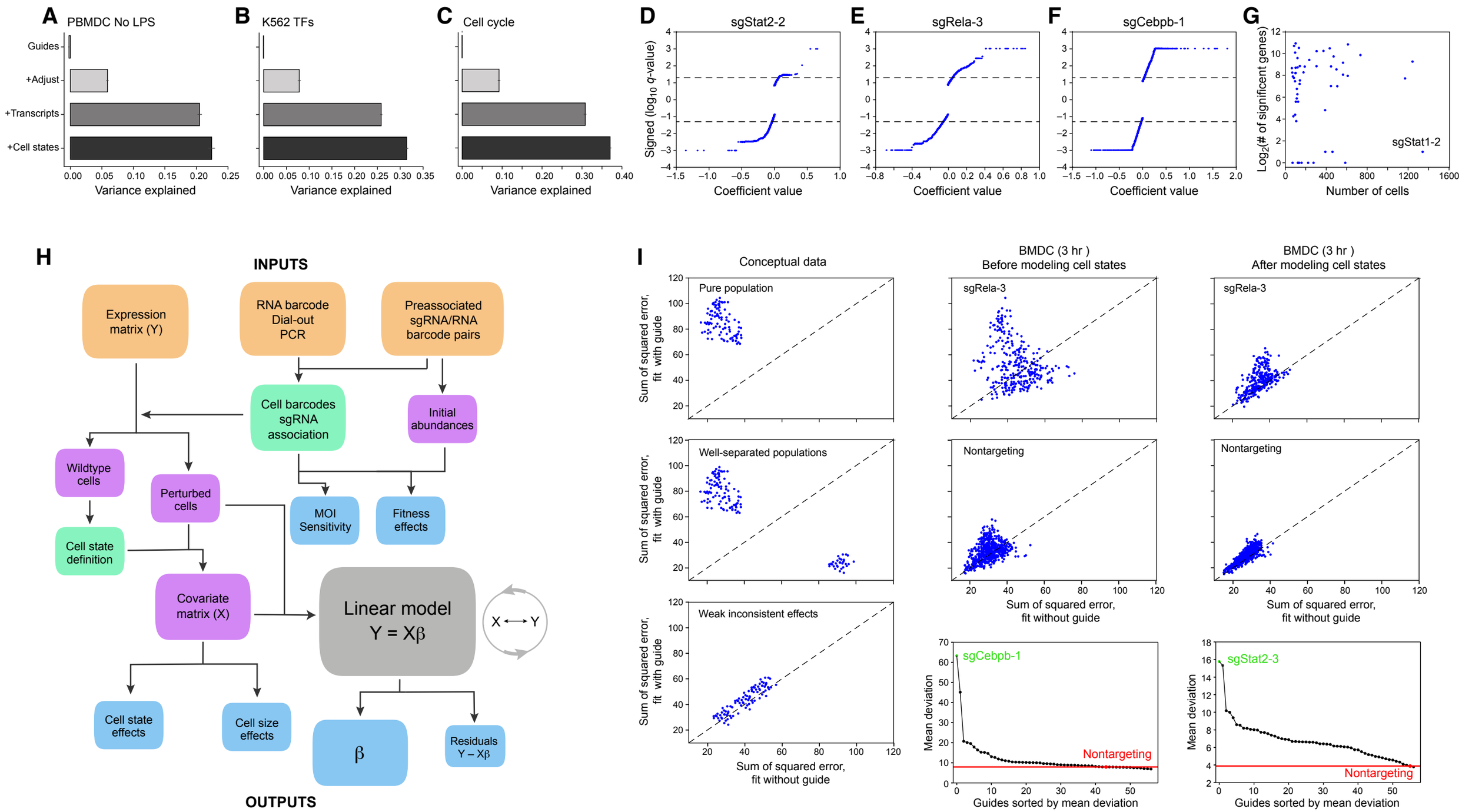
Supp. Fig. 2


A
PBMDC No LPS
Guides
+Adjust
+Transcripts
+Cell states
Variance explained
B
K562 TFs
Variance explained
C
Cell cycle
Variance explained
D
sgStat2-2
Signed (log10 q-value)
Coefficient value
E
sgRela-3
Coefficient value
F
sgCebpb-1
Coefficient value
G
Log2(# of significant genes)
sgStat1-2
Number of cells
H
INPUTS
Expression matrix (Y)
RNA barcode Dial-out PCR
Preassociated sgRNA/RNA barcode pairs
Cell barcodes sgRNA association
Initial abundances
Wildtype cells
Perturbed cells
MOI Sensitivity
Fitness effects
Cell state definition
Covariate matrix (X)
Linear model
Y = Xβ
X ⟷ Y
Cell state effects
Cell size effects
β
Residuals Y – Xβ
OUTPUTS
I
Conceptual data
BMDC (3 hr) Before modeling cell states
BMDC (3 hr) After modeling cell states
Pure population
sgRela-3
Well-separated populations
Nontargeting
Weak inconsistent effects
Sum of squared error, fit with guide
Sum of squared error, fit without guide
sgCebpb-1
sgStat2-3
Mean deviation
Guides sorted by mean deviation