Khetan_Fig3 **B** Example closing OCR **C** Chromatin state annotations A T2D disease state-associated changes chr12:26273118-26308027 T2D1 % islet ATAC-seq OCRs 801 Closing OCRs **T2D2 T2D3 T2D4** ATAC-Seq coverage **T2D5** 714 Opening OCRs ND₁ ND₂ Differential Chosing ND3 **ND11** Active TSS Genic enhancer 100 Weak TSS **ND14** Active enhancer-1 Flanking TSS ND3 ND1 ND2 T2D2 Active enhancer-2 **7**0 ChromHMM Poised TSS Weak enhancer Islet SEs ■ Strong transcription
■ Repressed Polymcomb BHLHE41 Refseq chromatin accessibility Weak transcription ■ Weak Rep/Polycomb ⊣ hg19 10KB _F closed ☐ Quiescent / low signal



Fraction of T2D islet samples with OCRs detected <u>5</u> 5 694 <u>4</u> 5 73 45 34 <u>1</u> 5 Differential & caQTL 20 Differential, not caQTL <u>0</u> 5 Fraction of ND islet samples with OCRs detected

E Chromatin accessibility changes at the TSPAN8 locus

