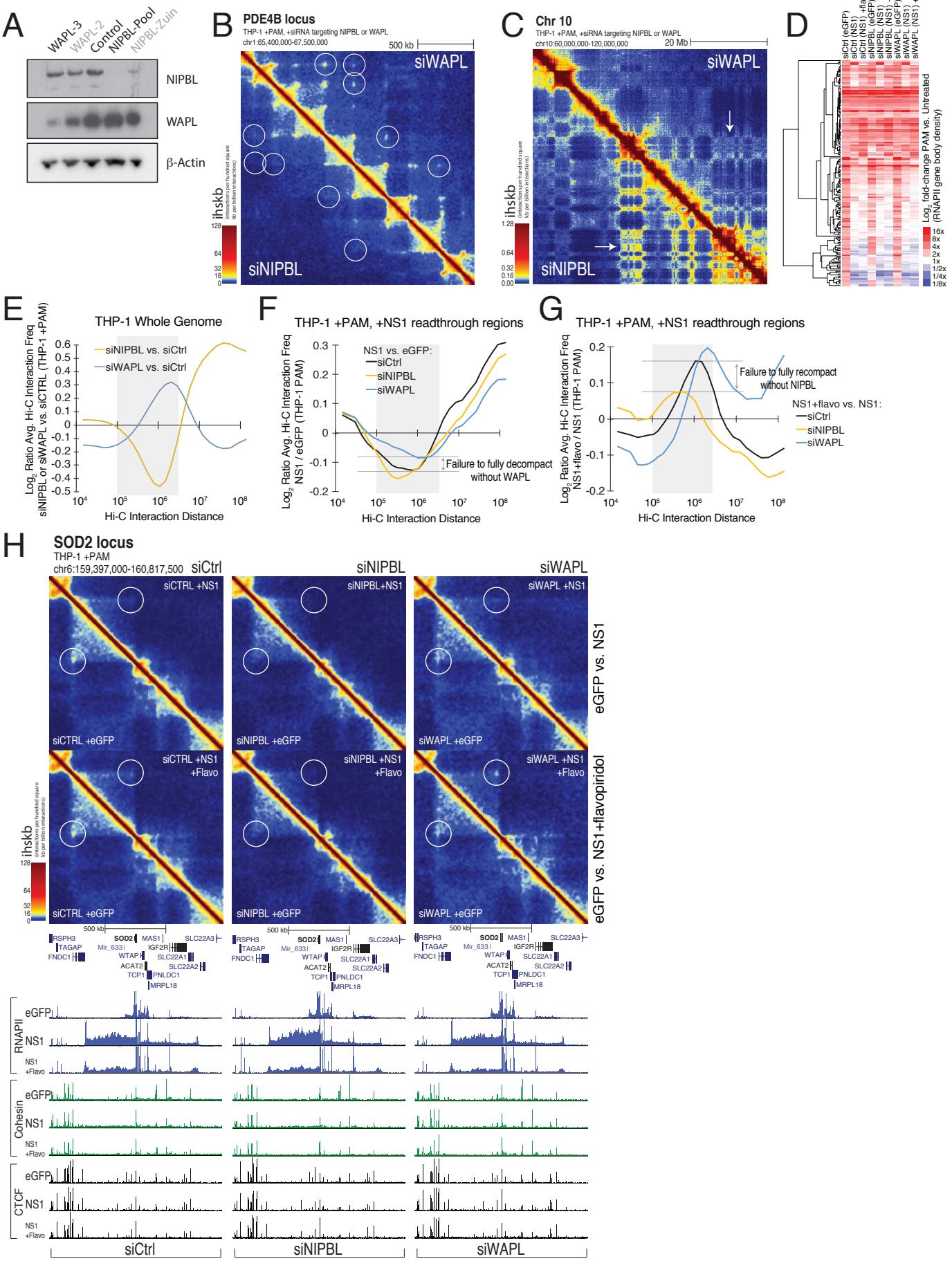
Figure S4


A
WAPL-3
WAPL-2
Control
NIPBL-Pool
NIPBL-Zuin
NIPBL
WAPL
β-Actin
B
PDE4B locus
THP-1 +PAM, +siRNA targeting NIPBL or WAPL
chr1:65,400,000-67,500,000
500 kb
siWAPL
siNIPBL
ihskb
C
Chr 10
THP-1 +PAM, +siRNA targeting NIPBL or WAPL
chr10:60,000,000-120,000,000
20 Mb
siWAPL
siNIPBL
ihskb
D
siCtrl (eGFP)
siCtrl (NS1)
siCtrl (NS1) +flavo
siNIPBL (eGFP)
siNIPBL (NS1)
siNIPBL (NS1) +flavo
siWAPL (eGFP)
siWAPL (NS1)
siWAPL (NS1) +flavo
Log2 fold-change PAM vs. Untreated (RNAPII gene body density)
16x
8x
4x
2x
1x
1/2x
1/4x
1/8x
E
THP-1 Whole Genome
siNIPBL vs. siCtrl
siWAPL vs. siCtrl
Log2 Ratio Avg. Hi-C Interaction Freq siNIPBL or siWAPL vs. siCTRL (THP-1 +PAM)
Hi-C Interaction Distance
F
THP-1 +PAM, +NS1 readthrough regions
NS1 vs. eGFP:
siCtrl
siNIPBL
siWAPL
Failure to fully decompact without WAPL
Log2 Ratio Avg. Hi-C Interaction Freq NS1 / eGFP (THP-1 PAM)
Hi-C Interaction Distance
G
THP-1 +PAM, +NS1 readthrough regions
Failure to fully recompact without NIPBL
NS1+flavo vs. NS1:
siCtrl
siNIPBL
siWAPL
Log2 Ratio Avg. Hi-C Interaction Freq NS1+flavo / NS1 (THP-1 PAM)
Hi-C Interaction Distance
H
SOD2 locus
THP-1 +PAM
chr6:159,397,000-160,817,500
siCtrl
siNIPBL
siWAPL
siCTRL +NS1
siNIPBL+NS1
siWAPL +NS1
siCTRL +eGFP
siNIPBL +eGFP
siWAPL +eGFP
siCTRL +NS1 +Flavo
siNIPBL +NS1 +Flavo
siWAPL +NS1 +Flavo
eGFP vs. NS1
eGFP vs. NS1+flavopiridol
ihskb
500 kb
RSPH3
TAGAP
FNDC1
SOD2
MAS1
Mir_633
IGF2R
WTAP
ACAT2
TCP1
PNLDC1
MRPL18
SLC22A1
SLC22A2
SLC22A3
RNAPII
Cohesin
CTCF
eGFP
NS1
NS1 +Flavo
siCtrl
siNIPBL
siWAPL