

Supplementary Table 3. Analysis of localization of Pita/ZIPIC/Zw5 TAD boundaries.

(A) Proportions of regions from a given set (rows) that overlap regions from another set (columns). Sets of regions: ChIP-Seq peaks (Pita, ZIPIC, Zw5) and TAD boundaries (four cell lines). TAD boundaries were taken by be at +/- 20 or +/-10 kb from TAD start and TAD end coordinates.

(B) Proportions of peaks found within +/- 10 kb TAD boundaries. Binomial P-value for peaks-in-TAD-boundaries enrichment (chance to observe no less than the given number of peaks within TAD boundaries of fixed total length and fixed total peaks count for a particular TF).

(A)

						TAD boundaries of +/-20kb			
dataset		peaks	Pita	ZIPIC	Zw5	Bg3	Kc167	OSC	S2
Pita		1845				0,44	0,43	0,44	0,43
ZIPIC		575				0,50	0,47	0,49	0,47
Zw5		695				0,53	0,50	0,49	0,49
TAD boundaries of +/-20kb	Bg3	752	0,64	0,29	0,35				
	Kc167	730	0,64	0,28	0,34				
	OSC	752	0,62	0,29	0,34				
	S2	721	0,64	0,28	0,31				

						TAD boundaries of +/-10kb			
dataset		peaks	Pita	ZIPIC	Zw5	Bg3	Kc167	OSC	S2
Pita		1845				0,25	0,25	0,25	0,23
ZIPIC		575				0,28	0,28	0,29	0,25
Zw5		695				0,31	0,31	0,28	0,29
TAD boundaries of +/-10kb	Bg3	851	0,41	0,16	0,20				
	Kc167	822	0,42	0,17	0,21				
	OSC	832	0,41	0,17	0,20				
	S2	808	0,39	0,15	0,19				

(B)

		TAD boundaries of +/-10kb							
		Bg3		Kc167		OSC		S2	
TF	peaks	fraction		fraction		fraction		fraction	
Pita	1845	0,25	0,14	0,25	0,14	0,25	0,14	0,23	0,13
ZIPIC	575	0,28	0,14	0,28	0,14	0,29	0,14	0,25	0,13
Zw5	695	0,31	0,14	0,31	0,14	0,28	0,14	0,29	0,13
		observed	expected	observed	expected	observed	expected	observed	expected

		TAD boundaries of +/-10kb							
		Bg3		Kc167		OSC		S2	
TF	peaks	count	P-value	count	P-value	count	P-value	count	P-value
CP190	7960	1870	0,00E+00	1839	0,00E+00	1801	0,00E+00	1770	0,00E+00
Pita	1845	454	0,00E+00	458	0,00E+00	461	0,00E+00	418	0,00E+00
ZIPIC	575	160	0,00E+00	163	0,00E+00	164	0,00E+00	145	3,42E-14
Zw5	695	212	0,00E+00	214	0,00E+00	197	0,00E+00	200	0,00E+00

cell line	total TAD boundaries length	genome fraction
Bg3	16980000	0,142
Kc167	16420000	0,137
OSC	16620000	0,139
S2	16130000	0,134