

## Extended Data for:

**Microscopy-based chromosome conformation capture enables simultaneous observation of genome organization and transcription in intact organisms**

### Table of Contents

#### [Tables](#)

[Supplementary Table 1 - Oligopaint probesets \(barcodes\)](#)

[Supplementary Table 2: Primer used for PCR amplification](#)

[Supplementary Table 3: Readout probes sequences](#)

[Supplementary Table 4: Oligopaint library \(online file\)](#)

[Supplementary Table 5: Hi-C and Chip-Seq](#)

## Tables

*Supplementary Table 1 - Oligopaint probesets (barcodes)*

Barcode	Oligopaint library	Universal Primer	Readout	Start coordinate	End coordinate	Coverage (kb)	Number of Oligos
1	2L_42_oligo	primer2	revRT1	15244500	15251200	6.7	75
2	2L_42_oligo	primer2	revRT2	15269900	15275500	5.6	75
3	2L_42_oligo	primer2	revRT3	15331200	15337700	6.5	75
4	2L_42_oligo	primer2	revRT22	15370000	15376400	6.4	75
5	2L_42_oligo	primer2	revRT23	15421000	15427000	6	75
6	2L_42_oligo	primer2	revRT24	15433900	15440000	6.1	75
7	2L_42_oligo	primer2	revRT7	15454200	15460000	5.8	75
8	2L_42_oligo	primer2	revRT8	15474000	15480300	6.3	75
9	2L_42_oligo	primer2	revRT9	15499000	15504500	5.5	75
10	2L_42_oligo	primer2	revRT10	15548000	15554800	6.8	75
11	2L_42_oligo	primer2	revRT11	15598000	15604300	6.3	75
12	2L_42_oligo	primer2	revRT12	15644000	15652000	8	75
13	2L_42_oligo	primer2	revRT13	15255000	15259000	4	60
14	2L_42_oligo	primer2	revRT14	15263000	15267000	4	56
15	2L_42_oligo	primer2	revRT15	15295000	15300500	5.5	75
16	2L_42_oligo	primer2	revRT16	15320000	15325500	5.5	75
17	2L_42_oligo	primer2	revRT17	15352000	15358000	6	60
18	2L_42_oligo	primer2	revRT18	15395000	15401300	6.3	75
19	2L_42_oligo	primer2	revRT19	15486500	15491500	5	59
20	2L_42_oligo	primer2	revRT20	15523000	15529000	6	75
21	2L_42_oligo	primer2	revRT21	15574000	15580300	6.3	75
22	2L_42_oligo	primer2	revRT25	15627000	15633000	6	75

## PCR primers and secondary oligonucleotides

Supplementary Table 2: Primer used for PCR amplification  
(Forward primer was also used for Reverse Transcription)

Primer Name	Sequence
BB287-FWD	CGCTCGGTCTCCGTTTCGTCTC
T7+BB288-REV	TAATACGACTCACTATAGGGTTGGGCTAGGTACAGGGTTCAGC

Supplementary Table 3: Readout probes sequences

Readout	Sequence
revRT1	CACCGACGTTCGCATAGAACGGAAGAGCGTGTG/iThioMC6-D//3AlexF647N/
revRT2	GCGATCATTGGGCACAACGTCCGCTCTTGGTC/iThioMC6-D//3AlexF647N/
revRT3	TCGCGCTTTCATCGTATCGCGGATCACGTGTC/iThioMC6-D//3AlexF647N/
revRT7	GATCCGATTGGAACCGTCCCAAGCGTTGCG/iThioMC6-D//3AlexF647N/
revRT8	GCTATCGTTCGTTTCGAGGCCAGAGCATTTCG/iThioMC6-D//3AlexF647N/
revRT9	CCCATGATCGTCCGATCTGGTCGGATTTGT/iThioMC6-D//3AlexF647N/
revRT10	AACGAGACGGTCAATCGCGCTGCATACTTG/iThioMC6-D//3AlexF647N/
revRT11	AGTGAATTGCTGCGCATCGGCGTACGACTT/iThioMC6-D//3AlexF647N/
revRT12	AAGTTCAACGGGACCGTGGCCGATGTTTCG/iThioMC6-D//3AlexF647N/
revRT13	TCTGTTTGACGCGCTGGACGGTGGATTTCGT/iThioMC6-D//3AlexF647N/
revRT14	GCAAGGGACGCTCGTTACGGGGATTTTCGCG/iThioMC6-D//3AlexF647N/
revRT15	TTAGTCGTCGCAACGCCAGGCAACTCATGC/iThioMC6-D//3AlexF647N/
revRT16	GTAAGCGCAACGGTGGACCGGAGACGACGG/iThioMC6-D//3AlexF647N/
revRT17	AAATTGCGTGACGGACCTGGGCCATTGGCC/iThioMC6-D//3AlexF647N/
revRT18	GCAGATTCCGCTACGCTCCGATTTCGATCAA/iThioMC6-D//3AlexF647N/
revRT19	GTATCCGTTCCCGACAAGCGGATCCGCGCG/iThioMC6-D//3AlexF647N/
revRT20	CGGCCGAATTACATCCGTCGTAATCGAGGC/iThioMC6-D//3AlexF647N/
revRT21	TAGCGCAGGAGGTCCACGACGTGCAAGGGTGT/iThioMC6-D//3AlexF647N/
revRT22	CGCAGCTCCACTTGATCTCGCTGGATCGTTCT/iThioMC6-D//3AlexF647N/
revRT23	CGAGCCAGGTCATCCTAGCCCATACGGCAATG/iThioMC6-D//3AlexF647N/
revRT24	GGTGTGGCTCGGTATCGTGCAAGGGTGAATGC/iThioMC6-D//3AlexF647N/
revRT25	ATTGCCCTACTCGCAAGCGGGAATACGGGC/iThioMC6-D//3AlexF647N/

Supplementary Table 5: Hi-C and Chip-Seq

<b>DATASET</b>	<b>SOURCE</b>	<b>ACCESSION</b>	<b>REFERENCE (PMID)</b>
HiC_mitotic	ArrayExpress	E-MTAB-4918	28388407
HiC_cycle9to13	GEO	GSE103625	30008320
HiC_cycle14	GEO	GSE103625	30008320
RNAseq_2to4h	Encode	ENCSR086YVX	22955616
RNApol2S5_C14Early	GEO	GSE62925	25748651
RNApol2S5_C14Late	GEO	GSE62925	25748651
H3K27me3_14c	GEO	GSE58935	25313869
H3K27me3_LateE	modEncode	GSE47230	19536255
PH_LateE	GEO	GSE60428	25284790
PC_2to4h	GEO	GSE68983	27678375
CTCF_LateE	modEncode	GSE47264	19536255
CP190_LateE	modEncode	GSE47234	19536255
SNA_2to4h	GEO	GSE68983	27678375
Zld_c13	GEO	GSE30757	22028662
Zld_c14	GEO	GSE30757	22028662
GAF_LateE	modEncode	GSE47236	19536255
GAF_2to4h	GEO	GSE68983	27678375