

Supplementary Table S1 | MDSs identified in U2OS cells

MDS (U2OS)	Chromosome	Start	End	Width	MidASeq signal (FC)	Replication timing (A.U)	Origin density (RPK)	The closest gene	Gene length (bp)	Nascent RNA (RPKM)	Known CFS
172	chr10	82000000	82800000	800000	68.857	2.881	10.778	DYDC1	20654	0.24	FRA10D
53	chr3	96900000	97700000	800000	65.311	2.996	10.615	CRYBG3	122947	0.077	NA
66	chr4	19000000	19700000	700000	64.724	2.465	5.923	SLIT2	365554	0.541	FRA4D
210	chr14	26900000	27800000	900000	61.408	2.756	7.469	MIR4307	84	0.683	NA
21	chr2	136900000	137500000	600000	56.974	2.786	10.998	THSD7B	898031	0.121	FRA2F and FRA2S
218	chr14	46400000	47900000	1500000	56.287	2.821	13.936	LINC00871	437743	0.467	NA
164	chr10	51100000	52100000	1000000	51.318	1.997	12.993	TIMM23	31306	0.167	FRA10C and FRA10G
234	chr16	78400000	79100000	700000	50.178	2.056	22.606	WWOX	1113238	0.326	FRA16D
235	chr16	82900000	83500000	600000	50.03	2.595	19.39	MIR3182	63	0.017	FRA16D
195	chr12	23800000	24300000	500000	49.992	2.33	8.96	SOX5	417407	0.334	NA
25	chr2	140700000	140900000	200000	49.333	3.32	5.405	YY1P2	1851	0.002	FRA2S
37	chr3	2200000	2900000	700000	47.633	2.887	10.19	CNTN4	819133	0.145	NA
72	chr4	61300000	61900000	600000	45.765	2.034	10.147	ADGRL3	532299	0.454	FRA4B
157	chr9	27900000	29400000	1500000	45.583	2.707	12.678	MIR876	81	0.307	FRA9C
33	chr2	204800000	205400000	600000	45.405	1.462	10.993	ICOS	21143	0.219	FRA2I
86	chr4	163700000	164100000	400000	40.841	2.689	8.58	NAF1	40214	0.068	NA
47	chr3	60000000	61000000	1000000	40.415	2.768	12.55	FHIT	1502098	0.04	FRA3B
60	chr3	173600000	174100000	500000	39.72	3.197	5.894	NLGN1	679048	0.133	NA
248	chr20	14300000	15700000	1400000	37.39	2.745	11.959	MACROD2-AS1	45263	0.056	NA
130	chr7	70000000	70500000	500000	37.255	1.358	14.878	AUTS2	26638	1.148	FRA7J
24	chr2	140300000	140400000	100000	36	2.994	6.23	YY1P2	1851	0.014	FRA2S
123	chr7	3400000	4100000	700000	35.307	1.229	38.091	SDK1	258034	0.767	FRA7B
251	chr21	27400000	28500000	1100000	34.365	2.012	14.131	MIR4759	83	0.693	NA
32	chr2	185600000	186500000	900000	34.1	0.991	8.811	FSIP2	94662	0.481	FRA2H
199	chr12	99000000	100100000	1100000	33.342	1.605	7.781	IKBIP	31648	0.082	NA
62	chr3	188500000	189300000	800000	32.673	0.554	14.276	TPRG1-AS2	1909	0.518	FRA3C
198	chr12	86300000	87400000	1100000	32.432	2.969	5.129	MIR548AL	78	0.41	FRA12B
181	chr11	31100000	31600000	500000	32.152	2.494	9.442	NA	228417	0.447	FRA11E
268	chrX	96900000	98000000	1100000	31.695	2.448	7.376	RPA4	1544	0.126	FRAXF
101	chr5	104300000	105200000	900000	31.536	2.591	7.794	RAB9BP1	625	0.476	FRA5F
209	chr13	107300000	107900000	600000	30.902	2.623	7.628	LINC00443	18301	0.36	NA
200	chr12	102300000	102800000	500000	30.837	1.524	10.27	WASHC3	49183	0.37	NA
208	chr13	93600000	94100000	500000	30.819	1.46	6.586	GPC6	1079711	0.644	FRA13D
216	chr14	43200000	44600000	1400000	30.469	2.8	11.267	FSCB	3146	0.296	NA
267	chrX	95600000	96200000	600000	30.253	2.872	6.678	DIAPH2	252689	0.121	FRAXF
126	chr7	18400000	18800000	400000	30.231	1.595	10.155	HDAC9	52757	0.763	NA
16	chr2	115300000	115700000	400000	29.223	2.685	10.455	DPP10	1383147	0.221	FRA2B and FRA2S
2	chr1	49000000	49800000	800000	28.918	3.063	10.531	BEND5	49008	0.033	FRA1B
118	chr6	120100000	121000000	900000	28.452	3.065	8.111	LOC285762	38756	0.287	NA
4	chr1	71300000	72600000	1300000	27.355	2.837	7.551	ZRANB2-AS1	20677	0.229	FRA1C and FRA1L
146	chr8	99300000	99600000	300000	27.152	2.24	7.947	KCNS2	3774	1.024	FRA8B
166	chr10	55200000	56000000	800000	26.789	3.128	9.736	PCDH15	855599	0.611	FRA10C
149	chr8	110600000	110600000	600000	26.66	2.897	8.157	SYBU	6362	0.384	NA
46	chr3	55700000	56100000	400000	26.623	0.799	16.04	MIR3938	103	0.162	NA
36	chr2	220100000	220600000	500000	26.44	0.7	15.334	MIR3132	75	0.265	NA
185	chr11	83600000	84300000	700000	26.323	2.801	14.857	DLG2	818268	0.552	FRA11F
119	chr6	126000000	126600000	600000	25.962	1.445	10.282	MIR5695	9926	0.697	NA
135	chr7	133600000	133900000	300000	25.694	2.362	8.467	LRGUK	136829	0.55	FRA7H
270	chrX	121400000	121800000	400000	25.22	2.784	3.158	GRIA3	20438	0.496	FRAXF
161	chr9	116500000	117100000	600000	25.203	0.399	17.365	KIF12	7420	0.19	FRA9B and FRA9E
28	chr2	153600000	154300000	700000	25.147	2.502	9.624	ARL6IP6	41219	0.092	FRA2S
206	chr13	80800000	81500000	700000	25.109	2.915	4.331	SPRY2	3683	1.229	FRA13E
133	chr7	109900000	111500000	1600000	25.017	3.067	11.924	LRRN3	34448	0.245	FRA7K
204	chr13	66500000	66900000	400000	24.291	2.162	5.303	PCDH9-AS2	89863	0.046	FRA13B
110	chr6	68800000	69100000	300000	24.195	2.63	8.207	ADGRB3	753772	0.062	FRA6D
265	chrX	91400000	92300000	900000	24.117	2.747	2.398	PCDH11X	787769	0.084	FRAXF
134	chr7	126600000	127000000	400000	24.094	3.062	7.508	GRM8	804918	0.104	NA
11	chr2	13500000	15500000	2000000	23.965	2.824	15.173	LRATD1	7359	0.365	FRA2C
222	chr14	66300000	67400000	1100000	23.351	-1.048	21.007	GPHN	551609	0.779	FRA14B and FRA14C

178	chr11	20900000	21400000	500000	23.108	2.737	11.774	NELL1	220539	0.06	FRA11C and FRA11I
102	chr5	120100000	120600000	500000	23.034	-0.137	10.154	PRR16	70133	0.259	NA
15	chr2	63100000	63700000	600000	22.803	0.444	14.652	LOC100132215	3747	1.377	FRA2S
26	chr2	141500000	141900000	400000	22.21	2.7	8.145	LRP1B	1900275	0.203	FRA2S
1	chr1	14100000	14800000	700000	22.068	-0.337	27.643	PRDM2	75719	0.093	FRA1A and FRA1B
224	chr14	78500000	80800000	2300000	21.738	1.576	13.043	DIO2-AS1	244049	0.143	NA
228	chr15	60600000	60900000	300000	21.577	-0.441	30.413	ANXA2	50836	0.623	FRA15A
131	chr7	78000000	79400000	1400000	21.517	1.41	17.343	MAGI2-AS3	18252	0.109	FRA7J
38	chr3	3600000	4400000	800000	21.014	1.372	16.378	LRRN1	48267	0.288	NA
23	chr2	139400000	140000000	600000	20.955	3.034	9.573	NXP2	111085	1.26	FRA2S
89	chr5	21300000	22400000	1100000	20.674	2.966	6.991	CDH12	461906	0.517	FRA5E
90	chr5	28500000	29100000	600000	20.657	2.526	10	LSP1P3	444	1.078	FRA5A and FRA5E
109	chr6	61700000	62200000	500000	20.082	2.705	10.574	KHDRBS2	606236	0.068	NA
129	chr7	40300000	40700000	400000	19.687	0.289	14.105	SUGCT	725792	0.124	NA
80	chr4	112900000	113400000	500000	19.532	0.62	14.62	FAM241A	43685	0.132	NA
205	chr13	68200000	68500000	300000	19.196	3.312	4.907	PCDH9	5830	0.262	FRA13B
213	chr14	37000000	37800000	800000	19.11	1.653	11.569	SLC25A21-AS1	1768	0.16	NA
243	chr18	52600000	53200000	600000	19.005	3.118	6.935	MIR4529	78	0.004	FRA18B
50	chr3	76100000	76600000	500000	19.004	2.476	8.81	ROBO2	1712470	0.004	NA
194	chr12	20700000	21300000	600000	18.968	1.971	7.838	SLCO1B1	108603	0.172	NA
160	chr9	105900000	106300000	400000	18.628	0.264	12.358	CYLC2	23178	0.202	NA
145	chr8	88900000	89800000	900000	18.623	1.598	11.417	MMP16	290258	0.471	NA
49	chr3	67100000	67700000	600000	18.54	2.919	12.64	MIR4272	64	0.372	NA
81	chr4	142200000	142600000	400000	18.501	0.319	9.993	IL15	97392	0.386	FRA4C
6	chr1	97300000	97600000	300000	18.463	2.023	8.263	DPYD-AS1	227033	0.281	FRA1M
19	chr2	132700000	133600000	900000	18.372	2.477	19.854	MIR663B	115	0.043	FRA2F and FRA2S
77	chr4	92600000	93600000	1000000	18.231	2.203	7.992	GRID2	912869	0.164	FRA4E
175	chr10	107700000	108500000	800000	18.081	2.993	10.394	SORCS1	591046	0.011	FRA10D
121	chr6	147800000	148200000	400000	18.027	1.75	13.35	SAMD5	61330	0.022	NA
29	chr2	157800000	158300000	500000	17.792	0.613	15.68	GALNT5	53574	0.266	NA
112	chr6	82900000	83100000	200000	17.573	0.108	8.56	IBTK	35691	0.261	NA
215	chr14	40800000	41500000	700000	17.448	3.384	7.396	LRFN5	296989	0.332	NA
113	chr6	92200000	92500000	300000	17.111	2.552	5.18	MIR4643	78	0.206	FRA6G
153	chr9	9400000	10400000	1000000	16.928	3.046	5.286	PTPRD	2298478	0.004	NA
35	chr2	213600000	214500000	900000	16.583	3.181	8.364	SPAG16-DT	7653	0.016	NA
152	chr9	2300000	2600000	300000	16.545	-1.057	10.217	VLDLR-AS1	198712	0.576	NA
158	chr9	78500000	78900000	400000	16.267	0.937	13.893	PCSK5	284919	0.039	NA
116	chr6	103900000	104400000	500000	16.235	2.875	6.502	HACE1	57227	0.004	FRA6F
93	chr5	60600000	61200000	600000	16.176	0.262	12.963	C5orf64	68727	0.678	FRA5H
171	chr10	75800000	76300000	500000	16.14	-0.938	22.598	ADK	558119	0.136	FRA10D
177	chr10	115500000	115800000	300000	16.062	0.752	6.033	MIR4483	62	0.193	FRA10B and FRA10D
87	chr5	11400000	11600000	200000	16.051	2.599	17.79	CTNND2	617009	0.039	NA
108	chr6	5200000	5700000	500000	15.895	2.344	17.49	FARS2	510540	0.509	FRA6B
207	chr13	91700000	92500000	800000	15.866	1.593	6.19	LINC00379	84086	0.259	NA
20	chr2	135300000	135700000	400000	15.858	0.733	12.183	CCNT2-AS1	51974	0.658	FRA2F and FRA2S
55	chr3	114600000	114900000	300000	15.855	-0.012	12.573	ZBTB20	733315	0.706	NA
45	chr3	54300000	54700000	400000	15.737	1.798	19.01	ESRG	7734	0.011	NA
88	chr5	12400000	12700000	300000	15.718	3.144	12.797	LINC01194	230327	0.652	NA
79	chr4	97300000	98200000	900000	15.611	2.787	9.437	STPG2-AS1	123239	0.198	FRA4E
273	chrX	142200000	142600000	400000	15.51	3.183	4.42	SPANXN3	8744	0.025	FRAXA, FRAXC and FRAXF
214	chr14	39700000	40100000	400000	15.437	2.441	9.968	LOC100288846	1359	0.026	NA
12	chr2	18800000	19100000	300000	15.381	1.352	18.1	NT5C1B	26710	0.106	FRA2C
189	chr11	90400000	90800000	400000	15.355	1.052	7.76	MIR4490	84	0.162	NA
229	chr16	7700000	8000000	300000	15.23	1.706	15.55	RBFOX1	380590	0.884	NA
173	chr10	85800000	86000000	200000	15.114	2.351	15.61	GHITM	14127	0.267	FRA10D
27	chr2	148000000	148300000	300000	15.08	2.413	9.807	ACVR2A	86308	0.782	FRA2K and FRA2S
242	chr18	39100000	39600000	500000	15.071	3.103	6.596	PIK3C3	16206	0.545	FRA18A
69	chr4	32900000	34600000	1700000	14.87	2.392	11.432	ARAP2	125615	0.381	FRA4D
34	chr2	211700000	212300000	600000	14.819	2.975	6.955	CPS1-IT1	2305	0.008	NA
70	chr4	35900000	36400000	500000	14.779	2.53	13.586	ARAP2	125615	0.85	FRA4D
233	chr16	72400000	72800000	400000	14.736	0.612	10.708	PMFBP1	53354	0.555	FRA16B
151	chr8	136700000	137000000	300000	14.716	2.147	19.757	KHDRBS3	65728	1.189	NA
111	chr6	78000000	78200000	200000	14.713	3.035	6.975	HTR1B	1173	0.045	NA

176	chr10	112700000	113100000	400000	14.678	-1.13	19.493	ADRA2A	3873	1.056	FRA10B, FRA10D and FRA10E
132	chr7	90800000	91200000	400000	14.561	0.972	23.475	FZD1	4350	2.18	FRA7E
78	chr4	94700000	95200000	500000	14.464	1.387	15.58	ATOH1	1065	0.545	FRA4E
201	chr13	35200000	35400000	200000	14.464	2.904	5.27	LINC00457	205232	0.342	FRA13A
188	chr11	89000000	89100000	100000	14.409	2.17	4.09	TYR	117888	0.009	FRA11F
91	chr5	59300000	59600000	300000	14.37	1.868	11.207	PDE4D	276159	0.326	FRA5H
259	chrX	10900000	11300000	400000	14.33	-0.27	5.685	HCCS	11799	0.132	NA
271	chrX	128300000	129100000	800000	14.313	2.706	4.419	UTP14A	23642	0.019	FRAXF
65	chr4	12600000	13200000	600000	14.276	1.993	9.128	RAB28	116643	0.09	FRA4A and FRA4D
74	chr4	85700000	86100000	400000	14.134	2.804	10.278	WDFY3	296852	0.066	FRA4E
258	chrX	7000000	7200000	200000	13.87	2.802	7.71	MIR4767	78	0.169	NA
246	chr20	8400000	8700000	300000	13.864	1.232	13.817	PLCB1	187792	0.676	FRA20B
59	chr3	158400000	158700000	300000	13.834	0.976	11.137	RARRES1	35379	0.395	FRA3D
165	chr10	54100000	54500000	400000	13.717	3.07	10.295	DKK1	3377	0.007	FRA10C and FRA10G
167	chr10	57400000	57600000	200000	13.673	2.969	11.27	PCDH15	1806764	0.259	FRA10C
5	chr1	80700000	80900000	200000	13.564	3.118	7.515	ADGRL2	686263	0.018	FRA1L
52	chr3	78700000	79400000	700000	13.551	2.37	8.923	ROBO1	91535	0.351	NA
31	chr2	167400000	167800000	400000	13.494	3.043	9.953	XIRP2	371265	0.047	FRA2G
274	chrX	148500000	148600000	100000	13.304	1.649	5.87	IDS	11677	0.306	FRAXA, FRAXD, FRAXE and FRAXF
107	chr6	1900000	2100000	200000	13.19	1.198	13.16	GMDS	552191	0.322	NA
117	chr6	114300000	114600000	300000	13.074	2.432	7.9	HS3ST5	7292	0.151	FRA6F
182	chr11	38600000	39000000	400000	13.052	1.679	8.923	LRRC4C	178930	0.439	NA
244	chr18	53500000	53900000	400000	13.03	2.772	6.765	LINC01539	54181	0.024	FRA18B
147	chr8	103600000	104000000	400000	13.022	2.192	9.32	AZIN1	37862	0.041	FRA8A
139	chr8	34000000	34200000	200000	13.016	2.972	9.21	DUSP26	8586	0.272	NA
115	chr6	101700000	101800000	100000	12.935	3.212	5.27	GRIK2	346350	0.117	NA
40	chr3	8200000	8700000	500000	12.794	-0.749	24.37	LMCD1-AS1	307409	1.202	NA
239	chr18	3900000	4100000	200000	12.708	0.002	36.965	DLGAP1-AS4	51591	0.042	NA
250	chr21	21100000	21400000	300000	12.652	2.988	7.597	LINC00320	60514	0.082	NA
163	chr10	9200000	9600000	400000	12.515	2.285	8.783	GATA3	20498	0.16	NA
10	chr1	245800000	246200000	400000	12.453	1.099	17.093	KIF26B	42716	0.412	FRA1I
96	chr5	65500000	66100000	600000	12.438	-2.417	14.383	MAST4	390176	1.261	NA
159	chr9	83400000	83700000	300000	12.387	0.526	19.473	TLE1	104999	0.668	NA
232	chr16	63200000	63400000	200000	12.367	3	8.21	CDH8	384825	0.085	FRA16C
13	chr2	21400000	21700000	300000	12.281	2.493	16.5	APOB	42645	1.031	NA
245	chr18	69600000	69900000	300000	12.281	1.56	8.51	CBLN2	6875	0.262	FRA18C
7	chr1	174600000	174800000	200000	12.184	1.207	12.56	RABGAP1L	294774	0.383	FRA1G
18	chr2	122200000	122500000	300000	12.168	1.797	22.163	RNU4ATAC	130	0.779	FRA2S
137	chr7	141500000	141800000	300000	12.096	0.761	15.05	OR9A4	945	0.613	NA
179	chr11	28400000	28700000	300000	12.076	1.213	13.89	METTL15	15697	0.262	FRA11D
61	chr3	174800000	175500000	700000	12.052	3.041	5.474	MIR4789	82	0.05	NA
125	chr7	14400000	14600000	200000	12.04	3.003	7.95	DGKB	696402	0.005	NA
63	chr3	192400000	192600000	200000	11.974	2.509	15.18	FGF12	588207	0.105	NA
17	chr2	116500000	117400000	900000	11.925	3.084	13.054	DPP10	682643	0.161	FRA2S
58	chr3	131300000	131700000	400000	11.915	0.629	14.758	MIR5704	77	0.54	NA
168	chr10	64500000	64700000	200000	11.902	2.943	12.815	EGR2	4371	0.105	FRA10C
103	chr5	129400000	130400000	1000000	11.794	2.861	9.535	HINT1	6066	0.176	FRA5C
162	chr9	119500000	120200000	700000	11.753	2.339	18.247	SNORA70C	136	0.021	FRA9B and FRA9E
249	chr21	16200000	16300000	100000	11.75	2.031	9.1	NRIP1	103571	0.413	NA
39	chr3	6800000	7300000	500000	11.745	2.525	9.878	GRM7	832572	0.017	NA
122	chr6	161800000	162800000	1000000	11.723	3.082	13.061	PRKN	489464	0.104	FRA6E
240	chr18	7900000	8100000	200000	11.708	1.605	27.615	PTPRM	459931	0.566	NA
99	chr5	93700000	94100000	400000	11.707	0.734	10.08	KIAA0825	245659	0.739	FRA5B and FRA5D
54	chr3	109700000	110000000	300000	11.704	3.052	12.24	LINC01205	85178	0.212	NA
41	chr3	17200000	17500000	300000	11.555	2.705	8.973	TBC1D5	150973	0.403	NA
106	chr5	167900000	168100000	200000	11.544	-1.395	27.38	MIR103B1	62	2.076	FRA5G
252	chr21	30900000	31500000	600000	11.484	0.727	28.592	GRIK1-AS2	34708	0.454	NA
3	chr1	57400000	58100000	700000	11.446	2.509	18.111	DAB1	293260	0.021	FRA1B
183	chr11	79000000	79200000	200000	11.412	2.334	39.7	MIR708	88	0.386	FRA11H
203	chr13	63900000	64000000	100000	11.388	3.675	4.33	OR7E156P	5134	0.219	FRA13B
191	chr11	116200000	116400000	200000	11.359	-0.212	47.795	BUD13	24829	0.288	FRA11B and FRA11G
187	chr11	87600000	87900000	300000	11.33	2.051	11.263	RAB38	62221	0.023	FRA11F
48	chr3	61800000	62100000	300000	11.307	2.132	14.933	PTPRG	77317	0.639	FRA3B

266	chrX	94400000	94600000	20000	11.298	3.013	5.295	BRDTP1	817	0.322	FRAXF
241	chr18	36600000	37200000	60000	11.217	1.751	10.373	MIR924HG	133715	0.261	FRA18A
170	chr10	66900000	67400000	50000	11.17	2.033	12.61	ANXA2P3	1350	0.031	FRA10C
174	chr10	106800000	107000000	20000	11.157	2.42	13.41	SORCS3	75140	0.064	FRA10D
247	chr20	13100000	13300000	20000	11.103	1.607	21.45	ISM1-AS1	2268	0.361	FRA20B
225	chr14	82000000	82400000	40000	11.095	2.797	10.04	SEL1L	62315	0.036	NA
186	chr11	84700000	85500000	80000	11.075	2.036	10.77	DLG2	2172259	0.082	FRA11F
260	chrX	56000000	56300000	30000	11.022	3.116	8.23	KLF8	37101	0.128	FRAXF
114	chr6	98300000	98600000	30000	10.923	1.921	6.463	MIR2113	89	0.024	NA
223	chr14	67800000	68500000	70000	10.854	-2.539	27.431	VT11B	23736	0.393	FRA14B and FRA14C
140	chr8	35500000	35600000	10000	10.846	3.069	8.78	UNC5D	44525	0.032	NA
9	chr1	187300000	187400000	10000	10.813	2.791	6.21	PLA2G4A	160082	0.462	FRA1K
262	chrX	65000000	65400000	40000	10.77	1.896	7.018	VSIG4	18388	0.381	FRAXF
256	chr22	33500000	33700000	20000	10.725	2.165	24.885	SYN3	545838	0.88	FRA22B
43	chr3	25200000	25400000	20000	10.69	2.82	13.02	RARB	423600	0.031	FRA3A
124	chr7	11300000	11700000	40000	10.587	1.959	13.843	THSD7A	9321	0.029	NA
14	chr2	32600000	33000000	40000	10.553	-0.154	21.688	MIR4765	77	0.417	NA
219	chr14	48800000	48900000	10000	10.54	2.986	14.5	LINC00648	30062	0.003	NA
120	chr6	129200000	129400000	20000	10.514	1.279	9.73	LAMA2	633425	0.056	NA
263	chrX	67800000	68000000	20000	10.507	2.487	6.52	STARD8	78174	0.026	FRAXF
100	chr5	94600000	95000000	40000	10.481	1.344	10.855	ARSK	1933	0.897	FRA5B and FRA5D
136	chr7	137000000	137300000	30000	10.475	1.506	6.65	PTN	116455	0.266	NA
142	chr8	51500000	51700000	20000	10.475	3.26	13.02	SNTG1	620307	0.021	NA
231	chr16	47400000	47500000	10000	10.456	2.579	11.77	PHKB	86250	0.917	NA
154	chr9	16000000	16400000	40000	10.445	-1.811	20.958	C9orf92	49173	0.064	FRA9G
144	chr8	88100000	88500000	40000	10.413	3.081	12.805	CNBD1	516280	0.296	NA
127	chr7	31800000	32000000	20000	10.351	1.068	15.695	PPP1R17	21439	0.144	NA
57	chr3	117300000	117700000	40000	10.317	2.916	13.118	TUSC7	7253	0.009	NA
169	chr10	66300000	66700000	40000	10.289	2.315	11.498	ANXA2P3	1350	0.01	FRA10C
104	chr5	136900000	137400000	50000	10.263	0.865	15.04	MIR874	78	0.048	FRA5C
193	chr12	19600000	19700000	10000	10.187	0.81	13.24	AEBP2	81659	0.291	NA
190	chr11	106900000	107100000	20000	10.183	0.783	12.795	GUCY1A2	344434	0.266	NA
211	chr14	29800000	30000000	20000	10.177	2.034	12.935	MIR548AI	278492	0.321	NA
143	chr8	71000000	71100000	10000	10.153	2.26	15.01	NCOA2	36452	0.093	NA
264	chrX	75300000	75700000	40000	10.145	3.09	7.273	PBDC1	751	0.127	FRAXF
56	chr3	116000000	116200000	20000	10.1	1.827	13.68	LSAMP	643176	0.263	NA
83	chr4	144600000	144800000	20000	10.034	0.548	12.695	FREM3	123268	0.124	NA
8	chr1	176200000	176800000	60000	9.976	2.774	14.612	PAPPA2	228035	0.094	FRA1G
227	chr15	27100000	27300000	20000	9.859	2.937	18.125	GABRA5	82492	0.126	NA
148	chr8	105500000	105800000	30000	9.85	2.135	10.147	LRP12	6912	0.457	FRA8A
85	chr4	150300000	150600000	30000	9.787	0.689	10.72	DCLK2	179183	0.443	NA
82	chr4	143700000	143800000	10000	9.612	1.55	9.71	INPP4B	818423	0.148	NA
97	chr5	81000000	81300000	30000	9.508	-0.876	16.803	SSBP2	333894	0.307	NA
94	chr5	62800000	63000000	20000	9.479	2.687	10.705	HTR1A	2245	0.019	FRA5H
42	chr3	20400000	20800000	40000	9.454	2.747	10.32	SGO1	17789	0.018	NA
202	chr13	57600000	57800000	20000	9.437	3.267	6.8	PRR20B	3022	0.165	FRA13B and FRA13C
221	chr14	65400000	65700000	30000	9.42	0.6	20.76	LOC100506321	4394	0.601	FRA14B
184	chr11	79600000	79700000	10000	9.373	2.713	25.16	TENM4	787368	0.004	NA
197	chr12	81400000	81500000	10000	9.372	2.548	5.95	ACSS3	177774	0.008	FRA12B
150	chr8	112400000	112500000	10000	9.35	2.644	7.87	CSMD3	27507	0.246	NA
105	chr5	145200000	145400000	20000	9.325	1.383	11.85	PRELID2	76318	0.075	NA
51	chr3	77100000	77200000	10000	8.943	3.387	8.88	ROBO2	609821	0.004	NA
64	chr4	11300000	11400000	10000	8.927	2.173	10.51	MIR572	95	0.07	FRA4A and FRA4D
257	chr22	35100000	35300000	20000	8.925	-3.261	55.72	ISX	21251	1.71	FRA22A
98	chr5	84100000	84300000	20000	8.921	-0.851	9.985	EDIL3	442486	2.247	NA
22	chr2	138200000	138500000	30000	8.87	0.345	11.293	HNMT	3207	0.291	FRA2F and FRA2S
75	chr4	86400000	86900000	50000	8.827	0.595	12.294	MIR4451	66	0.276	FRA4E
212	chr14	32100000	32500000	40000	8.797	-0.92	14.303	NUBPL	146655	0.233	NA
141	chr8	47600000	47800000	20000	8.78	0.235	21.44	LINC00293	13484	0.842	NA
92	chr5	59800000	59900000	10000	8.737	2.548	14.47	PDE4D	501698	0.025	FRA5H
71	chr4	36900000	37000000	10000	8.732	1.591	15.27	MIR4801	82	0.012	FRA4D
67	chr4	21300000	21600000	30000	8.658	1.327	7.563	KCNIP4	575291	0.052	FRA4D
238	chr17	60600000	61300000	70000	8.62	-0.469	26.654	MARCHF10	105337	0.449	NA

196	chr12	77700000	77900000	200000	8.552	0.333	6.865	E2F7	44335	0.037	NA
255	chr22	27900000	28600000	700000	8.364	-2.128	33.976	MIR3199-2	86	0.688	FRA22B
128	chr7	33600000	33800000	200000	8.299	1.872	27.105	BMPER	250962	0.303	FRA7C
73	chr4	84800000	84900000	100000	8.22	1.019	11.01	GPAT3	69558	1.004	NA
253	chr22	24700000	24800000	100000	8.216	-1.934	50.05	SPECC1L	75633	0.006	NA
84	chr4	148100000	148200000	100000	8.212	1.701	14.7	EDNRA	64038	0.463	NA
76	chr4	88800000	88900000	100000	8.123	1.205	11.02	SPP1	7762	0.586	FRA4E
155	chr9	17500000	17600000	100000	8.107	1.613	12.44	SH3GL2	218170	0.125	FRA9G
272	chrX	138800000	138900000	100000	8.099	2.939	4.98	ATP11C	42089	0.02	FRAXC and FRAXF
254	chr22	25500000	25900000	400000	8.089	-1.295	56.253	KIAA1671-AS1	10276	1.516	NA
220	chr14	49100000	49800000	700000	7.941	-0.89	32.311	RPS29	9745	0.663	NA
192	chr11	131800000	131900000	100000	7.89	-0.794	18.47	NTM	426005	0.958	NA
156	chr9	27000000	27100000	100000	7.853	-0.912	21.97	LRRC19	12557	1.011	FRA9C
269	chrX	99500000	99800000	300000	7.783	2.96	6.033	PCDH19	118630	0.664	FRAXF
217	chr14	44800000	46000000	1200000	7.75	1.531	19.343	SNORD127	99	0.437	NA
44	chr3	29600000	29700000	100000	7.602	-0.034	9.82	RBMS3	729084	0.425	NA
30	chr2	159400000	159700000	300000	7.576	-1.576	11.203	PKP4	104158	0.946	NA
226	chr14	83600000	83700000	100000	7.536	2.983	6.71	SEL1L	35052	0.295	NA
138	chr8	28000000	30000000	200000	7.504	0.573	9.255	CSMD1	252613	0.436	NA
236	chr17	58700000	59000000	300000	7.487	-1.68	31.36	BCAS3	360244	0.34	FRA17B
261	chrX	57100000	57200000	100000	7.246	2.625	10.53	SPIN2B	1865	0.516	FRAXF
95	chr5	65200000	65300000	100000	7.205	-1.971	8.49	LOC100303749	769	0.372	NA
237	chr17	59200000	59300000	100000	6.824	-2.565	41.49	BCAS3	235383	0.3	FRA17B
68	chr4	32100000	32200000	100000	6.746	2.962	13.17	PCDH7	426387	1.593	FRA4D
180	chr11	29000000	29100000	100000	6.431	1.152	9.15	METTL15	15697	0.017	FRA11D and FRA11E
230	chr16	46300000	46400000	100000	4.249	2.376	27.64	ANKRD26P1	49064	0.004	NA