Supplementary Table 2: Mutations in single cells

Chr	position	ref	alter	gene	function	Subset	cell_id	all_reads	mutant_reads	vaf
chr2	26178354	G	T	KIF3C	intron	Subset1	M-DCIS-2	37	28	75.6
chr2	26178354	G	T	KIF3C	intron	Subset1	M-DCIS-5	69	27	39.1
chr1	67288225	A	C	WDR78	intron	Subset1	MeC-2	164	114	69.5
chr1	67288225	A	C	WDR78	intron	Subset1	MeP-2	23	4	17.3
chr1	67288225	A	C	WDR78	intron	Subset1	MeC-10	15	14	93.3
chr1	67288225	A	C	WDR78	intron	Subset1	MeC-3	6	2	33.3
chr1	67288225	A	C	WDR78	intron	Subset1	MeC-4	87	41	47.1
chr1	67288225	A	C	WDR78	intron	Subset1	MeC-5	42	5	11.9
chr1	67288225	A	C	WDR78	intron	Subset1	MeP-1	67	2	2.9
chr1	67288225	A	C	WDR78	intron	Subset1	MeP-18	3	2	66.6
chr1	67288225	A	C	WDR78	intron	Subset1	MeP-4	45	36	80
chr1	67288225	A	C	WDR78	intron	Subset1	MeP-6	448	417	93
chr1	67288225	A	C	WDR78	intron	Subset1	DCIS-1	36	3	8.3
chr1	67288225	A	C	WDR78	intron	Subset1	DCIS-2	12	2	16.6
chr1	67288225	A	C	WDR78	intron	Subset1	DCIS-3	25	9	36
chr1	67288225	A	C	WDR78	intron	Subset1	DCIS-6	32	17	53.1
chr1	67288225	A	C	WDR78	intron	Subset1	DCIS-8	22	2	9
chr1	67288225	A	C	WDR78	intron	Subset1	InvF-10	12	8	66.6
chr1	67288225	A	C	WDR78	intron	Subset1	InvF-1	6	5	83.3
chr1	67288225	A	C	WDR78	intron	Subset1	InvF-11	51	4	7.8
chr1	67288225	A	C	WDR78	intron	Subset1	InvF-12	84	7	8.3
chr1	67288225	A	C	WDR78	intron	Subset1	InvF-9	48	19	39.5
chr1	67288225	A	C	WDR78	intron	Subset1	MeD-2	52	27	51.9
chr1	67288225	A	C	WDR78	intron	Subset1	MeD-7	66	5	7.5
chr1	67288225	A	C	WDR78	intron	Subset1	MeD-8	32	5	15.6
chr1	67288225	A	C	WDR78	intron	Subset1	MeD-9	56	27	48.2
chr1	67288225	A	C	WDR78	intron	Subset1	M-DCIS-2	34	7	20.5
chr1	67288225	A	C	WDR78	intron	Subset1	S1-11	219	54	24.6
chr1	67288225	A	C	WDR78	intron	Subset1	S1-1	15	15	100
chr1	67288225	A	C	WDR78	intron	Subset1	S1-2	60	23	38.3
chr1	67288225	A	C	WDR78	intron	Subset1	S1-6	26	10	38.4
chr1	67288225	A	C	WDR78	intron	Subset1	S1-9	6	2	33.3
chr18	23847672	T	A	TAF4B	intron	Subset1	MeC-2	51	22	43.1
chr18	23847672	T	A	TAF4B	intron	Subset1	MeP-2	17	7	41.1
chr18	23847672	T	A	TAF4B	intron	Subset1	MeC-3	186	2	1
chr18	23847672	T	A	TAF4B	intron	Subset1	MeC-4	74	29	39.1
chr18	23847672	T	A	TAF4B	intron	Subset1	MeC-8	2	2	100
chr18	23847672	T	A	TAF4B	intron	Subset1	MeP-1	12	2	16.6
chr18	23847672	T	A	TAF4B	intron	Subset1	MeP-16	3	2	66.6
chr18	23847672	T	A	TAF4B	intron	Subset1	MeP-18	2	2	100
chr18	23847672	T	A	TAF4B	intron	Subset1	MeP-4	30	23	76.6
chr18	23847672	T	A	TAF4B	intron	Subset1	MeP-6	43	34	79
chr18	23847672	T	A	TAF4B	intron	Subset1	DCIS-3	33	6	18.1
chr18	23847672	T	A	TAF4B	intron	Subset1	DCIS-6	11	3	27.2
chr18	23847672	T	A	TAF4B	intron	Subset1	InvF-1	15	7	46.6
chr18	23847672	T	A	TAF4B	intron	Subset1	InvF-12	13	7	53.8
chr18	23847672	T	A	TAF4B	intron	Subset1	InvF-9	33	3	9
chr18	23847672	T	A	TAF4B	intron	Subset1	MeD-2	139	11	7.9
chr18	23847672	T	A	TAF4B	intron	Subset1	MeD-7	261	12	4.5
chr18	23847672	T	A	TAF4B	intron	Subset1	MeD-8	153	39	25.4
chr18	23847672	T	A	TAF4B	intron	Subset1	MeD-9	214	87	40.6
chr18	23847672	T	A	TAF4B	intron	Subset1	M-DCIS-2	145	2	1.3
chr18	23847672	T	A	TAF4B	intron	Subset1	S1-11	190	57	30

chr18	23847672	T	A	TAF4B	intron	Subset1	S3-13	271	150	55.3
chr18	23847672	T	A	TAF4B	intron	Subset1	S3-7	77	49	63.6
chr18	23847672	T	A	TAF4B	intron	Subset1	S1-1	2	2	100
chr18	23847672	T	A	TAF4B	intron	Subset1	S1-2	44	32	72.7
chr18	23847672	T	A	TAF4B	intron	Subset1	S2-10	33	6	18.1
chr18	23847672	T	A	TAF4B	intron	Subset1	S2-13	35	32	91.4
chr17	66343089	A	G	ARSG	intron	Subset2	BN-3	19	6	31.5
chr17	66343089	A	G	ARSG	intron	Subset2	BN-4	12	2	16.6
chr17	66343089	A	G	ARSG	intron	Subset2	BN-5	15	4	26.6
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeC-2	228	115	50.4
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeP-2	30	4	13.3
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeC-1	110	105	95.4
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeC-11	43	37	86
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeC-20	3	2	66.6
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeC-4	75	37	49.3
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeP-18	4	4	100
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeP-4	129	10	7.7
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeP-6	90	10	11.1
chr19	56952444	T	A	ZNF667	utr-3	Subset1	DCIS-1	91	5	5.4
chr19	56952444	T	A	ZNF667	utr-3	Subset1	DCIS-3	23	2	8.6
chr19	56952444	T	A	ZNF667	utr-3	Subset1	InvF-1	30	9	30
chr19	56952444	T	A	ZNF667	utr-3	Subset1	InvF-13	5	2	40
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeD-2	108	33	30.5
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeD-4	96	5	5.2
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeD-7	93	17	18.2
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeD-8	37	9	24.3
chr19	56952444	T	A	ZNF667	utr-3	Subset1	MeD-9	70	59	84.2
chr19	56952444	T	A	ZNF667	utr-3	Subset1	S1-11	131	61	46.5
chr19	56952444	T	A	ZNF667	utr-3	Subset1	S3-13	41	4	9.7
chr19	56952444	T	A	ZNF667	utr-3	Subset1	S3-7	22	9	40.9
chr19	56952444	T	A	ZNF667	utr-3	Subset1	S1-2	58	16	27.5
chr19	56952444	T	A	ZNF667	utr-3	Subset1	S2-14	31	2	6.4
chr19	56952444	T	A	ZNF667	utr-3	Subset1	S2-7	21	19	90.4
chr11	55839004	G	C	.	.	Subset2	BN-1	10	4	40
chr11	55839004	G	C	.	.	Subset2	BN-12	15	6	40
chr11	55839004	G	C	.	.	Subset2	BN-15	3	2	66.6
chr11	55839004	G	C	.	.	Subset2	BNM-1	27	5	18.5
chr11	55839004	G	C	.	.	Subset2	BNM-2	90	7	7.7
chr11	55839004	G	C	.	.	Subset2	BNM-3	41	10	24.3
chr21	34945784	G	T	SON	intron	Subset1	MeC-2	177	20	11.2
chr21	34945784	G	T	SON	intron	Subset1	MeP-2	75	35	46.6
chr21	34945784	G	T	SON	intron	Subset1	MeC-1	8	2	25
chr21	34945784	G	T	SON	intron	Subset1	MeC-3	238	168	70.5
chr21	34945784	G	T	SON	intron	Subset1	MeC-4	104	19	18.2
chr21	34945784	G	T	SON	intron	Subset1	MeC-5	26	9	34.6
chr21	34945784	G	T	SON	intron	Subset1	MeC-8	42	5	11.9
chr21	34945784	G	T	SON	intron	Subset1	MeP-4	158	110	69.6
chr21	34945784	G	T	SON	intron	Subset1	MeP-6	30	10	33.3
chr21	34945784	G	T	SON	intron	Subset1	DCIS-1	34	4	11.7
chr21	34945784	G	T	SON	intron	Subset1	DCIS-3	41	2	4.8
chr21	34945784	G	T	SON	intron	Subset1	DCIS-8	39	6	15.3
chr21	34945784	G	T	SON	intron	Subset1	InvF-11	66	5	7.5
chr21	34945784	G	T	SON	intron	Subset1	InvF-9	118	21	17.7
chr21	34945784	G	T	SON	intron	Subset1	MeD-2	168	11	6.5
chr21	34945784	G	T	SON	intron	Subset1	MeD-7	175	60	34.2

chr21	34945784	G	T	SON	intron	Subset1	MeD-8	181	45	24.8
chr21	34945784	G	T	SON	intron	Subset1	MeD-9	174	71	40.8
chr21	34945784	G	T	SON	intron	Subset1	M-DCIS-2	480	11	2.2
chr21	34945784	G	T	SON	intron	Subset1	M-DCIS-5	90	3	3.3
chr21	34945784	G	T	SON	intron	Subset1	S1-11	375	128	34.1
chr21	34945784	G	T	SON	intron	Subset1	S1-1	161	2	1.2
chr21	34945784	G	T	SON	intron	Subset1	S1-2	77	27	35
chr21	34945784	G	T	SON	intron	Subset1	S1-6	39	20	51.2
chr21	34945784	G	T	SON	intron	Subset1	S1-9	71	58	81.6
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeC-2	143	15	10.4
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeP-2	67	3	4.4
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeC-3	489	146	29.8
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeC-4	233	12	5.1
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeP-1	41	4	9.7
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeP-4	67	51	76.1
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeP-6	71	46	64.7
chr1	7151574	C	A	CAMTA1	intron	Subset1	DCIS-1	154	14	9
chr1	7151574	C	A	CAMTA1	intron	Subset1	DCIS-2	57	6	10.5
chr1	7151574	C	A	CAMTA1	intron	Subset1	DCIS-6	49	25	51
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeD-2	39	8	20.5
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeD-7	117	15	12.8
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeD-8	33	6	18.1
chr1	7151574	C	A	CAMTA1	intron	Subset1	MeD-9	45	18	40
chr1	7151574	C	A	CAMTA1	intron	Subset1	M-DCIS-2	76	11	14.4
chr1	7151574	C	A	CAMTA1	intron	Subset1	S1-11	66	3	4.5
chr1	7151574	C	A	CAMTA1	intron	Subset1	S3-13	65	40	61.5
chr1	7151574	C	A	CAMTA1	intron	Subset1	S1-12	121	3	2.4
chr1	7151574	C	A	CAMTA1	intron	Subset1	S2-14	116	8	6.8
chr1	7151574	C	A	CAMTA1	intron	Subset1	S2-7	338	337	99.7
chr8	131792822	G	A	ADCY8	coding-synon	Subset2	BN-5	398	36	9
chr8	131792822	G	A	ADCY8	coding-synon	Subset2	BN-11	17	2	11.7
chr8	131792822	G	A	ADCY8	coding-synon	Subset2	BN-15	62	59	95.1
chr8	131792822	G	A	ADCY8	coding-synon	Subset2	BNM-1	13	4	30.7
chr8	131792822	G	A	ADCY8	coding-synon	Subset2	BNM-2	41	6	14.6
chr8	131792822	G	A	ADCY8	coding-synon	Subset2	BNM-3	25	8	32
chr1	176012469	A	T	RFWD2	intron	Subset1	MeC-2	195	118	60.5
chr1	176012469	A	T	RFWD2	intron	Subset1	MeP-2	443	308	69.5
chr1	176012469	A	T	RFWD2	intron	Subset1	MeC-1	9	8	88.8
chr1	176012469	A	T	RFWD2	intron	Subset1	MeC-10	79	76	96.2
chr1	176012469	A	T	RFWD2	intron	Subset1	MeC-11	6	3	50
chr1	176012469	A	T	RFWD2	intron	Subset1	MeC-20	3	3	100
chr1	176012469	A	T	RFWD2	intron	Subset1	MeC-3	307	304	99
chr1	176012469	A	T	RFWD2	intron	Subset1	MeC-4	130	122	93.8
chr1	176012469	A	T	RFWD2	intron	Subset1	MeC-5	123	120	97.5
chr1	176012469	A	T	RFWD2	intron	Subset1	MeC-8	12	9	75
chr1	176012469	A	T	RFWD2	intron	Subset1	MeP-1	31	4	12.9
chr1	176012469	A	T	RFWD2	intron	Subset1	MeP-12	24	6	25
chr1	176012469	A	T	RFWD2	intron	Subset1	MeP-4	169	153	90.5
chr1	176012469	A	T	RFWD2	intron	Subset1	MeP-5	103	2	1.9
chr1	176012469	A	T	RFWD2	intron	Subset1	MeP-6	93	81	87
chr1	176012469	A	T	RFWD2	intron	Subset1	DCIS-1	53	29	54.7
chr1	176012469	A	T	RFWD2	intron	Subset1	DCIS-2	25	12	48
chr1	176012469	A	T	RFWD2	intron	Subset1	DCIS-3	31	14	45.1
chr1	176012469	A	T	RFWD2	intron	Subset1	DCIS-5	8	8	100
chr1	176012469	A	T	RFWD2	intron	Subset1	DCIS-6	32	11	34.3

chr1	176012469	A	T	RFWD2	intron	Subset1	DCIS-8	38	16	42.1
chr1	176012469	A	T	RFWD2	intron	Subset1	InvF-10	4	4	100
chr1	176012469	A	T	RFWD2	intron	Subset1	InvF-4	9	7	77.7
chr1	176012469	A	T	RFWD2	intron	Subset1	InvF-1	47	42	89.3
chr1	176012469	A	T	RFWD2	intron	Subset1	InvF-11	46	4	8.6
chr1	176012469	A	T	RFWD2	intron	Subset1	InvF-12	5	4	80
chr1	176012469	A	T	RFWD2	intron	Subset1	InvF-13	5	4	80
chr1	176012469	A	T	RFWD2	intron	Subset1	InvF-9	503	207	41.1
chr1	176012469	A	T	RFWD2	intron	Subset1	MeD-2	152	90	59.2
chr1	176012469	A	T	RFWD2	intron	Subset1	MeD-4	99	16	16.1
chr1	176012469	A	T	RFWD2	intron	Subset1	MeD-7	153	60	39.2
chr1	176012469	A	T	RFWD2	intron	Subset1	MeD-8	238	162	68
chr1	176012469	A	T	RFWD2	intron	Subset1	MeD-9	290	163	56.2
chr1	176012469	A	T	RFWD2	intron	Subset1	M-DCIS-8	49	4	8.1
chr1	176012469	A	T	RFWD2	intron	Subset1	M-DCIS-2	35	7	20
chr1	176012469	A	T	RFWD2	intron	Subset1	S1-11	698	522	74.7
chr1	176012469	A	T	RFWD2	intron	Subset1	S3-2	2	2	100
chr1	176012469	A	T	RFWD2	intron	Subset1	S3-13	23	12	52.1
chr1	176012469	A	T	RFWD2	intron	Subset1	S3-7	19	4	21
chr1	176012469	A	T	RFWD2	intron	Subset1	S1-12	64	4	6.2
chr1	176012469	A	T	RFWD2	intron	Subset1	S1-2	48	8	16.6
chr1	176012469	A	T	RFWD2	intron	Subset1	S1-6	58	25	43.1
chr1	176012469	A	T	RFWD2	intron	Subset1	S1-9	96	15	15.6
chr1	176012469	A	T	RFWD2	intron	Subset1	S2-10	36	2	5.5
chr1	176012469	A	T	RFWD2	intron	Subset1	S2-14	35	2	5.7
chr1	176012469	A	T	RFWD2	intron	Subset1	S2-4	85	5	5.8
chr1	176012469	A	T	RFWD2	intron	Subset1	S2-5	68	14	20.5
chr1	176012469	A	T	RFWD2	intron	Subset1	S2-7	35	9	25.7
chr16	4519161	G	A	NMRAL1	intron	Subset2	BN-1	26	3	11.5
chr16	4519161	G	A	NMRAL1	intron	Subset2	BN-13	8	2	25
chr16	4519161	G	A	NMRAL1	intron	Subset2	BN-9	19	7	36.8
chr16	4519161	G	A	NMRAL1	intron	Subset2	BN-10	5368	5167	96.2
chr16	4519161	G	A	NMRAL1	intron	Subset2	BN-3	29	2	6.8
chr16	4519161	G	A	NMRAL1	intron	Subset2	BN-15	25	8	32
chr16	4519161	G	A	NMRAL1	intron	Subset2	BNM-2	20	2	10
chr16	4519161	G	A	NMRAL1	intron	Subset2	BNM-3	9	2	22.2
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeC-2	86	3	3.4
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeP-2	418	39	9.3
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeC-11	10	10	100
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeC-3	273	3	1
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeC-4	81	8	9.8
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeC-8	50	37	74
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeP-18	3	2	66.6
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeP-4	64	6	9.3
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeP-6	12	5	41.6
chr4	144442625	C	T	SMARCA5	missense	Subset1	DCIS-3	26	9	34.6
chr4	144442625	C	T	SMARCA5	missense	Subset1	DCIS-6	12	5	41.6
chr4	144442625	C	T	SMARCA5	missense	Subset1	InvF-1	8	4	50
chr4	144442625	C	T	SMARCA5	missense	Subset1	InvF-11	11	2	18.1
chr4	144442625	C	T	SMARCA5	missense	Subset1	InvF-13	4	2	50
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeD-2	38	5	13.1
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeD-4	29	2	6.8
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeD-7	45	3	6.6
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeD-8	9	5	55.5
chr4	144442625	C	T	SMARCA5	missense	Subset1	MeD-9	34	4	11.7

chr4	144442625	C	T	SMARCA5	missense	Subset1	S1-11	202	77	38.1
chr4	144442625	C	T	SMARCA5	missense	Subset1	S3-13	14	7	50
chr4	144442625	C	T	SMARCA5	missense	Subset1	S3-7	19	9	47.3
chr4	144442625	C	T	SMARCA5	missense	Subset1	S1-2	68	4	5.8
chr4	144442625	C	T	SMARCA5	missense	Subset1	S2-4	31	2	6.4
chr4	17910679	C	T	LCORL	intron	Subset1	MeC-2	52	26	50
chr4	17910679	C	T	LCORL	intron	Subset1	MeP-2	12	8	66.6
chr4	17910679	C	T	LCORL	intron	Subset1	MeC-3	4	2	50
chr4	17910679	C	T	LCORL	intron	Subset1	MeC-4	21	3	14.2
chr4	17910679	C	T	LCORL	intron	Subset1	MeP-4	31	2	6.4
chr4	17910679	C	T	LCORL	intron	Subset1	MeP-6	15	5	33.3
chr4	17910679	C	T	LCORL	intron	Subset1	DCIS-2	3	3	100
chr4	17910679	C	T	LCORL	intron	Subset1	DCIS-8	19	2	10.5
chr4	17910679	C	T	LCORL	intron	Subset1	InvF-1	21	10	47.6
chr4	17910679	C	T	LCORL	intron	Subset1	InvF-13	188	187	99.4
chr4	17910679	C	T	LCORL	intron	Subset1	InvF-9	40	21	52.5
chr4	17910679	C	T	LCORL	intron	Subset1	MeD-2	13	4	30.7
chr4	17910679	C	T	LCORL	intron	Subset1	MeD-7	55	4	7.2
chr4	17910679	C	T	LCORL	intron	Subset1	MeD-9	26	12	46.1
chr4	17910679	C	T	LCORL	intron	Subset1	M-DCIS-8	114	5	4.3
chr4	17910679	C	T	LCORL	intron	Subset1	S1-11	39	9	23
chr17	7671351	G	A	DNAH2	missense	Subset1	MeC-2	112	68	60.7
chr17	7671351	G	A	DNAH2	missense	Subset1	MeP-2	390	253	64.8
chr17	7671351	G	A	DNAH2	missense	Subset1	MeC-10	5	5	100
chr17	7671351	G	A	DNAH2	missense	Subset1	MeC-11	148	18	12.1
chr17	7671351	G	A	DNAH2	missense	Subset1	MeC-3	87	19	21.8
chr17	7671351	G	A	DNAH2	missense	Subset1	MeC-4	66	15	22.7
chr17	7671351	G	A	DNAH2	missense	Subset1	MeC-8	18	15	83.3
chr17	7671351	G	A	DNAH2	missense	Subset1	MeP-1	30	7	23.3
chr17	7671351	G	A	DNAH2	missense	Subset1	MeP-18	19	19	100
chr17	7671351	G	A	DNAH2	missense	Subset1	MeP-4	134	111	82.8
chr17	7671351	G	A	DNAH2	missense	Subset1	MeP-5	346	108	31.2
chr17	7671351	G	A	DNAH2	missense	Subset1	MeP-6	34	14	41.1
chr17	7671351	G	A	DNAH2	missense	Subset1	DCIS-1	86	5	5.8
chr17	7671351	G	A	DNAH2	missense	Subset1	DCIS-2	66	31	46.9
chr17	7671351	G	A	DNAH2	missense	Subset1	DCIS-3	252	73	28.9
chr17	7671351	G	A	DNAH2	missense	Subset1	DCIS-6	61	13	21.3
chr17	7671351	G	A	DNAH2	missense	Subset1	DCIS-8	41	4	9.7
chr17	7671351	G	A	DNAH2	missense	Subset1	InvF-10	25	10	40
chr17	7671351	G	A	DNAH2	missense	Subset1	InvF-1	46	12	26
chr17	7671351	G	A	DNAH2	missense	Subset1	InvF-13	3	3	100
chr17	7671351	G	A	DNAH2	missense	Subset1	InvF-9	197	14	7.1
chr17	7671351	G	A	DNAH2	missense	Subset1	MeD-2	81	47	58
chr17	7671351	G	A	DNAH2	missense	Subset1	MeD-7	343	17	4.9
chr17	7671351	G	A	DNAH2	missense	Subset1	MeD-8	59	41	69.4
chr17	7671351	G	A	DNAH2	missense	Subset1	MeD-9	23	23	100
chr17	7671351	G	A	DNAH2	missense	Subset1	M-DCIS-2	318	9	2.8
chr17	7671351	G	A	DNAH2	missense	Subset1	M-DCIS-5	41	6	14.6
chr17	7671351	G	A	DNAH2	missense	Subset1	S1-11	69	51	73.9
chr17	7671351	G	A	DNAH2	missense	Subset1	S3-2	19	6	31.5
chr17	7671351	G	A	DNAH2	missense	Subset1	S3-13	191	20	10.4
chr17	7671351	G	A	DNAH2	missense	Subset1	S3-3	161	78	48.4
chr17	7671351	G	A	DNAH2	missense	Subset1	S3-7	15	11	73.3
chr17	7671351	G	A	DNAH2	missense	Subset1	S1-1	577	571	98.9
chr17	7671351	G	A	DNAH2	missense	Subset1	S1-6	29	4	13.7

chr17	7671351	G	A	DNAH2	missense	Subset1	S1-9	45	37	82.2
chr17	7671351	G	A	DNAH2	missense	Subset1	S2-14	96	12	12.5
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeC-2	147	21	14.2
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeP-2	26	3	11.5
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeC-3	151	48	31.7
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeC-4	292	157	53.7
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeC-5	20	8	40
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeP-1	23	5	21.7
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeP-18	28	28	100
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeP-4	83	47	56.6
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeP-6	104	64	61.5
chr21	43716529	G	A	ABCG1	utr-3	Subset1	DCIS-1	56	2	3.5
chr21	43716529	G	A	ABCG1	utr-3	Subset1	DCIS-3	68	2	2.9
chr21	43716529	G	A	ABCG1	utr-3	Subset1	DCIS-6	83	8	9.6
chr21	43716529	G	A	ABCG1	utr-3	Subset1	DCIS-8	39	3	7.6
chr21	43716529	G	A	ABCG1	utr-3	Subset1	InvF-10	9	3	33.3
chr21	43716529	G	A	ABCG1	utr-3	Subset1	InvF-4	23	2	8.6
chr21	43716529	G	A	ABCG1	utr-3	Subset1	InvF-5	19	19	100
chr21	43716529	G	A	ABCG1	utr-3	Subset1	InvF-1	71	18	25.3
chr21	43716529	G	A	ABCG1	utr-3	Subset1	InvF-11	64	3	4.6
chr21	43716529	G	A	ABCG1	utr-3	Subset1	InvF-12	11	4	36.3
chr21	43716529	G	A	ABCG1	utr-3	Subset1	InvF-13	58	3	5.1
chr21	43716529	G	A	ABCG1	utr-3	Subset1	InvF-9	259	186	71.8
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeD-7	71	2	2.8
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeD-8	21	7	33.3
chr21	43716529	G	A	ABCG1	utr-3	Subset1	MeD-9	36	23	63.8
chr21	43716529	G	A	ABCG1	utr-3	Subset1	M-DCIS-2	86	13	15.1
chr21	43716529	G	A	ABCG1	utr-3	Subset1	M-DCIS-5	21	3	14.2
chr21	43716529	G	A	ABCG1	utr-3	Subset1	S1-11	62	26	41.9
chr21	43716529	G	A	ABCG1	utr-3	Subset1	S3-2	58	37	63.7
chr21	43716529	G	A	ABCG1	utr-3	Subset1	S3-1	103	2	1.9
chr21	43716529	G	A	ABCG1	utr-3	Subset1	S3-7	183	22	12
chr21	43716529	G	A	ABCG1	utr-3	Subset1	S1-6	59	12	20.3
chr21	43716529	G	A	ABCG1	utr-3	Subset1	S1-9	50	39	78
chr21	43716529	G	A	ABCG1	utr-3	Subset1	S2-8	116	3	2.5
chr20	34242158	T	A	RBM12	missense	Subset2	BN-10	14	6	42.8
chr20	34242158	T	A	RBM12	missense	Subset2	BN-3	63	28	44.4
chr20	34242158	T	A	RBM12	missense	Subset2	BN-4	118	47	39.8
chr20	34242158	T	A	RBM12	missense	Subset2	BN-5	152	42	27.6
chr20	34242158	T	A	RBM12	missense	Subset2	BNM-2	76	6	7.8
chr20	34242158	T	A	RBM12	missense	Subset2	BNM-3	52	6	11.5
chr20	58519261	A	T	FAM217B	missense	Subset1	MeC-2	20	7	35
chr20	58519261	A	T	FAM217B	missense	Subset1	MeP-2	146	2	1.3
chr20	58519261	A	T	FAM217B	missense	Subset1	MeC-3	16	10	62.5
chr20	58519261	A	T	FAM217B	missense	Subset1	MeC-4	37	6	16.2
chr20	58519261	A	T	FAM217B	missense	Subset1	MeP-1	30	11	36.6
chr20	58519261	A	T	FAM217B	missense	Subset1	MeP-4	23	8	34.7
chr20	58519261	A	T	FAM217B	missense	Subset1	MeP-6	27	16	59.2
chr20	58519261	A	T	FAM217B	missense	Subset1	DCIS-1	12	3	25
chr20	58519261	A	T	FAM217B	missense	Subset1	DCIS-2	13	4	30.7
chr20	58519261	A	T	FAM217B	missense	Subset1	DCIS-3	28	8	28.5
chr20	58519261	A	T	FAM217B	missense	Subset1	InvF-10	17	5	29.4
chr20	58519261	A	T	FAM217B	missense	Subset1	InvF-4	2	2	100
chr20	58519261	A	T	FAM217B	missense	Subset1	InvF-1	49	13	26.5
chr20	58519261	A	T	FAM217B	missense	Subset1	InvF-13	14	14	100

chr20	58519261	A	T	FAM217B	missense	Subset1	InvF-9	15	5	33.3
chr20	58519261	A	T	FAM217B	missense	Subset1	MeD-2	57	2	3.5
chr20	58519261	A	T	FAM217B	missense	Subset1	MeD-7	46	8	17.3
chr20	58519261	A	T	FAM217B	missense	Subset1	MeD-9	48	16	33.3
chr20	58519261	A	T	FAM217B	missense	Subset1	M-DCIS-5	36	2	5.5
chr20	58519261	A	T	FAM217B	missense	Subset1	S1-11	342	86	25.1
chr20	58519261	A	T	FAM217B	missense	Subset1	S3-2	9	4	44.4
chr20	58519261	A	T	FAM217B	missense	Subset1	S3-1	77	72	93.5
chr20	58519261	A	T	FAM217B	missense	Subset1	S3-3	60	9	15
chr20	58519261	A	T	FAM217B	missense	Subset1	S3-7	18	4	22.2
chr20	58519261	A	T	FAM217B	missense	Subset1	S2-4	39	2	5.1
chr9	124064411	C	T	GSN	coding-synon	Subset2	BN-3	7	4	57.1
chr9	124064411	C	T	GSN	coding-synon	Subset2	BN-11	122	67	54.9
chr9	124064411	C	T	GSN	coding-synon	Subset2	BNM-2	35	4	11.4
chr6	170626416	T	C	FAM120B	intron	Subset2	BN-1	341	256	75
chr6	170626416	T	C	FAM120B	intron	Subset2	BN-12	249	44	17.6
chr6	170626416	T	C	FAM120B	intron	Subset2	BN-4	58	5	8.6
chr6	170626416	T	C	FAM120B	intron	Subset2	BN-5	54	2	3.7
chr6	170626416	T	C	FAM120B	intron	Subset2	BN-15	7	2	28.5
chr6	170626416	T	C	FAM120B	intron	Subset2	BNM-2	23	6	26
chr22	29837765	G	A	RFPL1	missense	Subset2	BN-12	451	118	26.1
chr22	29837765	G	A	RFPL1	missense	Subset2	BN-10	210	69	32.8
chr22	29837765	G	A	RFPL1	missense	Subset2	BN-3	91	32	35.1
chr22	29837765	G	A	RFPL1	missense	Subset2	BN-4	106	6	5.6
chr22	29837765	G	A	RFPL1	missense	Subset2	BN-5	217	66	30.4
chr22	29837765	G	A	RFPL1	missense	Subset2	BNM-2	48	3	6.2
chr22	29837765	G	A	RFPL1	missense	Subset2	BNM-3	99	8	8
chr15	51529096	G	A	CYP19A1	nonsense	Subset3	MeC-4	270	44	16.2
chr15	51529096	G	A	CYP19A1	nonsense	Subset3	S1-9	23	7	30.4
chr15	51529096	G	A	CYP19A1	nonsense	Subset3	S2-2	38	35	92.1
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeC-2	340	16	4.7
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeP-2	273	6	2.1
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeC-1	3	2	66.6
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeC-10	34	16	47
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeC-11	2	2	100
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeC-20	14	14	100
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeC-3	66	4	6
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeC-4	47	19	40.4
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeP-1	23	4	17.3
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeP-4	58	38	65.5
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeP-6	160	65	40.6
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	DCIS-1	53	5	9.4
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	DCIS-3	33	4	12.1
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	DCIS-8	68	6	8.8
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	InvF-10	19	3	15.7
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	InvF-4	57	2	3.5
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	InvF-11	102	22	21.5
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	InvF-12	157	8	5
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	InvF-13	5	5	100
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	InvF-9	50	5	10
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeD-2	127	28	22
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeD-4	100	4	4
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeD-7	85	6	7
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeD-8	50	31	62
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	MeD-9	92	38	41.3

chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	M-DCIS-2	145	3	2
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	M-DCIS-3	430	401	93.2
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	S1-11	362	96	26.5
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	S3-2	10	3	30
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	S3-1	19	4	21
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	S3-7	104	66	63.4
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	S3-9	118	2	1.6
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	S1-1	127	108	85
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	S1-9	11	9	81.8
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	S2-10	108	18	16.6
chr3	111769579	A	G	TMPRSS7	coding-synon	Subset1	S2-13	8	7	87.5
chr15	42049973	T	A	MGA	intron	Subset3	DCIS-1	110	2	1.8
chr15	42049973	T	A	MGA	intron	Subset3	MeD-4	127	3	2.3
chr15	42049973	T	A	MGA	intron	Subset3	S3-13	72	9	12.5
chr15	42049973	T	A	MGA	intron	Subset3	S1-12	190	14	7.3
chr15	42049973	T	A	MGA	intron	Subset3	BN-3	233	14	6
chr12	53825187	G	C	AMHR2	missense	Subset3	MeP-12	185	3	1.6
chr12	53825187	G	C	AMHR2	missense	Subset3	DCIS-1	252	13	5.1
chr12	53825187	G	C	AMHR2	missense	Subset3	DCIS-8	61	5	8.1
chr12	53825187	G	C	AMHR2	missense	Subset3	Ly-10	67	5	7.4
chr12	53825187	G	C	AMHR2	missense	Subset3	MeD-2	50	6	12
chr12	53825187	G	C	AMHR2	missense	Subset3	MeD-4	116	8	6.8
chr12	53825187	G	C	AMHR2	missense	Subset3	S1-11	185	11	5.9
chr12	53825187	G	C	AMHR2	missense	Subset3	S3-3	74	3	4
chr12	53825187	G	C	AMHR2	missense	Subset3	S2-13	3	2	66.6
chr8	110457059	G	A	PKHD1L1	missense	Subset2	BN-11	11	5	45.4
chr8	110457059	G	A	PKHD1L1	missense	Subset2	BN-15	23	3	13
chr8	110457059	G	A	PKHD1L1	missense	Subset2	BNM-1	86	9	10.4
chr8	110457059	G	A	PKHD1L1	missense	Subset2	BNM-2	191	31	16.2
chr19	24309537	A	G	ZNF254	coding-synon	Subset2	BN-12	220	126	57.2
chr19	24309537	A	G	ZNF254	coding-synon	Subset2	BN-11	64	33	51.5
chr19	24309537	A	G	ZNF254	coding-synon	Subset2	BN-15	44	9	20.4
chr19	24309537	A	G	ZNF254	coding-synon	Subset2	BNM-1	58	7	12
chr19	24309537	A	G	ZNF254	coding-synon	Subset2	BNM-2	79	6	7.5
chr19	24309537	A	G	ZNF254	coding-synon	Subset2	BNM-3	74	3	4
chr16	15869796	A	G	MYH11	intron	Subset1	MeC-2	153	47	30.7
chr16	15869796	A	G	MYH11	intron	Subset1	MeP-2	198	82	41.4
chr16	15869796	A	G	MYH11	intron	Subset1	MeC-10	3	2	66.6
chr16	15869796	A	G	MYH11	intron	Subset1	MeC-11	62	2	3.2
chr16	15869796	A	G	MYH11	intron	Subset1	MeC-3	262	166	63.3
chr16	15869796	A	G	MYH11	intron	Subset1	MeC-4	285	61	21.4
chr16	15869796	A	G	MYH11	intron	Subset1	MeC-5	15	9	60
chr16	15869796	A	G	MYH11	intron	Subset1	MeC-8	58	19	32.7
chr16	15869796	A	G	MYH11	intron	Subset1	MeP-4	160	64	40
chr16	15869796	A	G	MYH11	intron	Subset1	MeP-6	227	75	33
chr16	15869796	A	G	MYH11	intron	Subset1	DCIS-1	89	10	11.2
chr16	15869796	A	G	MYH11	intron	Subset1	DCIS-2	22	3	13.6
chr16	15869796	A	G	MYH11	intron	Subset1	DCIS-3	259	184	71
chr16	15869796	A	G	MYH11	intron	Subset1	DCIS-6	562	547	97.3
chr16	15869796	A	G	MYH11	intron	Subset1	DCIS-8	64	4	6.2
chr16	15869796	A	G	MYH11	intron	Subset1	InvF-10	702	429	61.1
chr16	15869796	A	G	MYH11	intron	Subset1	InvF-4	1121	933	83.2
chr16	15869796	A	G	MYH11	intron	Subset1	InvF-5	685	379	55.3
chr16	15869796	A	G	MYH11	intron	Subset1	InvF-1	77	22	28.5
chr16	15869796	A	G	MYH11	intron	Subset1	InvF-9	399	131	32.8

chr16	15869796	A	G	MYH11	intron	Subset1	MeD-2	68	15	22
chr16	15869796	A	G	MYH11	intron	Subset1	MeD-7	574	77	13.4
chr16	15869796	A	G	MYH11	intron	Subset1	MeD-8	83	51	61.4
chr16	15869796	A	G	MYH11	intron	Subset1	MeD-9	92	57	61.9
chr16	15869796	A	G	MYH11	intron	Subset1	M-DCIS-8	77	40	51.9
chr16	15869796	A	G	MYH11	intron	Subset1	M-DCIS-2	291	5	1.7
chr16	15869796	A	G	MYH11	intron	Subset1	M-DCIS-3	6	2	33.3
chr16	15869796	A	G	MYH11	intron	Subset1	M-DCIS-5	33	11	33.3
chr16	15869796	A	G	MYH11	intron	Subset1	S1-11	187	78	41.7
chr16	15869796	A	G	MYH11	intron	Subset1	S3-2	1862	609	32.7
chr16	15869796	A	G	MYH11	intron	Subset1	S3-13	378	223	58.9
chr16	15869796	A	G	MYH11	intron	Subset1	S3-3	225	21	9.3
chr16	15869796	A	G	MYH11	intron	Subset1	S3-7	147	145	98.6
chr16	15869796	A	G	MYH11	intron	Subset1	S1-12	69	3	4.3
chr16	15869796	A	G	MYH11	intron	Subset1	S1-2	30	6	20
chr16	15869796	A	G	MYH11	intron	Subset1	S1-9	35	26	74.2
chr16	15869796	A	G	MYH11	intron	Subset1	S2-10	42	24	57.1
chr16	15869796	A	G	MYH11	intron	Subset1	S2-4	155	3	1.9
chr16	15869796	A	G	MYH11	intron	Subset1	S2-8	49	4	8.1
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeC-2	464	240	51.7
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeP-2	177	43	24.2
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeC-10	11	10	90.9
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeC-11	27	2	7.4
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeC-3	112	35	31.2
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeC-4	309	244	78.9
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeC-5	149	32	21.4
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeP-1	131	3	2.2
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeP-4	450	135	30
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeP-6	48	14	29.1
chr21	36171600	G	C	RUNX1	nonsense	Subset1	DCIS-2	24	2	8.3
chr21	36171600	G	C	RUNX1	nonsense	Subset1	DCIS-6	63	2	3.1
chr21	36171600	G	C	RUNX1	nonsense	Subset1	DCIS-8	51	14	27.4
chr21	36171600	G	C	RUNX1	nonsense	Subset1	InvF-11	144	2	1.3
chr21	36171600	G	C	RUNX1	nonsense	Subset1	InvF-13	32	9	28.1
chr21	36171600	G	C	RUNX1	nonsense	Subset1	InvF-9	101	32	31.6
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeD-2	81	14	17.2
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeD-4	110	3	2.7
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeD-7	177	15	8.4
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeD-8	98	4	4
chr21	36171600	G	C	RUNX1	nonsense	Subset1	MeD-9	61	20	32.7
chr21	36171600	G	C	RUNX1	nonsense	Subset1	M-DCIS-8	114	6	5.2
chr21	36171600	G	C	RUNX1	nonsense	Subset1	M-DCIS-2	1448	1334	92.1
chr21	36171600	G	C	RUNX1	nonsense	Subset1	S1-11	165	72	43.6
chr21	36171600	G	C	RUNX1	nonsense	Subset1	S3-13	222	21	9.4
chr21	36171600	G	C	RUNX1	nonsense	Subset1	S3-7	261	98	37.5
chr21	36171600	G	C	RUNX1	nonsense	Subset1	S1-12	95	2	2.1
chr21	36171600	G	C	RUNX1	nonsense	Subset1	S1-2	13	6	46.1
chr21	36171600	G	C	RUNX1	nonsense	Subset1	S1-6	98	30	30.6
chr21	36171600	G	C	RUNX1	nonsense	Subset1	S1-9	308	35	11.3
chr12	45210076	T	A	NELL2	intron	Subset1	MeC-2	124	25	20.1
chr12	45210076	T	A	NELL2	intron	Subset1	MeC-3	34	2	5.8
chr12	45210076	T	A	NELL2	intron	Subset1	MeC-4	153	8	5.2
chr12	45210076	T	A	NELL2	intron	Subset1	MeC-5	29	14	48.2
chr12	45210076	T	A	NELL2	intron	Subset1	MeP-4	89	14	15.7
chr12	45210076	T	A	NELL2	intron	Subset1	MeP-5	103	2	1.9

chr12	45210076	T	A	NELL2	intron	Subset1	MeP-6	99	5	5
chr12	45210076	T	A	NELL2	intron	Subset1	DCIS-1	50	8	16
chr12	45210076	T	A	NELL2	intron	Subset1	DCIS-6	145	13	8.9
chr12	45210076	T	A	NELL2	intron	Subset1	DCIS-8	46	2	4.3
chr12	45210076	T	A	NELL2	intron	Subset1	InvF-10	48	5	10.4
chr12	45210076	T	A	NELL2	intron	Subset1	InvF-4	532	309	58
chr12	45210076	T	A	NELL2	intron	Subset1	InvF-5	43	11	25.5
chr12	45210076	T	A	NELL2	intron	Subset1	InvF-9	173	103	59.5
chr12	45210076	T	A	NELL2	intron	Subset1	MeD-2	131	41	31.2
chr12	45210076	T	A	NELL2	intron	Subset1	MeD-7	141	30	21.2
chr12	45210076	T	A	NELL2	intron	Subset1	MeD-8	41	3	7.3
chr12	45210076	T	A	NELL2	intron	Subset1	MeD-9	97	67	69
chr12	45210076	T	A	NELL2	intron	Subset1	M-DCIS-2	75	12	16
chr12	45210076	T	A	NELL2	intron	Subset1	M-DCIS-5	164	2	1.2
chr12	45210076	T	A	NELL2	intron	Subset1	S1-11	229	149	65
chr12	45210076	T	A	NELL2	intron	Subset1	S3-2	28	10	35.7
chr12	45210076	T	A	NELL2	intron	Subset1	S3-3	23	2	8.6
chr12	45210076	T	A	NELL2	intron	Subset1	S1-6	320	55	17.1
chr4	169157501	C	T	DDX60	missense	Subset2	BN-12	185	16	8.6
chr4	169157501	C	T	DDX60	missense	Subset2	BN-5	59	15	25.4
chr4	169157501	C	T	DDX60	missense	Subset2	BN-11	10	2	20
chr4	169157501	C	T	DDX60	missense	Subset2	BNM-1	28	4	14.2
chr4	169157501	C	T	DDX60	missense	Subset2	BNM-2	70	14	20
chr4	169157501	C	T	DDX60	missense	Subset2	BNM-3	51	3	5.8
chr17	74562208	A	G	ST6GALNAC	missense	Subset3	MeC-3	52	36	69.2
chr17	74562208	A	G	ST6GALNAC	missense	Subset3	MeP-1	300	21	7
chr17	74562208	A	G	ST6GALNAC	missense	Subset3	MeP-12	32	2	6.2
chr17	74562208	A	G	ST6GALNAC	missense	Subset3	InvF-1	3	3	100
chr17	74562208	A	G	ST6GALNAC	missense	Subset3	MeD-7	15	2	13.3
chr17	74562208	A	G	ST6GALNAC	missense	Subset3	S1-11	103	3	2.9
chr17	74562208	A	G	ST6GALNAC	missense	Subset3	S2-4	14	2	14.2
chr17	74562208	A	G	ST6GALNAC	missense	Subset3	S2-8	50	6	12
chr17	74562208	A	G	ST6GALNAC	missense	Subset3	S2-9	31	6	19.3
chr15	60803463	T	C	RORA	missense	Subset2	BN-1	63	2	3.1
chr15	60803463	T	C	RORA	missense	Subset2	BN-13	126	4	3.1
chr15	60803463	T	C	RORA	missense	Subset2	BN-12	741	12	1.6
chr15	60803463	T	C	RORA	missense	Subset2	BN-5	175	3	1.7
chr15	60803463	T	C	RORA	missense	Subset2	BN-11	41	5	12.1
chr15	60803463	T	C	RORA	missense	Subset2	BNM-1	64	4	6.2
chr15	60803463	T	C	RORA	missense	Subset2	BNM-2	29	4	13.7
chr15	60803463	T	C	RORA	missense	Subset2	BNM-3	38	2	5.2
chr9	21216889	G	C	IFNA16	missense	Subset2	BNM-1	80	5	6.2
chr9	21216889	G	C	IFNA16	missense	Subset2	BNM-2	212	36	16.9
chr9	21216889	G	C	IFNA16	missense	Subset2	BNM-3	145	15	10.3
chr5	149562433	G	A	CDX1	missense	Subset1	MeC-2	198	151	76.2
chr5	149562433	G	A	CDX1	missense	Subset1	MeC-10	9	4	44.4
chr5	149562433	G	A	CDX1	missense	Subset1	MeC-3	48	35	72.9
chr5	149562433	G	A	CDX1	missense	Subset1	MeC-4	109	79	72.4
chr5	149562433	G	A	CDX1	missense	Subset1	MeC-5	8	5	62.5
chr5	149562433	G	A	CDX1	missense	Subset1	MeP-18	11	11	100
chr5	149562433	G	A	CDX1	missense	Subset1	MeP-4	32	7	21.8
chr5	149562433	G	A	CDX1	missense	Subset1	MeP-6	49	3	6.1
chr5	149562433	G	A	CDX1	missense	Subset1	DCIS-1	44	2	4.5
chr5	149562433	G	A	CDX1	missense	Subset1	DCIS-2	24	8	33.3
chr5	149562433	G	A	CDX1	missense	Subset1	DCIS-6	146	2	1.3

chr5	149562433	G	A	CDX1	missense	Subset1	InvF-10	10	8	80
chr5	149562433	G	A	CDX1	missense	Subset1	InvF-11	23	5	21.7
chr5	149562433	G	A	CDX1	missense	Subset1	InvF-13	21	18	85.7
chr5	149562433	G	A	CDX1	missense	Subset1	InvF-9	58	24	41.3
chr5	149562433	G	A	CDX1	missense	Subset1	MeD-2	11	2	18.1
chr5	149562433	G	A	CDX1	missense	Subset1	MeD-4	16	2	12.5
chr5	149562433	G	A	CDX1	missense	Subset1	MeD-7	94	4	4.2
chr5	149562433	G	A	CDX1	missense	Subset1	MeD-9	11	5	45.4
chr5	149562433	G	A	CDX1	missense	Subset1	M-DCIS-2	65	22	33.8
chr5	149562433	G	A	CDX1	missense	Subset1	S1-11	23	8	34.7
chr5	149562433	G	A	CDX1	missense	Subset1	S3-2	7	4	57.1
chr5	149562433	G	A	CDX1	missense	Subset1	S3-13	72	38	52.7
chr5	149562433	G	A	CDX1	missense	Subset1	S3-7	20	4	20
chr5	149562433	G	A	CDX1	missense	Subset1	S1-2	7	7	100
chr5	149562433	G	A	CDX1	missense	Subset1	S1-9	7	5	71.4
chr5	149562433	G	A	CDX1	missense	Subset1	S2-14	199	30	15
chr5	149562433	G	A	CDX1	missense	Subset1	S2-13	9	7	77.7
chr9	134090452	T	C	NUP214	intron	Subset3	DCIS-1	434	5	1.1
chr9	134090452	T	C	NUP214	intron	Subset3	DCIS-3	256	3	1.1
chr9	134090452	T	C	NUP214	intron	Subset3	DCIS-6	284	19	6.6
chr9	134090452	T	C	NUP214	intron	Subset3	DCIS-8	79	5	6.3
chr9	134090452	T	C	NUP214	intron	Subset3	InvF-10	287	26	9
chr9	134090452	T	C	NUP214	intron	Subset3	InvF-9	201	5	2.4
chr9	134090452	T	C	NUP214	intron	Subset3	Ly-10	272	27	9.9
chr9	134090452	T	C	NUP214	intron	Subset3	MeD-2	389	7	1.7
chr9	134090452	T	C	NUP214	intron	Subset3	MeD-4	473	33	6.9
chr9	134090452	T	C	NUP214	intron	Subset3	MeD-7	129	13	10
chr9	134090452	T	C	NUP214	intron	Subset3	MeD-8	354	25	7
chr9	134090452	T	C	NUP214	intron	Subset3	M-DCIS-8	57	16	28
chr9	134090452	T	C	NUP214	intron	Subset3	M-DCIS-5	97	3	3
chr9	134090452	T	C	NUP214	intron	Subset3	S1-11	813	29	3.5
chr9	134090452	T	C	NUP214	intron	Subset3	S1-2	221	11	4.9
chr9	134090452	T	C	NUP214	intron	Subset3	S1-4	15	2	13.3
chr9	134090452	T	C	NUP214	intron	Subset3	S1-6	425	132	31
chr9	134090452	T	C	NUP214	intron	Subset3	S2-14	253	5	1.9
chr9	134090452	T	C	NUP214	intron	Subset3	S2-13	362	61	16.8
chr9	134090452	T	C	NUP214	intron	Subset3	S2-4	387	10	2.5
chr13	28611324	C	G	FLT3	missense	Subset1	MeC-2	18	4	22.2
chr13	28611324	C	G	FLT3	missense	Subset1	MeP-2	575	414	72
chr13	28611324	C	G	FLT3	missense	Subset1	MeC-3	28	2	7.1
chr13	28611324	C	G	FLT3	missense	Subset1	MeC-4	124	46	37
chr13	28611324	C	G	FLT3	missense	Subset1	MeC-5	56	2	3.5
chr13	28611324	C	G	FLT3	missense	Subset1	MeP-1	105	3	2.8
chr13	28611324	C	G	FLT3	missense	Subset1	MeP-4	57	29	50.8
chr13	28611324	C	G	FLT3	missense	Subset1	MeP-5	138	3	2.1
chr13	28611324	C	G	FLT3	missense	Subset1	MeP-6	226	216	95.5
chr13	28611324	C	G	FLT3	missense	Subset1	DCIS-1	76	8	10.5
chr13	28611324	C	G	FLT3	missense	Subset1	DCIS-6	159	82	51.5
chr13	28611324	C	G	FLT3	missense	Subset1	DCIS-8	57	8	14
chr13	28611324	C	G	FLT3	missense	Subset1	InvF-4	7	6	85.7
chr13	28611324	C	G	FLT3	missense	Subset1	InvF-9	18	5	27.7
chr13	28611324	C	G	FLT3	missense	Subset1	MeD-2	42	11	26.1
chr13	28611324	C	G	FLT3	missense	Subset1	MeD-7	182	14	7.6
chr13	28611324	C	G	FLT3	missense	Subset1	MeD-8	92	30	32.6
chr13	28611324	C	G	FLT3	missense	Subset1	MeD-9	95	55	57.8

chr13	28611324	C	G	FLT3	missense	Subset1	M-DCIS-8	157	13	8.2
chr13	28611324	C	G	FLT3	missense	Subset1	M-DCIS-2	166	44	26.5
chr13	28611324	C	G	FLT3	missense	Subset1	S1-11	301	181	60.1
chr13	28611324	C	G	FLT3	missense	Subset1	S3-1	47	28	59.5
chr13	28611324	C	G	FLT3	missense	Subset1	S3-13	157	121	77
chr13	28611324	C	G	FLT3	missense	Subset1	S3-7	72	28	38.8
chr13	28611324	C	G	FLT3	missense	Subset1	S1-2	88	15	17
chr13	28611324	C	G	FLT3	missense	Subset1	S1-6	81	3	3.7
chr13	28611324	C	G	FLT3	missense	Subset1	S1-9	45	14	31.1
chr13	28611324	C	G	FLT3	missense	Subset1	S2-14	68	2	2.9
chr13	28611324	C	G	FLT3	missense	Subset1	S2-4	131	11	8.3
chr5	73141983	A	G	ARHGEF28	intron	Subset2	BN-3	19	6	31.5
chr5	73141983	A	G	ARHGEF28	intron	Subset2	BN-5	48	8	16.6
chr5	73141983	A	G	ARHGEF28	intron	Subset2	BNM-3	16	3	18.7
chr7	138603490	G	A	KIAA1549	coding-synon	Subset2	BN-1	4	2	50
chr7	138603490	G	A	KIAA1549	coding-synon	Subset2	BN-13	90	7	7.7
chr7	138603490	G	A	KIAA1549	coding-synon	Subset2	BN-4	98	15	15.3
chr7	138603490	G	A	KIAA1549	coding-synon	Subset2	BN-5	295	67	22.7
chr7	138603490	G	A	KIAA1549	coding-synon	Subset2	BN-11	155	10	6.4
chr7	138603490	G	A	KIAA1549	coding-synon	Subset2	BNM-1	30	4	13.3
chr7	138603490	G	A	KIAA1549	coding-synon	Subset2	BNM-2	41	7	17
chr7	138603490	G	A	KIAA1549	coding-synon	Subset2	BNM-3	76	5	6.5
chr2	201719959	G	A	CLK1	intron	Subset2	BN-13	68	55	80.8
chr2	201719959	G	A	CLK1	intron	Subset2	BN-12	46	5	10.8
chr2	201719959	G	A	CLK1	intron	Subset2	BN-5	32	4	12.5
chr2	201719959	G	A	CLK1	intron	Subset2	BN-11	17	6	35.2
chr2	201719959	G	A	CLK1	intron	Subset2	BN-15	8	3	37.5
chr2	201719959	G	A	CLK1	intron	Subset2	BNM-2	8	2	25
chr2	201719959	G	A	CLK1	intron	Subset2	BNM-3	9	2	22.2
chr8	41529867	C	T	ANK1	intron	Subset1	MeC-2	294	282	95.9
chr8	41529867	C	T	ANK1	intron	Subset1	MeC-20	56	54	96.4
chr8	41529867	C	T	ANK1	intron	Subset1	MeC-4	106	15	14.1
chr8	41529867	C	T	ANK1	intron	Subset1	MeC-5	2	2	100
chr8	41529867	C	T	ANK1	intron	Subset1	MeP-18	8	2	25
chr8	41529867	C	T	ANK1	intron	Subset1	MeP-4	126	6	4.7
chr8	41529867	C	T	ANK1	intron	Subset1	MeP-5	29	2	6.8
chr8	41529867	C	T	ANK1	intron	Subset1	MeP-6	228	18	7.8
chr8	41529867	C	T	ANK1	intron	Subset1	DCIS-1	28	2	7.1
chr8	41529867	C	T	ANK1	intron	Subset1	DCIS-3	53	3	5.6
chr8	41529867	C	T	ANK1	intron	Subset1	DCIS-8	30	2	6.6
chr8	41529867	C	T	ANK1	intron	Subset1	MeD-2	31	4	12.9
chr8	41529867	C	T	ANK1	intron	Subset1	MeD-7	197	3	1.5
chr8	41529867	C	T	ANK1	intron	Subset1	MeD-9	77	25	32.4
chr8	41529867	C	T	ANK1	intron	Subset1	M-DCIS-2	34	2	5.8
chr8	41529867	C	T	ANK1	intron	Subset1	S1-11	13	5	38.4
chr8	41529867	C	T	ANK1	intron	Subset1	S3-2	16	3	18.7
chr8	41529867	C	T	ANK1	intron	Subset1	S3-13	240	15	6.2
chr8	41529867	C	T	ANK1	intron	Subset1	S1-2	45	2	4.4
chr8	41529867	C	T	ANK1	intron	Subset1	S2-13	7292	286	3.9
chr14	73725856	G	A	PAPLN	intron	Subset1	MeC-2	47	12	25.5
chr14	73725856	G	A	PAPLN	intron	Subset1	MeC-4	26	6	23
chr14	73725856	G	A	PAPLN	intron	Subset1	MeC-5	6	4	66.6
chr14	73725856	G	A	PAPLN	intron	Subset1	MeP-18	9	9	100
chr14	73725856	G	A	PAPLN	intron	Subset1	MeP-4	88	76	86.3
chr14	73725856	G	A	PAPLN	intron	Subset1	MeP-6	42	30	71.4

chr14	73725856	G	A	PAPLN	intron	Subset1	DCIS-1	62	48	77.4
chr14	73725856	G	A	PAPLN	intron	Subset1	DCIS-3	36	2	5.5
chr14	73725856	G	A	PAPLN	intron	Subset1	InvF-10	118	34	28.8
chr14	73725856	G	A	PAPLN	intron	Subset1	InvF-4	75	70	93.3
chr14	73725856	G	A	PAPLN	intron	Subset1	InvF-5	106	10	9.4
chr14	73725856	G	A	PAPLN	intron	Subset1	InvF-1	6	2	33.3
chr14	73725856	G	A	PAPLN	intron	Subset1	MeD-9	20	4	20
chr14	73725856	G	A	PAPLN	intron	Subset1	S1-11	31	5	16.1
chr14	73725856	G	A	PAPLN	intron	Subset1	S3-2	268	100	37.3
chr14	73725856	G	A	PAPLN	intron	Subset1	S3-7	61	61	100
chr14	73725856	G	A	PAPLN	intron	Subset1	S1-1	4	4	100
chr14	73725856	G	A	PAPLN	intron	Subset1	S1-6	16	2	12.5
chrX	21444725	C	T	CNKSR2	missense	Subset3	MeP-1	39	2	5.1
chrX	21444725	C	T	CNKSR2	missense	Subset3	MeP-6	69	5	7.2
chrX	21444725	C	T	CNKSR2	missense	Subset3	DCIS-1	127	30	23.6
chrX	21444725	C	T	CNKSR2	missense	Subset3	DCIS-8	48	5	10.4
chrX	21444725	C	T	CNKSR2	missense	Subset3	InvF-1	160	31	19.3
chrX	21444725	C	T	CNKSR2	missense	Subset3	InvF-11	91	2	2.1
chrX	21444725	C	T	CNKSR2	missense	Subset3	InvF-13	8	6	75
chrX	21444725	C	T	CNKSR2	missense	Subset3	MeD-4	150	10	6.6
chrX	21444725	C	T	CNKSR2	missense	Subset3	Ly-5	208	139	66.8
chrX	21444725	C	T	CNKSR2	missense	Subset3	MeD-7	96	16	16.6
chrX	21444725	C	T	CNKSR2	missense	Subset3	M-DCIS-5	112	38	33.9
chrX	21444725	C	T	CNKSR2	missense	Subset3	S1-11	321	6	1.8
chrX	21444725	C	T	CNKSR2	missense	Subset3	S3-1	451	125	27.7
chrX	21444725	C	T	CNKSR2	missense	Subset3	S3-13	125	7	5.6
chrX	21444725	C	T	CNKSR2	missense	Subset3	S2-14	50	3	6
chrX	21444725	C	T	CNKSR2	missense	Subset3	S2-2	146	2	1.3
chrX	21444725	C	T	CNKSR2	missense	Subset3	S2-4	381	12	3.1
chrX	21444725	C	T	CNKSR2	missense	Subset3	S2-9	132	12	9
chrX	21444725	C	T	CNKSR2	missense	Subset3	BN-4	31	2	6.4
chrX	21444725	C	T	CNKSR2	missense	Subset3	BN-5	122	2	1.6
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeC-2	302	106	35
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeP-2	242	139	57.4
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeC-1	38	3	7.8
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeC-3	182	155	85.1
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeC-4	187	42	22.4
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeC-5	25	13	52
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeP-18	6	3	50
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeP-4	226	77	34
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeP-6	83	46	55.4
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	DCIS-1	71	8	11.2
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	DCIS-2	45	8	17.7
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	DCIS-3	113	9	7.9
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	DCIS-6	83	17	20.4
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	DCIS-8	75	21	28
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	InvF-10	10	6	60
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	InvF-4	232	227	97.8
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	InvF-5	2	2	100
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	InvF-12	18	14	77.7
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	InvF-13	3	2	66.6
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	InvF-9	233	174	74.6
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeD-2	187	57	30.4
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeD-4	140	9	6.4
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeD-7	486	172	35.3

chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeD-8	205	104	50.7
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	MeD-9	260	93	35.7
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	M-DCIS-8	697	159	22.8
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	M-DCIS-2	82	4	4.8
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	M-DCIS-4	12	2	16.6
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	M-DCIS-5	144	77	53.4
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S1-11	856	187	21.8
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S3-2	6	6	100
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S3-1	368	183	49.7
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S3-13	265	12	4.5
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S3-7	131	47	35.8
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S1-1	341	16	4.6
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S1-2	64	25	39
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S1-6	84	22	26.1
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S1-9	238	38	15.9
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S2-13	2	2	100
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S2-4	204	7	3.4
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S2-5	15	2	13.3
chr1	235345135	G	A	ARID4B	coding-synon	Subset1	S2-8	77	4	5.1
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeC-2	267	54	20.2
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeP-2	493	250	50.7
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeC-3	137	59	43
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeC-4	290	152	52.4
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeC-5	45	45	100
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeC-8	118	7	5.9
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeP-4	327	303	92.6
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeP-5	43	12	27.9
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeP-6	605	31	5.1
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	DCIS-1	193	8	4.1
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	DCIS-3	65	10	15.3
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	DCIS-5	12	5	41.6
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	DCIS-6	69	57	82.6
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	DCIS-8	91	14	15.3
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	InvF-10	609	83	13.6
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	InvF-4	56	10	17.8
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	InvF-13	10	5	50
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeD-2	190	34	17.8
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeD-4	313	18	5.7
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeD-7	253	34	13.4
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeD-8	169	21	12.4
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	MeD-9	203	117	57.6
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	M-DCIS-8	143	93	65
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	M-DCIS-2	190	3	1.5
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S1-11	288	110	38.1
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S3-2	1210	260	21.4
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S3-13	581	29	4.9
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S3-3	1137	35	3
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S3-7	49	26	53
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S1-1	1194	1193	99.9
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S1-6	149	57	38.2
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S1-9	138	2	1.4
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S2-13	22	9	40.9
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S2-4	641	22	3.4
chrX	24597532	C	T	PCYT1B	coding-synon	Subset1	S2-8	493	62	12.5
chr1	162725140	A	G	DDR2	intron	Subset3	BN-12	64	10	15.6

chr1	162725140	A	G	DDR2	intron	Subset3	S3-2	84	2	2.3
chr1	162725140	A	G	DDR2	intron	Subset3	S3-13	229	3	1.3
chr1	162725140	A	G	DDR2	intron	Subset3	BN-3	17	3	17.6
chr1	162725140	A	G	DDR2	intron	Subset3	BN-15	16	11	68.7
chr1	162725140	A	G	DDR2	intron	Subset3	BNM-1	8	5	62.5
chr1	162725140	A	G	DDR2	intron	Subset3	BNM-2	20	3	15
chr1	162725140	A	G	DDR2	intron	Subset3	BNM-3	27	5	18.5
chrX	140926199	C	A	MAGEC3	missense	Subset1	MeD-2	121	4	3.3
chrX	140926199	C	A	MAGEC3	missense	Subset1	MeD-7	159	4	2.5
chrX	140969602	A	G	MAGEC3	intron	Subset3	MeD-2	68	5	7.3
chrX	140969602	A	G	MAGEC3	intron	Subset3	MeD-7	138	9	6.5
chrX	140969602	A	G	MAGEC3	intron	Subset3	BN-3	197	3	1.5
chr11	111338407	C	A	BTG4	splice-3	Subset2	BN-1	227	227	100
chr11	111338407	C	A	BTG4	splice-3	Subset2	BN-13	400	43	10.7
chr11	111338407	C	A	BTG4	splice-3	Subset2	BN-12	99	2	2
chr11	111338407	C	A	BTG4	splice-3	Subset2	BN-5	155	11	7
chr11	111338407	C	A	BTG4	splice-3	Subset2	BNM-2	29	5	17.2
chr11	111338407	C	A	BTG4	splice-3	Subset2	BNM-3	40	10	25
chr17	33585881	A	G	SLFN5	missense	Subset2	BN-10	126	40	31.7
chr17	33585881	A	G	SLFN5	missense	Subset2	BN-3	91	3	3.2
chr17	33585881	A	G	SLFN5	missense	Subset2	BN-5	225	33	14.6
chr17	33585881	A	G	SLFN5	missense	Subset2	BN-11	181	155	85.6
chr17	33585881	A	G	SLFN5	missense	Subset2	BNM-1	22	6	27.2
chr17	33585881	A	G	SLFN5	missense	Subset2	BNM-2	65	7	10.7
chr17	33585881	A	G	SLFN5	missense	Subset2	BNM-3	44	3	6.8
chr8	24167395	G	A	ADAM28	intron	Subset2	BN-13	684	16	2.3
chr8	24167395	G	A	ADAM28	intron	Subset2	BN-12	39	4	10.2
chr8	24167395	G	A	ADAM28	intron	Subset2	BN-11	57	7	12.2
chr8	24167395	G	A	ADAM28	intron	Subset2	BN-15	26	11	42.3
chr8	24167395	G	A	ADAM28	intron	Subset2	BNM-1	41	9	21.9
chr8	24167395	G	A	ADAM28	intron	Subset2	BNM-2	106	9	8.4
chr8	24167395	G	A	ADAM28	intron	Subset2	BNM-3	124	24	19.3
chr1	38397587	C	T	INPP5B	missense	Subset1	MeC-2	31	19	61.2
chr1	38397587	C	T	INPP5B	missense	Subset1	MeP-2	101	3	2.9
chr1	38397587	C	T	INPP5B	missense	Subset1	MeC-3	148	90	60.8
chr1	38397587	C	T	INPP5B	missense	Subset1	MeC-4	279	96	34.4
chr1	38397587	C	T	INPP5B	missense	Subset1	MeC-5	188	39	20.7
chr1	38397587	C	T	INPP5B	missense	Subset1	MeP-4	325	301	92.6
chr1	38397587	C	T	INPP5B	missense	Subset1	MeP-5	308	10	3.2
chr1	38397587	C	T	INPP5B	missense	Subset1	MeP-6	77	14	18.1
chr1	38397587	C	T	INPP5B	missense	Subset1	DCIS-3	76	2	2.6
chr1	38397587	C	T	INPP5B	missense	Subset1	DCIS-6	245	229	93.4
chr1	38397587	C	T	INPP5B	missense	Subset1	DCIS-8	48	11	22.9
chr1	38397587	C	T	INPP5B	missense	Subset1	InvF-12	17	17	100
chr1	38397587	C	T	INPP5B	missense	Subset1	InvF-9	18	13	72.2
chr1	38397587	C	T	INPP5B	missense	Subset1	MeD-7	136	20	14.7
chr1	38397587	C	T	INPP5B	missense	Subset1	MeD-8	17	2	11.7
chr1	38397587	C	T	INPP5B	missense	Subset1	MeD-9	29	11	37.9
chr1	38397587	C	T	INPP5B	missense	Subset1	M-DCIS-8	50	6	12
chr1	38397587	C	T	INPP5B	missense	Subset1	M-DCIS-2	76	3	3.9
chr1	38397587	C	T	INPP5B	missense	Subset1	M-DCIS-3	29	24	82.7
chr1	38397587	C	T	INPP5B	missense	Subset1	S1-11	82	32	39
chr1	38397587	C	T	INPP5B	missense	Subset1	S3-13	62	3	4.8
chr1	38397587	C	T	INPP5B	missense	Subset1	S3-7	7	3	42.8
chr1	38397587	C	T	INPP5B	missense	Subset1	S1-1	16	9	56.2

chr1	38397587	C	T	INPP5B	missense	Subset1	S2-2	33	17	51.5
chr1	164953186	C	T	.	.	Subset1	MeC-2	111	47	42.3
chr1	164953186	C	T	.	.	Subset1	MeP-2	240	8	3.3
chr1	164953186	C	T	.	.	Subset1	MeC-1	59	58	98.3
chr1	164953186	C	T	.	.	Subset1	MeC-3	119	59	49.5
chr1	164953186	C	T	.	.	Subset1	MeC-4	127	19	14.9
chr1	164953186	C	T	.	.	Subset1	MeC-5	253	3	1.1
chr1	164953186	C	T	.	.	Subset1	MeC-8	116	5	4.3
chr1	164953186	C	T	.	.	Subset1	MeP-1	29	2	6.8
chr1	164953186	C	T	.	.	Subset1	MeP-18	9	3	33.3
chr1	164953186	C	T	.	.	Subset1	MeP-12	58	6	10.3
chr1	164953186	C	T	.	.	Subset1	MeP-4	273	148	54.2
chr1	164953186	C	T	.	.	Subset1	MeP-5	34	3	8.8
chr1	164953186	C	T	.	.	Subset1	MeP-6	131	21	16
chr1	164953186	C	T	.	.	Subset1	DCIS-1	108	17	15.7
chr1	164953186	C	T	.	.	Subset1	DCIS-6	28	3	10.7
chr1	164953186	C	T	.	.	Subset1	DCIS-8	68	3	4.4
chr1	164953186	C	T	.	.	Subset1	InvF-1	488	35	7.1
chr1	164953186	C	T	.	.	Subset1	InvF-11	74	7	9.4
chr1	164953186	C	T	.	.	Subset1	InvF-13	13	6	46.1
chr1	164953186	C	T	.	.	Subset1	InvF-9	449	43	9.5
chr1	164953186	C	T	.	.	Subset1	MeD-2	136	35	25.7
chr1	164953186	C	T	.	.	Subset1	MeD-4	67	2	2.9
chr1	164953186	C	T	.	.	Subset1	MeD-7	352	78	22.1
chr1	164953186	C	T	.	.	Subset1	MeD-8	66	12	18.1
chr1	164953186	C	T	.	.	Subset1	MeD-9	240	27	11.2
chr1	164953186	C	T	.	.	Subset1	M-DCIS-2	96	11	11.4
chr1	164953186	C	T	.	.	Subset1	S1-11	186	29	15.5
chr1	164953186	C	T	.	.	Subset1	S3-1	90	2	2.2
chr1	164953186	C	T	.	.	Subset1	S3-13	120	6	5
chr1	164953186	C	T	.	.	Subset1	S3-3	228	35	15.3
chr1	164953186	C	T	.	.	Subset1	S3-7	171	96	56.1
chr1	164953186	C	T	.	.	Subset1	S2-5	196	3	1.5
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeC-2	89	58	65.1
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeP-2	383	58	15.1
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeC-10	5	3	60
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeC-3	50	22	44
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeC-4	29	8	27.5
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeC-8	6	2	33.3
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeP-18	9	6	66.6
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeP-4	10	4	40
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeP-6	70	13	18.5
chr4	109683896	G	T	AGXT2L1	intron	Subset1	DCIS-2	29	10	34.4
chr4	109683896	G	T	AGXT2L1	intron	Subset1	DCIS-3	50	21	42
chr4	109683896	G	T	AGXT2L1	intron	Subset1	DCIS-6	17	4	23.5
chr4	109683896	G	T	AGXT2L1	intron	Subset1	DCIS-8	43	6	13.9
chr4	109683896	G	T	AGXT2L1	intron	Subset1	InvF-10	37	20	54
chr4	109683896	G	T	AGXT2L1	intron	Subset1	InvF-4	27	21	77.7
chr4	109683896	G	T	AGXT2L1	intron	Subset1	InvF-5	92	2	2.1
chr4	109683896	G	T	AGXT2L1	intron	Subset1	InvF-1	46	38	82.6
chr4	109683896	G	T	AGXT2L1	intron	Subset1	InvF-13	69	66	95.6
chr4	109683896	G	T	AGXT2L1	intron	Subset1	InvF-9	124	121	97.5
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeD-2	79	6	7.5
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeD-4	95	4	4.2
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeD-7	172	51	29.6

chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeD-8	105	60	57.1
chr4	109683896	G	T	AGXT2L1	intron	Subset1	MeD-9	94	57	60.6
chr4	109683896	G	T	AGXT2L1	intron	Subset1	M-DCIS-1	184	2	1
chr4	109683896	G	T	AGXT2L1	intron	Subset1	M-DCIS-3	202	6	2.9
chr4	109683896	G	T	AGXT2L1	intron	Subset1	M-DCIS-5	47	3	6.3
chr4	109683896	G	T	AGXT2L1	intron	Subset1	S1-11	208	85	40.8
chr4	109683896	G	T	AGXT2L1	intron	Subset1	S3-2	33	24	72.7
chr4	109683896	G	T	AGXT2L1	intron	Subset1	S3-13	8	6	75
chr4	109683896	G	T	AGXT2L1	intron	Subset1	S3-7	20	14	70
chr4	109683896	G	T	AGXT2L1	intron	Subset1	S1-6	84	2	2.3
chr4	109683896	G	T	AGXT2L1	intron	Subset1	S1-9	14	2	14.2
chr4	109683896	G	T	AGXT2L1	intron	Subset1	S2-13	55	46	83.6
chr4	109683896	G	T	AGXT2L1	intron	Subset1	S2-7	32	2	6.2
chr19	45917240	G	A	ERCC1	missense	Subset2	BN-12	107	29	27.1
chr19	45917240	G	A	ERCC1	missense	Subset2	BN-3	78	12	15.3
chr11	60885566	C	T	CD5	intron	Subset1	MeC-2	326	230	70.5
chr11	60885566	C	T	CD5	intron	Subset1	MeP-2	99	44	44.4
chr11	60885566	C	T	CD5	intron	Subset1	MeC-10	66	41	62.1
chr11	60885566	C	T	CD5	intron	Subset1	MeC-11	107	38	35.5
chr11	60885566	C	T	CD5	intron	Subset1	MeC-3	100	9	9
chr11	60885566	C	T	CD5	intron	Subset1	MeC-4	154	33	21.4
chr11	60885566	C	T	CD5	intron	Subset1	MeC-5	54	5	9.2
chr11	60885566	C	T	CD5	intron	Subset1	MeP-1	80	2	2.5
chr11	60885566	C	T	CD5	intron	Subset1	MeP-18	21	20	95.2
chr11	60885566	C	T	CD5	intron	Subset1	MeP-4	118	58	49.1
chr11	60885566	C	T	CD5	intron	Subset1	MeP-5	163	17	10.4
chr11	60885566	C	T	CD5	intron	Subset1	MeP-6	94	46	48.9
chr11	60885566	C	T	CD5	intron	Subset1	DCIS-1	83	3	3.6
chr11	60885566	C	T	CD5	intron	Subset1	DCIS-3	54	11	20.3
chr11	60885566	C	T	CD5	intron	Subset1	DCIS-8	64	8	12.5
chr11	60885566	C	T	CD5	intron	Subset1	MeD-2	21	2	9.5
chr11	60885566	C	T	CD5	intron	Subset1	MeD-7	122	3	2.4
chr11	60885566	C	T	CD5	intron	Subset1	MeD-8	19	3	15.7
chr11	60885566	C	T	CD5	intron	Subset1	MeD-9	44	6	13.6
chr11	60885566	C	T	CD5	intron	Subset1	M-DCIS-8	40	10	25
chr11	60885566	C	T	CD5	intron	Subset1	M-DCIS-2	387	162	41.8
chr11	60885566	C	T	CD5	intron	Subset1	S1-11	31	11	35.4
chr11	60885566	C	T	CD5	intron	Subset1	S3-2	12	6	50
chr11	60885566	C	T	CD5	intron	Subset1	S3-3	99	11	11.1
chr11	60885566	C	T	CD5	intron	Subset1	S3-7	19	19	100
chr11	60885566	C	T	CD5	intron	Subset1	S1-1	54	4	7.4
chr11	60885566	C	T	CD5	intron	Subset1	S1-2	39	11	28.2
chr11	60885566	C	T	CD5	intron	Subset1	S2-14	83	22	26.5
chr11	60885566	C	T	CD5	intron	Subset1	S2-4	101	5	4.9
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeC-2	255	119	46.6
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeP-2	179	23	12.8
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeC-10	9	2	22.2
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeC-3	310	79	25.4
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeC-4	148	23	15.5
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeC-8	178	8	4.4
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeP-18	29	29	100
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeP-4	298	33	11
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeP-6	80	38	47.5
chr3	51675937	T	G	RAD54L2	intron	Subset1	DCIS-1	122	13	10.6
chr3	51675937	T	G	RAD54L2	intron	Subset1	DCIS-3	129	3	2.3

chr3	51675937	T	G	RAD54L2	intron	Subset1	DCIS-5	4	2	50
chr3	51675937	T	G	RAD54L2	intron	Subset1	DCIS-6	212	20	9.4
chr3	51675937	T	G	RAD54L2	intron	Subset1	DCIS-8	87	8	9.1
chr3	51675937	T	G	RAD54L2	intron	Subset1	InvF-10	18	5	27.7
chr3	51675937	T	G	RAD54L2	intron	Subset1	InvF-4	4	3	75
chr3	51675937	T	G	RAD54L2	intron	Subset1	InvF-1	152	10	6.5
chr3	51675937	T	G	RAD54L2	intron	Subset1	InvF-12	27	9	33.3
chr3	51675937	T	G	RAD54L2	intron	Subset1	InvF-9	61	30	49.1
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeD-2	138	6	4.3
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeD-7	415	48	11.5
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeD-8	140	52	37.1
chr3	51675937	T	G	RAD54L2	intron	Subset1	MeD-9	113	37	32.7
chr3	51675937	T	G	RAD54L2	intron	Subset1	M-DCIS-8	138	2	1.4
chr3	51675937	T	G	RAD54L2	intron	Subset1	M-DCIS-2	192	7	3.6
chr3	51675937	T	G	RAD54L2	intron	Subset1	M-DCIS-5	51	2	3.9
chr3	51675937	T	G	RAD54L2	intron	Subset1	S1-11	443	109	24.6
chr3	51675937	T	G	RAD54L2	intron	Subset1	S3-13	90	7	7.7
chr3	51675937	T	G	RAD54L2	intron	Subset1	S3-3	83	2	2.4
chr3	51675937	T	G	RAD54L2	intron	Subset1	S3-7	218	213	97.7
chr3	51675937	T	G	RAD54L2	intron	Subset1	S2-10	172	7	4
chr3	51675937	T	G	RAD54L2	intron	Subset1	S2-4	232	18	7.7
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeC-2	54	30	55.5
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeC-10	4	4	100
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeC-3	249	9	3.6
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeC-4	185	92	49.7
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeC-8	27	26	96.2
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeP-4	88	16	18.1
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeP-5	107	2	1.8
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeP-6	29	7	24.1
chr11	125299770	G	A	PKNOX2	intron	Subset1	DCIS-5	4	2	50
chr11	125299770	G	A	PKNOX2	intron	Subset1	DCIS-6	43	16	37.2
chr11	125299770	G	A	PKNOX2	intron	Subset1	InvF-1	38	6	15.7
chr11	125299770	G	A	PKNOX2	intron	Subset1	InvF-9	99	88	88.8
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeD-2	43	2	4.6
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeD-7	292	12	4.1
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeD-8	85	6	7
chr11	125299770	G	A	PKNOX2	intron	Subset1	MeD-9	57	19	33.3
chr11	125299770	G	A	PKNOX2	intron	Subset1	M-DCIS-8	165	2	1.2
chr11	125299770	G	A	PKNOX2	intron	Subset1	S1-11	27	8	29.6
chr11	125299770	G	A	PKNOX2	intron	Subset1	S3-3	47	24	51
chr11	125299770	G	A	PKNOX2	intron	Subset1	S3-7	190	26	13.6
chr11	125299770	G	A	PKNOX2	intron	Subset1	S1-2	11	6	54.5
chr11	125299770	G	A	PKNOX2	intron	Subset1	S2-14	139	3	2.1
chr5	141052174	C	T	ARAP3	missense	Subset2	BN-1	48	29	60.4
chr5	141052174	C	T	ARAP3	missense	Subset2	BN-3	232	4	1.7
chr5	141052174	C	T	ARAP3	missense	Subset2	BN-4	21	2	9.5
chr5	141052174	C	T	ARAP3	missense	Subset2	BN-5	59	2	3.3
chr5	141052174	C	T	ARAP3	missense	Subset2	BN-15	62	34	54.8
chr5	141052174	C	T	ARAP3	missense	Subset2	BNM-3	35	14	40
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeC-2	133	8	6
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeP-2	171	6	3.5
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeC-3	158	65	41.1
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeC-4	47	11	23.4
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeC-5	5	2	40
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeC-8	35	8	22.8

chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeP-1	15	3	20
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeP-12	66	2	3
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeP-4	160	34	21.2
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeP-6	222	43	19.3
chrX	11197553	C	T	ARHGAP6	missense	Subset1	DCIS-1	102	31	30.3
chrX	11197553	C	T	ARHGAP6	missense	Subset1	DCIS-3	19	4	21
chrX	11197553	C	T	ARHGAP6	missense	Subset1	DCIS-6	34	3	8.8
chrX	11197553	C	T	ARHGAP6	missense	Subset1	DCIS-8	50	4	8
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeD-2	86	26	30.2
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeD-4	91	4	4.3
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeD-7	182	17	9.3
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeD-8	88	38	43.1
chrX	11197553	C	T	ARHGAP6	missense	Subset1	MeD-9	70	32	45.7
chrX	11197553	C	T	ARHGAP6	missense	Subset1	M-DCIS-2	61	4	6.5
chrX	11197553	C	T	ARHGAP6	missense	Subset1	M-DCIS-4	197	2	1
chrX	11197553	C	T	ARHGAP6	missense	Subset1	M-DCIS-5	56	4	7.1
chrX	11197553	C	T	ARHGAP6	missense	Subset1	S1-11	166	74	44.5
chrX	11197553	C	T	ARHGAP6	missense	Subset1	S3-1	76	13	17.1
chrX	11197553	C	T	ARHGAP6	missense	Subset1	S3-13	412	30	7.2
chrX	11197553	C	T	ARHGAP6	missense	Subset1	S3-3	562	119	21.1
chrX	11197553	C	T	ARHGAP6	missense	Subset1	S3-7	762	11	1.4
chrX	11197553	C	T	ARHGAP6	missense	Subset1	S1-6	101	45	44.5
chrX	11197553	C	T	ARHGAP6	missense	Subset1	S2-14	70	35	50
chr12	51386791	C	T	SLC11A2	intron	Subset2	BN-12	129	4	3.1
chr12	51386791	C	T	SLC11A2	intron	Subset2	BN-8	102	2	1.9
chr12	51386791	C	T	SLC11A2	intron	Subset2	BN-10	101	6	5.9
chr12	51386791	C	T	SLC11A2	intron	Subset2	BN-3	6	4	66.6
chr12	51386791	C	T	SLC11A2	intron	Subset2	BN-4	37	28	75.6
chr12	51386791	C	T	SLC11A2	intron	Subset2	BN-5	56	10	17.8
chr12	51386791	C	T	SLC11A2	intron	Subset2	BN-11	40	2	5
chr12	51386791	C	T	SLC11A2	intron	Subset2	BNM-3	7	2	28.5
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeC-2	130	36	27.6
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeC-11	7	5	71.4
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeC-3	137	21	15.3
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeC-4	86	26	30.2
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeP-18	3	3	100
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeP-4	44	17	38.6
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeP-6	63	27	42.8
chr9	119459942	A	G	TRIM32	utr-5	Subset1	DCIS-3	50	2	4
chr9	119459942	A	G	TRIM32	utr-5	Subset1	DCIS-6	74	14	18.9
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeD-2	84	22	26.1
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeD-4	107	4	3.7
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeD-7	146	32	21.9
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeD-8	126	8	6.3
chr9	119459942	A	G	TRIM32	utr-5	Subset1	MeD-9	55	50	90.9
chr9	119459942	A	G	TRIM32	utr-5	Subset1	M-DCIS-5	28	3	10.7
chr9	119459942	A	G	TRIM32	utr-5	Subset1	S1-11	115	23	20
chr9	119459942	A	G	TRIM32	utr-5	Subset1	S3-13	21	3	14.2
chr9	119459942	A	G	TRIM32	utr-5	Subset1	S3-3	42	3	7.1
chr9	119459942	A	G	TRIM32	utr-5	Subset1	S3-7	2	2	100
chr9	119459942	A	G	TRIM32	utr-5	Subset1	S1-2	57	5	8.7
chr9	119459942	A	G	TRIM32	utr-5	Subset1	S2-14	100	4	4
chr9	119459942	A	G	TRIM32	utr-5	Subset1	S2-4	160	5	3.1
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeC-2	80	13	16.2
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeP-2	163	152	93.2

chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeC-10	10	2	20
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeC-3	106	79	74.5
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeC-4	249	5	2
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeC-5	5	3	60
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeP-16	199	67	33.6
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeP-4	58	53	91.3
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeP-6	58	7	12
chrX	51488774	G	T	GSPT2	utr-3	Subset1	DCIS-6	12	3	25
chrX	51488774	G	T	GSPT2	utr-3	Subset1	DCIS-8	34	2	5.8
chrX	51488774	G	T	GSPT2	utr-3	Subset1	InvF-13	2	2	100
chrX	51488774	G	T	GSPT2	utr-3	Subset1	InvF-9	14	8	57.1
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeD-2	116	16	13.7
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeD-7	176	43	24.4
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeD-8	24	23	95.8
chrX	51488774	G	T	GSPT2	utr-3	Subset1	MeD-9	75	29	38.6
chrX	51488774	G	T	GSPT2	utr-3	Subset1	M-DCIS-5	75	4	5.3
chrX	51488774	G	T	GSPT2	utr-3	Subset1	S1-11	191	106	55.4
chrX	51488774	G	T	GSPT2	utr-3	Subset1	S3-1	122	104	85.2
chrX	51488774	G	T	GSPT2	utr-3	Subset1	S3-13	71	15	21.1
chrX	51488774	G	T	GSPT2	utr-3	Subset1	S1-12	28	2	7.1
chrX	51488774	G	T	GSPT2	utr-3	Subset1	S2-4	199	4	2
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeC-2	567	97	17.1
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeP-2	179	21	11.7
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeC-1	50	5	10
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeC-16	2	2	100
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeC-3	169	56	33.1
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeC-4	256	158	61.7
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeC-8	128	87	67.9
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeP-1	84	4	4.7
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeP-18	578	578	100
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeP-4	226	55	24.3
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeP-6	480	166	34.5
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	DCIS-1	306	4	1.3
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	DCIS-2	125	18	14.4
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	DCIS-3	295	35	11.8
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	DCIS-6	106	26	24.5
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	InvF-11	286	5	1.7
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeD-2	167	10	5.9
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeD-4	268	4	1.4
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeD-7	303	38	12.5
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeD-8	186	27	14.5
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	MeD-9	772	261	33.8
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	M-DCIS-2	307	14	4.5
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	S1-11	502	170	33.8
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	S3-13	184	35	19
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	S1-12	377	33	8.7
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	S1-9	164	129	78.6
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	S2-2	212	32	15
chr20	45905326	G	A	ZMYND8	coding-synon	Subset1	S2-7	652	615	94.3
chr16	81303746	A	G	BCMO1	intron	Subset2	BN-13	222	83	37.3
chr16	81303746	A	G	BCMO1	intron	Subset2	BN-12	48	37	77
chr16	81303746	A	G	BCMO1	intron	Subset2	BN-10	797	8	1
chr16	81303746	A	G	BCMO1	intron	Subset2	BN-3	100	2	2
chr16	81303746	A	G	BCMO1	intron	Subset2	BN-4	36	10	27.7
chr16	81303746	A	G	BCMO1	intron	Subset2	BN-11	45	5	11.1

chr16	81303746	A	G	BCMO1	intron	Subset2	BN-15	148	7	4.7
chr16	81303746	A	G	BCMO1	intron	Subset2	BNM-1	61	6	9.8
chr16	81303746	A	G	BCMO1	intron	Subset2	BNM-2	65	4	6.1
chr16	81303746	A	G	BCMO1	intron	Subset2	BNM-3	32	8	25
chr10	112337693	T	A	SMC3	intron	Subset1	MeC-2	24	9	37.5
chr10	112337693	T	A	SMC3	intron	Subset1	MeP-2	772	481	62.3
chr10	112337693	T	A	SMC3	intron	Subset1	MeC-3	39	12	30.7
chr10	112337693	T	A	SMC3	intron	Subset1	MeC-4	27	8	29.6
chr10	112337693	T	A	SMC3	intron	Subset1	MeC-5	9	5	55.5
chr10	112337693	T	A	SMC3	intron	Subset1	MeP-4	18	12	66.6
chr10	112337693	T	A	SMC3	intron	Subset1	MeP-6	28	6	21.4
chr10	112337693	T	A	SMC3	intron	Subset1	DCIS-1	27	2	7.4
chr10	112337693	T	A	SMC3	intron	Subset1	DCIS-3	13	7	53.8
chr10	112337693	T	A	SMC3	intron	Subset1	DCIS-6	30	9	30
chr10	112337693	T	A	SMC3	intron	Subset1	InvF-10	212	58	27.3
chr10	112337693	T	A	SMC3	intron	Subset1	InvF-4	78	16	20.5
chr10	112337693	T	A	SMC3	intron	Subset1	InvF-5	325	322	99
chr10	112337693	T	A	SMC3	intron	Subset1	InvF-1	51	5	9.8
chr10	112337693	T	A	SMC3	intron	Subset1	InvF-9	21	8	38
chr10	112337693	T	A	SMC3	intron	Subset1	MeD-2	122	10	8.1
chr10	112337693	T	A	SMC3	intron	Subset1	MeD-4	65	2	3
chr10	112337693	T	A	SMC3	intron	Subset1	MeD-7	63	13	20.6
chr10	112337693	T	A	SMC3	intron	Subset1	MeD-8	169	4	2.3
chr10	112337693	T	A	SMC3	intron	Subset1	MeD-9	39	27	69.2
chr10	112337693	T	A	SMC3	intron	Subset1	S1-11	150	76	50.6
chr10	112337693	T	A	SMC3	intron	Subset1	S3-2	418	85	20.3
chr10	112337693	T	A	SMC3	intron	Subset1	S1-1	19	5	26.3
chr10	112337693	T	A	SMC3	intron	Subset1	S1-2	9	4	44.4
chr17	41059362	C	T	G6PC	intron	Subset1	MeC-2	397	125	31.4
chr17	41059362	C	T	G6PC	intron	Subset1	MeC-1	119	2	1.6
chr17	41059362	C	T	G6PC	intron	Subset1	MeC-3	2824	247	8.7
chr17	41059362	C	T	G6PC	intron	Subset1	MeC-4	1031	425	41.2
chr17	41059362	C	T	G6PC	intron	Subset1	MeC-8	622	146	23.4
chr17	41059362	C	T	G6PC	intron	Subset1	MeP-12	121	2	1.6
chr17	41059362	C	T	G6PC	intron	Subset1	MeP-4	462	277	59.9
chr17	41059362	C	T	G6PC	intron	Subset1	MeP-6	160	27	16.8
chr17	41059362	C	T	G6PC	intron	Subset1	DCIS-1	284	42	14.7
chr17	41059362	C	T	G6PC	intron	Subset1	DCIS-2	185	17	9.1
chr17	41059362	C	T	G6PC	intron	Subset1	DCIS-8	121	15	12.3
chr17	41059362	C	T	G6PC	intron	Subset1	InvF-10	16	6	37.5
chr17	41059362	C	T	G6PC	intron	Subset1	InvF-4	4	2	50
chr17	41059362	C	T	G6PC	intron	Subset1	InvF-1	84	3	3.5
chr17	41059362	C	T	G6PC	intron	Subset1	InvF-11	475	78	16.4
chr17	41059362	C	T	G6PC	intron	Subset1	InvF-13	47	47	100
chr17	41059362	C	T	G6PC	intron	Subset1	InvF-9	330	27	8.1
chr17	41059362	C	T	G6PC	intron	Subset1	MeD-2	209	40	19.1
chr17	41059362	C	T	G6PC	intron	Subset1	MeD-4	141	2	1.4
chr17	41059362	C	T	G6PC	intron	Subset1	MeD-7	330	118	35.7
chr17	41059362	C	T	G6PC	intron	Subset1	MeD-8	130	8	6.1
chr17	41059362	C	T	G6PC	intron	Subset1	MeD-9	113	56	49.5
chr17	41059362	C	T	G6PC	intron	Subset1	M-DCIS-1	119	6	5
chr17	41059362	C	T	G6PC	intron	Subset1	M-DCIS-8	218	5	2.2
chr17	41059362	C	T	G6PC	intron	Subset1	S1-11	180	63	35
chr17	41059362	C	T	G6PC	intron	Subset1	S3-2	7	2	28.5
chr17	41059362	C	T	G6PC	intron	Subset1	S3-13	836	61	7.2

chr17	41059362	C	T	G6PC	intron	Subset1	S3-7	71	52	73.2
chr17	41059362	C	T	G6PC	intron	Subset1	S1-1	1404	29	2
chr17	41059362	C	T	G6PC	intron	Subset1	S1-2	48	6	12.5
chr2	74757492	T	C	HTRA2	missense	Subset1	MeC-2	22	3	13.6
chr2	74757492	T	C	HTRA2	missense	Subset1	MeC-20	10	7	70
chr2	74757492	T	C	HTRA2	missense	Subset1	MeC-3	681	223	32.7
chr2	74757492	T	C	HTRA2	missense	Subset1	MeC-4	146	5	3.4
chr2	74757492	T	C	HTRA2	missense	Subset1	MeC-5	324	209	64.5
chr2	74757492	T	C	HTRA2	missense	Subset1	MeP-18	3	3	100
chr2	74757492	T	C	HTRA2	missense	Subset1	MeP-4	454	381	83.9
chr2	74757492	T	C	HTRA2	missense	Subset1	MeP-6	147	11	7.4
chr2	74757492	T	C	HTRA2	missense	Subset1	DCIS-3	92	9	9.7
chr2	74757492	T	C	HTRA2	missense	Subset1	DCIS-6	20	7	35
chr2	74757492	T	C	HTRA2	missense	Subset1	DCIS-8	23	3	13
chr2	74757492	T	C	HTRA2	missense	Subset1	InvF-11	46	2	4.3
chr2	74757492	T	C	HTRA2	missense	Subset1	InvF-12	160	159	99.3
chr2	74757492	T	C	HTRA2	missense	Subset1	InvF-13	1346	1337	99.3
chr2	74757492	T	C	HTRA2	missense	Subset1	InvF-9	113	17	15
chr2	74757492	T	C	HTRA2	missense	Subset1	MeD-2	30	3	10
chr2	74757492	T	C	HTRA2	missense	Subset1	MeD-7	257	97	37.7
chr2	74757492	T	C	HTRA2	missense	Subset1	MeD-8	23	4	17.3
chr2	74757492	T	C	HTRA2	missense	Subset1	MeD-9	76	52	68.4
chr2	74757492	T	C	HTRA2	missense	Subset1	M-DCIS-3	72	72	100
chr2	74757492	T	C	HTRA2	missense	Subset1	S1-11	19	6	31.5
chr2	74757492	T	C	HTRA2	missense	Subset1	S3-3	85	4	4.7
chr2	74757492	T	C	HTRA2	missense	Subset1	S3-7	6	4	66.6
chr2	74757492	T	C	HTRA2	missense	Subset1	S2-8	268	3	1.1
chr7	6639734	C	G	C7orf26	coding-synon	Subset3	MeP-5	25	20	80
chr7	6639734	C	G	C7orf26	coding-synon	Subset3	M-DCIS-1	191	149	78
chr7	6639734	C	G	C7orf26	coding-synon	Subset3	M-DCIS-5	59	2	3.3
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeC-2	125	13	10.4
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeP-2	481	261	54.2
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeC-1	7	3	42.8
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeC-11	124	123	99.1
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeC-20	24	24	100
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeC-3	153	16	10.4
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeC-4	81	40	49.3
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeP-1	224	4	1.7
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeP-18	10	9	90
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeP-12	136	4	2.9
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeP-4	223	175	78.4
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeP-6	176	14	7.9
chr10	5200766	G	A	AKR1CL1	intron	Subset1	DCIS-1	59	7	11.8
chr10	5200766	G	A	AKR1CL1	intron	Subset1	DCIS-6	88	4	4.5
chr10	5200766	G	A	AKR1CL1	intron	Subset1	DCIS-8	57	6	10.5
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeD-2	191	29	15.1
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeD-4	291	4	1.3
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeD-7	192	53	27.6
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeD-8	133	35	26.3
chr10	5200766	G	A	AKR1CL1	intron	Subset1	MeD-9	518	99	19.1
chr10	5200766	G	A	AKR1CL1	intron	Subset1	M-DCIS-8	32	7	21.8
chr10	5200766	G	A	AKR1CL1	intron	Subset1	M-DCIS-2	103	3	2.9
chr10	5200766	G	A	AKR1CL1	intron	Subset1	S1-11	328	72	21.9
chr10	5200766	G	A	AKR1CL1	intron	Subset1	S3-2	408	108	26.4
chr10	5200766	G	A	AKR1CL1	intron	Subset1	S3-13	98	3	3

chr10	5200766	G	A	AKR1CL1	intron	Subset1	S1-1	138	17	12.3
chr10	5200766	G	A	AKR1CL1	intron	Subset1	S1-12	56	8	14.2
chr10	5200766	G	A	AKR1CL1	intron	Subset1	S2-10	937	884	94.3
chr10	5200766	G	A	AKR1CL1	intron	Subset1	S2-13	76	40	52.6
chr10	5200766	G	A	AKR1CL1	intron	Subset1	S2-7	73	59	80.8
chr2	63631702	C	T	WDPCP	missense	Subset3	M-DCIS-5	148	4	2.7
chr2	63631702	C	T	WDPCP	missense	Subset3	S2-4	800	8	1
chr2	63631702	C	T	WDPCP	missense	Subset3	S2-9	439	135	30.7
chr4	106157474	C	A	TET2	nonsense	Subset3	S2-9	21	9	42.8
chr9	40332891	G	C	.	.	Subset1	MeC-2	10	6	60
chr9	40332891	G	C	.	.	Subset1	MeP-2	273	5	1.8
chr9	40332891	G	C	.	.	Subset1	MeC-5	18	3	16.6
chr9	40332891	G	C	.	.	Subset1	MeC-8	21	4	19
chr9	40332891	G	C	.	.	Subset1	MeP-4	55	28	50.9
chr9	40332891	G	C	.	.	Subset1	MeP-6	17	2	11.7
chr9	40332891	G	C	.	.	Subset1	DCIS-3	170	132	77.6
chr9	40332891	G	C	.	.	Subset1	DCIS-6	18	9	50
chr9	40332891	G	C	.	.	Subset1	DCIS-8	11	2	18.1
chr9	40332891	G	C	.	.	Subset1	MeD-2	78	12	15.3
chr9	40332891	G	C	.	.	Subset1	MeD-8	133	107	80.4
chr9	40332891	G	C	.	.	Subset1	MeD-9	58	44	75.8
chr9	40332891	G	C	.	.	Subset1	M-DCIS-2	58	34	58.6
chr9	40332891	G	C	.	.	Subset1	S1-11	159	24	15
chr9	40332891	G	C	.	.	Subset1	S3-13	34	2	5.8
chr9	40332891	G	C	.	.	Subset1	S3-7	45	17	37.7
chr9	40332891	G	C	.	.	Subset1	S1-2	31	3	9.6
chr9	40332891	G	C	.	.	Subset1	S2-14	24	5	20.8
chr9	40332891	G	C	.	.	Subset1	S2-13	18	12	66.6
chr14	23866253	C	T	MYH6	missense	Subset1	MeC-2	166	102	61.4
chr14	23866253	C	T	MYH6	missense	Subset1	MeP-2	6	3	50
chr14	23866253	C	T	MYH6	missense	Subset1	MeC-3	192	180	93.7
chr14	23866253	C	T	MYH6	missense	Subset1	MeC-4	20	6	30
chr14	23866253	C	T	MYH6	missense	Subset1	MeC-5	4	4	100
chr14	23866253	C	T	MYH6	missense	Subset1	MeP-4	44	9	20.4
chr14	23866253	C	T	MYH6	missense	Subset1	MeP-6	19	2	10.5
chr14	23866253	C	T	MYH6	missense	Subset1	MeD-2	7	4	57.1
chr14	23866253	C	T	MYH6	missense	Subset1	MeD-7	77	15	19.4
chr14	23866253	C	T	MYH6	missense	Subset1	MeD-8	19	3	15.7
chr14	23866253	C	T	MYH6	missense	Subset1	MeD-9	20	8	40
chr11	62356789	C	T	TUT1	intron	Subset2	BN-4	19	4	21
chr11	62356789	C	T	TUT1	intron	Subset2	BN-5	27	5	18.5
chr6	136500313	G	A	PDE7B	intron	Subset1	MeC-2	69	60	86.9
chr6	136500313	G	A	PDE7B	intron	Subset1	MeP-2	260	67	25.7
chr6	136500313	G	A	PDE7B	intron	Subset1	MeC-4	51	15	29.4
chr6	136500313	G	A	PDE7B	intron	Subset1	MeP-4	37	7	18.9
chr6	136500313	G	A	PDE7B	intron	Subset1	MeP-6	67	52	77.6
chr6	136500313	G	A	PDE7B	intron	Subset1	DCIS-8	31	3	9.6
chr6	136500313	G	A	PDE7B	intron	Subset1	InvF-10	295	60	20.3
chr6	136500313	G	A	PDE7B	intron	Subset1	InvF-4	470	177	37.6
chr6	136500313	G	A	PDE7B	intron	Subset1	InvF-5	9	6	66.6
chr6	136500313	G	A	PDE7B	intron	Subset1	InvF-11	46	2	4.3
chr6	136500313	G	A	PDE7B	intron	Subset1	InvF-12	7	7	100
chr6	136500313	G	A	PDE7B	intron	Subset1	InvF-9	63	30	47.6
chr6	136500313	G	A	PDE7B	intron	Subset1	MeD-2	86	2	2.3
chr6	136500313	G	A	PDE7B	intron	Subset1	MeD-7	151	25	16.5

chr6	136500313	G	A	PDE7B	intron	Subset1	MeD-8	34	19	55.8
chr6	136500313	G	A	PDE7B	intron	Subset1	MeD-9	99	20	20.2
chr6	136500313	G	A	PDE7B	intron	Subset1	S1-11	131	63	48
chr6	136500313	G	A	PDE7B	intron	Subset1	S3-2	335	142	42.3
chr6	136500313	G	A	PDE7B	intron	Subset1	S3-1	34	3	8.8
chr6	136500313	G	A	PDE7B	intron	Subset1	S3-13	91	8	8.7
chr6	136500313	G	A	PDE7B	intron	Subset1	S3-3	177	12	6.7
chr6	136500313	G	A	PDE7B	intron	Subset1	S3-7	407	300	73.7
chr7	134252992	A	C	AKR1B15	missense	Subset2	BN-12	331	75	22.6
chr7	134252992	A	C	AKR1B15	missense	Subset2	BN-15	92	7	7.6
chr7	134252992	A	C	AKR1B15	missense	Subset2	BNM-1	59	9	15.2
chr7	134252992	A	C	AKR1B15	missense	Subset2	BNM-2	113	15	13.2
chr7	134252992	A	C	AKR1B15	missense	Subset2	BNM-3	42	3	7.1
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeC-2	693	58	8.3
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeP-2	43	9	20.9
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeC-1	7	6	85.7
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeC-10	4	4	100
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeC-3	170	14	8.2
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeC-4	106	48	45.2
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeP-12	29	2	6.8
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeP-4	61	40	65.5
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeP-6	145	19	13.1
chr10	7247868	C	G	SFMBT2	missense	Subset1	DCIS-6	34	10	29.4
chr10	7247868	C	G	SFMBT2	missense	Subset1	DCIS-8	48	9	18.7
chr10	7247868	C	G	SFMBT2	missense	Subset1	InvF-10	284	49	17.2
chr10	7247868	C	G	SFMBT2	missense	Subset1	InvF-4	365	82	22.4
chr10	7247868	C	G	SFMBT2	missense	Subset1	InvF-5	100	4	4
chr10	7247868	C	G	SFMBT2	missense	Subset1	InvF-9	45	8	17.7
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeD-2	63	3	4.7
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeD-4	104	4	3.8
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeD-7	160	17	10.6
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeD-8	41	8	19.5
chr10	7247868	C	G	SFMBT2	missense	Subset1	MeD-9	133	106	79.6
chr10	7247868	C	G	SFMBT2	missense	Subset1	M-DCIS-3	4	2	50
chr10	7247868	C	G	SFMBT2	missense	Subset1	S1-11	232	46	19.8
chr10	7247868	C	G	SFMBT2	missense	Subset1	S3-2	164	58	35.3
chr10	7247868	C	G	SFMBT2	missense	Subset1	S3-1	125	106	84.8
chr10	7247868	C	G	SFMBT2	missense	Subset1	S3-13	44	3	6.8
chr10	7247868	C	G	SFMBT2	missense	Subset1	S3-7	69	44	63.7
chr10	7247868	C	G	SFMBT2	missense	Subset1	S1-1	16	13	81.2
chr10	7247868	C	G	SFMBT2	missense	Subset1	S1-2	17	4	23.5
chr12	112646352	C	T	HECTD4	coding-synon	Subset2	MeP-12	119	2	1.6
chr12	112646352	C	T	HECTD4	coding-synon	Subset2	BN-1	230	50	21.7
chr12	112646352	C	T	HECTD4	coding-synon	Subset2	BN-3	55	41	74.5
chr12	112646352	C	T	HECTD4	coding-synon	Subset2	BNM-3	30	6	20
chr7	31847965	A	G	PDE1C	intron	Subset1	InvF-10	222	133	59.9
chr7	31847965	A	G	PDE1C	intron	Subset1	InvF-4	435	420	96.5
chr7	31847965	A	G	PDE1C	intron	Subset1	InvF-5	137	122	89
chr7	31847965	A	G	PDE1C	intron	Subset1	InvF-1	29	3	10.3
chr7	31847965	A	G	PDE1C	intron	Subset1	InvF-9	82	64	78
chr1	100356847	T	A	AGL	missense	Subset2	BNM-1	32	2	6.2
chr1	100356847	T	A	AGL	missense	Subset2	BNM-2	70	16	22.8
chr1	100356847	T	A	AGL	missense	Subset2	BNM-3	36	6	16.6
chr8	103309664	G	T	UBR5	intron	Subset1	DCIS-3	41	6	14.6
chr8	103309664	G	T	UBR5	intron	Subset1	DCIS-5	7948	2073	26

chr2	200801136	T	C	TYW5	missense	Subset2	BN-3	155	14	9
chr2	200801136	T	C	TYW5	missense	Subset2	BN-4	115	4	3.4
chr2	200801136	T	C	TYW5	missense	Subset2	BN-5	217	19	8.7
chr2	200801136	T	C	TYW5	missense	Subset2	BNM-1	75	4	5.3
chr2	200801136	T	C	TYW5	missense	Subset2	BNM-2	135	13	9.6
chr2	200801136	T	C	TYW5	missense	Subset2	BNM-3	107	11	10.2
chr7	2415101	A	G	EIF3B	missense	Subset1	MeC-2	98	47	47.9
chr7	2415101	A	G	EIF3B	missense	Subset1	MeC-3	168	83	49.4
chr7	2415101	A	G	EIF3B	missense	Subset1	MeC-4	94	48	51
chr7	2415101	A	G	EIF3B	missense	Subset1	MeC-5	16	10	62.5
chr7	2415101	A	G	EIF3B	missense	Subset1	MeC-8	61	49	80.3
chr7	2415101	A	G	EIF3B	missense	Subset1	MeP-1	28	4	14.2
chr7	2415101	A	G	EIF3B	missense	Subset1	MeP-18	56	56	100
chr7	2415101	A	G	EIF3B	missense	Subset1	MeP-12	107	8	7.4
chr7	2415101	A	G	EIF3B	missense	Subset1	MeP-4	102	75	73.5
chr7	2415101	A	G	EIF3B	missense	Subset1	MeP-5	8	5	62.5
chr7	2415101	A	G	EIF3B	missense	Subset1	MeP-6	45	23	51.1
chr7	2415101	A	G	EIF3B	missense	Subset1	DCIS-1	50	2	4
chr7	2415101	A	G	EIF3B	missense	Subset1	DCIS-2	44	41	93.1
chr7	2415101	A	G	EIF3B	missense	Subset1	DCIS-3	30	17	56.6
chr7	2415101	A	G	EIF3B	missense	Subset1	DCIS-5	55	55	100
chr7	2415101	A	G	EIF3B	missense	Subset1	DCIS-6	24	8	33.3
chr7	2415101	A	G	EIF3B	missense	Subset1	DCIS-8	16	4	25
chr7	2415101	A	G	EIF3B	missense	Subset1	InvF-10	6	5	83.3
chr7	2415101	A	G	EIF3B	missense	Subset1	InvF-4	15	15	100
chr7	2415101	A	G	EIF3B	missense	Subset1	InvF-5	4	4	100
chr7	2415101	A	G	EIF3B	missense	Subset1	InvF-1	79	34	43
chr7	2415101	A	G	EIF3B	missense	Subset1	InvF-13	23	7	30.4
chr7	2415101	A	G	EIF3B	missense	Subset1	InvF-9	328	42	12.8
chr7	2415101	A	G	EIF3B	missense	Subset1	MeD-7	100	13	13
chr7	2415101	A	G	EIF3B	missense	Subset1	MeD-8	11	7	63.6
chr7	2415101	A	G	EIF3B	missense	Subset1	MeD-9	19	11	57.8
chr7	2415101	A	G	EIF3B	missense	Subset1	M-DCIS-2	62	15	24.1
chr7	2415101	A	G	EIF3B	missense	Subset1	M-DCIS-5	16	4	25
chr7	2415101	A	G	EIF3B	missense	Subset1	S1-11	52	27	51.9
chr7	2415101	A	G	EIF3B	missense	Subset1	S3-2	22	11	50
chr7	2415101	A	G	EIF3B	missense	Subset1	S3-7	31	31	100
chr7	2415101	A	G	EIF3B	missense	Subset1	S1-2	8	3	37.5
chr7	2415101	A	G	EIF3B	missense	Subset1	S2-14	174	7	4
chrX	151821894	G	A	.	.	Subset2	BN-1	33	29	87.8
chrX	151821894	G	A	.	.	Subset2	BN-10	790	782	98.9
chrX	151821894	G	A	.	.	Subset2	BN-3	13	8	61.5
chrX	151821894	G	A	.	.	Subset2	BNM-3	12	3	25
chr19	14910151	T	C	OR7C1	coding-synon	Subset2	BN-10	248	10	4
chr19	14910151	T	C	OR7C1	coding-synon	Subset2	BNM-1	42	5	11.9
chr19	14910151	T	C	OR7C1	coding-synon	Subset2	BNM-2	73	4	5.4
chr19	14910151	T	C	OR7C1	coding-synon	Subset2	BNM-3	92	18	19.5
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeC-2	310	67	21.6
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeP-2	150	12	8
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeC-1	4	2	50
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeC-11	27	4	14.8
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeC-3	26	7	26.9
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeC-4	73	32	43.8
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeC-8	71	68	95.7
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeP-4	148	25	16.8

chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeP-6	242	9	3.7
chr9	84607442	A	T	SPATA31D1	missense	Subset1	DCIS-1	56	8	14.2
chr9	84607442	A	T	SPATA31D1	missense	Subset1	DCIS-2	14	2	14.2
chr9	84607442	A	T	SPATA31D1	missense	Subset1	DCIS-3	81	12	14.8
chr9	84607442	A	T	SPATA31D1	missense	Subset1	DCIS-5	16	8	50
chr9	84607442	A	T	SPATA31D1	missense	Subset1	DCIS-6	18	4	22.2
chr9	84607442	A	T	SPATA31D1	missense	Subset1	DCIS-8	41	6	14.6
chr9	84607442	A	T	SPATA31D1	missense	Subset1	InvF-10	52	14	26.9
chr9	84607442	A	T	SPATA31D1	missense	Subset1	InvF-4	281	85	30.2
chr9	84607442	A	T	SPATA31D1	missense	Subset1	InvF-5	6	2	33.3
chr9	84607442	A	T	SPATA31D1	missense	Subset1	InvF-11	101	30	29.7
chr9	84607442	A	T	SPATA31D1	missense	Subset1	InvF-9	108	17	15.7
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeD-2	153	3	1.9
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeD-4	89	5	5.6
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeD-7	220	58	26.3
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeD-8	156	122	78.2
chr9	84607442	A	T	SPATA31D1	missense	Subset1	MeD-9	86	63	73.2
chr9	84607442	A	T	SPATA31D1	missense	Subset1	M-DCIS-2	52	2	3.8
chr9	84607442	A	T	SPATA31D1	missense	Subset1	M-DCIS-5	128	2	1.5
chr9	84607442	A	T	SPATA31D1	missense	Subset1	S1-11	102	28	27.4
chr9	84607442	A	T	SPATA31D1	missense	Subset1	S3-2	132	63	47.7
chr9	84607442	A	T	SPATA31D1	missense	Subset1	S3-13	70	9	12.8
chr9	84607442	A	T	SPATA31D1	missense	Subset1	S3-7	64	60	93.7
chr9	84607442	A	T	SPATA31D1	missense	Subset1	S1-1	321	209	65.1
chr9	84607442	A	T	SPATA31D1	missense	Subset1	S1-2	82	6	7.3
chr9	84607442	A	T	SPATA31D1	missense	Subset1	S1-6	127	34	26.7
chr9	84607442	A	T	SPATA31D1	missense	Subset1	S2-13	518	435	83.9
chr9	84607442	A	T	SPATA31D1	missense	Subset1	S2-4	139	7	5
chr9	84607442	A	T	SPATA31D1	missense	Subset1	BNM-2	94	2	2.1
chr5	73072247	G	T	ARHGEF28	intron	Subset1	DCIS-1	55	2	3.6
chr5	73072247	G	T	ARHGEF28	intron	Subset1	DCIS-5	6	2	33.3
chr5	73072247	G	T	ARHGEF28	intron	Subset1	DCIS-8	72	36	50
chr5	73072247	G	T	ARHGEF28	intron	Subset1	M-DCIS-5	73	3	4.1
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeC-2	13	4	30.7
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeC-11	56	56	100
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeC-3	10	8	80
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeC-4	86	53	61.6
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeP-4	147	101	68.7
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeP-6	126	92	73
chr5	148699178	G	A	AFAP1L1	missense	Subset1	DCIS-6	94	3	3.1
chr5	148699178	G	A	AFAP1L1	missense	Subset1	DCIS-8	38	4	10.5
chr5	148699178	G	A	AFAP1L1	missense	Subset1	InvF-10	34	6	17.6
chr5	148699178	G	A	AFAP1L1	missense	Subset1	InvF-1	11	6	54.5
chr5	148699178	G	A	AFAP1L1	missense	Subset1	InvF-9	147	77	52.3
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeD-2	56	27	48.2
chr5	148699178	G	A	AFAP1L1	missense	Subset1	Ly-3	40	2	5
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeD-4	71	9	12.6
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeD-7	130	14	10.7
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeD-8	42	14	33.3
chr5	148699178	G	A	AFAP1L1	missense	Subset1	MeD-9	64	41	64
chr5	148699178	G	A	AFAP1L1	missense	Subset1	M-DCIS-1	27	2	7.4
chr5	148699178	G	A	AFAP1L1	missense	Subset1	M-DCIS-5	47	2	4.2
chr5	148699178	G	A	AFAP1L1	missense	Subset1	S1-11	73	10	13.6
chr5	148699178	G	A	AFAP1L1	missense	Subset1	S3-2	48	22	45.8
chr5	148699178	G	A	AFAP1L1	missense	Subset1	S3-13	85	9	10.5

chr5	148699178	G	A	AFAP1L1	missense	Subset1	S3-7	41	26	63.4
chr5	148699178	G	A	AFAP1L1	missense	Subset1	S1-2	33	9	27.2
chr5	148699178	G	A	AFAP1L1	missense	Subset1	S1-6	18	2	11.1
chr5	148699178	G	A	AFAP1L1	missense	Subset1	S1-9	46	9	19.5
chr5	148699178	G	A	AFAP1L1	missense	Subset1	BN-4	115	2	1.7
chr5	148699178	G	A	AFAP1L1	missense	Subset1	BNM-1	9	2	22.2
chr4	55564710	T	A	KIT	missense	Subset1	MeC-2	33	2	6
chr4	55564710	T	A	KIT	missense	Subset1	MeP-2	109	39	35.7
chr4	55564710	T	A	KIT	missense	Subset1	MeC-4	67	26	38.8
chr4	55564710	T	A	KIT	missense	Subset1	MeC-8	20	9	45
chr4	55564710	T	A	KIT	missense	Subset1	MeP-12	32	2	6.2
chr4	55564710	T	A	KIT	missense	Subset1	MeP-4	31	13	41.9
chr4	55564710	T	A	KIT	missense	Subset1	MeP-6	43	13	30.2
chr4	55564710	T	A	KIT	missense	Subset1	DCIS-6	81	8	9.8
chr4	55564710	T	A	KIT	missense	Subset1	InvF-1	12	12	100
chr4	55564710	T	A	KIT	missense	Subset1	InvF-9	114	5	4.3
chr4	55564710	T	A	KIT	missense	Subset1	MeD-2	60	10	16.6
chr4	55564710	T	A	KIT	missense	Subset1	MeD-7	54	4	7.4
chr4	55564710	T	A	KIT	missense	Subset1	MeD-8	63	6	9.5
chr4	55564710	T	A	KIT	missense	Subset1	MeD-9	57	32	56.1
chr4	55564710	T	A	KIT	missense	Subset1	M-DCIS-2	35	3	8.5
chr4	55564710	T	A	KIT	missense	Subset1	M-DCIS-5	55	3	5.4
chr4	55564710	T	A	KIT	missense	Subset1	S1-11	136	40	29.4
chr4	55564710	T	A	KIT	missense	Subset1	S3-1	189	31	16.4
chr4	55564710	T	A	KIT	missense	Subset1	S3-7	131	14	10.6
chr4	55564710	T	A	KIT	missense	Subset1	S1-6	36	6	16.6
chr18	59919932	G	A	KIAA1468	missense	Subset2	BN-1	206	164	79.6
chr18	59919932	G	A	KIAA1468	missense	Subset2	BN-10	115	4	3.4
chr18	59919932	G	A	KIAA1468	missense	Subset2	BN-3	31	4	12.9
chr18	59919932	G	A	KIAA1468	missense	Subset2	BN-5	32	3	9.3
chr18	59919932	G	A	KIAA1468	missense	Subset2	BNM-2	36	3	8.3
chr18	59919932	G	A	KIAA1468	missense	Subset2	BNM-3	9	3	33.3
chr19	56466570	C	T	NLRP8	coding-synon	Subset2	BN-10	199	3	1.5
chr19	56466570	C	T	NLRP8	coding-synon	Subset2	BN-4	61	52	85.2
chr19	56466570	C	T	NLRP8	coding-synon	Subset2	BN-5	438	190	43.3
chr19	56466570	C	T	NLRP8	coding-synon	Subset2	BNM-1	16	2	12.5
chr19	56466570	C	T	NLRP8	coding-synon	Subset2	BNM-3	61	6	9.8
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeC-2	121	39	32.2
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeP-2	150	14	9.3
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeC-3	105	89	84.7
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeC-4	68	59	86.7
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeC-5	86	48	55.8
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeC-8	18	9	50
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeP-4	53	11	20.7
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeP-6	62	25	40.3
chr18	10691421	T	C	PIEZO2	intron	Subset1	DCIS-1	29	6	20.6
chr18	10691421	T	C	PIEZO2	intron	Subset1	DCIS-3	146	88	60.2
chr18	10691421	T	C	PIEZO2	intron	Subset1	DCIS-6	39	5	12.8
chr18	10691421	T	C	PIEZO2	intron	Subset1	DCIS-8	50	4	8
chr18	10691421	T	C	PIEZO2	intron	Subset1	InvF-10	86	19	22
chr18	10691421	T	C	PIEZO2	intron	Subset1	InvF-5	204	121	59.3
chr18	10691421	T	C	PIEZO2	intron	Subset1	InvF-13	3	3	100
chr18	10691421	T	C	PIEZO2	intron	Subset1	InvF-9	51	5	9.8
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeD-2	93	10	10.7
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeD-7	65	24	36.9

chr18	10691421	T	C	PIEZO2	intron	Subset1	MeD-8	56	18	32.1
chr18	10691421	T	C	PIEZO2	intron	Subset1	MeD-9	44	15	34
chr18	10691421	T	C	PIEZO2	intron	Subset1	S1-11	247	49	19.8
chr18	10691421	T	C	PIEZO2	intron	Subset1	S3-1	43	34	79
chr18	10691421	T	C	PIEZO2	intron	Subset1	S3-7	166	5	3
chr18	10691421	T	C	PIEZO2	intron	Subset1	S1-1	313	42	13.4
chr18	10691421	T	C	PIEZO2	intron	Subset1	S1-6	91	7	7.6
chr18	10691421	T	C	PIEZO2	intron	Subset1	S1-9	17	5	29.4
chr18	10691421	T	C	PIEZO2	intron	Subset1	S2-10	156	2	1.2
chr18	10691421	T	C	PIEZO2	intron	Subset1	S2-13	9	7	77.7
chr18	10691421	T	C	PIEZO2	intron	Subset1	S2-7	17	5	29.4
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeC-2	72	2	2.7
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeP-2	7	3	42.8
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeC-11	7	3	42.8
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeC-3	93	55	59.1
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeC-4	72	13	18
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeC-8	123	118	95.9
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeP-18	199	183	91.9
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeP-4	16	9	56.2
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeP-6	49	11	22.4
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeD-2	8	2	25
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeD-7	66	2	3
chr19	19603173	G	A	GATAD2A	missense	Subset1	MeD-9	43	5	11.6
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeC-2	603	53	8.7
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeC-11	92	2	2.1
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeC-3	118	43	36.4
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeC-4	167	53	31.7
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeC-8	157	3	1.9
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeP-4	215	26	12
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeP-6	75	30	40
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	DCIS-1	112	2	1.7
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	DCIS-2	196	39	19.8
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	DCIS-3	118	7	5.9
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	DCIS-6	50	19	38
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	DCIS-8	136	9	6.6
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	InvF-10	17	11	64.7
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	InvF-5	14	11	78.5
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	InvF-1	275	56	20.3
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	InvF-12	13	7	53.8
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	InvF-9	57	31	54.3
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeD-2	128	9	7
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeD-4	141	5	3.5
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeD-7	70	23	32.8
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeD-8	115	9	7.8
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	MeD-9	144	52	36.1
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	M-DCIS-8	41	3	7.3
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	M-DCIS-2	98	28	28.5
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	M-DCIS-3	12	4	33.3
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	S1-11	748	185	24.7
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	S3-2	12	2	16.6
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	S3-7	89	14	15.7
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	S1-2	79	41	51.8
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	S1-6	102	6	5.8
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	S1-9	95	8	8.4
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	S2-14	52	6	11.5

chr14	59954739	G	A	L3HYPDH	promoter	Subset1	S2-13	39	31	79.4
chr14	59954739	G	A	L3HYPDH	promoter	Subset1	S2-8	27	12	44.4
chr1	155895459	C	T	KIAA0907	missense	Subset2	BN-5	124	15	12
chr1	155895459	C	T	KIAA0907	missense	Subset2	BN-15	199	30	15
chrX	72797180	A	T	CHIC1	intron	Subset1	InvF-1	63	3	4.7
chrX	72797180	A	T	CHIC1	intron	Subset1	InvF-13	31	31	100
chrX	72797180	A	T	CHIC1	intron	Subset1	InvF-9	184	6	3.2
chr17	26856144	C	A	FOXN1	coding-synon	Subset2	BN-3	134	16	11.9
chr17	26856144	C	A	FOXN1	coding-synon	Subset2	BN-4	32	5	15.6
chr17	26856144	C	A	FOXN1	coding-synon	Subset2	BN-5	83	2	2.4
chr19	54201564	T	A	MIR523	promoter	Subset1	MeC-2	121	13	10.7
chr19	54201564	T	A	MIR523	promoter	Subset1	MeC-11	748	8	1
chr19	54201564	T	A	MIR523	promoter	Subset1	MeC-20	21	13	61.9
chr19	54201564	T	A	MIR523	promoter	Subset1	MeC-3	69	20	28.9
chr19	54201564	T	A	MIR523	promoter	Subset1	MeC-4	107	20	18.6
chr19	54201564	T	A	MIR523	promoter	Subset1	MeC-5	16	2	12.5
chr19	54201564	T	A	MIR523	promoter	Subset1	MeC-8	8	6	75
chr19	54201564	T	A	MIR523	promoter	Subset1	MeP-1	50	4	8
chr19	54201564	T	A	MIR523	promoter	Subset1	MeP-4	64	16	25
chr19	54201564	T	A	MIR523	promoter	Subset1	MeP-6	82	25	30.4
chr19	54201564	T	A	MIR523	promoter	Subset1	DCIS-6	114	12	10.5
chr19	54201564	T	A	MIR523	promoter	Subset1	DCIS-8	64	12	18.7
chr19	54201564	T	A	MIR523	promoter	Subset1	InvF-4	52	51	98
chr19	54201564	T	A	MIR523	promoter	Subset1	InvF-13	15	2	13.3
chr19	54201564	T	A	MIR523	promoter	Subset1	InvF-9	89	12	13.4
chr19	54201564	T	A	MIR523	promoter	Subset1	MeD-2	90	47	52.2
chr19	54201564	T	A	MIR523	promoter	Subset1	MeD-4	125	4	3.2
chr19	54201564	T	A	MIR523	promoter	Subset1	MeD-7	251	22	8.7
chr19	54201564	T	A	MIR523	promoter	Subset1	MeD-8	92	33	35.8
chr19	54201564	T	A	MIR523	promoter	Subset1	MeD-9	153	144	94.1
chr19	54201564	T	A	MIR523	promoter	Subset1	M-DCIS-2	40	3	7.5
chr19	54201564	T	A	MIR523	promoter	Subset1	M-DCIS-3	16	12	75
chr19	54201564	T	A	MIR523	promoter	Subset1	M-DCIS-5	65	20	30.7
chr19	54201564	T	A	MIR523	promoter	Subset1	S1-11	202	98	48.5
chr19	54201564	T	A	MIR523	promoter	Subset1	S3-2	42	2	4.7
chr19	54201564	T	A	MIR523	promoter	Subset1	S3-13	30	16	53.3
chr19	54201564	T	A	MIR523	promoter	Subset1	S1-12	102	4	3.9
chr19	54201564	T	A	MIR523	promoter	Subset1	S1-2	104	7	6.7
chr19	54201564	T	A	MIR523	promoter	Subset1	S1-9	22	2	9
chr19	54201564	T	A	MIR523	promoter	Subset1	S2-10	1321	128	9.6
chr19	54201564	T	A	MIR523	promoter	Subset1	S2-4	91	3	3.2
chr19	54201564	T	A	MIR523	promoter	Subset1	S2-7	56	43	76.7
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeC-2	181	116	64
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeP-2	72	11	15.2
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeC-10	22	19	86.3
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeC-20	4	3	75
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeC-3	3912	379	9.6
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeC-4	219	75	34.2
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeC-5	40	33	82.5
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeC-8	133	42	31.5
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeP-17	9	2	22.2
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeP-4	468	119	25.4
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeP-6	134	36	26.8
chr22	30856049	C	T	SEC14L3	missense	Subset1	DCIS-1	215	85	39.5
chr22	30856049	C	T	SEC14L3	missense	Subset1	DCIS-2	171	32	18.7

chr22	30856049	C	T	SEC14L3	missense	Subset1	DCIS-3	230	53	23
chr22	30856049	C	T	SEC14L3	missense	Subset1	DCIS-6	58	18	31
chr22	30856049	C	T	SEC14L3	missense	Subset1	DCIS-8	57	3	5.2
chr22	30856049	C	T	SEC14L3	missense	Subset1	InvF-10	47	8	17
chr22	30856049	C	T	SEC14L3	missense	Subset1	InvF-5	10	9	90
chr22	30856049	C	T	SEC14L3	missense	Subset1	InvF-1	55	55	100
chr22	30856049	C	T	SEC14L3	missense	Subset1	InvF-11	345	13	3.7
chr22	30856049	C	T	SEC14L3	missense	Subset1	InvF-12	196	2	1
chr22	30856049	C	T	SEC14L3	missense	Subset1	InvF-8	18	14	77.7
chr22	30856049	C	T	SEC14L3	missense	Subset1	InvF-9	140	137	97.8
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeD-2	110	45	40.9
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeD-4	115	5	4.3
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeD-7	325	15	4.6
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeD-8	61	7	11.4
chr22	30856049	C	T	SEC14L3	missense	Subset1	MeD-9	39	13	33.3
chr22	30856049	C	T	SEC14L3	missense	Subset1	M-DCIS-2	291	148	50.8
chr22	30856049	C	T	SEC14L3	missense	Subset1	S1-11	169	59	34.9
chr22	30856049	C	T	SEC14L3	missense	Subset1	S3-2	47	5	10.6
chr22	30856049	C	T	SEC14L3	missense	Subset1	S3-13	234	35	14.9
chr22	30856049	C	T	SEC14L3	missense	Subset1	S1-6	101	4	3.9
chr22	30856049	C	T	SEC14L3	missense	Subset1	S1-9	13	7	53.8
chr22	30856049	C	T	SEC14L3	missense	Subset1	S2-13	21	11	52.3
chr22	30856049	C	T	SEC14L3	missense	Subset1	S2-4	175	4	2.2
chr22	30856049	C	T	SEC14L3	missense	Subset1	S2-7	67	3	4.4
chr11	93826773	C	T	HEPHL1	nonsense	Subset2	BNM-1	89	8	8.9
chr11	93826773	C	T	HEPHL1	nonsense	Subset2	BNM-2	178	17	9.5
chr11	93826773	C	T	HEPHL1	nonsense	Subset2	BNM-3	156	19	12.1
chr6	43535248	A	G	XPO5	intron	Subset2	BN-4	27	5	18.5
chr6	43535248	A	G	XPO5	intron	Subset2	BN-5	23	19	82.6
chr6	43535248	A	G	XPO5	intron	Subset2	BN-15	6	6	100
chr2	33614215	A	G	LTBP1	intron	Subset3	Ly-10	149	8	5.3
chr2	33614215	A	G	LTBP1	intron	Subset3	Ly-3	195	101	51.7
chr2	33614215	A	G	LTBP1	intron	Subset3	M-DCIS-5	97	2	2
chr2	33614215	A	G	LTBP1	intron	Subset3	S3-2	138	2	1.4
chr2	33614215	A	G	LTBP1	intron	Subset3	S1-4	86	7	8.1
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeC-2	13	2	15.3
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeP-2	60	22	36.6
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeC-1	6	2	33.3
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeC-3	63	29	46
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeC-4	40	7	17.5
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeC-5	40	31	77.5
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeC-8	78	3	3.8
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeP-4	51	46	90.1
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeP-6	42	6	14.2
chr10	75006655	A	T	DNAJC9	intron	Subset1	DCIS-1	39	5	12.8
chr10	75006655	A	T	DNAJC9	intron	Subset1	DCIS-2	28	2	7.1
chr10	75006655	A	T	DNAJC9	intron	Subset1	DCIS-3	55	36	65.4
chr10	75006655	A	T	DNAJC9	intron	Subset1	InvF-10	7	6	85.7
chr10	75006655	A	T	DNAJC9	intron	Subset1	InvF-4	6	6	100
chr10	75006655	A	T	DNAJC9	intron	Subset1	InvF-13	117	57	48.7
chr10	75006655	A	T	DNAJC9	intron	Subset1	InvF-9	157	126	80.2
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeD-7	46	4	8.6
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeD-8	39	16	41
chr10	75006655	A	T	DNAJC9	intron	Subset1	MeD-9	68	32	47
chr10	75006655	A	T	DNAJC9	intron	Subset1	S1-11	125	66	52.8

chr10	75006655	A	T	DNAJC9	intron	Subset1	S3-13	45	20	44.4
chr10	75006655	A	T	DNAJC9	intron	Subset1	S3-7	15	14	93.3
chr10	75006655	A	T	DNAJC9	intron	Subset1	S1-1	17	6	35.2
chr10	75006655	A	T	DNAJC9	intron	Subset1	S1-12	139	2	1.4
chr10	75006655	A	T	DNAJC9	intron	Subset1	S1-6	34	3	8.8
chr10	75006655	A	T	DNAJC9	intron	Subset1	S2-14	39	2	5.1
chr10	75006655	A	T	DNAJC9	intron	Subset1	S2-4	51	4	7.8
chrX	53239909	A	C	KDM5C	missense	Subset3	MeC-2	47	3	6.3
chrX	53239909	A	C	KDM5C	missense	Subset3	MeC-3	155	11	7
chrX	53239909	A	C	KDM5C	missense	Subset3	DCIS-1	251	67	26.6
chrX	53239909	A	C	KDM5C	missense	Subset3	DCIS-3	66	4	6
chrX	53239909	A	C	KDM5C	missense	Subset3	DCIS-8	135	2	1.4
chrX	53239909	A	C	KDM5C	missense	Subset3	InvF-11	189	14	7.4
chrX	53239909	A	C	KDM5C	missense	Subset3	InvF-13	80	72	90
chrX	53239909	A	C	KDM5C	missense	Subset3	InvF-9	59	5	8.4
chrX	53239909	A	C	KDM5C	missense	Subset3	Ly-10	151	4	2.6
chrX	53239909	A	C	KDM5C	missense	Subset3	MeD-2	118	4	3.3
chrX	53239909	A	C	KDM5C	missense	Subset3	MeD-4	183	3	1.6
chrX	53239909	A	C	KDM5C	missense	Subset3	MeD-7	287	22	7.6
chrX	53239909	A	C	KDM5C	missense	Subset3	M-DCIS-8	24	12	50
chrX	53239909	A	C	KDM5C	missense	Subset3	M-DCIS-5	89	3	3.3
chrX	53239909	A	C	KDM5C	missense	Subset3	S3-13	169	3	1.7
chrX	53239909	A	C	KDM5C	missense	Subset3	S1-12	43	3	6.9
chrX	53239909	A	C	KDM5C	missense	Subset3	S1-6	146	2	1.3
chrX	53239909	A	C	KDM5C	missense	Subset3	S2-10	30	2	6.6
chrX	53239909	A	C	KDM5C	missense	Subset3	S2-2	29	3	10.3
chrX	53239909	A	C	KDM5C	missense	Subset3	S2-13	39	26	66.6
chrX	53239909	A	C	KDM5C	missense	Subset3	S2-4	381	4	1
chrX	53239909	A	C	KDM5C	missense	Subset3	S2-8	392	10	2.5
chrX	53239909	A	C	KDM5C	missense	Subset3	S2-9	191	42	21.9
chrX	53239909	A	C	KDM5C	missense	Subset3	BN-4	135	2	1.4
chr4	122784286	T	C	BBS7	intron	Subset2	BN-1	2	2	100
chr4	122784286	T	C	BBS7	intron	Subset2	BN-11	9	3	33.3
chr4	122784286	T	C	BBS7	intron	Subset2	BNM-1	30	3	10
chr4	122784286	T	C	BBS7	intron	Subset2	BNM-2	70	5	7.1
chr4	122784286	T	C	BBS7	intron	Subset2	BNM-3	28	10	35.7
chr18	77895881	A	T	ADNP2	missense	Subset2	BN-1	86	85	98.8
chr18	77895881	A	T	ADNP2	missense	Subset2	BN-10	26	8	30.7
chr18	77895881	A	T	ADNP2	missense	Subset2	BN-5	21	5	23.8
chr18	77895881	A	T	ADNP2	missense	Subset2	BN-11	4	2	50
chr18	77895881	A	T	ADNP2	missense	Subset2	BNM-2	23	3	13
chr18	77895881	A	T	ADNP2	missense	Subset2	BNM-3	11	2	18.1
chr15	26825646	G	A	GABRB3	intron	Subset2	BN-1	120	86	71.6
chr15	26825646	G	A	GABRB3	intron	Subset2	DCIS-1	101	2	1.9
chr15	26825646	G	A	GABRB3	intron	Subset2	BNM-2	25	2	8
chr15	26825646	G	A	GABRB3	intron	Subset2	BNM-3	22	6	27.2
chr3	178952085	A	G	PIK3CA	missense	Subset2	BN-1	399	156	39
chr3	178952085	A	G	PIK3CA	missense	Subset2	BN-12	315	118	37.4
chr3	178952085	A	G	PIK3CA	missense	Subset2	BN-3	27	5	18.5
chr3	178952085	A	G	PIK3CA	missense	Subset2	BN-11	67	22	32.8
chr3	178952085	A	G	PIK3CA	missense	Subset2	BNM-2	59	9	15.2
chr3	178952085	A	G	PIK3CA	missense	Subset2	BNM-3	65	5	7.6
chr22	31522431	G	A	INPP5J	coding-synon	Subset3	DCIS-1	52	2	3.8
chr22	31522431	G	A	INPP5J	coding-synon	Subset3	Ly-3	102	10	9.8
chr22	31522431	G	A	INPP5J	coding-synon	Subset3	S1-11	4	3	75

chr22	31522431	G	A	INPP5J	coding-synon	Subset3	S3-9	162	2	1.2
chr22	31522431	G	A	INPP5J	coding-synon	Subset3	S1-2	8	5	62.5
chr22	31522431	G	A	INPP5J	coding-synon	Subset3	S2-14	119	29	24.3
chr22	31522431	G	A	INPP5J	coding-synon	Subset3	S2-5	318	7	2.2
chr22	31522431	G	A	INPP5J	coding-synon	Subset3	S2-9	10	4	40
chr4	187207577	C	T	F11	nonsense	Subset1	MeC-2	1053	298	28.3
chr4	187207577	C	T	F11	nonsense	Subset1	MeP-2	73	34	46.5
chr4	187207577	C	T	F11	nonsense	Subset1	MeC-10	9	2	22.2
chr4	187207577	C	T	F11	nonsense	Subset1	MeC-11	10	6	60
chr4	187207577	C	T	F11	nonsense	Subset1	MeC-4	120	51	42.5
chr4	187207577	C	T	F11	nonsense	Subset1	MeC-5	15	2	13.3
chr4	187207577	C	T	F11	nonsense	Subset1	MeP-1	34	3	8.8
chr4	187207577	C	T	F11	nonsense	Subset1	MeP-4	45	41	91.1
chr4	187207577	C	T	F11	nonsense	Subset1	MeP-5	28	6	21.4
chr4	187207577	C	T	F11	nonsense	Subset1	MeP-6	269	168	62.4
chr4	187207577	C	T	F11	nonsense	Subset1	DCIS-1	76	6	7.8
chr4	187207577	C	T	F11	nonsense	Subset1	DCIS-2	29	9	31
chr4	187207577	C	T	F11	nonsense	Subset1	DCIS-3	63	2	3.1
chr4	187207577	C	T	F11	nonsense	Subset1	DCIS-8	67	7	10.4
chr4	187207577	C	T	F11	nonsense	Subset1	MeD-2	51	25	49
chr4	187207577	C	T	F11	nonsense	Subset1	MeD-4	123	2	1.6
chr4	187207577	C	T	F11	nonsense	Subset1	MeD-7	135	13	9.6
chr4	187207577	C	T	F11	nonsense	Subset1	MeD-8	60	12	20
chr4	187207577	C	T	F11	nonsense	Subset1	MeD-9	62	27	43.5
chr4	187207577	C	T	F11	nonsense	Subset1	M-DCIS-1	88	2	2.2
chr4	187207577	C	T	F11	nonsense	Subset1	M-DCIS-5	118	4	3.3
chr4	187207577	C	T	F11	nonsense	Subset1	S1-11	480	89	18.5
chr4	187207577	C	T	F11	nonsense	Subset1	S3-2	6	2	33.3
chr4	187207577	C	T	F11	nonsense	Subset1	S3-1	77	6	7.7
chr4	187207577	C	T	F11	nonsense	Subset1	S3-13	36	2	5.5
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeC-2	135	38	28.1
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeP-2	99	76	76.7
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeC-11	7	2	28.5
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeC-3	18	6	33.3
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeC-4	148	59	39.8
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeP-12	47	2	4.2
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeP-4	172	9	5.2
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeP-6	132	15	11.3
chr8	97270718	C	G	MTERFD1	missense	Subset1	DCIS-1	41	4	9.7
chr8	97270718	C	G	MTERFD1	missense	Subset1	DCIS-3	41	3	7.3
chr8	97270718	C	G	MTERFD1	missense	Subset1	DCIS-6	35	5	14.2
chr8	97270718	C	G	MTERFD1	missense	Subset1	DCIS-8	42	10	23.8
chr8	97270718	C	G	MTERFD1	missense	Subset1	InvF-10	8	2	25
chr8	97270718	C	G	MTERFD1	missense	Subset1	InvF-5	23	23	100
chr8	97270718	C	G	MTERFD1	missense	Subset1	InvF-11	63	7	11.1
chr8	97270718	C	G	MTERFD1	missense	Subset1	InvF-13	5	4	80
chr8	97270718	C	G	MTERFD1	missense	Subset1	InvF-9	421	5	1.1
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeD-2	89	25	28
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeD-4	132	5	3.7
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeD-7	217	11	5
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeD-8	94	13	13.8
chr8	97270718	C	G	MTERFD1	missense	Subset1	MeD-9	196	52	26.5
chr8	97270718	C	G	MTERFD1	missense	Subset1	M-DCIS-8	17	2	11.7
chr8	97270718	C	G	MTERFD1	missense	Subset1	S1-11	156	47	30.1
chr8	97270718	C	G	MTERFD1	missense	Subset1	S3-13	82	20	24.3

chr8	97270718	C	G	MTERFD1	missense	Subset1	S1-2	46	4	8.6
chr8	97270718	C	G	MTERFD1	missense	Subset1	S1-9	20	6	30
chr8	97270718	C	G	MTERFD1	missense	Subset1	S2-14	53	2	3.7
chr8	97270718	C	G	MTERFD1	missense	Subset1	S2-5	1247	28	2.2
chr8	97270718	C	G	MTERFD1	missense	Subset1	S2-7	83	5	6
chr4	101051130	G	A	.	.	Subset2	BNM-2	36	3	8.3
chr4	101051130	G	A	.	.	Subset2	BNM-3	39	6	15.3
chr4	56886813	A	G	CEP135	intron	Subset1	MeC-2	54	33	61.1
chr4	56886813	A	G	CEP135	intron	Subset1	MeP-2	162	35	21.6
chr4	56886813	A	G	CEP135	intron	Subset1	MeC-10	5	3	60
chr4	56886813	A	G	CEP135	intron	Subset1	MeC-16	6	6	100
chr4	56886813	A	G	CEP135	intron	Subset1	MeC-20	8	8	100
chr4	56886813	A	G	CEP135	intron	Subset1	MeC-4	659	618	93.7
chr4	56886813	A	G	CEP135	intron	Subset1	MeC-5	49	23	46.9
chr4	56886813	A	G	CEP135	intron	Subset1	MeP-18	2	2	100
chr4	56886813	A	G	CEP135	intron	Subset1	MeP-4	104	9	8.6
chr4	56886813	A	G	CEP135	intron	Subset1	MeP-6	28	7	25
chr4	56886813	A	G	CEP135	intron	Subset1	DCIS-8	42	6	14.2
chr4	56886813	A	G	CEP135	intron	Subset1	InvF-4	5	3	60
chr4	56886813	A	G	CEP135	intron	Subset1	InvF-13	6	2	33.3
chr4	56886813	A	G	CEP135	intron	Subset1	InvF-9	32	24	75
chr4	56886813	A	G	CEP135	intron	Subset1	MeD-2	258	62	24
chr4	56886813	A	G	CEP135	intron	Subset1	MeD-4	116	3	2.5
chr4	56886813	A	G	CEP135	intron	Subset1	MeD-7	221	26	11.7
chr4	56886813	A	G	CEP135	intron	Subset1	MeD-8	97	36	37.1
chr4	56886813	A	G	CEP135	intron	Subset1	MeD-9	102	46	45
chr4	56886813	A	G	CEP135	intron	Subset1	M-DCIS-8	34	8	23.5
chr4	56886813	A	G	CEP135	intron	Subset1	M-DCIS-5	74	3	4
chr4	56886813	A	G	CEP135	intron	Subset1	S1-11	363	130	35.8
chr4	56886813	A	G	CEP135	intron	Subset1	S3-2	5	2	40
chr4	56886813	A	G	CEP135	intron	Subset1	S3-7	27	14	51.8
chr4	56886813	A	G	CEP135	intron	Subset1	S1-12	19	3	15.7
chr4	56886813	A	G	CEP135	intron	Subset1	S1-2	12	5	41.6
chr4	56886813	A	G	CEP135	intron	Subset1	S1-6	207	27	13
chr4	56886813	A	G	CEP135	intron	Subset1	S1-9	34	25	73.5
chr19	12155067	G	A	ZNF878	coding-synon	Subset3	MeP-16	10	5	50
chr19	12155067	G	A	ZNF878	coding-synon	Subset3	DCIS-3	100	9	9
chr19	12155067	G	A	ZNF878	coding-synon	Subset3	DCIS-8	55	7	12.7
chr19	12155067	G	A	ZNF878	coding-synon	Subset3	S1-11	399	9	2.2
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeC-2	98	54	55.1
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeP-2	292	61	20.8
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeC-3	74	70	94.5
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeC-4	271	164	60.5
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeC-5	71	70	98.5
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeP-1	49	9	18.3
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeP-4	105	12	11.4
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeP-6	28	11	39.2
chr11	93412579	C	G	KIAA1731	missense	Subset1	DCIS-1	50	2	4
chr11	93412579	C	G	KIAA1731	missense	Subset1	DCIS-3	56	4	7.1
chr11	93412579	C	G	KIAA1731	missense	Subset1	DCIS-6	10	3	30
chr11	93412579	C	G	KIAA1731	missense	Subset1	DCIS-8	52	6	11.5
chr11	93412579	C	G	KIAA1731	missense	Subset1	InvF-5	6	2	33.3
chr11	93412579	C	G	KIAA1731	missense	Subset1	InvF-1	14	4	28.5
chr11	93412579	C	G	KIAA1731	missense	Subset1	InvF-9	247	188	76.1
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeD-2	41	4	9.7

chr11	93412579	C	G	KIAA1731	missense	Subset1	MeD-4	83	9	10.8
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeD-8	78	14	17.9
chr11	93412579	C	G	KIAA1731	missense	Subset1	MeD-9	139	20	14.3
chr11	93412579	C	G	KIAA1731	missense	Subset1	M-DCIS-8	433	306	70.6
chr11	93412579	C	G	KIAA1731	missense	Subset1	S1-11	264	49	18.5
chr11	93412579	C	G	KIAA1731	missense	Subset1	S3-13	70	8	11.4
chr11	93412579	C	G	KIAA1731	missense	Subset1	S3-7	77	33	42.8
chr11	93412579	C	G	KIAA1731	missense	Subset1	S1-1	6	2	33.3
chr11	93412579	C	G	KIAA1731	missense	Subset1	S1-12	123	3	2.4
chr11	93412579	C	G	KIAA1731	missense	Subset1	S2-13	29	2	6.8
chr11	93412579	C	G	KIAA1731	missense	Subset1	S2-5	96	8	8.3
chr10	24893265	G	A	ARHGAP21	coding-synon	Subset3	MeP-12	21	2	9.5
chr10	24893265	G	A	ARHGAP21	coding-synon	Subset3	DCIS-1	21	2	9.5
chr10	24893265	G	A	ARHGAP21	coding-synon	Subset3	InvF-11	30	2	6.6
chr10	24893265	G	A	ARHGAP21	coding-synon	Subset3	Ly-10	34	2	5.8
chr10	24893265	G	A	ARHGAP21	coding-synon	Subset3	MeD-2	53	6	11.3
chr10	24893265	G	A	ARHGAP21	coding-synon	Subset3	MeD-9	28	2	7.1
chr10	24893265	G	A	ARHGAP21	coding-synon	Subset3	BN-4	159	7	4.4
chr1	171956880	G	A	DNM3	missense	Subset1	MeC-2	583	14	2.4
chr1	171956880	G	A	DNM3	missense	Subset1	MeC-11	12	4	33.3
chr1	171956880	G	A	DNM3	missense	Subset1	MeC-3	195	11	5.6
chr1	171956880	G	A	DNM3	missense	Subset1	MeC-4	154	58	37.6
chr1	171956880	G	A	DNM3	missense	Subset1	MeC-5	29	7	24.1
chr1	171956880	G	A	DNM3	missense	Subset1	MeP-1	11	4	36.3
chr1	171956880	G	A	DNM3	missense	Subset1	MeP-4	98	15	15.3
chr1	171956880	G	A	DNM3	missense	Subset1	MeP-5	15	7	46.6
chr1	171956880	G	A	DNM3	missense	Subset1	MeP-6	170	54	31.7
chr1	171956880	G	A	DNM3	missense	Subset1	DCIS-1	49	4	8.1
chr1	171956880	G	A	DNM3	missense	Subset1	DCIS-6	37	4	10.8
chr1	171956880	G	A	DNM3	missense	Subset1	InvF-10	275	35	12.7
chr1	171956880	G	A	DNM3	missense	Subset1	InvF-5	308	193	62.6
chr1	171956880	G	A	DNM3	missense	Subset1	InvF-1	88	2	2.2
chr1	171956880	G	A	DNM3	missense	Subset1	InvF-9	80	3	3.7
chr1	171956880	G	A	DNM3	missense	Subset1	MeD-2	107	4	3.7
chr1	171956880	G	A	DNM3	missense	Subset1	MeD-4	90	2	2.2
chr1	171956880	G	A	DNM3	missense	Subset1	MeD-7	141	35	24.8
chr1	171956880	G	A	DNM3	missense	Subset1	MeD-8	96	19	19.7
chr1	171956880	G	A	DNM3	missense	Subset1	MeD-9	128	26	20.3
chr1	171956880	G	A	DNM3	missense	Subset1	M-DCIS-2	80	7	8.7
chr1	171956880	G	A	DNM3	missense	Subset1	S1-11	471	53	11.2
chr1	171956880	G	A	DNM3	missense	Subset1	S3-2	366	55	15
chr1	171956880	G	A	DNM3	missense	Subset1	S3-13	43	5	11.6
chr1	171956880	G	A	DNM3	missense	Subset1	S3-3	124	28	22.5
chr1	171956880	G	A	DNM3	missense	Subset1	S3-7	99	12	12.1
chr1	171956880	G	A	DNM3	missense	Subset1	S1-1	24	2	8.3
chr1	171956880	G	A	DNM3	missense	Subset1	S2-8	25	10	40
chr2	175213669	G	A	CIR1	coding-synon	Subset3	MeC-2	79	6	7.5
chr2	175213669	G	A	CIR1	coding-synon	Subset3	MeC-3	137	7	5.1
chr2	175213669	G	A	CIR1	coding-synon	Subset3	DCIS-1	66	3	4.5
chr2	175213669	G	A	CIR1	coding-synon	Subset3	DCIS-3	57	10	17.5
chr2	175213669	G	A	CIR1	coding-synon	Subset3	M-DCIS-3	10	9	90
chr2	175213669	G	A	CIR1	coding-synon	Subset3	M-DCIS-4	31	2	6.4
chr2	175213669	G	A	CIR1	coding-synon	Subset3	M-DCIS-5	54	8	14.8
chr2	175213669	G	A	CIR1	coding-synon	Subset3	S1-11	173	3	1.7
chr2	175213669	G	A	CIR1	coding-synon	Subset3	S2-2	4	2	50

chr2	175213669	G	A	CIR1	coding-synon	Subset3	S2-4	25	3	12
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeC-1	35	7	20
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeC-20	7	2	28.5
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeC-4	265	164	61.8
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeC-5	16	13	81.2
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeC-8	137	11	8
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeP-1	30	2	6.6
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeP-18	57	14	24.5
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeP-4	177	51	28.8
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeP-6	76	12	15.7
chr1	236646875	G	C	EDARADD	utr-3	Subset1	DCIS-1	115	2	1.7
chr1	236646875	G	C	EDARADD	utr-3	Subset1	DCIS-2	53	6	11.3
chr1	236646875	G	C	EDARADD	utr-3	Subset1	DCIS-6	221	4	1.8
chr1	236646875	G	C	EDARADD	utr-3	Subset1	DCIS-8	70	2	2.8
chr1	236646875	G	C	EDARADD	utr-3	Subset1	InvF-5	21	10	47.6
chr1	236646875	G	C	EDARADD	utr-3	Subset1	InvF-1	102	21	20.5
chr1	236646875	G	C	EDARADD	utr-3	Subset1	InvF-13	9	3	33.3
chr1	236646875	G	C	EDARADD	utr-3	Subset1	InvF-9	557	416	74.6
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeD-2	101	23	22.7
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeD-7	202	61	30.1
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeD-8	182	12	6.5
chr1	236646875	G	C	EDARADD	utr-3	Subset1	MeD-9	179	18	10
chr1	236646875	G	C	EDARADD	utr-3	Subset1	S1-11	300	38	12.6
chr1	236646875	G	C	EDARADD	utr-3	Subset1	S3-13	322	20	6.2
chr1	236646875	G	C	EDARADD	utr-3	Subset1	S3-3	123	60	48.7
chr1	236646875	G	C	EDARADD	utr-3	Subset1	S3-7	74	12	16.2
chr1	236646875	G	C	EDARADD	utr-3	Subset1	S1-2	109	2	1.8
chr1	236646875	G	C	EDARADD	utr-3	Subset1	S1-9	12	3	25
chr9	140657011	G	A	EHMT1	intron	Subset1	MeC-2	14	2	14.2
chr9	140657011	G	A	EHMT1	intron	Subset1	MeC-1	11	5	45.4
chr9	140657011	G	A	EHMT1	intron	Subset1	MeC-10	414	413	99.7
chr9	140657011	G	A	EHMT1	intron	Subset1	MeC-3	141	17	12
chr9	140657011	G	A	EHMT1	intron	Subset1	MeC-4	119	48	40.3
chr9	140657011	G	A	EHMT1	intron	Subset1	MeC-5	7	2	28.5
chr9	140657011	G	A	EHMT1	intron	Subset1	MeP-1	32	9	28.1
chr9	140657011	G	A	EHMT1	intron	Subset1	MeP-4	79	20	25.3
chr9	140657011	G	A	EHMT1	intron	Subset1	MeP-6	53	8	15
chr9	140657011	G	A	EHMT1	intron	Subset1	DCIS-1	89	6	6.7
chr9	140657011	G	A	EHMT1	intron	Subset1	DCIS-5	9	6	66.6
chr9	140657011	G	A	EHMT1	intron	Subset1	DCIS-6	80	2	2.5
chr9	140657011	G	A	EHMT1	intron	Subset1	DCIS-8	40	18	45
chr9	140657011	G	A	EHMT1	intron	Subset1	InvF-10	34	2	5.8
chr9	140657011	G	A	EHMT1	intron	Subset1	InvF-5	78	25	32
chr9	140657011	G	A	EHMT1	intron	Subset1	InvF-1	49	10	20.4
chr9	140657011	G	A	EHMT1	intron	Subset1	InvF-12	85	62	72.9
chr9	140657011	G	A	EHMT1	intron	Subset1	InvF-13	32	31	96.8
chr9	140657011	G	A	EHMT1	intron	Subset1	InvF-9	55	50	90.9
chr9	140657011	G	A	EHMT1	intron	Subset1	MeD-2	77	20	25.9
chr9	140657011	G	A	EHMT1	intron	Subset1	MeD-7	249	19	7.6
chr9	140657011	G	A	EHMT1	intron	Subset1	MeD-8	107	87	81.3
chr9	140657011	G	A	EHMT1	intron	Subset1	MeD-9	95	65	68.4
chr9	140657011	G	A	EHMT1	intron	Subset1	M-DCIS-1	18	2	11.1
chr9	140657011	G	A	EHMT1	intron	Subset1	M-DCIS-5	40	2	5
chr9	140657011	G	A	EHMT1	intron	Subset1	S1-11	99	39	39.3
chr9	140657011	G	A	EHMT1	intron	Subset1	S3-2	66	29	43.9

chr9	140657011	G	A	EHMT1	intron	Subset1	S3-7	12	3	25
chr9	140657011	G	A	EHMT1	intron	Subset1	S1-2	8	4	50
chr9	140657011	G	A	EHMT1	intron	Subset1	S2-14	42	12	28.5
chr9	140657011	G	A	EHMT1	intron	Subset1	S2-4	281	3	1
chr20	47309328	C	T	PREX1	coding-synon	Subset2	S1-11	188	2	1
chr20	47309328	C	T	PREX1	coding-synon	Subset2	BN-5	136	13	9.5
chr20	47309328	C	T	PREX1	coding-synon	Subset2	BN-11	59	8	13.5
chrX	149984601	A	T	CD99L2	intron	Subset1	MeC-2	25	19	76
chrX	149984601	A	T	CD99L2	intron	Subset1	MeP-2	307	169	55
chrX	149984601	A	T	CD99L2	intron	Subset1	MeC-11	12	11	91.6
chrX	149984601	A	T	CD99L2	intron	Subset1	MeC-3	6	3	50
chrX	149984601	A	T	CD99L2	intron	Subset1	MeC-4	33	16	48.4
chrX	149984601	A	T	CD99L2	intron	Subset1	MeP-17	142	140	98.5
chrX	149984601	A	T	CD99L2	intron	Subset1	MeP-4	38	26	68.4
chrX	149984601	A	T	CD99L2	intron	Subset1	MeP-5	12	3	25
chrX	149984601	A	T	CD99L2	intron	Subset1	MeP-6	43	4	9.3
chrX	149984601	A	T	CD99L2	intron	Subset1	DCIS-1	98	3	3
chrX	149984601	A	T	CD99L2	intron	Subset1	DCIS-3	22	2	9
chrX	149984601	A	T	CD99L2	intron	Subset1	DCIS-8	50	2	4
chrX	149984601	A	T	CD99L2	intron	Subset1	InvF-10	253	70	27.6
chrX	149984601	A	T	CD99L2	intron	Subset1	InvF-4	388	368	94.8
chrX	149984601	A	T	CD99L2	intron	Subset1	InvF-5	660	591	89.5
chrX	149984601	A	T	CD99L2	intron	Subset1	InvF-11	67	2	2.9
chrX	149984601	A	T	CD99L2	intron	Subset1	InvF-13	25	25	100
chrX	149984601	A	T	CD99L2	intron	Subset1	InvF-9	256	4	1.5
chrX	149984601	A	T	CD99L2	intron	Subset1	MeD-2	78	6	7.6
chrX	149984601	A	T	CD99L2	intron	Subset1	MeD-4	110	5	4.5
chrX	149984601	A	T	CD99L2	intron	Subset1	MeD-7	65	3	4.6
chrX	149984601	A	T	CD99L2	intron	Subset1	MeD-8	78	12	15.3
chrX	149984601	A	T	CD99L2	intron	Subset1	MeD-9	290	75	25.8
chrX	149984601	A	T	CD99L2	intron	Subset1	S1-11	151	54	35.7
chrX	149984601	A	T	CD99L2	intron	Subset1	S3-2	410	43	10.4
chrX	149984601	A	T	CD99L2	intron	Subset1	S3-13	81	2	2.4
chrX	149984601	A	T	CD99L2	intron	Subset1	S3-3	40	4	10
chrX	149984601	A	T	CD99L2	intron	Subset1	S3-7	83	83	100
chrX	149984601	A	T	CD99L2	intron	Subset1	S1-12	23	3	13
chrX	149984601	A	T	CD99L2	intron	Subset1	S1-2	88	6	6.8
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeC-2	137	68	49.6
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeP-2	315	18	5.7
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeC-3	156	11	7
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeC-4	156	84	53.8
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeC-5	40	10	25
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeC-8	82	4	4.8
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeP-12	477	31	6.4
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeP-4	197	90	45.6
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeP-6	94	43	45.7
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	DCIS-1	59	11	18.6
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	DCIS-2	90	3	3.3
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	DCIS-3	106	78	73.5
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	DCIS-5	120	115	95.8
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	DCIS-8	49	10	20.4
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	InvF-11	114	6	5.2
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	InvF-12	4	4	100
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	InvF-13	31	3	9.6
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	InvF-9	82	7	8.5

chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeD-2	47	7	14.8
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeD-4	57	4	7
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeD-7	94	30	31.9
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeD-8	44	7	15.9
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	MeD-9	104	40	38.4
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	M-DCIS-1	82	10	12.1
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	M-DCIS-8	16	5	31.2
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	M-DCIS-2	122	45	36.8
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	M-DCIS-5	35	2	5.7
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	S1-11	254	57	22.4
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	S3-13	82	4	4.8
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	S3-3	24	2	8.3
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	S3-7	22	9	40.9
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	S1-1	289	70	24.2
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	S1-2	31	10	32.2
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	S1-6	87	11	12.6
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	S1-9	74	3	4
chr5	133997269	A	C	SEC24A	coding-synon	Subset1	S2-14	131	20	15.2
chr9	3270833	C	A	RFX3	intron	Subset1	MeC-2	165	21	12.7
chr9	3270833	C	A	RFX3	intron	Subset1	MeP-2	154	10	6.4
chr9	3270833	C	A	RFX3	intron	Subset1	MeC-1	3	3	100
chr9	3270833	C	A	RFX3	intron	Subset1	MeC-11	5	2	40
chr9	3270833	C	A	RFX3	intron	Subset1	MeC-3	38	30	78.9
chr9	3270833	C	A	RFX3	intron	Subset1	MeC-4	34	6	17.6
chr9	3270833	C	A	RFX3	intron	Subset1	MeC-5	17	16	94.1
chr9	3270833	C	A	RFX3	intron	Subset1	MeC-8	24	5	20.8
chr9	3270833	C	A	RFX3	intron	Subset1	MeP-4	65	55	84.6
chr9	3270833	C	A	RFX3	intron	Subset1	MeP-6	108	81	75
chr9	3270833	C	A	RFX3	intron	Subset1	DCIS-2	38	2	5.2
chr9	3270833	C	A	RFX3	intron	Subset1	DCIS-6	20	12	60
chr9	3270833	C	A	RFX3	intron	Subset1	MeD-2	82	10	12.1
chr9	3270833	C	A	RFX3	intron	Subset1	MeD-4	112	9	8
chr9	3270833	C	A	RFX3	intron	Subset1	MeD-7	139	16	11.5
chr9	3270833	C	A	RFX3	intron	Subset1	MeD-8	140	16	11.4
chr9	3270833	C	A	RFX3	intron	Subset1	MeD-9	99	83	83.8
chr9	3270833	C	A	RFX3	intron	Subset1	S1-11	118	28	23.7
chr9	3270833	C	A	RFX3	intron	Subset1	S3-13	93	40	43
chr9	3270833	C	A	RFX3	intron	Subset1	S3-3	34	7	20.5
chr9	3270833	C	A	RFX3	intron	Subset1	S3-7	39	7	17.9
chr9	3270833	C	A	RFX3	intron	Subset1	S2-7	137	65	47.4
chr19	36940733	G	T	ZNF566	missense	Subset1	MeC-2	206	176	85.4
chr19	36940733	G	T	ZNF566	missense	Subset1	MeP-2	214	109	50.9
chr19	36940733	G	T	ZNF566	missense	Subset1	MeC-10	89	21	23.5
chr19	36940733	G	T	ZNF566	missense	Subset1	MeC-4	315	20	6.3
chr19	36940733	G	T	ZNF566	missense	Subset1	MeP-4	64	12	18.7
chr19	36940733	G	T	ZNF566	missense	Subset1	MeP-6	71	18	25.3
chr19	36940733	G	T	ZNF566	missense	Subset1	DCIS-3	67	10	14.9
chr19	36940733	G	T	ZNF566	missense	Subset1	DCIS-8	85	13	15.2
chr19	36940733	G	T	ZNF566	missense	Subset1	InvF-10	226	22	9.7
chr19	36940733	G	T	ZNF566	missense	Subset1	InvF-4	102	72	70.5
chr19	36940733	G	T	ZNF566	missense	Subset1	InvF-5	108	104	96.2
chr19	36940733	G	T	ZNF566	missense	Subset1	InvF-1	113	4	3.5
chr19	36940733	G	T	ZNF566	missense	Subset1	InvF-9	70	61	87.1
chr19	36940733	G	T	ZNF566	missense	Subset1	MeD-2	61	14	22.9
chr19	36940733	G	T	ZNF566	missense	Subset1	MeD-4	117	2	1.7

chr19	36940733	G	T	ZNF566	missense	Subset1	MeD-7	130	4	3
chr19	36940733	G	T	ZNF566	missense	Subset1	MeD-8	112	32	28.5
chr19	36940733	G	T	ZNF566	missense	Subset1	MeD-9	150	88	58.6
chr19	36940733	G	T	ZNF566	missense	Subset1	M-DCIS-2	87	8	9.1
chr19	36940733	G	T	ZNF566	missense	Subset1	M-DCIS-3	15	15	100
chr19	36940733	G	T	ZNF566	missense	Subset1	S1-11	456	196	42.9
chr19	36940733	G	T	ZNF566	missense	Subset1	S3-2	344	31	9
chr19	36940733	G	T	ZNF566	missense	Subset1	S3-13	102	38	37.2
chr19	36940733	G	T	ZNF566	missense	Subset1	S3-3	217	4	1.8
chr19	36940733	G	T	ZNF566	missense	Subset1	S3-7	76	2	2.6
chr19	36940733	G	T	ZNF566	missense	Subset1	S1-6	82	9	10.9
chr19	36940733	G	T	ZNF566	missense	Subset1	S1-9	24	9	37.5
chr19	36940733	G	T	ZNF566	missense	Subset1	S2-14	120	27	22.5
chr19	36940733	G	T	ZNF566	missense	Subset1	S2-13	95	88	92.6
chr1	150956791	G	A	ANXA9	missense	Subset3	S1-2	90	4	4.4
chr1	150956791	G	A	ANXA9	missense	Subset3	BN-15	224	4	1.7
chrX	48792335	G	C	OTUD5	intron	Subset3	MeC-1	135	2	1.4
chrX	48792335	G	C	OTUD5	intron	Subset3	MeC-8	7	4	57.1
chrX	48792335	G	C	OTUD5	intron	Subset3	MeP-1	64	3	4.6
chrX	48792335	G	C	OTUD5	intron	Subset3	BN-8	4	3	75
chrX	48792335	G	C	OTUD5	intron	Subset3	DCIS-2	88	54	61.3
chrX	48792335	G	C	OTUD5	intron	Subset3	DCIS-3	69	4	5.7
chrX	48792335	G	C	OTUD5	intron	Subset3	DCIS-8	67	5	7.4
chrX	48792335	G	C	OTUD5	intron	Subset3	InvF-12	1743	1740	99.8
chrX	48792335	G	C	OTUD5	intron	Subset3	InvF-8	25	3	12
chrX	48792335	G	C	OTUD5	intron	Subset3	Ly-10	159	4	2.5
chrX	48792335	G	C	OTUD5	intron	Subset3	MeD-4	183	6	3.2
chrX	48792335	G	C	OTUD5	intron	Subset3	M-DCIS-5	88	6	6.8
chrX	48792335	G	C	OTUD5	intron	Subset3	S3-13	452	5	1.1
chrX	48792335	G	C	OTUD5	intron	Subset3	S3-3	368	13	3.5
chrX	48792335	G	C	OTUD5	intron	Subset3	S1-2	170	5	2.9
chrX	48792335	G	C	OTUD5	intron	Subset3	S1-6	218	36	16.5
chrX	48792335	G	C	OTUD5	intron	Subset3	S2-10	109	8	7.3
chrX	48792335	G	C	OTUD5	intron	Subset3	S2-14	695	35	5
chrX	48792335	G	C	OTUD5	intron	Subset3	S2-2	417	333	79.8
chrX	48792335	G	C	OTUD5	intron	Subset3	S2-4	303	5	1.6
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeC-2	110	13	11.8
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeC-1	4	2	50
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeC-11	53	4	7.5
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeC-3	48	20	41.6
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeC-4	211	67	31.7
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeC-5	34	2	5.8
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeP-1	226	5	2.2
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeP-18	29	3	10.3
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeP-4	215	140	65.1
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeP-6	185	131	70.8
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	DCIS-1	79	8	10.1
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	DCIS-2	184	121	65.7
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	DCIS-3	236	10	4.2
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	DCIS-5	37	26	70.2
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	DCIS-6	751	97	12.9
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	DCIS-8	94	10	10.6
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	InvF-10	228	70	30.7
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	InvF-4	129	15	11.6
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	InvF-5	503	295	58.6

chr20	30897952	C	T	KIF3B	coding-synon	Subset1	InvF-1	53	17	32
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	InvF-13	226	219	96.9
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	InvF-9	41	4	9.7
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeD-2	95	5	5.2
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeD-4	174	7	4
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeD-7	374	43	11.4
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeD-8	194	37	19
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	MeD-9	116	45	38.7
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	M-DCIS-1	117	9	7.6
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	M-DCIS-2	98	4	4
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	M-DCIS-5	116	6	5.1
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	S1-11	198	68	34.3
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	S3-2	758	255	33.6
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	S3-13	197	3	1.5
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	S3-3	297	50	16.8
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	S3-7	131	14	10.6
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	S1-2	76	2	2.6
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	S2-13	16	2	12.5
chr20	30897952	C	T	KIF3B	coding-synon	Subset1	S2-5	961	776	80.7
chr3	120764358	A	T	STXBP5L	missense	Subset3	MeC-2	120	2	1.6
chr3	120764358	A	T	STXBP5L	missense	Subset3	DCIS-1	61	5	8.1
chr3	120764358	A	T	STXBP5L	missense	Subset3	DCIS-3	45	4	8.8
chr3	120764358	A	T	STXBP5L	missense	Subset3	DCIS-8	68	4	5.8
chr3	120764358	A	T	STXBP5L	missense	Subset3	Ly-10	134	2	1.4
chr3	120764358	A	T	STXBP5L	missense	Subset3	MeD-2	155	19	12.2
chr3	120764358	A	T	STXBP5L	missense	Subset3	MeD-4	135	14	10.3
chr3	120764358	A	T	STXBP5L	missense	Subset3	M-DCIS-8	22	15	68.1
chr3	120764358	A	T	STXBP5L	missense	Subset3	S1-11	267	3	1.1
chr3	120764358	A	T	STXBP5L	missense	Subset3	S2-4	106	9	8.4
chr3	120764358	A	T	STXBP5L	missense	Subset3	BN-15	23	2	8.6
chr6	26427877	C	G	.	.	Subset2	BN-13	158	5	3.1
chr6	26427877	C	G	.	.	Subset2	BN-4	23	3	13
chr6	26427877	C	G	.	.	Subset2	BN-11	3	3	100
chr6	26427877	C	G	.	.	Subset2	BNM-3	12	3	25
chr9	80923397	G	A	PSAT1	missense	Subset2	S2-7	102	2	1.9
chr9	80923397	G	A	PSAT1	missense	Subset2	BNM-1	19	4	21
chr9	80923397	G	A	PSAT1	missense	Subset2	BNM-2	27	2	7.4
chr9	80923397	G	A	PSAT1	missense	Subset2	BNM-3	22	7	31.8
chr8	10479301	C	T	RP1L1	intron	Subset1	MeC-2	92	30	32.6
chr8	10479301	C	T	RP1L1	intron	Subset1	MeP-2	122	61	50
chr8	10479301	C	T	RP1L1	intron	Subset1	MeC-11	13	13	100
chr8	10479301	C	T	RP1L1	intron	Subset1	MeC-4	77	40	51.9
chr8	10479301	C	T	RP1L1	intron	Subset1	MeC-8	171	62	36.2
chr8	10479301	C	T	RP1L1	intron	Subset1	MeP-4	58	52	89.6
chr8	10479301	C	T	RP1L1	intron	Subset1	MeP-5	88	4	4.5
chr8	10479301	C	T	RP1L1	intron	Subset1	MeP-6	35	14	40
chr8	10479301	C	T	RP1L1	intron	Subset1	DCIS-1	163	17	10.4
chr8	10479301	C	T	RP1L1	intron	Subset1	DCIS-3	15	3	20
chr8	10479301	C	T	RP1L1	intron	Subset1	DCIS-6	17	5	29.4
chr8	10479301	C	T	RP1L1	intron	Subset1	DCIS-8	88	22	25
chr8	10479301	C	T	RP1L1	intron	Subset1	InvF-10	276	55	19.9
chr8	10479301	C	T	RP1L1	intron	Subset1	InvF-4	267	90	33.7
chr8	10479301	C	T	RP1L1	intron	Subset1	InvF-5	68	60	88.2
chr8	10479301	C	T	RP1L1	intron	Subset1	InvF-1	9	5	55.5
chr8	10479301	C	T	RP1L1	intron	Subset1	InvF-11	196	7	3.5

chr8	10479301	C	T	RP1L1	intron	Subset1	InvF-12	4	4	100
chr8	10479301	C	T	RP1L1	intron	Subset1	InvF-9	397	7	1.7
chr8	10479301	C	T	RP1L1	intron	Subset1	MeD-2	49	3	6.1
chr8	10479301	C	T	RP1L1	intron	Subset1	MeD-4	125	5	4
chr8	10479301	C	T	RP1L1	intron	Subset1	MeD-7	84	5	5.9
chr8	10479301	C	T	RP1L1	intron	Subset1	MeD-8	104	59	56.7
chr8	10479301	C	T	RP1L1	intron	Subset1	MeD-9	39	39	100
chr8	10479301	C	T	RP1L1	intron	Subset1	M-DCIS-8	31	11	35.4
chr8	10479301	C	T	RP1L1	intron	Subset1	M-DCIS-2	57	3	5.2
chr8	10479301	C	T	RP1L1	intron	Subset1	M-DCIS-5	134	4	2.9
chr8	10479301	C	T	RP1L1	intron	Subset1	S1-11	215	69	32
chr8	10479301	C	T	RP1L1	intron	Subset1	S3-2	325	111	34.1
chr8	10479301	C	T	RP1L1	intron	Subset1	S3-13	89	2	2.2
chr8	10479301	C	T	RP1L1	intron	Subset1	S3-7	270	246	91.1
chr8	10479301	C	T	RP1L1	intron	Subset1	S1-1	4	4	100
chr8	10479301	C	T	RP1L1	intron	Subset1	S1-6	42	3	7.1
chr8	10479301	C	T	RP1L1	intron	Subset1	S1-9	198	2	1
chr8	10479301	C	T	RP1L1	intron	Subset1	S2-13	648	647	99.8
chr8	10479301	C	T	RP1L1	intron	Subset1	S2-5	676	135	19.9
chr8	10479301	C	T	RP1L1	intron	Subset1	S2-7	2520	2033	80.6
chr8	10479301	C	T	RP1L1	intron	Subset1	S2-8	67	2	2.9
chr19	14829518	A	G	ZNF333	missense	Subset3	MeP-2	238	8	3.3
chr19	14829518	A	G	ZNF333	missense	Subset3	Ly-10	182	23	12.6
chr19	14829518	A	G	ZNF333	missense	Subset3	MeD-7	269	6	2.2
chr19	14829518	A	G	ZNF333	missense	Subset3	M-DCIS-3	21	8	38
chr19	14829518	A	G	ZNF333	missense	Subset3	S3-13	157	5	3.1
chr19	14829518	A	G	ZNF333	missense	Subset3	BN-3	96	10	10.4
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeC-2	21	8	38
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeP-2	25	11	44
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeC-11	3	2	66.6
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeC-4	23	12	52.1
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeP-4	37	28	75.6
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeP-6	16	4	25
chr12	129360318	C	A	GLT1D1	intron	Subset1	DCIS-1	35	22	62.8
chr12	129360318	C	A	GLT1D1	intron	Subset1	InvF-5	11	9	81.8
chr12	129360318	C	A	GLT1D1	intron	Subset1	InvF-9	25	4	16
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeD-2	6	2	33.3
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeD-4	33	3	9
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeD-7	36	9	25
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeD-8	15	2	13.3
chr12	129360318	C	A	GLT1D1	intron	Subset1	MeD-9	23	10	43.4
chr12	129360318	C	A	GLT1D1	intron	Subset1	M-DCIS-2	17	3	17.6
chr12	129360318	C	A	GLT1D1	intron	Subset1	S1-11	65	8	12.3
chr12	129360318	C	A	GLT1D1	intron	Subset1	S3-2	38	16	42.1
chr12	129360318	C	A	GLT1D1	intron	Subset1	S3-13	11	2	18.1
chr12	129360318	C	A	GLT1D1	intron	Subset1	S3-7	68	2	2.9
chr12	129360318	C	A	GLT1D1	intron	Subset1	S2-10	54	5	9.2
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeC-2	222	192	86.4
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeP-2	155	155	100
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeC-10	32	9	28.1
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeC-11	688	7	1
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeC-3	139	138	99.2
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeC-4	178	140	78.6
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeC-5	32	31	96.8
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeP-1	12	3	25

chr1	237580424	G	A	RYR2	splice-5	Subset1	MeP-17	4	3	75
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeP-18	86	84	97.6
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeP-12	62	17	27.4
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeP-4	75	57	76
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeP-5	43	7	16.2
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeP-6	257	147	57.1
chr1	237580424	G	A	RYR2	splice-5	Subset1	DCIS-1	30	12	40
chr1	237580424	G	A	RYR2	splice-5	Subset1	DCIS-2	47	18	38.2
chr1	237580424	G	A	RYR2	splice-5	Subset1	DCIS-3	64	29	45.3
chr1	237580424	G	A	RYR2	splice-5	Subset1	DCIS-5	35	28	80
chr1	237580424	G	A	RYR2	splice-5	Subset1	DCIS-6	81	40	49.3
chr1	237580424	G	A	RYR2	splice-5	Subset1	DCIS-8	62	21	33.8
chr1	237580424	G	A	RYR2	splice-5	Subset1	InvF-10	221	142	64.2
chr1	237580424	G	A	RYR2	splice-5	Subset1	InvF-4	195	191	97.9
chr1	237580424	G	A	RYR2	splice-5	Subset1	InvF-5	197	149	75.6
chr1	237580424	G	A	RYR2	splice-5	Subset1	InvF-1	152	133	87.5
chr1	237580424	G	A	RYR2	splice-5	Subset1	InvF-12	7	5	71.4
chr1	237580424	G	A	RYR2	splice-5	Subset1	InvF-9	98	50	51
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeD-2	137	63	45.9
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeD-4	132	14	10.6
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeD-7	136	29	21.3
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeD-8	70	33	47.1
chr1	237580424	G	A	RYR2	splice-5	Subset1	MeD-9	212	175	82.5
chr1	237580424	G	A	RYR2	splice-5	Subset1	M-DCIS-8	30	22	73.3
chr1	237580424	G	A	RYR2	splice-5	Subset1	M-DCIS-2	379	31	8.1
chr1	237580424	G	A	RYR2	splice-5	Subset1	M-DCIS-3	83	18	21.6
chr1	237580424	G	A	RYR2	splice-5	Subset1	M-DCIS-5	47	4	8.5
chr1	237580424	G	A	RYR2	splice-5	Subset1	S1-11	656	410	62.5
chr1	237580424	G	A	RYR2	splice-5	Subset1	S3-2	127	85	66.9
chr1	237580424	G	A	RYR2	splice-5	Subset1	S3-1	109	64	58.7
chr1	237580424	G	A	RYR2	splice-5	Subset1	S3-13	147	53	36
chr1	237580424	G	A	RYR2	splice-5	Subset1	S3-3	238	39	16.3
chr1	237580424	G	A	RYR2	splice-5	Subset1	S3-7	44	29	65.9
chr1	237580424	G	A	RYR2	splice-5	Subset1	S1-12	12	3	25
chr1	237580424	G	A	RYR2	splice-5	Subset1	S1-2	265	51	19.2
chr1	237580424	G	A	RYR2	splice-5	Subset1	S1-6	87	55	63.2
chr1	237580424	G	A	RYR2	splice-5	Subset1	S2-14	35	2	5.7
chr1	237580424	G	A	RYR2	splice-5	Subset1	S2-4	99	5	5
chr1	237580424	G	A	RYR2	splice-5	Subset1	S2-7	435	206	47.3
chr1	237580424	G	A	RYR2	splice-5	Subset1	S2-8	232	37	15.9
chr21	48019239	G	A	S100B	utr-3	Subset1	MeC-2	224	67	29.9
chr21	48019239	G	A	S100B	utr-3	Subset1	MeP-2	142	79	55.6
chr21	48019239	G	A	S100B	utr-3	Subset1	MeC-3	15	8	53.3
chr21	48019239	G	A	S100B	utr-3	Subset1	MeC-4	91	13	14.2
chr21	48019239	G	A	S100B	utr-3	Subset1	MeP-1	60	3	5
chr21	48019239	G	A	S100B	utr-3	Subset1	MeP-4	36	17	47.2
chr21	48019239	G	A	S100B	utr-3	Subset1	MeP-6	91	20	21.9
chr21	48019239	G	A	S100B	utr-3	Subset1	BN-9	181	2	1.1
chr21	48019239	G	A	S100B	utr-3	Subset1	DCIS-1	48	5	10.4
chr21	48019239	G	A	S100B	utr-3	Subset1	DCIS-3	63	4	6.3
chr21	48019239	G	A	S100B	utr-3	Subset1	DCIS-6	15	6	40
chr21	48019239	G	A	S100B	utr-3	Subset1	InvF-10	11	3	27.2
chr21	48019239	G	A	S100B	utr-3	Subset1	InvF-4	39	39	100
chr21	48019239	G	A	S100B	utr-3	Subset1	InvF-13	19	17	89.4
chr21	48019239	G	A	S100B	utr-3	Subset1	MeD-2	49	12	24.4

chr21	48019239	G	A	S100B	utr-3	Subset1	MeD-7	119	36	30.2
chr21	48019239	G	A	S100B	utr-3	Subset1	MeD-8	18	4	22.2
chr21	48019239	G	A	S100B	utr-3	Subset1	MeD-9	27	7	25.9
chr21	48019239	G	A	S100B	utr-3	Subset1	M-DCIS-2	50	3	6
chr21	48019239	G	A	S100B	utr-3	Subset1	S1-11	104	42	40.3
chr21	48019239	G	A	S100B	utr-3	Subset1	S3-13	70	12	17.1
chr21	48019239	G	A	S100B	utr-3	Subset1	S3-7	192	43	22.3
chr21	48019239	G	A	S100B	utr-3	Subset1	S1-1	18	7	38.8
chr21	48019239	G	A	S100B	utr-3	Subset1	S1-6	70	12	17.1
chr21	48019239	G	A	S100B	utr-3	Subset1	S1-9	39	5	12.8
chr21	48019239	G	A	S100B	utr-3	Subset1	S2-13	3	2	66.6
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeC-2	83	65	78.3
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeP-2	339	218	64.3
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeC-1	10	2	20
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeC-10	7	4	57.1
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeC-16	2	2	100
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeC-3	41	34	82.9
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeC-4	109	37	33.9
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeC-5	17	12	70.5
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeC-8	11	7	63.6
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeP-1	5	4	80
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeP-18	19	18	94.7
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeP-12	54	6	11.1
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeP-4	106	30	28.3
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeP-6	33	20	60.6
chr3	178936091	G	A	PIK3CA	missense	Subset1	DCIS-1	31	6	19.3
chr3	178936091	G	A	PIK3CA	missense	Subset1	DCIS-2	5	3	60
chr3	178936091	G	A	PIK3CA	missense	Subset1	DCIS-3	37	20	54
chr3	178936091	G	A	PIK3CA	missense	Subset1	DCIS-6	54	35	64.8
chr3	178936091	G	A	PIK3CA	missense	Subset1	DCIS-8	35	10	28.5
chr3	178936091	G	A	PIK3CA	missense	Subset1	InvF-9	89	5	5.6
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeD-2	39	14	35.8
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeD-7	95	37	38.9
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeD-8	22	15	68.1
chr3	178936091	G	A	PIK3CA	missense	Subset1	MeD-9	84	53	63
chr3	178936091	G	A	PIK3CA	missense	Subset1	M-DCIS-2	29	8	27.5
chr3	178936091	G	A	PIK3CA	missense	Subset1	M-DCIS-3	27	15	55.5
chr3	178936091	G	A	PIK3CA	missense	Subset1	S1-11	243	179	73.6
chr3	178936091	G	A	PIK3CA	missense	Subset1	S3-2	4	2	50
chr3	178936091	G	A	PIK3CA	missense	Subset1	S3-1	42	10	23.8
chr3	178936091	G	A	PIK3CA	missense	Subset1	S3-13	28	17	60.7
chr3	178936091	G	A	PIK3CA	missense	Subset1	S3-3	26	2	7.6
chr3	178936091	G	A	PIK3CA	missense	Subset1	S3-7	32	17	53.1
chr3	178936091	G	A	PIK3CA	missense	Subset1	S1-1	9	4	44.4
chr3	178936091	G	A	PIK3CA	missense	Subset1	S1-2	37	11	29.7
chr3	178936091	G	A	PIK3CA	missense	Subset1	S1-6	30	2	6.6
chr3	178936091	G	A	PIK3CA	missense	Subset1	S1-9	4	3	75
chr3	178936091	G	A	PIK3CA	missense	Subset1	S2-10	103	63	61.1
chr3	178936091	G	A	PIK3CA	missense	Subset1	S2-14	22	7	31.8
chr3	178936091	G	A	PIK3CA	missense	Subset1	S2-13	111	7	6.3
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeC-2	245	111	45.3
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeP-2	705	164	23.2
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeC-11	29	7	24.1
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeC-3	247	179	72.4
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeC-4	302	122	40.3

chr6	35212297	A	C	SCUBE3	intron	Subset1	MeC-5	61	55	90.1
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeC-8	396	116	29.2
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeP-1	436	6	1.3
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeP-4	175	24	13.7
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeP-6	230	33	14.3
chr6	35212297	A	C	SCUBE3	intron	Subset1	DCIS-1	59	17	28.8
chr6	35212297	A	C	SCUBE3	intron	Subset1	DCIS-3	78	12	15.3
chr6	35212297	A	C	SCUBE3	intron	Subset1	DCIS-6	93	15	16.1
chr6	35212297	A	C	SCUBE3	intron	Subset1	DCIS-8	36	8	22.2
chr6	35212297	A	C	SCUBE3	intron	Subset1	InvF-10	11	9	81.8
chr6	35212297	A	C	SCUBE3	intron	Subset1	InvF-1	24	15	62.5
chr6	35212297	A	C	SCUBE3	intron	Subset1	InvF-13	6	4	66.6
chr6	35212297	A	C	SCUBE3	intron	Subset1	InvF-9	24	5	20.8
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeD-2	38	13	34.2
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeD-4	36	2	5.5
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeD-7	99	4	4
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeD-8	18	3	16.6
chr6	35212297	A	C	SCUBE3	intron	Subset1	MeD-9	65	15	23
chr6	35212297	A	C	SCUBE3	intron	Subset1	M-DCIS-8	36	11	30.5
chr6	35212297	A	C	SCUBE3	intron	Subset1	M-DCIS-2	57	2	3.5
chr6	35212297	A	C	SCUBE3	intron	Subset1	M-DCIS-5	29	7	24.1
chr6	35212297	A	C	SCUBE3	intron	Subset1	S1-11	137	49	35.7
chr6	35212297	A	C	SCUBE3	intron	Subset1	S3-2	25	6	24
chr6	35212297	A	C	SCUBE3	intron	Subset1	S3-13	416	22	5.2
chr6	35212297	A	C	SCUBE3	intron	Subset1	S3-7	209	113	54
chr6	35212297	A	C	SCUBE3	intron	Subset1	S1-1	105	104	99
chr6	35212297	A	C	SCUBE3	intron	Subset1	S1-12	164	24	14.6
chr6	35212297	A	C	SCUBE3	intron	Subset1	S1-2	13	9	69.2
chr6	35212297	A	C	SCUBE3	intron	Subset1	S1-9	16	2	12.5
chr6	35212297	A	C	SCUBE3	intron	Subset1	S2-10	138	11	7.9
chr6	35212297	A	C	SCUBE3	intron	Subset1	S2-14	73	2	2.7
chr6	35212297	A	C	SCUBE3	intron	Subset1	S2-4	186	118	63.4
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeC-2	79	56	70.8
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeP-2	210	75	35.7
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeC-10	38	5	13.1
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeC-20	8	8	100
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeC-4	88	63	71.5
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeC-5	27	3	11.1
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeP-18	25	24	96
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeP-4	52	12	23
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeP-6	47	23	48.9
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	DCIS-1	51	10	19.6
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	DCIS-2	20	2	10
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	DCIS-3	42	2	4.7
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	DCIS-8	29	3	10.3
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	InvF-1	31	8	25.8
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	InvF-13	14	4	28.5
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	InvF-9	1028	1009	98.1
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeD-2	72	10	13.8
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeD-7	141	31	21.9
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeD-8	18	7	38.8
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	MeD-9	108	26	24
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	M-DCIS-2	33	5	15.1
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	M-DCIS-5	55	3	5.4
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	S1-11	177	82	46.3

chr4	99300218	G	T	RAP1GDS1	missense	Subset1	S3-1	14	5	35.7
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	S3-13	82	12	14.6
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	S3-7	24	2	8.3
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	S1-2	24	5	20.8
chr4	99300218	G	T	RAP1GDS1	missense	Subset1	S2-14	35	2	5.7
chrX	134167162	C	G	FAM127A	utr-3	Subset2	BN-12	46	2	4.3
chrX	134167162	C	G	FAM127A	utr-3	Subset2	BN-10	217	7	3.2
chrX	134167162	C	G	FAM127A	utr-3	Subset2	BN-3	100	5	5
chrX	134167162	C	G	FAM127A	utr-3	Subset2	BN-5	32	4	12.5
chrX	134167162	C	G	FAM127A	utr-3	Subset2	BN-11	12	10	83.3
chrX	134167162	C	G	FAM127A	utr-3	Subset2	BNM-1	12	7	58.3
chrX	134167162	C	G	FAM127A	utr-3	Subset2	BNM-2	12	2	16.6
chr17	73945426	C	T	ACOX1	missense	Subset2	BN-12	60	26	43.3
chr17	73945426	C	T	ACOX1	missense	Subset2	BN-10	40	29	72.5
chr17	73945426	C	T	ACOX1	missense	Subset2	BN-5	124	2	1.6
chr1	158390259	G	A	OR10K2	missense	Subset1	InvF-10	156	39	25
chr1	158390259	G	A	OR10K2	missense	Subset1	InvF-4	82	72	87.8
chr1	158390259	G	A	OR10K2	missense	Subset1	InvF-5	145	23	15.8
chr1	158390259	G	A	OR10K2	missense	Subset1	InvF-1	206	36	17.4
chr1	158390259	G	A	OR10K2	missense	Subset1	InvF-11	254	4	1.5
chr1	158390259	G	A	OR10K2	missense	Subset1	InvF-9	179	56	31.2
chr7	28725930	C	T	CREB5	intron	Subset1	MeC-2	653	17	2.6
chr7	28725930	C	T	CREB5	intron	Subset1	MeP-2	142	19	13.3
chr7	28725930	C	T	CREB5	intron	Subset1	MeC-11	104	5	4.8
chr7	28725930	C	T	CREB5	intron	Subset1	MeC-3	24	2	8.3
chr7	28725930	C	T	CREB5	intron	Subset1	MeC-4	83	14	16.8
chr7	28725930	C	T	CREB5	intron	Subset1	MeC-5	18	7	38.8
chr7	28725930	C	T	CREB5	intron	Subset1	MeP-1	33	3	9
chr7	28725930	C	T	CREB5	intron	Subset1	MeP-4	78	33	42.3
chr7	28725930	C	T	CREB5	intron	Subset1	MeP-5	94	2	2.1
chr7	28725930	C	T	CREB5	intron	Subset1	MeP-6	49	27	55.1
chr7	28725930	C	T	CREB5	intron	Subset1	DCIS-1	41	4	9.7
chr7	28725930	C	T	CREB5	intron	Subset1	DCIS-3	97	7	7.2
chr7	28725930	C	T	CREB5	intron	Subset1	DCIS-5	7	2	28.5
chr7	28725930	C	T	CREB5	intron	Subset1	DCIS-6	107	3	2.8
chr7	28725930	C	T	CREB5	intron	Subset1	DCIS-8	43	9	20.9
chr7	28725930	C	T	CREB5	intron	Subset1	InvF-10	24	7	29.1
chr7	28725930	C	T	CREB5	intron	Subset1	InvF-5	18	14	77.7
chr7	28725930	C	T	CREB5	intron	Subset1	InvF-13	18	3	16.6
chr7	28725930	C	T	CREB5	intron	Subset1	InvF-9	437	9	2
chr7	28725930	C	T	CREB5	intron	Subset1	MeD-2	42	6	14.2
chr7	28725930	C	T	CREB5	intron	Subset1	MeD-7	221	33	14.9
chr7	28725930	C	T	CREB5	intron	Subset1	MeD-8	92	9	9.7
chr7	28725930	C	T	CREB5	intron	Subset1	MeD-9	58	19	32.7
chr7	28725930	C	T	CREB5	intron	Subset1	M-DCIS-2	93	31	33.3
chr7	28725930	C	T	CREB5	intron	Subset1	S1-11	525	57	10.8
chr7	28725930	C	T	CREB5	intron	Subset1	S3-2	41	6	14.6
chr7	28725930	C	T	CREB5	intron	Subset1	S3-1	86	5	5.8
chr7	28725930	C	T	CREB5	intron	Subset1	S3-7	95	20	21
chr7	28725930	C	T	CREB5	intron	Subset1	S1-2	81	63	77.7
chr7	28725930	C	T	CREB5	intron	Subset1	S2-14	124	2	1.6
chr11	73814460	G	A	C2CD3	missense	Subset2	BN-1	242	4	1.6
chr11	73814460	G	A	C2CD3	missense	Subset2	BN-13	31	6	19.3
chr11	73814460	G	A	C2CD3	missense	Subset2	BN-12	233	5	2.1
chr11	73814460	G	A	C2CD3	missense	Subset2	BN-4	428	32	7.4

chr11	73814460	G	A	C2CD3	missense	Subset2	BN-5	458	81	17.6
chr11	73814460	G	A	C2CD3	missense	Subset2	BN-15	20	4	20
chr11	73814460	G	A	C2CD3	missense	Subset2	BNM-1	30	6	20
chr11	73814460	G	A	C2CD3	missense	Subset2	BNM-2	56	7	12.5
chr11	73814460	G	A	C2CD3	missense	Subset2	BNM-3	137	23	16.7
chr7	107720040	G	T	LAMB4	intron	Subset3	InvF-11	109	17	15.5
chr7	107720040	G	T	LAMB4	intron	Subset3	Ly-3	205	34	16.5
chr7	107720040	G	T	LAMB4	intron	Subset3	MeD-4	190	4	2.1
chr7	107720040	G	T	LAMB4	intron	Subset3	MeD-8	90	14	15.5
chr3	169099360	C	T	MECOM	intron	Subset2	BN-13	243	37	15.2
chr3	169099360	C	T	MECOM	intron	Subset2	BNM-2	70	4	5.7
chr3	169099360	C	T	MECOM	intron	Subset2	BNM-3	54	11	20.3
chr2	182761450	G	A	SSFA2	intron	Subset1	MeC-2	10	4	40
chr2	182761450	G	A	SSFA2	intron	Subset1	MeC-3	11	4	36.3
chr2	182761450	G	A	SSFA2	intron	Subset1	MeC-4	59	31	52.5
chr2	182761450	G	A	SSFA2	intron	Subset1	MeC-5	26	21	80.7
chr2	182761450	G	A	SSFA2	intron	Subset1	MeC-8	6	2	33.3
chr2	182761450	G	A	SSFA2	intron	Subset1	MeP-4	33	9	27.2
chr2	182761450	G	A	SSFA2	intron	Subset1	MeP-5	25	2	8
chr2	182761450	G	A	SSFA2	intron	Subset1	MeP-6	31	9	29
chr2	182761450	G	A	SSFA2	intron	Subset1	InvF-13	3	2	66.6
chr2	182761450	G	A	SSFA2	intron	Subset1	MeD-2	29	6	20.6
chr2	182761450	G	A	SSFA2	intron	Subset1	MeD-7	100	9	9
chr2	182761450	G	A	SSFA2	intron	Subset1	MeD-8	24	8	33.3
chr2	182761450	G	A	SSFA2	intron	Subset1	MeD-9	49	13	26.5
chr2	182761450	G	A	SSFA2	intron	Subset1	M-DCIS-8	15	2	13.3
chr2	182761450	G	A	SSFA2	intron	Subset1	M-DCIS-2	25	3	12
chr2	182761450	G	A	SSFA2	intron	Subset1	S1-11	75	36	48
chr2	182761450	G	A	SSFA2	intron	Subset1	S3-13	45	3	6.6
chr2	182761450	G	A	SSFA2	intron	Subset1	S3-7	23	6	26
chr2	182761450	G	A	SSFA2	intron	Subset1	S2-13	77	2	2.5
chr16	8994508	T	C	USP7	intron	Subset2	BN-12	84	11	13
chr16	8994508	T	C	USP7	intron	Subset2	BN-10	11	4	36.3
chr16	8994508	T	C	USP7	intron	Subset2	BN-3	30	4	13.3
chr16	8994508	T	C	USP7	intron	Subset2	BN-4	57	19	33.3
chr16	8994508	T	C	USP7	intron	Subset2	BN-5	51	15	29.4
chr16	8994508	T	C	USP7	intron	Subset2	BNM-1	29	3	10.3
chr11	66083512	G	T	CD248	nonsense	Subset1	MeC-2	48	20	41.6
chr11	66083512	G	T	CD248	nonsense	Subset1	MeP-2	59	5	8.4
chr11	66083512	G	T	CD248	nonsense	Subset1	MeC-4	109	51	46.7
chr11	66083512	G	T	CD248	nonsense	Subset1	MeC-5	62	2	3.2
chr11	66083512	G	T	CD248	nonsense	Subset1	MeC-8	21	17	80.9
chr11	66083512	G	T	CD248	nonsense	Subset1	MeP-1	25	5	20
chr11	66083512	G	T	CD248	nonsense	Subset1	MeP-18	28	25	89.2
chr11	66083512	G	T	CD248	nonsense	Subset1	MeP-4	22	6	27.2
chr11	66083512	G	T	CD248	nonsense	Subset1	MeP-5	314	7	2.2
chr11	66083512	G	T	CD248	nonsense	Subset1	MeP-6	21	7	33.3
chr11	66083512	G	T	CD248	nonsense	Subset1	DCIS-1	21	3	14.2
chr11	66083512	G	T	CD248	nonsense	Subset1	InvF-10	43	16	37.2
chr11	66083512	G	T	CD248	nonsense	Subset1	InvF-4	144	35	24.3
chr11	66083512	G	T	CD248	nonsense	Subset1	InvF-5	20	3	15
chr11	66083512	G	T	CD248	nonsense	Subset1	InvF-9	26	4	15.3
chr11	66083512	G	T	CD248	nonsense	Subset1	MeD-4	46	2	4.3
chr11	66083512	G	T	CD248	nonsense	Subset1	MeD-9	17	5	29.4
chr11	66083512	G	T	CD248	nonsense	Subset1	M-DCIS-2	381	95	24.9

chr11	66083512	G	T	CD248	nonsense	Subset1	S1-11	39	25	64.1
chr11	66083512	G	T	CD248	nonsense	Subset1	S3-2	220	106	48.1
chr11	66083512	G	T	CD248	nonsense	Subset1	S3-13	126	2	1.5
chr11	66083512	G	T	CD248	nonsense	Subset1	S3-7	12	2	16.6
chr11	66083512	G	T	CD248	nonsense	Subset1	S1-9	27	18	66.6
chr11	66083512	G	T	CD248	nonsense	Subset1	S2-10	52	5	9.6
chr11	66083512	G	T	CD248	nonsense	Subset1	S2-14	44	3	6.8

Supplementary Table 10: CNV_segmentation of all the 54 Chinese breast cancers

Sample_id	Chr	Start	End	Bins_number	Log2_Copy_ratio	Copy_ratio
M26	1	805000	143125000	1731	-0.024970494	0.982840699
M26	1	144995000	248485000	1542	1.031156288	2.043661544
M26	2	5000	243035000	3593	0.027108049	1.018967508
M26	3	205000	197755000	3047	0.345249069	1.270370283
M26	4	275000	190465000	2756	0.009478834	1.006591859
M26	5	135000	180655000	2690	0.343789998	1.269086141
M26	6	475000	2195000	28	-0.491597076	0.711237316
M26	6	2255000	170665000	2512	0.013075606	1.009104515
M26	7	85000	158835000	2271	0.345954698	1.270991779
M26	8	155000	146295000	2164	0.344270429	1.269508829
M26	9	255000	140945000	1683	-0.009689107	0.993306524
M26	10	115000	135215000	1926	0.004836242	1.003357852
M26	11	235000	134835000	1920	-0.014053527	0.990306129
M26	12	555000	39675000	531	0.335155494	1.261513368
M26	12	39995000	63895000	364	0.001374559	1.000953226
M26	12	64215000	133765000	1092	0.347109014	1.272009119
M26	13	19285000	32305000	209	-0.048354471	0.967038698
M26	13	32475000	114805000	1240	-0.408229984	0.75354732
M26	14	20725000	107135000	1304	0.003501484	1.002429992
M26	15	20055000	102095000	1197	0.325833884	1.253388693
M26	16	205000	35165000	466	0.790852512	1.730096503
M26	16	46635000	89905000	627	-0.466154464	0.723891578
M26	17	75000	80985000	1074	0.340485531	1.266182649
M26	18	355000	77815000	1192	-0.427663178	0.743465047
M26	19	285000	14575000	177	0.246219343	1.186094816
M26	19	14795000	59045000	624	0.294706697	1.226635574
M26	20	255000	62795000	917	0.32075106	1.248980593
M26	21	14665000	48045000	513	0.361635464	1.284881637
M26	22	17205000	22115000	47	0.281052103	1.215080673
M26	22	22285000	35575000	199	-0.481311271	0.716326256
M26	22	35895000	39585000	44	0.235448885	1.177272981
M26	22	40205000	51095000	127	-0.491341094	0.711363524
M26	X	2865000	152175000	2205	-0.034900715	0.976098933
L6	1	1305000	5645000	53	-0.088157691	0.940723278
L6	1	5795000	120305000	1933	-0.004894644	0.99661304
L6	1	121205000	155755000	136	0.418840389	1.336852586
L6	1	155935000	249185000	1589	0.044856392	1.031580489
L6	2	165000	117345000	1908	0.033610307	1.023570382
L6	2	117505000	152045000	598	-0.376518104	0.770294429
L6	2	152205000	176705000	440	-0.044633334	0.969536197
L6	2	176855000	242995000	1141	-0.342764006	0.78852915
L6	3	105000	197775000	3426	-0.001928233	0.998664343
L6	4	155000	190735000	3184	0.002357182	1.00163521
L6	5	165000	180645000	3059	-0.008696076	0.993990469
L6	6	205000	170865000	2837	-0.013242439	0.990863039

L6	7	55000	158925000	2564	-0.007389497	0.994891086
L6	8	155000	146205000	2442	-0.01196283	0.991742282
L6	9	285000	140915000	1930	-0.015074014	0.989605886
L6	10	145000	135365000	2232	-0.004801635	0.996677292
L6	11	255000	69065000	1076	-0.011466177	0.992083752
L6	11	69345000	103285000	578	0.570476168	1.485013625
L6	11	103505000	134875000	562	-0.376055658	0.770541381
L6	12	355000	3285000	47	-0.345130456	0.787236787
L6	12	3615000	10305000	109	0.145064133	1.105779808
L6	12	10315000	13865000	56	-0.351396968	0.78382475
L6	12	14045000	133845000	2017	0.014948662	1.01041549
L6	13	19375000	28885000	163	0.032113056	1.022508656
L6	13	28895000	89085000	1000	-0.307679104	0.807940467
L6	13	89315000	112175000	419	0.436426138	1.353247889
L6	13	112555000	115095000	37	-0.013731719	0.990527051
L6	14	20505000	107235000	1505	0.007271596	1.00505301
L6	15	20055000	102285000	1346	0.006200051	1.004306796
L6	16	165000	54435000	650	-0.000005	0.999996533
L6	16	54445000	64145000	170	-0.343556233	0.788096264
L6	16	64375000	73575000	157	0.054259639	1.038326119
L6	16	73755000	90075000	285	-0.356202914	0.781217995
L6	17	105000	19175000	316	-0.32732079	0.797015237
L6	17	19185000	49745000	367	0.062641912	1.044376508
L6	17	49925000	80985000	521	0.587353622	1.502488159
L6	18	165000	77775000	1311	-0.008485258	0.99413573
L6	19	255000	59095000	811	0.007329677	1.005093473
L6	20	205000	62815000	1051	0.000653184	1.000452855
L6	21	14605000	48095000	577	0.005155247	1.003579737
L6	22	16905000	51165000	544	-0.02418861	0.983373505
L6	X	2845000	110675000	1783	-0.019360744	0.9866698
L6	X	110755000	152685000	746	0.237518822	1.178963311
L3	1	1305000	49695000	777	0.175200785	1.129121538
L3	1	49865000	61525000	209	0.079079058	1.05634351
L3	1	61695000	143255000	1002	0.252027371	1.190879443
L3	1	145405000	191925000	741	0.521367364	1.435314973
L3	1	192145000	236875000	769	0.2667994	1.203135724
L3	1	236885000	249155000	210	0.435033838	1.351942542
L3	2	125000	65955000	1179	0.263152026	1.200097838
L3	2	65965000	72315000	108	0.049807288	1.035126644
L3	2	72325000	98405000	313	0.122478798	1.088603664
L3	2	98575000	171045000	1247	-0.021263499	0.985369349
L3	2	171105000	178445000	134	0.188568172	1.139632107
L3	2	178615000	243045000	1109	0.04820973	1.033981039
L3	3	255000	87695000	1564	0.02910719	1.020380469
L3	3	87835000	101995000	189	0.383741697	1.304721327
L3	3	101995001	102564999	10	0.860277592	1.81538758
L3	3	102565000	142045000	699	-0.003125051	0.997836224
L3	3	142415000	183645000	718	0.449313997	1.365390858

L3	3	183725000	197775000	236	0.079084971	1.056347839
L3	4	245000	53325000	842	-0.058208555	0.960456011
L3	4	53545000	97995000	756	0.304516477	1.235004653
L3	4	98165000	134695000	613	0.041401424	1.029113015
L3	4	134755000	190795000	965	0.192794047	1.142975157
L3	5	85000	21895000	386	0.037193176	1.026115532
L3	5	21935000	42595000	345	0.142930931	1.104145985
L3	5	42805000	55485000	158	0.413763879	1.332156778
L3	5	55655000	180635000	2165	-0.014611503	0.989923192
L3	6	455000	88745000	1377	0.396278855	1.316108887
L3	6	88885000	127465000	667	0.259292941	1.196891969
L3	6	127505000	141165000	250	0.377166438	1.29878843
L3	6	141335000	159325000	329	0.237001476	1.178540614
L3	6	159495000	170765000	200	0.049049885	1.034583354
L3	7	55000	99485000	1573	0.275016451	1.210007887
L3	7	99495000	112355000	220	-0.154635097	0.898359567
L3	7	112575000	152795000	664	0.378207945	1.299726387
L3	7	152805000	159045000	106	0.301461163	1.232391949
L3	8	235000	29555000	501	-0.007462676	0.994840623
L3	8	29725000	146245000	1937	0.430563581	1.34775997
L3	9	305000	141045000	1933	0.013309889	1.0092684
L3	10	315000	68135000	1079	0.467074079	1.382303182
L3	10	68145000	83505000	248	0.213009212	1.159103353
L3	10	83515000	135325000	903	-0.001512053	0.998952474
L3	11	245000	56385000	865	0.225229357	1.168963073
L3	11	56455000	73115000	270	0.377797004	1.299356222
L3	11	73285000	132335000	1040	0.006391743	1.004440247
L3	11	132505000	134945000	41	0.176196026	1.129900729
L3	12	205000	26735000	439	0.787884355	1.726540713
L3	12	27105000	34095000	118	0.429556327	1.346819325
L3	12	34175000	112275000	1296	0.017299929	1.012063582
L3	12	112445000	133455000	374	0.352825119	1.277058947
L3	13	19275000	106845000	1487	-0.030582343	0.979025035
L3	13	107015000	115065000	136	0.514739992	1.428736624
L3	14	19105000	25935000	97	0.367291526	1.289928881
L3	14	26105000	29165000	51	-0.046836019	0.968057053
L3	14	29335000	31665000	36	0.483984453	1.398601011
L3	14	31835000	107245000	1312	-0.001211468	0.999160627
L3	15	20155000	48265000	407	-0.01522157	0.989504676
L3	15	48585000	75045000	468	0.164820726	1.121026767
L3	15	75145000	102295000	465	0.542990593	1.456989614
L3	16	165000	25945000	403	0.220378964	1.165039577
L3	16	26045000	60045000	346	0.015266637	1.010638214
L3	16	60185000	68655000	151	0.310311335	1.239975259
L3	16	68665000	90095000	364	0.367818412	1.290400061
L3	17	115000	61395000	880	0.219415491	1.164261789
L3	17	61405000	80965000	326	0.471327658	1.386384719
L3	18	85000	5415000	92	0.032816238	1.023007157

L3	18	5585000	18755000	176	0.420814568	1.338683182
L3	18	18925000	41315000	389	0.178926762	1.132041433
L3	18	41485000	57245000	294	-0.087204566	0.941344978
L3	18	57305000	62495000	89	0.371350133	1.293562833
L3	18	62555000	77845000	259	-0.056521131	0.961580049
L3	19	305000	32295000	413	0.183786627	1.13586126
L3	19	32305000	41495000	148	0.645794577	1.564600767
L3	19	41715000	59035000	244	0.04870208	1.034333967
L3	20	255000	25995000	477	-0.062773548	0.957421728
L3	20	26155000	35775000	102	0.415826763	1.334062967
L3	20	35945000	62895000	470	0.172364597	1.126903983
L3	21	14425000	48025000	577	0.308921461	1.238781258
L3	22	17245000	51155000	542	0.035829487	1.025146068
L3	X	2805000	65775000	1030	0.359405758	1.282897367
L3	X	65785000	83255000	306	0.262690469	1.199713956
L3	X	83425000	141955000	1006	0.408341897	1.32715962
L3	X	142125000	152585000	181	-0.105688146	0.929361544
L7	1	1305000	82605000	1368	0.013240972	1.009220189
L7	1	82785000	113055000	499	-0.318199924	0.80207001
L7	1	113065000	159415000	315	-0.024496747	0.983163494
L7	1	159595000	248125000	1527	0.244442102	1.184634578
L7	2	5000	186085000	3120	0.016246651	1.011324968
L7	2	186205000	209155000	388	0.229541584	1.172462341
L7	2	209335000	243045000	586	0.054217243	1.038295607
L7	3	195000	36095000	657	8.06E-05	1.000055847
L7	3	36275000	71045000	633	-0.296298369	0.814339129
L7	3	71055000	77245000	113	0.133099876	1.096647506
L7	3	77265000	82615000	90	-0.306774856	0.808447024
L7	3	82625000	197665000	1926	0.000845291	1.000586083
L7	4	195000	43395000	732	-0.288515801	0.818743923
L7	4	43555000	116295000	1184	-0.017171085	0.98816846
L7	4	116525000	190715000	1260	0.249528931	1.188818878
L7	5	145000	85005000	1392	-0.002299758	0.998407199
L7	5	85015000	180615000	1666	0.174698853	1.12872877
L7	6	205000	28385000	497	-0.296320346	0.814326724
L7	6	33615000	170845000	2337	-0.002133571	0.998522214
L7	7	325000	159095000	2565	0.001257185	1.000871794
L7	8	325000	30475000	516	-0.287587155	0.819271109
L7	8	30655000	146245000	1921	-0.001829673	0.998732571
L7	9	355000	106475000	1337	-0.30766092	0.80795065
L7	9	106655000	140935000	590	0.01818117	1.012681969
L7	10	155000	83585000	1331	-0.001376721	0.999046185
L7	10	83595000	135325000	901	-0.286303695	0.820000279
L7	11	255000	65845000	1027	-0.278496585	0.824449719
L7	11	65905000	79545000	221	0.345245032	1.270366728
L7	11	79655000	134925000	973	-0.29366038	0.815829522
L7	12	455000	29345000	481	-0.299756342	0.81238959
L7	12	29525000	133485000	1749	-0.014525165	0.989982436

L7	13	19205000	115095000	1628	-0.298970525	0.812832209
L7	14	20575000	46385000	436	-0.003182015	0.997796826
L7	14	46565000	55725000	160	0.236919165	1.178473375
L7	14	55955000	107145000	901	-0.281280622	0.822860273
L7	15	22815000	32915000	144	-0.270020654	0.829307673
L7	15	32925000	99085000	1142	0.007455023	1.005180802
L7	15	99105000	102385000	60	-0.317977443	0.802193709
L7	16	365000	60945000	762	-0.012864998	0.991122304
L7	16	61125000	90095000	501	-0.284625992	0.820954408
L7	17	125000	22105000	355	-0.283663408	0.821502341
L7	17	25485000	81095000	850	0.273875707	1.209051507
L7	18	325000	77995000	1311	-0.006307126	0.995637776
L7	19	975000	10985000	128	-0.047327695	0.967727192
L7	19	11215000	23095000	189	-0.250233469	0.840760345
L7	19	23255000	59095000	487	-0.025239417	0.982657512
L7	20	235000	62885000	1052	0.010500416	1.007304885
L7	21	14605000	47995000	575	0.015206384	1.010596007
L7	22	17225000	21225000	51	0.300593685	1.231651147
L7	22	21905000	50985000	489	-0.236736709	0.848662768
L7	X	2765000	5635000	56	-0.342679314	0.788575441
L7	X	5815000	152665000	2472	-0.02333305	0.983956847
M20	1	1305000	118095000	1956	-0.263222246	0.83322484
M20	1	118205000	249195000	1763	0.46361554	1.378993388
M20	2	15000	32395000	581	0.046064169	1.032444456
M20	2	32515000	191735000	2625	-0.182335471	0.881275211
M20	2	191745000	242945000	889	0.009799666	1.006815733
M20	3	165000	197645000	3423	0.027654479	1.019353522
M20	4	165000	30345000	509	-0.5513229	0.68239411
M20	4	30455000	190745000	2674	-0.067125421	0.954538027
M20	5	165000	5335000	89	0.160322522	1.117536941
M20	5	5345000	45285000	688	0.217500746	1.162717606
M20	5	45295000	180675000	2283	0.011783092	1.008200861
M20	6	495000	69745000	1032	0.042154015	1.029649998
M20	6	69915000	170855000	1799	-0.549919301	0.683058335
M20	7	325000	124385000	1996	-0.010830626	0.992520891
M20	7	124395000	132695000	139	-0.11885165	0.920920389
M20	7	132805000	149985000	281	-0.061805196	0.958064575
M20	7	150205000	158965000	142	-0.182965741	0.880890292
M20	8	185000	40795000	706	-0.917480962	0.529432637
M20	8	40965000	74845000	525	-0.533091779	0.691072138
M20	8	74915000	146255000	1207	0.037707392	1.026481333
M20	9	325000	141035000	1933	-0.241912288	0.845623697
M20	10	105000	45595000	757	0.087898771	1.062821098
M20	10	45655000	135315000	1474	-0.215489221	0.861254057
M20	11	235000	71455000	1111	-0.24427479	0.84424007
M20	11	71555000	77945000	105	-0.121937366	0.918952779
M20	11	77955000	121125000	756	-0.507734987	0.703325784
M20	11	121305000	134925000	248	-0.79916688	0.574680946

M20	12	305000	20845000	337	-0.74121046	0.598237205
M20	12	21115000	133485000	1895	0.033230162	1.02330071
M20	13	19255000	106235000	1475	-0.55030509	0.682875704
M20	13	106245000	114965000	149	-0.819711957	0.566555048
M20	14	19135000	107075000	1504	0.020190432	1.014093329
M20	15	20095000	102285000	1345	-0.215834778	0.861047793
M20	16	155000	90135000	1269	-0.014824995	0.989776713
M20	17	155000	22115000	354	-0.480677246	0.716641131
M20	17	25485000	34275000	134	0.016078749	1.011207276
M20	17	34405000	81035000	713	0.242375824	1.182939117
M20	18	205000	77845000	1311	-0.211020363	0.863925994
M20	19	305000	34515000	451	-0.232274283	0.851291846
M20	19	34735000	59085000	355	-0.114494302	0.923706034
M20	20	305000	59305000	1010	0.286518892	1.2196937
M20	20	59475000	62755000	35	0.004799139	1.003332049
M20	21	14425000	48035000	577	-0.111430488	0.925669769
M20	22	17305000	51195000	543	-0.379080828	0.768927335
M20	X	2735000	68725000	1085	-0.103278013	0.930915412
M20	X	68895000	83065000	246	-0.16625029	0.891155878
M20	X	83285000	152595000	1192	0.020744574	1.014482918
L8	1	1305000	110085000	1822	-0.176010943	0.885147051
L8	1	110515000	248195000	1893	0.00237749	1.001649309
L8	2	75000	54335000	973	0.061283835	1.04339385
L8	2	54515000	144445000	1401	-0.174664836	0.885973323
L8	2	144555000	242995000	1718	-0.389849018	0.763209472
L8	3	155000	197605000	3422	-0.152070491	0.899957956
L8	4	135000	190785000	3185	-0.440941739	0.736653591
L8	5	215000	55245000	885	-0.126487288	0.916059182
L8	5	55425000	105055000	830	-0.569761957	0.673727943
L8	5	105065000	139085000	592	-0.556380229	0.680006184
L8	5	139265000	180605000	744	-0.119104429	0.920759046
L8	6	435000	131195000	2113	-0.018361789	0.987353229
L8	6	131255000	170815000	720	-0.214348729	0.861935173
L8	7	145000	54845000	944	-0.020848075	0.985653127
L8	7	55005000	68055000	121	-0.184382433	0.880025704
L8	7	68065000	158955000	1494	-0.040528426	0.972298752
L8	8	185000	146225000	2442	-0.008685961	0.993997439
L8	9	305000	15045000	271	-0.418327823	0.74829144
L8	9	15195000	140925000	1657	0.113655225	1.081966046
L8	10	155000	67295000	1072	0.270543689	1.20626233
L8	10	67295001	81374999	223	1.712366045	3.276978131
L8	10	81375000	135445000	939	-0.444480797	0.734848729
L8	11	605000	134795000	2219	-0.192724727	0.874951694
L8	12	225000	30895000	511	-0.061753886	0.95809865
L8	12	31075000	84405000	826	-0.079891983	0.946128482
L8	12	84685000	105125000	377	-0.035885837	0.975432646
L8	12	105305000	133465000	511	-0.139737589	0.907684239
L8	13	19245000	115045000	1626	-0.694354229	0.617985876

L8	14	19105000	59115000	661	-0.099690026	0.933233483
L8	14	59125000	107245000	846	-0.087268465	0.941303285
L8	15	22875000	102285000	1343	-0.043349024	0.970399677
L8	16	165000	50915000	583	0.068915376	1.048927799
L8	16	51055000	90095000	682	-0.438567675	0.737866808
L8	17	55000	80965000	1207	-0.44580389	0.73417511
L8	18	95000	77885000	1313	-0.402863918	0.756355339
L8	19	365000	29585000	362	-0.487767156	0.713127945
L8	19	29595000	59085000	447	-0.079834423	0.946166231
L8	20	315000	62755000	1048	-0.02444493	0.983198807
L8	21	14435000	25095000	157	-0.520468107	0.697145596
L8	21	25275000	48075000	417	-0.097438999	0.934690736
L8	22	17355000	50985000	540	-0.4679917	0.722970307
L8	X	2705000	22845000	374	-0.086428493	0.941851494
L8	X	23105000	49775000	459	-0.034285841	0.976515033
L8	X	50055000	152655000	1693	-0.078042368	0.94734225
L1	1	1305000	38295000	584	-0.209360101	0.864920777
L1	1	38295001	39264999	18	0.918899655	1.890672726
L1	1	39265000	44605000	95	0.843547492	1.794457174
L1	1	44775000	59825000	256	0.138831287	1.101012835
L1	1	59835000	121245000	1036	-0.005475778	0.996211674
L1	1	121285000	162645000	248	0.987608758	1.98289565
L1	1	162695000	248875000	1477	0.136340994	1.099113973
L1	2	95000	242905000	4094	0.013841833	1.009640602
L1	3	125000	6395000	124	-0.203831306	0.868241745
L1	3	6555000	99545000	1583	0.003436128	1.002384581
L1	3	99715000	197625000	1711	0.156124306	1.114289656
L1	4	145000	190735000	3184	-0.04566896	0.968840474
L1	5	155000	45855000	787	-0.025009571	0.982814078
L1	5	49605000	175005000	2189	-0.194145774	0.874090296
L1	5	175035000	180645000	80	0.013009648	1.009058382
L1	6	465000	64985000	965	0.206529503	1.153909039
L1	6	64995000	116935000	890	-0.011418486	0.992116548
L1	6	117055000	159495000	776	0.167908939	1.123428992
L1	6	159665000	170845000	199	-0.161665607	0.893992351
L1	7	105000	158945000	2563	-0.005021528	0.996525392
L1	8	165000	8595000	138	-0.482844803	0.715565233
L1	8	8655000	34075000	448	-0.354735318	0.782013101
L1	8	34105000	47965000	175	0.75330134	1.685645708
L1	8	48285000	79805000	545	0.155499996	1.113807564
L1	8	79905000	146265000	1130	0.618451071	1.535226023
L1	9	335000	21275000	382	-0.195464747	0.87329153
L1	9	21495000	30145000	158	-0.457194787	0.728401205
L1	9	30235000	33985000	65	-0.079490804	0.946391614
L1	9	34065000	132335000	1203	0.135879955	1.098762787
L1	9	132505000	140975000	114	-0.099305018	0.933482565
L1	10	195000	135445000	2233	-0.083573337	0.943717305
L1	11	235000	128095000	2102	0.13840937	1.10069089

L1	11	128125000	134845000	120	0.070771615	1.050278267
L1	12	315000	20795000	336	0.035467552	1.024888917
L1	12	21065000	38705000	232	-0.208621009	0.865363989
L1	12	38875000	44915000	109	0.041888169	1.029460281
L1	12	45085000	119455000	1305	-0.001721884	0.998807193
L1	12	119675000	127505000	135	-0.270860194	0.828825219
L1	12	127515000	133495000	105	-0.072225851	0.951169361
L1	13	19265000	115095000	1627	-0.187970636	0.877839665
L1	14	20565000	107105000	1502	-0.185571388	0.879300754
L1	15	20175000	28305000	92	0.118066661	1.085279517
L1	15	28315000	102375000	1255	-0.165892005	0.891377218
L1	16	295000	47375000	517	-0.237418132	0.848262017
L1	16	47545000	52995000	101	0.270792783	1.20647062
L1	16	53105000	84755000	567	-0.003168832	0.997805944
L1	16	84765000	89995000	74	0.233307344	1.175526729
L1	17	15000	21825000	353	-0.167565382	0.890343913
L1	17	22045000	81045000	854	0.155511106	1.113816142
L1	18	65000	19295000	283	-0.200985516	0.869956087
L1	18	19325000	23405000	74	0.041380483	1.029098077
L1	18	23675000	77995000	955	-0.396831972	0.7595243
L1	19	965000	59005000	806	-0.264566847	0.832448631
L1	20	225000	62885000	1053	0.019163277	1.013371582
L1	21	14755000	48025000	574	-0.002132192	0.998523168
L1	22	17245000	28045000	156	-0.042319907	0.971092139
L1	22	28145000	51115000	383	-0.187208176	0.878303723
L1	X	2785000	58095000	961	-0.201858849	0.86942962
L1	X	62105000	146295000	1461	-0.472594454	0.720667428
L1	X	146305000	152615000	104	-0.114486666	0.923710924
M24	1	1305000	121295000	1993	-0.027072767	0.981409562
M24	1	145195000	249175000	1724	1.128175768	2.185821767
M24	2	5000	243045000	4099	-0.011728029	0.991903703
M24	3	205000	197685000	3423	-0.01525565	0.989481302
M24	4	205000	190765000	3183	-0.013051006	0.990994526
M24	5	105000	180625000	3060	-0.020151032	0.986129464
M24	6	445000	170895000	2836	-0.005517031	0.996183188
M24	7	315000	159085000	2565	0.464642882	1.379975718
M24	8	305000	146295000	2441	-0.012764803	0.99119114
M24	9	205000	140925000	1933	-0.024290381	0.983304138
M24	10	145000	135385000	2233	0.261740206	1.198923998
M24	11	455000	134875000	2222	-0.01792589	0.987651595
M24	12	345000	133845000	2236	-0.02729196	0.981260465
M24	13	19345000	115045000	1624	-0.004518965	0.996872593
M24	14	20515000	107225000	1505	-0.031372628	0.978488888
M24	15	22805000	102345000	1345	-0.027490907	0.981125159
M24	16	185000	90095000	1267	-0.075919432	0.948737297
M24	17	55000	63495000	913	0.720458346	1.647705429
M24	17	63715000	81035000	293	1.675839381	3.195051933
M24	18	55000	77965000	1314	0.020956504	1.014631956

M24	19	355000	58985000	807	-0.155483039	0.897831713
M24	20	205000	62645000	1050	0.555719462	1.46990148
M24	21	14695000	47955000	572	-0.032061061	0.978022078
M24	22	16925000	51105000	543	0.393830254	1.313877028
M24	X	2755000	152645000	2531	-0.044266369	0.96978284
L13	1	1305000	115275000	1906	0.315683054	1.244600779
L13	1	115505000	174595000	549	0.922481397	1.895372482
L13	1	174655000	184795000	183	1.314494563	2.487151799
L13	1	185025000	195615000	149	0.720135223	1.647336432
L13	1	195625000	248185000	924	0.961383938	1.947176873
L13	2	65000	96195000	1571	0.381025429	1.302267143
L13	2	96245000	243045000	2526	-0.041716653	0.97149828
L13	3	275000	34895000	634	0.904192584	1.871496804
L13	3	35005000	84105000	875	-0.056132451	0.961839146
L13	3	84255000	184645000	1689	0.903184664	1.870189764
L13	3	184755000	197755000	219	-0.038165728	0.973892387
L13	4	105000	190715000	3184	0.72725121	1.655481869
L13	5	145000	180665000	3059	0.591713731	1.507035844
L13	6	495000	13195000	229	0.070420764	1.050022879
L13	6	13305000	16435000	59	1.119503402	2.172721712
L13	6	16555000	34195000	212	0.664366374	1.584872051
L13	6	34425000	71715000	562	0.078265435	1.055747942
L13	6	71805000	73345000	30	0.859788741	1.814772548
L13	6	73405000	170865000	1732	-0.042505598	0.970967157
L13	7	345000	23845000	387	0.812517785	1.756273811
L13	7	23965000	32925000	163	0.854033532	1.807547465
L13	7	32955000	49395000	300	1.206293128	2.30743999
L13	7	49515000	70285000	256	0.534784366	1.448725603
L13	7	70455000	159095000	1452	0.002364359	1.001640192
L13	8	325000	35775000	615	0.014998651	1.010450502
L13	8	35805000	38565000	52	0.776004006	1.712381324
L13	8	38745000	60295000	307	0.002104125	1.001459532
L13	8	60455000	70545000	175	1.23259115	2.349886621
L13	8	70685000	73855000	56	-0.021863663	0.984959519
L13	8	74035000	75795000	30	0.929764397	1.904964876
L13	8	76025000	78195000	35	-0.04903031	0.96658579
L13	8	78625000	81635000	53	0.881189579	1.841893415
L13	8	81645000	90185000	138	1.117989979	2.170443668
L13	8	90305000	93175000	51	0.045780323	1.032241345
L13	8	93355000	134135000	726	1.282302919	2.432269209
L13	8	134355000	136745000	46	0.081912004	1.058419836
L13	8	136905000	146095000	124	0.791425397	1.73078365
L13	9	225000	140955000	1933	0.336432856	1.262630806
L13	10	185000	1235000	19	0.613206007	1.529654687
L13	10	1415000	135345000	2209	-0.043159429	0.970527213
L13	11	205000	6405000	82	0.156778185	1.114794805
L13	11	6455000	16585000	181	1.051595972	2.072821626
L13	11	16765000	24425000	131	0.106767973	1.076813179

L13	11	24655000	33895000	153	0.732191574	1.661160617
L13	11	34075000	35895000	36	0.259387686	1.196970574
L13	11	36075000	45775000	181	0.984514371	1.978647163
L13	11	46005000	48545000	48	0.517386054	1.43135949
L13	11	48555000	60845000	122	0.012492167	1.008696507
L13	11	61075000	62995000	30	0.48185851	1.396541562
L13	11	63055000	66375000	55	0.312776932	1.242096215
L13	11	66605000	80775000	230	1.273747308	2.417887816
L13	11	80855000	85665000	93	0.046027145	1.032417961
L13	11	85845000	88315000	39	0.951126127	1.933381212
L13	11	88495000	134935000	813	0.0134548	1.009369781
L13	12	465000	133805000	2234	0.679418175	1.601493758
L13	13	19335000	115025000	1624	0.056641367	1.040041695
L13	14	20505000	107125000	1504	0.613277668	1.529730669
L13	15	22855000	65625000	712	-0.113090139	0.924605507
L13	15	65805000	102395000	630	0.701413633	1.626097353
L13	16	155000	31835000	487	0.740449549	1.670696352
L13	16	34215000	52925000	132	0.058641451	1.04148456
L13	16	53105000	55565000	47	1.021173675	2.029569403
L13	16	55575000	89985000	594	0.048792877	1.034399066
L13	17	15000	20135000	337	-0.044724968	0.969474618
L13	17	20145000	42315000	248	0.816918234	1.761638902
L13	17	42325000	81045000	625	1.298512132	2.45975075
L13	18	205000	77985000	1313	0.760199984	1.69372539
L13	19	305000	18105000	246	0.025360497	1.017733969
L13	19	18285000	59095000	560	0.627655843	1.545052481
L13	20	775000	12895000	223	1.787269979	3.451611236
L13	20	12895001	13624999	13	1.83380334	3.564756023
L13	20	13625000	15435000	33	0.344724124	1.269908124
L13	20	15605000	20595000	97	1.353486926	2.555289813
L13	20	20705000	34215000	169	0.32096534	1.249166115
L13	20	34305000	61505000	484	1.609452813	3.051360875
L13	21	14635000	46345000	543	-0.056903487	0.961325237
L13	21	46455000	48015000	29	0.653287955	1.572748466
L13	22	17245000	51155000	542	0.549075855	1.463148149
L13	X	2755000	13605000	201	0.2996015	1.230804394
L13	X	13615000	152625000	2330	0.069288393	1.049199041
L2	1	1305000	107105000	1772	-0.288087331	0.818987121
L2	1	107285000	248865000	1942	-0.022976254	0.984200221
L2	2	95000	227405000	3827	-0.073217119	0.950516042
L2	2	227585000	242985000	265	-0.28317363	0.821781279
L2	3	205000	13845000	245	-0.129659305	0.914047279
L2	3	14025000	39985000	479	0.225110094	1.168866443
L2	3	40155000	96905000	931	-0.310124794	0.806571987
L2	3	97085000	100945000	72	0.133343156	1.096832447
L2	3	101125000	181675000	1411	0.125798144	1.091111203
L2	3	181685000	197755000	273	0.257401385	1.19532372
L2	4	235000	16395000	257	-0.313125323	0.804896215

L2	4	16535000	53545000	585	0.111552826	1.080390475
L2	4	53555000	149855000	1643	-0.309701787	0.806808514
L2	4	150035000	176845000	449	-0.066328922	0.955065165
L2	4	177175000	190495000	237	-0.313287764	0.804805593
L2	5	105000	5775000	99	-0.353096035	0.78290218
L2	5	5955000	22265000	290	0.406404162	1.325378261
L2	5	22445000	180635000	2664	0.015123905	1.010538233
L2	6	465000	56695000	882	-0.050034119	0.965913485
L2	6	56875000	125395000	1124	-0.273740162	0.827172334
L2	6	125575000	170865000	823	-0.069881381	0.952716328
L2	7	345000	11045000	163	-0.347589477	0.785896114
L2	7	11325000	54765000	777	0.409983552	1.328670666
L2	7	54855000	158935000	1618	0.097359587	1.069813702
L2	8	165000	36225000	627	-0.54784332	0.684041937
L2	8	36235000	120405000	1377	-0.067214344	0.954479195
L2	8	120455000	140045000	367	0.27380966	1.208996158
L2	8	140235000	146215000	68	-0.31086522	0.806158141
L2	9	295000	27615000	498	-0.294682504	0.815251727
L2	9	27795000	71075000	202	-0.083350043	0.943863381
L2	9	71255000	140945000	1224	-0.300456751	0.811995281
L2	10	145000	42975000	713	0.611478518	1.527824168
L2	10	43205000	135355000	1516	-0.265677176	0.831808207
L2	11	285000	65265000	1015	-0.300831966	0.811784126
L2	11	65495000	71175000	88	0.088849091	1.06352142
L2	11	71455000	134835000	1111	-0.494790074	0.709664933
L2	12	315000	61195000	951	0.095458462	1.068404874
L2	12	61365000	133795000	1282	0.264142056	1.200921671
L2	13	19205000	90335000	1185	-0.233039337	0.85084053
L2	13	90505000	114955000	437	-0.079074015	0.946665063
L2	14	19135000	34795000	251	0.119802111	1.086585809
L2	14	34855000	52385000	284	0.092716086	1.066375904
L2	14	52565000	107145000	966	-0.301815521	0.811230882
L2	15	20195000	102345000	1345	0.288271951	1.221176685
L2	16	145000	77375000	1053	-0.018753536	0.987085161
L2	16	77385000	90055000	214	-0.135826225	0.910148446
L2	17	85000	11985000	202	-0.257899058	0.836304912
L2	17	12165000	81095000	1004	0.105686673	1.076006411
L2	18	165000	64715000	1083	-0.063542563	0.956911519
L2	18	64945000	77865000	225	-0.288524199	0.818739157
L2	19	345000	59095000	809	0.005252306	1.003647256
L2	20	155000	33755000	542	-0.011026183	0.992386364
L2	20	33935000	62595000	504	0.657154924	1.576969682
L2	21	14625000	48065000	576	0.115309964	1.083207749
L2	22	17345000	50825000	539	-0.07661869	0.948277566
L2	X	2705000	25425000	418	0.201290863	1.149726622
L2	X	25655000	152555000	2109	-0.005374326	0.996281731
M17	1	1305000	27035000	395	-0.660534911	0.632643687
M17	1	27205000	143255000	1596	0.055827245	1.039454959

M17	1	143255001	146524999	9	0.84714786	1.798940986
M17	1	146525000	185425000	649	0.572530293	1.48712951
M17	1	185435000	248875000	1067	0.0468338	1.032995378
M17	2	95000	101675000	1661	-0.137899703	0.908841297
M17	2	101845000	243005000	2432	-0.650276338	0.637158259
M17	3	225000	46625000	847	-0.079949085	0.946091035
M17	3	46845000	79755000	598	-0.682102655	0.623256248
M17	3	79765000	130945000	816	0.066743601	1.047349973
M17	3	131085000	155545000	431	0.505074068	1.419196216
M17	3	155675000	197795000	724	0.045860156	1.032298467
M17	4	105000	48305000	818	-0.494560263	0.709777987
M17	4	48355000	153435000	1735	-0.104341056	0.930229724
M17	4	153655000	190755000	628	-0.785852062	0.5800093
M17	5	175000	157595000	2657	0.040617288	1.028553821
M17	5	157705000	180555000	398	0.221982559	1.16633527
M17	6	225000	5245000	88	-0.231369303	0.851826016
M17	6	5305000	17075000	216	-0.272043843	0.828145494
M17	6	17205000	74535000	819	-0.199941682	0.870585754
M17	6	74705000	100365000	438	-0.417600468	0.748668797
M17	6	100585000	116725000	282	-0.14380521	0.905128663
M17	6	116735000	170885000	985	-0.347690496	0.785841086
M17	7	105000	64785000	1014	-0.429383755	0.742578909
M17	7	65055000	72945000	139	-0.275916508	0.825925462
M17	7	72975000	143045000	1153	-0.073921745	0.950051914
M17	7	143165000	158955000	253	-0.512765964	0.700877413
M17	8	175000	31075000	529	-0.987204287	0.504454381
M17	8	31245000	93275000	1007	0.013953476	1.009718736
M17	8	93445000	133615000	714	0.493053809	1.407420868
M17	8	133655000	146225000	186	0.004742203	1.003292453
M17	9	295000	140945000	1931	0.041228789	1.028989877
M17	10	165000	25465000	458	0.643014257	1.561588418
M17	10	25475000	32495000	132	0.509620239	1.423675392
M17	10	32505000	53155000	232	0.066636227	1.047272026
M17	10	53325000	72185000	320	-0.630118759	0.646123226
M17	10	72355000	135305000	1083	0.044875761	1.031594339
M17	11	205000	81665000	1288	-0.021193656	0.985417053
M17	11	81675000	134845000	935	-0.616925451	0.652059061
M17	12	315000	49245000	761	0.039197349	1.027541989
M17	12	49335000	68945000	326	0.513884787	1.427889944
M17	12	69115000	133755000	1144	-0.693981994	0.618145345
M17	13	19275000	115055000	1626	0.062436682	1.044227951
M17	14	20525000	95035000	1305	0.06410147	1.045433627
M17	14	95155000	106885000	195	0.492428354	1.406810837
M17	15	22855000	80765000	967	-0.614478157	0.65316611
M17	15	80775000	102285000	376	0.05905441	1.041782718
M17	16	155000	19305000	291	0.776033748	1.712416626
M17	16	19475000	33845000	196	0.492304114	1.406689693
M17	16	34255000	90145000	778	-0.690010877	0.619849177

M17	17	165000	17195000	291	-0.595184993	0.661959568
M17	17	17305000	29855000	120	0.037571266	1.026384484
M17	17	29865000	32265000	47	0.484334608	1.398940505
M17	17	32505000	80975000	742	-0.558906575	0.678816447
M17	18	95000	47235000	775	0.106047078	1.076275245
M17	18	47455000	77835000	534	-0.546118895	0.684860047
M17	19	305000	59045000	809	-0.12878599	0.914600752
M17	20	185000	43395000	721	0.183956954	1.135995369
M17	20	43615000	62775000	327	0.480119763	1.394859454
M17	21	14645000	48045000	575	-0.089921543	0.939573844
M17	22	17315000	51155000	542	-0.148092764	0.902442699
M17	X	2825000	152625000	2530	0.01201438	1.008362506
L20	1	1305000	120395000	1990	-0.305384637	0.80922644
L20	1	121305000	249185000	1727	0.235171019	1.177046258
L20	2	165000	16245000	291	0.762848799	1.696837958
L20	2	16455000	23135000	120	-0.054078051	0.963209782
L20	2	23145000	99195000	1202	0.229918713	1.172768869
L20	2	99255000	243045000	2480	-0.044841375	0.969396397
L20	3	105000	96475000	1654	-0.313678597	0.804587597
L20	3	96485000	193895000	1716	-0.006247367	0.995679018
L20	3	194075000	197795000	53	-0.351705344	0.783657225
L20	4	245000	190495000	3181	-0.038863511	0.973421462
L20	5	125000	45815000	787	0.409637809	1.328352287
L20	5	49645000	170545000	2109	-0.302717353	0.810723938
L20	5	170725000	180665000	157	0.373412322	1.295413175
L20	6	495000	38355000	574	0.25390201	1.192427878
L20	6	38365000	170755000	2258	-0.013252246	0.990856303
L20	7	85000	52945000	912	0.20118447	1.149641838
L20	7	53125000	159055000	1650	-0.033603609	0.976976924
L20	8	285000	21155000	348	-0.362011229	0.77807912
L20	8	21335000	43295000	394	-0.038108715	0.973930875
L20	8	43355000	81285000	589	0.461468971	1.376943126
L20	8	81305000	146255000	1104	0.614859881	1.531409254
L20	9	335000	83145000	920	-0.44719782	0.733466093
L20	9	83155000	141035000	1012	-0.051606679	0.964861198
L20	10	315000	6195000	114	0.79804125	1.738738834
L20	10	6225000	20055000	245	0.678402964	1.600367198
L20	10	20105000	100075000	1249	0.161370447	1.118348978
L20	10	100305000	104235000	67	0.889895841	1.853042334
L20	10	104235001	104664999	6	1.033606391	2.047135206
L20	10	104665000	135365000	546	-0.248324036	0.841873843
L20	11	495000	7035000	90	-0.291245974	0.817195988
L20	11	7265000	134785000	2126	-0.056850252	0.96136071
L20	12	215000	125975000	2104	-0.041714761	0.971499554
L20	12	126155000	133495000	129	-0.178126362	0.883850113
L20	13	19265000	29695000	180	-0.350620023	0.784246982
L20	13	29855000	31665000	35	0.555617916	1.469798023
L20	13	31755000	62645000	523	-0.239541099	0.847014693

L20	13	62825000	90145000	436	0.205589261	1.153157251
L20	13	90305000	115045000	443	0.17539134	1.129270685
L20	14	20525000	107075000	1503	-0.29086507	0.817411774
L20	15	20155000	34935000	182	0.237422926	1.178884948
L20	15	35215000	48265000	222	-0.552206871	0.681976121
L20	15	48595000	63775000	273	0.451434248	1.367398974
L20	15	64105000	69625000	98	-0.336017434	0.792225237
L20	15	69805000	102245000	556	0.401476491	1.32085902
L20	16	125000	90095000	1269	-0.082980266	0.944105333
L20	17	55000	29045000	407	0.263332806	1.200248228
L20	17	29375000	81045000	799	0.411739155	1.330288498
L20	18	55000	32495000	512	-0.038186982	0.97387804
L20	18	32675000	77845000	798	-0.312852551	0.805048413
L20	19	255000	24395000	338	-0.401490287	0.757075829
L20	19	28355000	58995000	468	0.387177565	1.307832305
L20	20	195000	62895000	1053	0.371776611	1.293945283
L20	21	14405000	47975000	576	0.06356936	1.04504811
L20	22	17205000	51175000	544	-0.328251368	0.796501306
L20	X	2855000	152675000	2530	-0.283752977	0.82145134
L4	1	1305000	119405000	1975	0.208143464	1.155200654
L4	1	119575000	189395000	735	0.440618517	1.35718606
L4	1	189755000	230995000	685	0.168977555	1.124261432
L4	1	231185000	248185000	313	0.316642503	1.245428763
L4	2	55000	242995000	4097	-0.007141955	0.995061807
L4	3	215000	72505000	1322	0.004021299	1.00279124
L4	3	72675000	197795000	2099	0.154925223	1.11336391
L4	4	255000	190335000	3180	-0.016562119	0.988585657
L4	5	55000	136865000	2275	-0.021601631	0.98513843
L4	5	136875000	180685000	787	0.168369861	1.123787969
L4	6	505000	17325000	307	-0.012411341	0.991434013
L4	6	17335000	41545000	317	0.222021127	1.16636645
L4	6	41555000	63675000	314	0.321500686	1.249629734
L4	6	63705000	170895000	1897	0.022346962	1.015610322
L4	7	355000	159085000	2564	0.015270114	1.01064065
L4	8	305000	37645000	650	-0.009640772	0.993339804
L4	8	37755000	54905000	228	0.161581275	1.118512419
L4	8	55125000	146105000	1554	0.311111396	1.24066309
L4	9	225000	21475000	388	0.301927221	1.232790134
L4	9	21745000	140975000	1543	0.196933351	1.14625923
L4	10	195000	32785000	593	0.217640857	1.162830532
L4	10	32955000	135345000	1635	-0.02171441	0.985061423
L4	11	265000	36065000	595	0.007838309	1.005447888
L4	11	36075000	108645000	1156	0.168352013	1.123774066
L4	11	108655000	134815000	470	-0.05134501	0.965036216
L4	12	235000	44225000	670	0.158204084	1.115897166
L4	12	44235000	98675000	925	0.016662192	1.011616303
L4	12	98845000	133825000	639	0.202159661	1.150419202
L4	13	19345000	50405000	539	0.007094169	1.004929413

L4	13	50415000	115045000	1085	0.16786293	1.123393165
L4	14	19105000	107145000	1506	0.009194733	1.006393656
L4	15	22805000	102315000	1344	0.008401525	1.005840483
L4	16	105000	75545000	1019	0.189355221	1.140253992
L4	16	75635000	90025000	248	-0.024703232	0.983022789
L4	17	45000	16575000	286	0.234528202	1.176521922
L4	17	16805000	81055000	922	0.035241045	1.02472802
L4	18	225000	15325000	269	0.044147994	1.031074082
L4	18	15335000	39245000	358	0.206437065	1.153835107
L4	18	39295000	77875000	684	0.013716433	1.009552846
L4	19	305000	58905000	806	0.301820909	1.232699293
L4	20	175000	62825000	1053	0.005111146	1.00354906
L4	21	14645000	26715000	186	0.213085161	1.159164374
L4	21	26725000	48005000	388	0.293326553	1.225462683
L4	22	17225000	51125000	543	0.016456565	1.011472127
L4	X	2795000	152695000	2531	0.159054593	1.116555213
L21	1	1305000	27705000	406	-0.253408398	0.838912124
L21	1	27715000	34825000	122	-0.118441122	0.92118248
L21	1	34835000	55125000	343	0.235129512	1.177012394
L21	1	55155000	108145000	921	-0.013842018	0.990451325
L21	1	108205000	145195000	203	0.149808935	1.109422535
L21	1	145405000	248865000	1722	0.520182017	1.434136174
L21	2	55000	119215000	1946	0.193621918	1.143631226
L21	2	119385000	126645000	127	0.017749798	1.012379218
L21	2	126965000	128655000	30	0.22173833	1.166137841
L21	2	128825000	224025000	1654	-0.01536625	0.989405449
L21	2	224245000	234195000	177	0.17312557	1.127498544
L21	2	234315000	243045000	149	-0.254813215	0.838095636
L21	3	125000	154505000	2680	-0.024704359	0.983022021
L21	3	154515000	197685000	745	0.345710292	1.270776478
L21	4	205000	40735000	684	-0.249486815	0.841195586
L21	4	40855000	48195000	128	0.651738781	1.571060546
L21	4	48195001	52714999	16	0.932019325	1.907944659
L21	4	52715000	62165000	165	0.017874038	1.012466405
L21	4	62335000	63365000	16	-0.407127125	0.754123585
L21	4	63585000	127565000	1083	-0.005892441	0.995924
L21	4	127785000	129985000	40	-0.46138195	0.726290216
L21	4	130155000	150985000	360	-0.079971674	0.946076222
L21	4	150995000	162115000	194	-0.178623187	0.883545792
L21	4	162125000	164045000	32	0.014502227	1.010102871
L21	4	164175000	175605000	188	0.220891644	1.165453662
L21	4	175805000	182465000	103	-0.158806406	0.895765864
L21	4	182635000	184685000	37	0.215690914	1.161259915
L21	4	184855000	190765000	109	-0.158751997	0.895799647
L21	5	185000	23005000	404	0.001791653	1.001242651
L21	5	23175000	40245000	279	-0.208886589	0.865204702
L21	5	40415000	180625000	2369	-0.018218145	0.987451541
L21	6	445000	18235000	324	0.185453967	1.137174747

L21	6	18455000	39545000	267	-0.004142449	0.997132792
L21	6	39715000	58485000	309	-0.22095954	0.857994592
L21	6	61955000	62545000	9	0.220533171	1.165164112
L21	6	62705000	65185000	47	0.042254762	1.029721903
L21	6	65405000	69135000	54	0.457735662	1.373384572
L21	6	69355000	170815000	1806	-0.027701412	0.980982012
L21	7	135000	27755000	460	0.401414084	1.320801884
L21	7	27905000	43895000	294	-0.03573754	0.975532917
L21	7	44165000	49885000	101	0.613372906	1.529831656
L21	7	49895000	62695000	132	0.035999313	1.02526675
L21	7	63565000	66895000	51	0.525390319	1.439322934
L21	7	66975000	71205000	81	0.327617869	1.254939547
L21	7	71215000	83665000	176	0.452261573	1.368183345
L21	7	83675000	131745000	816	0.386179537	1.306927885
L21	7	131755000	159095000	445	0.042267893	1.029731276
L21	8	365000	42065000	726	-0.539794014	0.687869115
L21	8	42305000	93995000	819	0.016973255	1.011834443
L21	8	94165000	123495000	510	0.387826897	1.30842107
L21	8	123555000	146275000	378	0.312765974	1.242086781
L21	9	255000	79745000	861	-0.237003418	0.848505892
L21	9	80115000	91575000	215	0.210224348	1.15686807
L21	9	91585000	94195000	43	0.513472815	1.427482259
L21	9	94355000	97535000	52	0.228918145	1.171955788
L21	9	97705000	115115000	318	-0.2396662	0.846941248
L21	9	115125000	120095000	90	0.024341658	1.017015494
L21	9	120265000	129445000	172	0.189489793	1.140360358
L21	9	129515000	135875000	114	0.545528693	1.459555118
L21	9	136145000	141025000	52	0.067286171	1.047743936
L21	10	295000	38245000	698	0.228627798	1.171719952
L21	10	38335000	135325000	1530	0.08218151	1.058617574
L21	11	245000	43475000	735	-0.041152951	0.971877947
L21	11	43695000	59095000	177	0.208129765	1.155189685
L21	11	59205000	70035000	175	0.425975706	1.343480803
L21	11	70205000	75695000	88	-0.037009252	0.97467338
L21	11	76015000	81095000	90	0.174877418	1.128868484
L21	11	81105000	88885000	142	0.059944307	1.042425519
L21	11	89055000	96645000	124	-0.542542341	0.686559975
L21	11	96655000	103585000	118	0.086276219	1.061626449
L21	11	103755000	134925000	558	-0.380053925	0.768408868
L21	12	395000	120295000	2005	0.0038418	1.002666482
L21	12	120305000	124335000	69	0.169004584	1.124282496
L21	12	124455000	133845000	159	-0.018224268	0.98744735
L21	13	19365000	21745000	36	0.124375307	1.090035641
L21	13	21915000	114995000	1584	0.0078545	1.005459172
L21	14	20465000	107245000	1506	-0.003292536	0.99772039
L21	15	20095000	35465000	188	-0.179482903	0.883019435
L21	15	35555000	45035000	159	-0.129323375	0.914260139
L21	15	45045000	52305000	127	-0.182399192	0.881236287

L21	15	52475000	56505000	75	0.710893784	1.636817851
L21	15	56675000	65085000	147	0.058710601	1.04153448
L21	15	65105000	72025000	126	-0.218944864	0.85919359
L21	15	72105000	74655000	40	0.051746362	1.036518856
L21	15	74825000	91105000	265	0.320694836	1.248931919
L21	15	91155000	96485000	97	0.035691773	1.025048217
L21	15	96495000	102255000	107	-0.173401397	0.886749553
L21	16	125000	11205000	174	0.380240003	1.301558361
L21	16	11215000	22445000	170	0.419919905	1.337853279
L21	16	22715000	31855000	144	0.350302635	1.274828021
L21	16	34225000	89985000	776	-0.24002431	0.846731044
L21	17	5000	15765000	275	0.014673584	1.010222853
L21	17	15905000	31935000	180	0.452255625	1.368177704
L21	17	32105000	35935000	58	0.639500704	1.557789938
L21	17	35935001	36454999	5	0.957879112	1.94245222
L21	17	36455000	43195000	78	0.321308054	1.249462891
L21	17	43365000	52735000	135	0.481532645	1.396226158
L21	17	52745000	56625000	70	0.320549169	1.248805823
L21	17	56895000	68445000	192	0.451247836	1.367222302
L21	17	68505000	77245000	154	0.344705156	1.269891428
L21	17	77805000	81095000	48	0.446348264	1.362586921
L21	18	265000	75605000	1271	-0.016718772	0.988478319
L21	18	75905000	77785000	35	0.521370565	1.435318158
L21	19	305000	59095000	810	-0.034110577	0.976633671
L21	20	165000	32445000	523	0.32125859	1.249420053
L21	20	32595000	38445000	105	0.421141037	1.338986149
L21	20	38615000	50645000	223	-0.043325408	0.970415562
L21	20	50735000	62855000	196	-0.225664711	0.855200908
L21	21	14605000	47995000	575	0.177878173	1.131218934
L21	22	16905000	25345000	109	0.167646199	1.123224414
L21	22	25505000	51115000	432	0.302687896	1.233440305
L21	X	2785000	45385000	764	-0.249936431	0.840933468
L21	X	45555000	152695000	1764	0.001981844	1.001374654
L9	1	1305000	8965000	104	0.265932122	1.202412675
L9	1	9135000	10605000	23	0.065198473	1.04622886
L9	1	10925000	30565000	323	-0.264830715	0.83229639
L9	1	30575000	69695000	680	0.017282047	1.012051038
L9	1	69805000	90185000	367	0.253196331	1.191844757
L9	1	90405000	105495000	239	0.012353375	1.008599472
L9	1	105655000	115595000	161	-0.308049661	0.807732973
L9	1	115755000	119275000	61	-0.007941817	0.994510276
L9	1	119495000	164045000	289	0.500927769	1.415123308
L9	1	164215000	204615000	672	0.008177332	1.005684189
L9	1	204785000	248175000	773	0.273556333	1.208783886
L9	2	45000	33065000	591	0.006536908	1.00454132
L9	2	33285000	85765000	918	0.274688501	1.209732862
L9	2	85935000	242965000	2579	-0.01151317	0.992051437
L9	3	185000	5885000	112	0.18325702	1.135444367

L9	3	5895000	45575000	717	0.025739478	1.018001353
L9	3	45745000	70235000	445	-0.306474229	0.808615504
L9	3	70305000	103275000	503	-0.020575707	0.985839227
L9	3	103285000	176195000	1271	0.260117481	1.197576221
L9	3	176225000	194075000	320	0.016321362	1.011377341
L9	3	194205000	197755000	50	-0.246931438	0.842686876
L9	4	105000	58835000	945	-0.327843032	0.796726777
L9	4	58845000	68395000	155	-0.061618461	0.95818859
L9	4	68605000	84935000	276	-0.307378679	0.808108729
L9	4	85155000	108355000	400	-0.007065653	0.995114436
L9	4	108505000	190795000	1401	-0.333164019	0.79379368
L9	5	175000	45845000	787	-0.001057893	0.999266993
L9	5	49555000	145035000	1634	-0.315025991	0.803836509
L9	5	145205000	180595000	633	-0.05244366	0.964301595
L9	6	235000	3975000	67	-0.287036218	0.819584032
L9	6	4145000	41215000	550	0.051278733	1.036182938
L9	6	41385000	146885000	1778	0.254178161	1.192656146
L9	6	147255000	157895000	197	-0.001190036	0.99917547
L9	6	158065000	170865000	231	-0.319427651	0.801387743
L9	7	335000	22825000	368	0.008040982	1.005589146
L9	7	22995000	48305000	460	-0.298953694	0.812841692
L9	7	48475000	76935000	363	-0.01862942	0.987170084
L9	7	77105000	143125000	1108	0.232682483	1.175017695
L9	7	143795000	150645000	116	-0.028704313	0.980300312
L9	7	151005000	159015000	133	0.252223572	1.191041409
L9	8	235000	27605000	466	-0.338547275	0.790837247
L9	8	27775000	61945000	539	-0.00294959	0.997957589
L9	8	61985000	63285000	23	-0.316017927	0.803284015
L9	8	63455000	80935000	296	-0.028050022	0.980744999
L9	8	81155000	103595000	392	0.286032465	1.219282531
L9	8	103795000	115035000	182	0.438202901	1.35491552
L9	8	115455000	121765000	114	0.241245874	1.182012976
L9	8	121935000	124685000	54	-0.000463454	0.99967881
L9	8	124855000	146075000	350	0.260036976	1.197509396
L9	9	5945000	21045000	276	0.6025411	1.518388636
L9	9	21245000	93075000	719	0.03242606	1.022730521
L9	9	93345000	136885000	785	-0.291045836	0.817309361
L9	9	137155000	141005000	39	0.012591095	1.008765677
L9	10	105000	14095000	266	0.241265699	1.18202922
L9	10	14105000	65995000	787	-0.003468757	0.997598529
L9	10	66205000	135375000	1178	-0.309373215	0.806992284
L9	11	295000	22305000	361	-0.305522126	0.809149324
L9	11	22475000	64455000	638	-0.005732268	0.996034578
L9	11	64675000	89125000	417	0.253630474	1.192203467
L9	11	89345000	134925000	798	-0.037415139	0.974399205
L9	12	395000	3685000	51	0.325056206	1.252713242
L9	12	3855000	26385000	376	0.016609488	1.011579347
L9	12	26605000	133495000	1800	-0.310111113	0.806579636

L9	13	19255000	29345000	173	-0.298951399	0.812842984
L9	13	29355000	42935000	239	-0.091548641	0.938514773
L9	13	42945000	94735000	853	-0.333526377	0.79359433
L9	13	94855000	115095000	360	0.002043006	1.001417107
L9	14	19115000	31715000	192	-0.149041566	0.901849395
L9	14	31885000	48545000	279	-0.311338255	0.805893859
L9	14	49015000	60245000	205	0.031102248	1.021792497
L9	14	60325000	80845000	368	-0.230429992	0.852380804
L9	14	81005000	107235000	452	0.011192681	1.007788348
L9	15	22855000	102255000	1342	-0.284211159	0.821190499
L9	16	125000	68955000	910	0.001527005	1.001058999
L9	16	69125000	88265000	339	-0.288937199	0.81850481
L9	17	135000	19395000	319	-0.272468063	0.827902016
L9	17	19545000	54525000	448	-0.144821795	0.904491095
L9	17	54535000	81025000	437	-0.017354602	0.988042769
L9	18	195000	24895000	380	0.012689668	1.008834604
L9	18	25005000	77795000	928	-0.326802211	0.797301777
L9	19	265000	59085000	811	0.026907559	1.018825913
L9	20	255000	33845000	542	-0.005666718	0.996079834
L9	20	34005000	47445000	249	-0.305411197	0.809211542
L9	20	47605000	62755000	253	0.043754678	1.030793024
L9	21	14425000	48015000	576	0.030237318	1.021180092
L9	22	17235000	51145000	542	0.027798904	1.019455572
L9	X	2815000	107455000	1721	-0.013136925	0.99093551
L9	X	107465000	152555000	807	-0.33857623	0.790821374
L19	1	1305000	24015000	343	-0.178748409	0.883469106
L19	1	24195000	106985000	1423	0.053262428	1.037608662
L19	1	107055000	121255000	221	-0.184429517	0.879996983
L19	1	121265000	248185000	1726	0.001540696	1.0010685
L19	2	65000	32015000	573	-0.112253721	0.925141712
L19	2	32025000	242995000	3524	-0.013922554	0.990396037
L19	3	165000	89805000	1601	-0.18319252	0.880751834
L19	3	89815000	197645000	1822	-0.001423196	0.999014002
L19	4	105000	94025000	1536	0.001354369	1.000939218
L19	4	94355000	190765000	1646	-0.207003367	0.866334835
L19	5	195000	49635000	789	0.010911057	1.00759164
L19	5	49645000	169095000	2082	-0.184114425	0.8801892
L19	5	169315000	180595000	183	0.332667799	1.259339966
L19	6	205000	11405000	200	0.061218414	1.043346537
L19	6	11585000	18045000	119	0.255704366	1.193918507
L19	6	18065000	170765000	2512	0.025478347	1.017817109
L19	7	95000	8985000	132	-0.194382696	0.873946762
L19	7	9215000	51945000	759	0.22578933	1.169416887
L19	7	52155000	158965000	1666	0.044843114	1.031570995
L19	8	195000	33615000	577	-0.265819093	0.831726386
L19	8	33795000	56365000	328	-0.055159913	0.962487752
L19	8	56455000	97905000	711	0.253595395	1.192174479
L19	8	97915000	100865000	54	-0.239848711	0.846834111

L19	8	101045000	142245000	725	0.219195067	1.16408392
L19	8	142255000	146275000	38	0.01016543	1.007071022
L19	9	355000	36885000	662	-0.201032565	0.869927716
L19	9	36895000	140915000	1267	-0.048794157	0.966744022
L19	10	145000	42985000	713	0.039732315	1.027923083
L19	10	43215000	135395000	1517	-0.190147696	0.876515984
L19	11	295000	16135000	255	-0.148314616	0.902303936
L19	11	16205000	20655000	77	0.007754212	1.00538928
L19	11	20885000	39225000	315	-0.133211379	0.911799562
L19	11	39405000	130745000	1492	-0.067455049	0.954319959
L19	11	130815000	134855000	73	-0.134244024	0.911147152
L19	12	305000	39615000	589	0.062133527	1.04400855
L19	12	39625000	133475000	1646	-0.18091961	0.882140518
L19	13	19255000	115085000	1627	-0.013383974	0.990765835
L19	14	20505000	107095000	1503	-0.02070848	0.985748503
L19	15	20175000	29425000	101	-0.288041861	0.819012933
L19	15	29605000	86195000	947	-0.022371264	0.984613029
L19	15	86285000	102345000	293	-0.167018431	0.890681522
L19	16	275000	34975000	501	0.001200958	1.000832787
L19	16	46555000	90135000	764	-0.198012644	0.871750599
L19	17	155000	21075000	347	-0.188598438	0.877457748
L19	17	21855000	34815000	145	0.020229236	1.014120605
L19	17	35045000	80995000	707	0.002133416	1.001479865
L19	18	175000	18745000	272	0.148890608	1.108716572
L19	18	18865000	77825000	1038	-0.205775646	0.867072392
L19	19	305000	7595000	79	-0.163848672	0.892640598
L19	19	7755000	10045000	35	0.283159178	1.216856611
L19	19	10155000	24295000	218	0.063892419	1.045282151
L19	19	28255000	35975000	139	-0.243865948	0.844479351
L19	19	36305000	58975000	328	0.154224769	1.112823483
L19	20	205000	62855000	1052	0.036729583	1.025785856
L19	21	14685000	48095000	575	-0.152743925	0.899537964
L19	22	17355000	33895000	259	-0.212660995	0.862944095
L19	22	34075000	41915000	135	0.249729475	1.188984143
L19	22	42095000	51165000	140	-0.185226289	0.879511113
L19	X	2855000	57895000	957	-0.13818987	0.908658522
L19	X	57905000	152555000	1570	-0.042215317	0.971162542
L10	1	1305000	120275000	1988	0.002768236	1.001920637
L10	1	120285000	249185000	1732	0.252622179	1.191370531
L10	2	5000	242995000	4098	0.004930738	1.003423574
L10	3	215000	197695000	3423	0.225452306	1.169143734
L10	4	215000	190495000	3182	-0.003347705	0.997682238
L10	5	105000	42565000	731	0.228764918	1.171831322
L10	5	42835000	180675000	2326	0.00681815	1.004737167
L10	6	495000	65645000	975	0.242421119	1.182976258
L10	6	65705000	170795000	1858	-0.284108204	0.821249104
L10	7	115000	55995000	963	0.230987542	1.173638044
L10	7	56005000	158945000	1600	0.002959307	1.002053341

L10	8	165000	17655000	284	-0.013053727	0.990992657
L10	8	17975000	25065000	132	-0.287434418	0.819357849
L10	8	25075000	146275000	2025	-0.008531137	0.994104116
L10	9	255000	141035000	1934	0.003874267	1.002689046
L10	10	305000	135415000	2231	-0.003144445	0.99782281
L10	11	255000	134855000	2222	0.004210757	1.002922938
L10	12	325000	133845000	2237	-0.000558307	0.999613086
L10	13	19255000	114945000	1624	0.007866874	1.005467796
L10	14	19115000	107245000	1507	-0.005114536	0.99646115
L10	15	20185000	102285000	1344	-0.004113825	0.997152576
L10	16	155000	90145000	1269	0.21411212	1.159989801
L10	17	165000	17715000	300	-0.24763888	0.842273756
L10	17	17725000	81005000	906	-0.0127276	0.991216701
L10	18	175000	77845000	1312	0.014574418	1.010153417
L10	19	315000	58945000	807	-0.017660105	0.987833565
L10	20	155000	62785000	1052	0.244618231	1.184779211
L10	21	14605000	48015000	575	0.216658206	1.162038772
L10	22	17335000	51105000	540	-0.03110294	0.978671817
L10	X	2825000	152575000	2529	-0.332021725	0.794422437
M11	1	1305000	145625000	2001	-0.157799393	0.896391334
M11	1	146545000	249195000	1716	0.470790136	1.385868274
M11	2	35000	242955000	4096	-0.021254726	0.985375341
M11	3	175000	197655000	3423	-0.038578549	0.973613752
M11	4	155000	43045000	726	0.050029285	1.035285939
M11	4	43165000	70245000	390	0.354241329	1.278313177
M11	4	70255000	168895000	1693	0.059107096	1.041820764
M11	4	169065000	190705000	369	0.094899415	1.067990945
M11	5	55000	59595000	971	0.448861191	1.364962382
M11	5	59765000	180595000	2086	-0.04726375	0.967770085
M11	6	225000	49405000	759	0.127503863	1.092402002
M11	6	49575000	57095000	130	0.824277065	1.770647544
M11	6	57665000	140895000	1399	0.169608838	1.124753486
M11	6	140945000	170795000	541	-0.351174023	0.783945886
M11	7	105000	63435000	996	0.210657556	1.157215503
M11	7	63805000	159095000	1567	0.031734129	1.022240127
M11	8	195000	36735000	635	-0.354247661	0.78227748
M11	8	36955000	38675000	34	0.423780636	1.341438241
M11	8	38685000	62625000	350	-0.013264385	0.990847966
M11	8	62635000	70875000	143	0.197725631	1.14688889
M11	8	71145000	125545000	934	0.986394609	1.98122758
M11	8	125545001	125814999	5	1.074155032	2.105488553
M11	8	125815000	146145000	334	-0.135009125	0.910664074
M11	9	265000	15195000	275	0.169273987	1.12449246
M11	9	15335000	27695000	223	-0.237035866	0.848486808
M11	9	27755000	140925000	1430	0.186182772	1.137749358
M11	10	145000	135445000	2234	0.052119729	1.03678714
M11	11	455000	17045000	270	-0.349616602	0.78479263
M11	11	17395000	36945000	339	0.965030107	1.952104259

M11	11	37115000	71515000	496	0.051171683	1.036106055
M11	11	71685000	134945000	1108	-0.328930022	0.796126714
M11	12	395000	116045000	1926	0.05471229	1.038651949
M11	12	116165000	133765000	305	0.196116839	1.145610673
M11	13	19255000	79645000	1018	-0.334439227	0.79309235
M11	13	79865000	115075000	606	0.172765376	1.127217079
M11	14	20545000	49935000	492	0.289729517	1.222411073
M11	14	49945000	107095000	1010	-0.314217362	0.804287185
M11	15	20165000	79585000	948	0.048570752	1.034239816
M11	15	79755000	102365000	395	0.573353174	1.487977978
M11	16	285000	90135000	1267	0.181447446	1.134021071
M11	17	5000	11355000	192	-0.337709695	0.791296513
M11	17	11525000	45915000	426	0.521708928	1.43565483
M11	17	46085000	81075000	586	0.194863839	1.144616127
M11	18	155000	46395000	759	-0.018435747	0.987302615
M11	18	46465000	74105000	484	0.227225028	1.170581211
M11	18	74325000	77865000	64	-0.19615836	0.872871774
M11	19	255000	59025000	810	0.220737245	1.16532894
M11	20	245000	3245000	55	-0.303194481	0.81045586
M11	20	3405000	13565000	187	0.422851263	1.340574376
M11	20	13735000	16955000	60	-0.010208027	0.992949308
M11	20	17125000	62895000	740	0.488556151	1.40304001
M11	21	14665000	48085000	576	0.020745674	1.014483693
M11	22	17355000	51145000	541	0.091362897	1.065376156
M11	X	2705000	152665000	2532	-0.093805904	0.937047506
L18	1	1305000	248165000	3717	0.021160727	1.014775594
L18	2	5000	242895000	4096	-0.000630796	0.999562861
L18	3	125000	197685000	3425	0.001563032	1.001083998
L18	4	205000	68085000	1093	-0.038637649	0.973573869
L18	4	68105000	77285000	148	0.197558505	1.146756039
L18	4	77295000	153645000	1314	-0.006779098	0.99531211
L18	4	153645001	154224999	10	0.483537546	1.39816783
L18	4	154225000	160095000	105	0.237308404	1.17879137
L18	4	160205000	190795000	512	0.053969605	1.038117399
L18	5	165000	180525000	3057	-0.000810899	0.999438085
L18	6	205000	102595000	1605	-0.00433194	0.997001831
L18	6	102655000	130405000	493	0.323094087	1.251010664
L18	6	130585000	170895000	735	0.024676499	1.017251565
L18	7	85000	159045000	2565	0.009298949	1.006466357
L18	8	275000	146295000	2442	0.02933536	1.020541861
L18	9	355000	141045000	1932	0.013603895	1.009474099
L18	10	195000	135295000	2230	0.010179414	1.007080783
L18	11	275000	134895000	2223	-0.00914874	0.993678641
L18	12	1305000	133845000	2221	0.001596702	1.001107362
L18	13	19255000	115065000	1626	-0.013836603	0.990455042
L18	14	20455000	107065000	1503	-0.004524496	0.996868771
L18	15	20095000	102385000	1347	0.004937553	1.003428314
L18	16	155000	90035000	1267	-0.020683391	0.985765646

L18	17	65000	26215000	372	-0.046905392	0.968010504
L18	17	26495000	40655000	186	0.277627486	1.21219978
L18	17	40705000	81045000	646	-0.005419714	0.996250388
L18	18	225000	77875000	1312	-0.051431588	0.964978305
L18	19	355000	15635000	204	0.143505588	1.104585878
L18	19	15645000	59015000	603	0.055568438	1.039268506
L18	20	155000	62855000	1053	-0.006360256	0.99560111
L18	21	14685000	48045000	574	-0.000348976	0.999758137
L18	22	17325000	51185000	543	0.006122001	1.004252464
L18	X	2865000	152625000	2529	-0.036990624	0.974685965
L11	1	1305000	121255000	1992	-0.117016605	0.922092505
L11	1	145175000	240605000	1582	0.617390837	1.534098202
L11	1	240825000	248105000	135	0.615350676	1.531930318
L11	2	55000	243045000	4098	-0.143596202	0.905259802
L11	3	105000	197685000	3425	0.04192946	1.029489746
L11	4	205000	139045000	2287	-0.056643133	0.961498736
L11	4	139305000	190785000	895	0.395686262	1.315568402
L11	5	205000	180575000	3057	0.044394851	1.031250523
L11	6	245000	66995000	993	0.07257144	1.051589352
L11	6	67165000	170865000	1841	-0.69437349	0.617977626
L11	7	335000	158975000	2562	0.018494632	1.012902024
L11	8	195000	28275000	480	-0.633839667	0.644458933
L11	8	28445000	146095000	1957	0.062786449	1.044481145
L11	9	215000	141045000	1935	-0.684683134	0.622142456
L11	10	315000	92995000	1494	0.045430505	1.031991083
L11	10	93155000	103665000	171	0.440836038	1.357390704
L11	10	103835000	107955000	76	-0.691114391	0.619375237
L11	10	108125000	112295000	80	0.445080367	1.361389953
L11	10	112465000	114465000	36	-0.740073848	0.598708705
L11	10	114635000	117895000	57	0.488076484	1.402573605
L11	10	118065000	135285000	296	-0.621631887	0.649935345
L11	11	205000	67085000	1051	0.010078975	1.007010673
L11	11	67085001	70454999	49	2.074533566	4.212082127
L11	11	70455000	134865000	1123	-0.680777529	0.623828976
L11	12	335000	6725000	109	0.505935131	1.420043507
L11	12	7045000	15795000	137	-0.615873322	0.652534768
L11	12	16065000	18295000	39	-0.04015844	0.972548134
L11	12	18385000	23665000	88	-0.671435231	0.627881743
L11	12	23885000	133845000	1850	-0.032156249	0.977957551
L11	13	19355000	115045000	1624	0.005691405	1.003952773
L11	14	20515000	107125000	1504	0.05101717	1.035995093
L11	15	20195000	102395000	1346	0.058509561	1.041389352
L11	16	275000	15795000	247	0.508823469	1.422889343
L11	16	15965000	50545000	325	0.032030195	1.02244993
L11	16	50715000	90055000	688	-0.681144093	0.623670492
L11	17	75000	19525000	324	-0.620656499	0.650374907
L11	17	19695000	81095000	883	0.079370474	1.056556907
L11	18	205000	77895000	1312	-0.015626087	0.989227268

L11	19	335000	59025000	808	0.080590557	1.057450812
L11	20	155000	62755000	1051	0.055328851	1.03909593
L11	21	14425000	48095000	578	0.023496017	1.016419541
L11	22	17365000	51165000	541	-0.645665139	0.639198027
L11	X	2755000	152655000	2531	-0.003459	0.997605276
L5	1	1305000	39295000	603	-0.270584125	0.828983835
L5	1	39355000	46585000	128	0.239093111	1.180250514
L5	1	46595000	158505000	1438	-0.024263807	0.98332225
L5	1	158515000	167545000	162	0.211463046	1.157861784
L5	1	167565000	180225000	225	0.083953354	1.059918513
L5	1	180445000	212845000	521	0.289538243	1.222249016
L5	1	212955000	248135000	634	-0.203369473	0.868519729
L5	2	5000	242915000	4096	0.008068575	1.005608379
L5	3	135000	159675000	2775	-0.24842293	0.841816137
L5	3	159845000	197685000	646	0.010131545	1.007047369
L5	4	205000	190725000	3183	-0.284159821	0.821219722
L5	5	145000	180545000	3057	0.001688089	1.001170779
L5	6	215000	72045000	1079	-0.012360679	0.991468829
L5	6	72085000	170845000	1757	-0.301625606	0.811337679
L5	7	305000	159025000	2564	0.002624437	1.001820777
L5	8	245000	48445000	767	-0.105908709	0.929219472
L5	8	48555000	146245000	1672	-0.005293061	0.996337852
L5	9	255000	2435000	39	-0.170149443	0.888750614
L5	9	2445000	88155000	977	-0.094970949	0.936291101
L5	9	88375000	96245000	140	-0.149518571	0.901551261
L5	9	96285000	140995000	773	-0.07269122	0.950862593
L5	10	165000	42735000	709	0.049211475	1.03469924
L5	10	42955000	135335000	1520	-0.293354709	0.816002395
L5	11	255000	98815000	1584	-0.006729963	0.995346009
L5	11	98985000	134835000	634	-0.30754187	0.808017324
L5	12	205000	105835000	1735	0.019293868	1.013463315
L5	12	105845000	133335000	499	0.333384103	1.259965388
L5	13	19205000	114945000	1625	-0.266545883	0.831307491
L5	14	19115000	31675000	192	-0.052834699	0.964040259
L5	14	31805000	107245000	1313	-0.256078119	0.837361145
L5	15	22865000	102245000	1342	0.016505775	1.011506629
L5	16	165000	90095000	1268	0.007768148	1.005398992
L5	17	115000	22015000	353	-0.28580256	0.820285163
L5	17	22055000	80935000	852	-0.002132368	0.998523047
L5	18	55000	77785000	1312	0.011537426	1.008029197
L5	19	255000	59095000	811	-0.039384923	0.973069717
L5	20	155000	62895000	1054	0.049627975	1.034997997
L5	21	14615000	47935000	574	0.026281213	1.018383686
L5	22	17205000	49205000	518	-0.300709157	0.811853232
L5	22	49215000	51195000	26	0.227388829	1.170714125
L5	X	2865000	10695000	148	-0.307729487	0.807912251
L5	X	11015000	152675000	2379	-0.000342014	0.999762962
L26	1	1305000	249195000	3720	0.027921859	1.019542459

L26	2	65000	243045000	4098	0.01201192	1.008360787
L26	3	235000	197595000	3420	0.000323003	1.000223914
L26	4	115000	190795000	3186	-0.030617464	0.979001202
L26	5	75000	180645000	3061	0.000717971	1.000497783
L26	6	405000	170895000	2837	0.010474938	1.007287096
L26	7	365000	159095000	2564	-0.00305435	0.997885125
L26	8	205000	75445000	1245	0.027035259	1.018916098
L26	8	75475000	129495000	933	0.572434892	1.487031174
L26	8	129645000	138625000	167	0.145720107	1.106282706
L26	8	138795000	146145000	90	0.044922543	1.03162779
L26	9	265000	116405000	1520	-0.000364459	0.999747408
L26	9	116415000	123235000	130	0.187861432	1.139073966
L26	9	123455000	140935000	279	-0.010679028	0.99262519
L26	10	155000	135445000	2234	0.001602301	1.001111248
L26	11	605000	112085000	1813	-0.006345677	0.995611171
L26	11	112095000	134785000	406	0.166410454	1.122262725
L26	12	205000	133775000	2237	-0.008729258	0.993967608
L26	13	19205000	115045000	1627	0.011196738	1.007791182
L26	14	20455000	107085000	1504	-0.015693432	0.989181092
L26	15	20055000	102385000	1348	0.022691999	1.015853245
L26	16	355000	90145000	1267	0.001849422	1.001282744
L26	17	165000	80945000	1205	-0.022009424	0.98486001
L26	18	65000	77975000	1315	0.04949923	1.034905638
L26	19	395000	59095000	808	-0.122956506	0.918303846
L26	20	315000	37005000	600	0.051245298	1.036158924
L26	20	37225000	47245000	187	0.114178496	1.08235855
L26	20	47465000	62895000	258	0.047190947	1.033251134
L26	21	14675000	47945000	573	0.008794578	1.006114555
L26	22	16915000	51145000	544	-0.005564124	0.996150671
L26	X	2815000	152645000	2530	-0.04360001	0.970230871
M12	1	1305000	120345000	1989	0.058602481	1.041456427
M12	1	121235000	188735000	714	0.429554732	1.346817835
M12	1	188745000	249195000	1014	0.600774395	1.516530375
M12	2	175000	243005000	4095	-0.000231861	0.999839299
M12	3	235000	197625000	3421	-0.020422782	0.985943731
M12	4	155000	190795000	3185	-0.032307129	0.97785528
M12	5	225000	180565000	3056	0.128924005	1.093477856
M12	6	245000	170875000	2837	0.048048655	1.033865603
M12	7	355000	159075000	2564	0.138230108	1.100554132
M12	8	305000	146295000	2441	0.158426381	1.116069122
M12	9	355000	140995000	1931	-0.006001273	0.995848875
M12	10	105000	135395000	2234	-0.005345337	0.99630175
M12	11	255000	134825000	2222	0.004433883	1.003078061
M12	12	305000	133495000	2235	-0.016132781	0.988879899
M12	13	19215000	115055000	1627	0.133051472	1.096610712
M12	14	20455000	107145000	1505	0.115192452	1.083119521
M12	15	20075000	102395000	1348	0.147635083	1.107752116
M12	16	155000	34995000	502	0.114344344	1.082482982

M12	16	46565000	90095000	763	-0.190539264	0.876278117
M12	17	15000	29815000	415	-0.104859358	0.92989559
M12	17	29825000	81075000	796	0.157561683	1.115400392
M12	18	255000	77995000	1312	0.170122814	1.125154263
M12	19	975000	59095000	808	0.106070851	1.076292981
M12	20	185000	62895000	1053	0.197968258	1.147081786
M12	21	14695000	48045000	574	-0.008100084	0.994401182
M12	22	17325000	50995000	541	0.002263233	1.001569985
M12	X	2705000	71915000	1140	0.123149662	1.089109992
M12	X	72345000	100105000	451	0.020616968	1.014393192
M12	X	100255000	152565000	932	0.107534758	1.077385652
L22	1	1305000	33205000	498	-0.133489479	0.911623817
L22	1	33215000	69295000	631	0.043828046	1.030845446
L22	1	69405000	147345000	889	-0.102141125	0.93164929
L22	1	147365000	168815000	335	0.15237309	1.111396106
L22	1	168825000	248165000	1362	0.025308226	1.017697096
L22	2	45000	86745000	1532	0.026264762	1.018372073
L22	2	86845000	110445000	282	-0.122730984	0.918447407
L22	2	111405000	229545000	2047	-0.005013439	0.99653098
L22	2	229725000	242975000	229	-0.0992481	0.933519394
L22	3	205000	101435000	1746	-0.119659732	0.920404708
L22	3	101555000	114035000	220	0.005867458	1.004075294
L22	3	114055000	148055000	595	-0.075456682	0.949041656
L22	3	148235000	174245000	454	0.368911195	1.291377857
L22	3	174475000	197795000	400	0.018592392	1.012970663
L22	4	105000	44925000	763	-0.01211642	0.991636706
L22	4	45055000	95405000	793	-0.060596387	0.958867657
L22	4	95415000	159785000	1108	-0.041587979	0.971584932
L22	4	159905000	190345000	515	-0.111463111	0.925648837
L22	5	75000	25385000	439	-0.143838094	0.905108033
L22	5	25395000	44865000	334	-0.017893011	0.987674104
L22	5	44875000	180555000	2286	-0.122254921	0.918750528
L22	6	235000	28055000	489	-0.093217141	0.937429993
L22	6	28065000	56715000	394	0.044232923	1.031134782
L22	6	56855000	70115000	155	-0.201460574	0.86966967
L22	6	70295000	144335000	1311	-0.011888868	0.991793126
L22	6	144515000	154595000	185	-0.117209886	0.921968978
L22	6	154775000	170845000	289	0.00674801	1.00468832
L22	7	105000	158935000	2563	-0.007589017	0.994753505
L22	8	165000	146245000	2443	-0.010074831	0.993040986
L22	9	205000	20895000	379	0.311035597	1.240597907
L22	9	21085000	27845000	123	-0.29467168	0.815257843
L22	9	27955000	113235000	960	-0.008259247	0.994291482
L22	9	113245000	140905000	465	-0.090287981	0.939335227
L22	10	105000	42895000	712	-0.002216232	0.998465004
L22	10	42905000	135395000	1522	-0.118653746	0.921046726
L22	11	205000	95395000	1529	-0.006899057	0.995229354
L22	11	95655000	111125000	268	-0.129219195	0.914326161

L22	11	111155000	134945000	425	-0.048080106	0.967222623
L22	12	315000	28385000	467	0.139092402	1.101212126
L22	12	28395000	48515000	279	-0.029716183	0.979612995
L22	12	48555000	133845000	1490	-0.104480999	0.930139495
L22	13	19225000	48105000	502	0.015914325	1.011092035
L22	13	48115000	94695000	763	-0.059305766	0.959725834
L22	13	94755000	115035000	361	-0.00702118	0.995145112
L22	14	20455000	34645000	248	0.10894107	1.07843638
L22	14	34675000	106895000	1255	-0.124857145	0.917094849
L22	15	20075000	64475000	696	-0.117136947	0.922015592
L22	15	64485000	102345000	651	0.037203169	1.02612264
L22	16	105000	28575000	452	-0.019960338	0.986259818
L22	16	29005000	90055000	813	-0.082130301	0.944661717
L22	17	85000	55165000	781	-0.092926967	0.93761856
L22	17	55345000	81065000	423	0.119769845	1.086561508
L22	18	245000	46605000	761	0.014977663	1.010435802
L22	18	46785000	77845000	545	-0.113765456	0.924172806
L22	19	305000	59095000	810	-0.071374657	0.951730719
L22	20	325000	62855000	1050	-0.09416138	0.936816648
L22	21	14685000	48045000	574	-0.020682481	0.985766268
L22	22	17325000	51195000	543	-0.003934168	0.997276757
L22	X	2875000	152575000	2528	-0.161336622	0.894196236
M10	1	1305000	248875000	3719	0.029488704	1.02065034
M10	2	105000	223925000	3764	-0.046526664	0.968264654
M10	2	224105000	242785000	326	-0.17890201	0.88337505
M10	3	105000	32215000	587	0.006716187	1.004666159
M10	3	32225000	57645000	450	-0.185637908	0.879260213
M10	3	57665000	197655000	2387	0.004267659	1.002962495
M10	4	185000	190795000	3184	-0.003022826	0.99790693
M10	5	225000	180635000	3058	8.12E-05	1.000056318
M10	6	465000	170745000	2833	0.016863887	1.011757741
M10	7	75000	159015000	2565	0.009882569	1.00687359
M10	8	245000	15995000	254	-0.412469941	0.75133596
M10	8	16275000	35425000	353	-0.138300997	0.908588533
M10	8	35705000	146205000	1826	0.569634487	1.484147508
M10	9	205000	140975000	1934	-0.193048425	0.874755403
M10	10	255000	2095000	36	-0.33263378	0.79408548
M10	10	2205000	16275000	268	0.079237019	1.056459176
M10	10	16455000	31995000	271	0.195189426	1.144874473
M10	10	32155000	65125000	453	-0.189678491	0.876801097
M10	10	65135000	83345000	291	-0.031591756	0.978340278
M10	10	83625000	127995000	790	0.286976881	1.220080958
M10	10	128175000	135405000	109	-0.149110292	0.901806434
M10	11	485000	128345000	2105	0.014693542	1.010236829
M10	11	128515000	130295000	31	0.214799844	1.160542892
M10	11	130375000	134895000	82	-0.165213854	0.891796317
M10	12	205000	55995000	867	-0.02713521	0.981367085
M10	12	56325000	133495000	1366	0.18659132	1.138071596

M10	13	19275000	115095000	1627	-0.05296418	0.963953741
M10	14	19145000	107245000	1506	-0.003187962	0.997792713
M10	15	22875000	102295000	1343	0.017443578	1.012164358
M10	16	125000	52935000	623	0.208859858	1.15577443
M10	16	53115000	90105000	643	-0.020902819	0.985615726
M10	17	135000	81025000	1207	-0.001696791	0.998824565
M10	18	205000	77875000	1312	0.016282218	1.011349901
M10	19	355000	28545000	343	0.03259944	1.022853438
M10	19	28635000	38265000	167	0.452712901	1.36861143
M10	19	38405000	49345000	167	-0.079987286	0.946065984
M10	19	49705000	57605000	102	0.384714143	1.305601068
M10	19	57805000	59005000	18	-0.095819143	0.935740796
M10	20	155000	62855000	1053	0.048383415	1.034105527
M10	21	14685000	48035000	574	0.015513639	1.010811259
M10	22	17315000	51155000	542	0.035706866	1.02505894
M10	X	2705000	152695000	2533	-0.022355809	0.984623577
L15	1	1305000	248185000	3718	0.000932513	1.000646577
L15	2	55000	8605000	152	-0.102439938	0.931456346
L15	2	8775000	242995000	3942	-0.004808315	0.996672678
L15	3	215000	49975000	904	-0.012915536	0.991087586
L15	3	49985000	88565000	676	-0.178956902	0.88334144
L15	3	88575000	197615000	1841	-0.002165457	0.998500145
L15	4	135000	190335000	3182	0.002983588	1.002070205
L15	5	55000	16435000	303	-0.08195195	0.944778507
L15	5	16445000	180675000	2759	-0.002004511	0.998611544
L15	6	495000	8135000	139	-0.20314918	0.868652358
L15	6	8405000	37875000	423	0.304427439	1.234928435
L15	6	38095000	96335000	925	0.003112734	1.002159912
L15	6	96555000	118845000	391	0.366163065	1.288920306
L15	6	119065000	123875000	89	-0.137762639	0.908927646
L15	6	123905000	161305000	682	0.008462977	1.005883328
L15	6	161475000	170745000	166	-0.07844304	0.947079186
L15	7	65000	158975000	2565	0.141985396	1.10342257
L15	8	195000	55615000	894	-0.158861162	0.895731867
L15	8	55785000	146295000	1545	0.109818352	1.079092361
L15	9	365000	32055000	575	-0.124028579	0.917621705
L15	9	32065000	118525000	983	0.013350196	1.009296598
L15	9	118535000	123845000	101	-0.102986198	0.931103728
L15	9	123855000	141015000	272	0.019545944	1.013640409
L15	10	155000	135415000	2233	-0.001771384	0.998772924
L15	11	485000	47285000	801	-0.13139763	0.912946592
L15	11	47295000	130035000	1333	-0.012717852	0.991223398
L15	11	130045000	134885000	87	-0.148216499	0.902365303
L15	12	355000	25455000	413	-0.165068155	0.891886384
L15	12	25465000	133825000	1823	0.014168785	1.009869438
L15	13	19345000	115075000	1625	-0.159060754	0.895607954
L15	14	20545000	107235000	1504	-0.002361534	0.998364448
L15	15	22855000	89085000	1104	-0.126381972	0.916126056

L15	15	89095000	102385000	241	0.304309298	1.234827312
L15	16	355000	90035000	1265	0.012292026	1.008556583
L15	17	55000	17695000	302	-0.112682689	0.924866674
L15	17	17825000	81095000	906	0.041531515	1.029205816
L15	18	225000	77875000	1312	-0.023549846	0.983808997
L15	19	345000	59075000	809	0.107380686	1.0772706
L15	20	205000	56315000	961	-0.027556797	0.98108035
L15	20	56585000	62775000	86	-0.091653387	0.938446635
L15	21	14445000	48035000	576	0.003000705	1.002082095
L15	22	16905000	51125000	544	0.00917995	1.006383344
L15	X	2795000	152665000	2530	-0.099376958	0.933436018
L17	1	1305000	240715000	3579	0.007992245	1.005555175
L17	1	240895000	248865000	135	0.054387957	1.038418475
L17	2	95000	242925000	4095	-0.004714017	0.996737825
L17	3	155000	197775000	3425	-0.005063271	0.996496559
L17	4	255000	190345000	3180	0.018453152	1.012872902
L17	5	55000	180575000	3060	-0.010238992	0.992927996
L17	6	405000	170745000	2834	0.001165988	1.000808528
L17	7	75000	158995000	2565	-0.024229378	0.983345717
L17	8	155000	146135000	2442	-0.000306995	0.99978723
L17	9	265000	140885000	1931	0.004530034	1.003144915
L17	10	115000	135395000	2234	-0.005035591	0.996515679
L17	11	295000	134875000	2222	-0.006606475	0.995431209
L17	12	355000	133385000	2233	0.018473265	1.012887023
L17	13	19215000	115055000	1627	0.00317933	1.002206174
L17	14	20535000	107245000	1504	0.006933946	1.004817814
L17	15	22845000	102395000	1345	0.003271404	1.002270138
L17	16	375000	48745000	541	0.051613035	1.03642307
L17	16	48875000	90055000	722	0.006633636	1.004608674
L17	17	85000	10495000	173	0.09638991	1.069094891
L17	17	10555000	57435000	642	0.04539144	1.031963139
L17	17	57445000	80995000	391	0.069036571	1.049015919
L17	18	175000	77845000	1312	-0.02009567	0.986167306
L17	19	325000	58995000	808	0.126212243	1.091424431
L17	20	225000	62645000	1050	-0.038705188	0.973528293
L17	21	14425000	48035000	577	-0.009611841	0.993359725
L17	22	17315000	51165000	542	0.015694605	1.010938059
L17	X	2845000	152685000	2530	0.009278265	1.006451928
M27	1	1305000	248895000	3719	0.005201907	1.003612196
M27	2	125000	242945000	4095	-0.01603379	0.988947753
M27	3	175000	197765000	3424	-0.015600355	0.989244912
M27	4	245000	190345000	3180	-0.006625451	0.995418116
M27	5	55000	180635000	3061	-0.018982425	0.986928569
M27	6	465000	170875000	2836	-0.012450887	0.991406837
M27	7	105000	158995000	2564	0.001324034	1.000918172
M27	8	175000	40125000	695	-0.19505227	0.873541246
M27	8	40355000	145945000	1740	0.518871027	1.432833553
M27	9	225000	140885000	1932	0.090521085	1.06475469

M27	10	115000	135365000	2233	-0.007104075	0.995087934
M27	11	295000	134945000	2223	-0.020907936	0.985612231
M27	12	345000	133775000	2235	0.009088308	1.006319419
M27	13	19305000	115095000	1626	-0.015455584	0.989344185
M27	14	20575000	107235000	1504	0.002613185	1.001812963
M27	15	22865000	102345000	1344	0.005485899	1.003809774
M27	16	505000	6125000	76	0.532196346	1.446129094
M27	16	6205000	53045000	543	0.236207348	1.177892067
M27	16	53055000	90075000	644	-0.169795265	0.888968827
M27	17	105000	81045000	1208	0.051088793	1.036046526
M27	18	95000	77815000	1311	-0.017077824	0.988232342
M27	19	295000	35965000	476	0.077170369	1.054946889
M27	19	35975000	58945000	331	0.102200603	1.073409531
M27	20	175000	62845000	1053	-0.010111371	0.993015835
M27	21	14405000	47975000	576	-0.010231058	0.992933457
M27	22	17205000	51155000	543	0.02294687	1.016032725
M27	X	2835000	152645000	2529	0.00392971	1.00272758
M25	1	1305000	29445000	440	-0.01167149	0.991942576
M25	1	29605000	88285000	1027	-0.133426678	0.9116635
M25	1	88355000	248135000	2248	0.007680578	1.005337968
M25	2	5000	242935000	4097	-0.018571774	0.98720953
M25	3	155000	87215000	1556	-0.169781204	0.888977491
M25	3	87255000	197755000	1867	0.033573826	1.023544499
M25	4	225000	53805000	851	-0.261159395	0.834417086
M25	4	53975000	190755000	2329	-0.012369735	0.991462605
M25	5	175000	49715000	791	-0.009172267	0.993662436
M25	5	49885000	68765000	337	-0.29552723	0.81477452
M25	5	68765001	71304999	12	0.710627461	1.63651572
M25	5	71305000	76345000	97	0.22343795	1.167512463
M25	5	76515000	97205000	355	0.017654188	1.012312129
M25	5	97375000	121015000	386	0.218613424	1.163614698
M25	5	121055000	141515000	366	0.00049023	1.000339859
M25	5	141735000	152785000	209	-0.328933448	0.796124823
M25	5	152955000	171815000	350	-0.010539663	0.992721083
M25	5	171825000	180565000	136	-0.123248718	0.918117867
M25	6	235000	170735000	2834	-0.002976455	0.997939005
M25	7	55000	159035000	2566	-0.008182214	0.994344574
M25	8	255000	34685000	596	-0.217547566	0.860026151
M25	8	34695000	146235000	1845	0.161109135	1.118146432
M25	9	305000	140995000	1932	-0.005871054	0.995938764
M25	10	265000	135285000	2230	0.008125994	1.005648402
M25	11	205000	30395000	491	-0.219573527	0.858819273
M25	11	30455000	42485000	224	0.057012541	1.04030931
M25	11	42555000	49555000	115	-0.252914529	0.839199353
M25	11	49655000	129355000	1290	-0.005074262	0.996488968
M25	11	129365000	134875000	100	-0.071462343	0.951672875
M25	12	205000	84085000	1335	-0.002797364	0.998062894
M25	12	84095000	133395000	900	-0.240920735	0.846205088

M25	13	19215000	26085000	117	0.11801453	1.085240302
M25	13	26095000	115025000	1510	-0.219973562	0.85858117
M25	14	20495000	42985000	381	-0.26130398	0.834333466
M25	14	43155000	52045000	145	0.003300395	1.002290278
M25	14	52265000	70525000	334	-0.287918344	0.819083056
M25	14	70745000	107095000	634	0.013702499	1.009543096
M25	15	20165000	31435000	126	-0.120333477	0.919974975
M25	15	31445000	102395000	1221	-0.136167474	0.909933189
M25	16	105000	48975000	549	-0.000400578	0.999722379
M25	16	48985000	90115000	720	-0.250231771	0.840761335
M25	17	135000	4075000	64	-0.076477394	0.948370443
M25	17	4245000	22125000	288	-0.396224315	0.759844276
M25	17	25405000	38895000	184	0.371171826	1.293402968
M25	17	39035000	43245000	56	-0.291889861	0.816831348
M25	17	43265000	69075000	415	0.03059887	1.021436041
M25	17	69245000	74625000	94	0.335455118	1.26177539
M25	17	74845000	78695000	62	0.144450059	1.10530924
M25	17	79305000	80935000	22	-0.335237251	0.792653774
M25	18	55000	7965000	144	0.113327547	1.081720328
M25	18	8135000	28895000	301	-0.19444342	0.873909978
M25	18	29085000	35445000	109	0.43543118	1.352314941
M25	18	35445001	35954999	9	0.54387735	1.457885432
M25	18	35955000	59995000	440	-0.271914389	0.828219807
M25	18	60175000	73885000	229	0.079276818	1.056488321
M25	18	74055000	77865000	69	0.181073849	1.133727445
M25	19	335000	29845000	367	0.040520878	1.028485089
M25	19	29855000	31185000	24	0.280606745	1.214705638
M25	19	31355000	48535000	276	-0.222290587	0.857203362
M25	19	48705000	59055000	135	0.208783453	1.155713222
M25	20	275000	24095000	444	0.244064671	1.1843247
M25	20	24255000	62885000	605	0.059793422	1.042316502
M25	21	14605000	48085000	577	-0.063903135	0.956672389
M25	22	17205000	38625000	347	-0.246157481	0.84313907
M25	22	38635000	43355000	76	0.018558586	1.012946926
M25	22	43365000	50955000	118	-0.203223217	0.868607782
M25	X	2725000	152645000	2532	-0.013301788	0.990822278
M13	1	1305000	121275000	1993	-0.41471784	0.750166196
M13	1	145405000	248875000	1723	0.796179579	1.736496592
M13	2	105000	24445000	435	0.046617271	1.032840352
M13	2	24625000	28255000	64	0.222561893	1.166803721
M13	2	28305000	36945000	158	0.118459885	1.085575363
M13	2	37075000	104595000	1052	0.119351579	1.086246538
M13	2	104605000	243045000	2382	0.041372492	1.029092377
M13	3	105000	51645000	928	0.171842103	1.126495931
M13	3	51805000	68795000	321	0.067467102	1.047875343
M13	3	68955000	98845000	443	0.168733336	1.124071134
M13	3	98995000	103965000	92	0.411853799	1.330394214
M13	3	104245000	123465000	343	0.137393499	1.099916114

M13	3	123555000	138375000	262	0.059634561	1.042201734
M13	3	138655000	141995000	62	0.202305115	1.150535194
M13	3	142155000	197625000	956	0.077223498	1.05498574
M13	4	155000	39095000	656	0.178364954	1.131600684
M13	4	39205000	190455000	2524	0.411531754	1.330097271
M13	5	55000	45075000	776	-0.050796648	0.965403091
M13	5	45085000	45795000	12	0.285301937	1.218665288
M13	5	45855000	180645000	2272	-0.034658588	0.976262765
M13	6	475000	13535000	237	0.313311491	1.242556532
M13	6	13765000	22325000	161	0.495671713	1.409977082
M13	6	22335000	170845000	2434	0.440672492	1.357236837
M13	7	85000	6745000	93	0.205119919	1.152782164
M13	7	6905000	53795000	833	0.079387157	1.056569125
M13	7	53805000	114975000	907	0.140827495	1.102537323
M13	7	115255000	126465000	192	0.064256459	1.045545944
M13	7	126645000	152355000	418	0.125286346	1.090724198
M13	7	152365000	159055000	114	0.049974467	1.035246602
M13	8	285000	32055000	545	-0.47031819	0.721805384
M13	8	32055001	41484999	172	3.061945094	8.350977594
M13	8	41485000	67795000	395	0.388014569	1.308591286
M13	8	67975000	146105000	1323	1.673762647	3.19045602
M13	9	235000	140935000	1932	0.003483821	1.002417719
M13	10	165000	65115000	1036	-0.021936915	0.984909509
M13	10	65305000	89355000	390	0.303938821	1.234510255
M13	10	89635000	125785000	650	-0.014910106	0.989718324
M13	10	126065000	135425000	148	0.250201306	1.189373062
M13	11	605000	8045000	109	0.308988426	1.238838759
M13	11	8145000	55765000	743	0.314405586	1.243499206
M13	11	55775000	67355000	196	0.883164723	1.844416815
M13	11	67785000	127225000	1030	-0.356206554	0.781216024
M13	11	127355000	134925000	136	0.707115764	1.632537084
M13	12	455000	125745000	2096	0.32421124	1.25197976
M13	12	125835000	133805000	136	0.245513512	1.185514667
M13	13	19335000	23775000	72	-0.422579807	0.746089285
M13	13	23955000	50195000	461	-0.07108748	0.951920186
M13	13	50255000	53565000	57	0.314301978	1.243409906
M13	13	53745000	57505000	59	0.236169269	1.177860978
M13	13	57515000	115045000	968	-0.044302307	0.969758683
M13	14	20525000	45045000	415	0.330749397	1.257666491
M13	14	45225000	107145000	1086	-0.431317749	0.741584117
M13	15	20165000	40505000	276	0.158904768	1.116439264
M13	15	40515000	46545000	99	0.32540662	1.253017549
M13	15	46555000	102335000	971	0.196909694	1.146240434
M13	16	255000	13665000	218	0.463329769	1.378720263
M13	16	13845000	14715000	17	-0.285423546	0.820500691
M13	16	15595000	24995000	142	0.443264246	1.35967726
M13	16	25225000	56335000	296	1.63700537	3.110195721
M13	16	56565000	90045000	579	-0.423327189	0.745702876

M13	17	45000	21065000	348	-0.182250763	0.881326956
M13	17	21845000	33095000	122	0.44521297	1.361515088
M13	17	33375000	49395000	201	0.533177619	1.447113038
M13	17	49605000	81095000	529	0.481189727	1.395894324
M13	18	55000	77805000	1312	-0.067234642	0.954465766
M13	19	285000	36665000	484	0.051955849	1.036669375
M13	19	36895000	48745000	187	0.342495337	1.267947786
M13	19	49165000	56555000	90	0.640714656	1.559101288
M13	19	56785000	59045000	37	0.323420702	1.251293914
M13	20	205000	62645000	1050	0.606696024	1.522767858
M13	21	14425000	27715000	208	0.109509879	1.078861657
M13	21	27855000	30095000	40	-0.335552556	0.792480556
M13	21	30105000	33795000	65	0.065498959	1.046446793
M13	21	33955000	36045000	39	0.239907043	1.180916569
M13	21	36255000	38935000	50	-0.082980035	0.944105484
M13	21	39105000	48015000	162	-0.272726851	0.827753522
M13	22	17245000	50955000	540	0.185169266	1.136950359
M13	X	2735000	152675000	2532	0.322216138	1.250249596
L25	1	1305000	119935000	1986	-0.02733304	0.981232525
L25	1	120365000	249195000	1731	0.399291344	1.318859924
L25	2	15000	243035000	4099	-0.025875956	0.982224044
L25	3	265000	197655000	3421	0.024196671	1.016913291
L25	4	185000	190705000	3182	-0.037726163	0.974189161
L25	5	135000	180605000	3058	0.022181219	1.01549365
L25	6	435000	170725000	2833	-0.04026135	0.972478763
L25	7	55000	159015000	2565	0.050654841	1.035734938
L25	8	205000	146095000	2440	0.001765352	1.001224397
L25	9	205000	140935000	1933	-0.037620985	0.974260186
L25	10	165000	135335000	2232	-0.019364717	0.986667082
L25	11	265000	134945000	2224	-0.050269505	0.965755903
L25	12	475000	133475000	2233	0.031858036	1.022327927
L25	13	19255000	114945000	1624	0.004338136	1.003011492
L25	14	20475000	107145000	1505	0.076815831	1.054687671
L25	15	22825000	102305000	1344	-0.026798307	0.981596284
L25	16	185000	48055000	531	0.052169617	1.036822992
L25	16	48385000	90095000	732	-0.430099015	0.742210844
L25	17	95000	80955000	1206	0.019965792	1.013935438
L25	18	85000	77845000	1312	0.010269068	1.007143368
L25	19	275000	58945000	808	0.049101188	1.034620145
L25	20	155000	62895000	1054	0.032677428	1.022908732
L25	21	14775000	47975000	573	-0.016738333	0.988464917
L25	22	17205000	50835000	541	-0.016620742	0.988545488
L25	X	2715000	152645000	2532	0.016236106	1.011317576
M19	1	1305000	121285000	1993	0.022270168	1.015556262
M19	1	145415000	248195000	1722	0.250252401	1.189415187
M19	2	75000	242945000	4096	0.141808766	1.103287486
M19	3	175000	38225000	696	0.135227323	1.098265852
M19	3	38235000	197645000	2727	-0.009499415	0.993437137

M19	4	175000	190745000	3184	-0.016280217	0.988778846
M19	5	175000	180625000	3059	-0.003986529	0.997240563
M19	6	205000	170855000	2837	-0.06960664	0.952897776
M19	7	55000	159095000	2567	0.144607688	1.105430013
M19	8	325000	146295000	2441	0.009773643	1.006797572
M19	9	235000	140915000	1931	0.003813122	1.002646551
M19	10	145000	135415000	2233	0.00619064	1.004300244
M19	11	455000	134845000	2221	-0.036239377	0.97519364
M19	12	325000	55395000	856	0.013181185	1.009178367
M19	12	55555000	58745000	52	0.163353018	1.119886884
M19	12	58865000	133465000	1323	0.016147599	1.011255535
M19	13	19245000	114975000	1625	-0.053803151	0.963393336
M19	14	20455000	107105000	1504	0.019167002	1.013374198
M19	15	20185000	102375000	1346	0.030307941	1.021230083
M19	16	505000	90075000	1264	0.025178133	1.017605331
M19	17	105000	53715000	755	0.154772184	1.113245811
M19	17	53725000	80955000	451	0.388577934	1.309102384
M19	18	85000	77775000	1311	-0.012843773	0.991136886
M19	19	255000	59085000	811	0.069039901	1.04901834
M19	20	315000	62795000	1049	0.154080146	1.112711933
M19	21	14615000	47945000	574	0.004782929	1.003320775
M19	22	16925000	51145000	544	0.052553935	1.037099227
M19	X	2725000	19705000	314	0.014473158	1.010082518
M19	X	19885000	104585000	1356	0.087672829	1.062654661
M19	X	104595000	152645000	858	0.025642105	1.017932646
L16	1	1305000	192665000	2747	0.002035343	1.001411788
L16	1	192835000	248895000	968	0.223980079	1.167951267
L16	2	35000	242975000	4097	0.00800175	1.0055618
L16	3	195000	197695000	3423	0.006876236	1.00477762
L16	4	155000	190745000	3184	0.007374045	1.005124383
L16	5	55000	180645000	3061	0.000565709	1.000392196
L16	6	485000	170745000	2832	0.007655329	1.005320373
L16	7	65000	159095000	2567	0.023235965	1.016236344
L16	8	315000	146235000	2440	0.142053912	1.103474975
L16	9	305000	141005000	1932	-0.004667298	0.996770103
L16	10	155000	135295000	2231	-0.001346467	0.999067135
L16	11	215000	134885000	2224	-0.024970986	0.982840365
L16	12	355000	133845000	2236	-0.003239189	0.997757284
L16	13	19335000	115045000	1624	-0.040443542	0.972355961
L16	14	20515000	107145000	1504	-0.001807898	0.998747645
L16	15	20075000	102345000	1347	0.010221727	1.00711032
L16	16	265000	90105000	1267	-0.057009607	0.961254527
L16	17	55000	80945000	1207	-0.015088541	0.989595921
L16	18	55000	77895000	1314	-0.015560778	0.98927205
L16	19	325000	59065000	809	0.004730554	1.003284352
L16	20	285000	62795000	1049	0.003857293	1.002677249
L16	21	14615000	47935000	574	0.013333983	1.009285255
L16	22	16905000	51105000	543	-0.005764508	0.99601232

L16	X	2775000	152655000	2531	0.021798471	1.015224275
M14	1	1305000	11385000	142	0.066106371	1.046887467
M14	1	11615000	18815000	104	-0.711019398	0.610888337
M14	1	19045000	101275000	1444	0.014110138	1.009828387
M14	1	101305000	106495000	65	-0.746082969	0.596220147
M14	1	106555000	145505000	235	0.000193959	1.000134451
M14	1	145555000	187415000	684	0.771368369	1.706887967
M14	1	187595000	209175000	327	0.612545396	1.528954417
M14	1	209355000	211735000	44	0.183517514	1.135649402
M14	1	211915000	215885000	77	-0.294123972	0.815567408
M14	1	215905000	217575000	33	-0.196723792	0.872529738
M14	1	217805000	249195000	543	0.698381063	1.622682858
M14	2	575000	1695000	21	-2.300203166	0.203034505
M14	2	1695001	2214999	10	-2.434119546	0.185036329
M14	2	2215000	19885000	318	-0.023491048	0.983849094
M14	2	20065000	35225000	271	0.504776941	1.418903958
M14	2	35405000	45045000	171	0.200313195	1.148947753
M14	2	45115000	46495000	25	0.483656032	1.398282664
M14	2	46675000	55465000	159	-0.030185318	0.979294497
M14	2	55795000	64945000	164	0.794255613	1.734182358
M14	2	65125000	124845000	879	-0.071787704	0.951458276
M14	2	124955000	142925000	304	-0.737936186	0.599596478
M14	2	143155000	242885000	1742	0.008066705	1.005607075
M14	3	115000	9285000	177	0.551850036	1.465964366
M14	3	9515000	42365000	589	0.074217304	1.052789718
M14	3	42545000	86305000	770	-0.726342811	0.604434196
M14	3	86585000	87995000	26	0.496397227	1.410686321
M14	3	88155000	90165000	32	-0.759860171	0.590553565
M14	3	93595000	155185000	1081	0.47021333	1.385314298
M14	3	155355000	197635000	728	0.025621207	1.017917901
M14	4	165000	37865000	631	-0.768198302	0.587150275
M14	4	38045000	39555000	29	0.422760775	1.340490295
M14	4	39735000	162755000	2046	-0.009512402	0.993428195
M14	4	163085000	187045000	400	-0.746550904	0.596026795
M14	4	187155000	190785000	65	-0.027012623	0.981450476
M14	5	215000	10395000	187	0.434068365	1.351038105
M14	5	10575000	13455000	51	0.366258882	1.289005913
M14	5	13465000	42545000	488	0.911144306	1.880536496
M14	5	42825000	45765000	52	-0.015967929	0.988992901
M14	5	49595000	180695000	2271	-0.73773277	0.599681025
M14	6	405000	15545000	277	0.477368133	1.392201595
M14	6	15705000	40045000	324	0.024300933	1.016986785
M14	6	40225000	44185000	67	0.495235561	1.409550886
M14	6	44305000	72625000	416	-0.018077072	0.987548103
M14	6	72805000	100335000	473	-0.747346697	0.595698117
M14	6	100565000	117545000	299	0.0066586	1.004626057
M14	6	117875000	126525000	162	-0.73371822	0.601352066
M14	6	126805000	170815000	799	-0.006570591	0.995455969

M14	7	145000	15545000	236	0.529661325	1.44359027
M14	7	15725000	57805000	746	-0.013235502	0.990867803
M14	7	62505000	112215000	800	0.487925057	1.402426397
M14	7	112395000	155965000	721	-0.01005218	0.993056577
M14	7	156145000	159055000	47	-0.711778432	0.61056702
M14	8	285000	1975000	30	-0.615759511	0.652586247
M14	8	2155000	20295000	298	0.078764052	1.056112888
M14	8	20465000	36565000	295	-0.305231819	0.809312162
M14	8	36575000	54375000	243	0.504929532	1.419054041
M14	8	54375001	55854999	25	1.445332125	2.723255085
M14	8	55855000	116345000	1028	1.037014878	2.051977452
M14	8	116525000	145145000	498	-0.074401166	0.949736256
M14	8	145215000	146145000	12	-0.572600864	0.672403498
M14	9	205000	28395000	516	-0.799013686	0.574741972
M14	9	28585000	129685000	1250	0.004463741	1.003098821
M14	9	129865000	141015000	162	-0.609990744	0.655200905
M14	10	295000	22605000	403	0.472240008	1.387261736
M14	10	22785000	116885000	1508	-0.026006085	0.982135453
M14	10	117265000	135365000	312	0.477678525	1.392501156
M14	11	295000	19385000	309	-0.741462404	0.598132741
M14	11	19555000	126845000	1765	-0.011112737	0.992326828
M14	11	126905000	134905000	144	-0.803576983	0.572926914
M14	12	385000	13045000	201	0.897227155	1.862482868
M14	12	13205000	20615000	127	0.083483217	1.059573169
M14	12	20845000	42245000	297	0.517966603	1.431935593
M14	12	42245001	44444999	40	1.69080934	3.228377622
M14	12	44445000	68045000	398	-0.70585489	0.613079092
M14	12	68275000	110505000	748	-0.017616528	0.987863403
M14	12	110735000	120895000	190	0.451618419	1.367573544
M14	12	120975000	133825000	220	0.003469074	1.002407472
M14	13	19205000	24785000	95	0.009500185	1.006606755
M14	13	25065000	115015000	1528	-0.727035072	0.604144235
M14	14	20495000	107055000	1502	-0.7067198	0.612711655
M14	15	20085000	24245000	20	-0.256344355	0.837206632
M14	15	24285000	63895000	664	-0.730655933	0.602629861
M14	15	64175000	66805000	45	0.523928411	1.437865181
M14	15	67035000	76855000	170	0.028124167	1.019685439
M14	15	77085000	79945000	44	0.466475341	1.381729627
M14	15	80125000	86395000	97	0.038737531	1.027214542
M14	15	86575000	97885000	205	0.449080799	1.365170173
M14	15	98065000	101725000	68	0.042087116	1.029602253
M14	15	101905000	102315000	8	-0.620174696	0.650592143
M14	16	195000	90035000	1266	-0.052623079	0.964181679
M14	17	65000	9865000	161	-0.64477527	0.639592413
M14	17	10045000	63615000	749	0.03003094	1.021034022
M14	17	63795000	69595000	107	0.521426548	1.435373855
M14	17	69655000	81095000	184	0.901482266	1.867984217
M14	18	195000	9055000	164	-0.024998884	0.982821359

M14	18	9065000	11745000	52	0.825679117	1.772369145
M14	18	12015000	25015000	164	0.46570495	1.380991988
M14	18	25195000	29845000	79	0.821869758	1.767695472
M14	18	30025000	69695000	696	-0.022271634	0.984681027
M14	18	69755000	77975000	149	-0.762757935	0.589368584
M14	19	955000	6995000	70	-0.12206702	0.918870197
M14	19	7425000	18185000	173	-0.682759961	0.622972351
M14	19	18465000	59045000	558	0.030566148	1.021412874
M14	20	205000	13875000	253	-0.701550339	0.61491106
M14	20	14105000	62585000	793	-0.017728712	0.98778659
M14	21	14405000	48095000	578	-0.016887786	0.988362524
M14	22	17335000	51185000	542	-0.707368866	0.612436059
M14	X	2865000	10645000	147	0.407531603	1.326414426
M14	X	10925000	58085000	810	-0.716483861	0.608578866
M14	X	62115000	90145000	476	-0.025068853	0.982773694
M14	X	90315000	93095000	28	-0.781796799	0.581641938
M14	X	93125000	152695000	1062	-0.046759605	0.968108329
L23	1	1305000	2775000	18	0.061714984	1.043705714
L23	1	3705000	8445000	74	-0.445190598	0.734487275
L23	1	8545000	85355000	1318	-0.019176932	0.986795518
L23	1	85535000	106965000	350	0.276990497	1.21166468
L23	1	107145000	121175000	218	-0.028034492	0.980755556
L23	1	121205000	151885000	69	0.308117057	1.238090743
L23	1	151955000	179745000	488	-0.010292115	0.992891436
L23	1	179975000	239625000	1008	0.635478652	1.553453064
L23	1	239755000	243285000	64	0.168029874	1.123523167
L23	1	243295000	249195000	94	0.43230458	1.349387385
L23	2	195000	10345000	183	0.222711073	1.16692438
L23	2	10395000	14465000	73	-0.202368249	0.869122687
L23	2	14555000	53785000	701	-0.032176315	0.977943949
L23	2	53955000	60205000	112	0.181899651	1.134376579
L23	2	60215000	78725000	315	0.495142027	1.409459504
L23	2	79005000	190085000	1779	0.289531936	1.222243672
L23	2	190205000	204235000	243	0.500811547	1.415009311
L23	2	204465000	242935000	673	0.229002013	1.172023919
L23	3	165000	8005000	152	0.005211471	1.003618848
L23	3	8055000	58605000	898	0.191470852	1.141927337
L23	3	58615000	135545000	1304	-0.000110294	0.999923553
L23	3	135825000	177575000	719	0.375513927	1.297301606
L23	3	177755000	188345000	191	-0.113990282	0.924028797
L23	3	188525000	193325000	85	-0.520299538	0.697227057
L23	3	193355000	197635000	64	0.068861721	1.048888789
L23	4	165000	5695000	86	0.130827036	1.094921193
L23	4	5925000	31045000	431	-0.331844811	0.794519861
L23	4	31225000	40695000	161	0.290771428	1.223294214
L23	4	40845000	89945000	778	0.117382613	1.084765058
L23	4	90025000	98175000	141	-0.267970383	0.830487073
L23	4	98355000	190325000	1572	0.032076187	1.022482525

L23	5	55000	10425000	191	-0.249820263	0.841001184
L23	5	10605000	24295000	234	0.419841809	1.337780859
L23	5	24675000	106245000	1306	-0.080087266	0.946000423
L23	5	106325000	130805000	433	-0.429186373	0.742680512
L23	5	130855000	180615000	888	-0.250931472	0.840353668
L23	6	445000	8045000	139	-0.183525057	0.880548847
L23	6	8305000	16795000	156	0.318005863	1.24660626
L23	6	16945000	22815000	108	0.449186277	1.365269986
L23	6	22825000	90855000	1001	0.30071987	1.231758878
L23	6	90905000	170825000	1424	0.042018501	1.029553286
L23	7	55000	8025000	116	0.191818008	1.142202152
L23	7	8205000	79075000	1122	0.072397632	1.051462671
L23	7	79155000	105825000	438	0.259307128	1.196903739
L23	7	106005000	159095000	884	0.013854118	1.009649199
L23	8	215000	41895000	726	-0.424589819	0.745050531
L23	8	42075000	51955000	102	0.090963748	1.06508144
L23	8	52135000	63595000	204	0.202494491	1.150686229
L23	8	63805000	131355000	1171	0.716427118	1.64310778
L23	8	131365000	146235000	229	0.08201698	1.058496853
L23	9	315000	72995000	739	0.307225136	1.237325552
L23	9	73015000	117645000	803	-0.048228937	0.967122848
L23	9	117705000	123265000	106	-0.491788923	0.711142743
L23	9	123495000	140915000	277	-0.130351536	0.913608808
L23	10	145000	12745000	240	0.070329241	1.049956269
L23	10	12925000	26975000	245	0.307976585	1.237970198
L23	10	27155000	56535000	393	0.608494615	1.52466746
L23	10	56545000	94745000	642	0.276338652	1.211117343
L23	10	94815000	135395000	706	-0.026155234	0.982033922
L23	11	475000	76915000	1199	0.314909446	1.243933572
L23	11	76925000	109645000	571	-0.032678702	0.977603461
L23	11	109775000	134945000	451	0.193824118	1.143791523
L23	12	525000	11045000	168	0.612532728	1.528940992
L23	12	11275000	29045000	303	1.008158458	2.011342064
L23	12	29045001	29324999	5	0.58555362	1.500614725
L23	12	29325000	133825000	1755	-0.007913554	0.994529759
L23	13	19255000	30695000	199	-0.131143682	0.913107306
L23	13	30745000	38295000	136	0.209837723	1.156558084
L23	13	38565000	48455000	170	-0.096546515	0.935269136
L23	13	48465000	95925000	777	0.492325849	1.406710886
L23	13	96105000	115065000	338	0.010685202	1.007433913
L23	14	20545000	78675000	1008	-0.01666445	0.988515539
L23	14	78705000	88675000	181	-0.357536248	0.780496329
L23	14	88855000	107245000	312	-0.148101407	0.902437293
L23	15	20055000	25525000	41	0.165077551	1.121226347
L23	15	25535000	93175000	1136	0.03391398	1.023785856
L23	15	93355000	102235000	165	0.16277157	1.119435628
L23	16	105000	90095000	1269	-0.01709667	0.988219432
L23	17	105000	48525000	665	0.067547	1.047933377

L23	17	48805000	81095000	541	0.563557688	1.477909254
L23	18	165000	13785000	249	0.384805953	1.305684157
L23	18	14015000	77975000	1062	0.036312263	1.025489175
L23	19	955000	15865000	207	0.067293097	1.047748966
L23	19	15955000	43885000	387	0.307448578	1.237517201
L23	19	44115000	58965000	206	0.451202096	1.367178956
L23	20	195000	3335000	58	-0.204793475	0.867662886
L23	20	3345000	29905000	422	0.213527964	1.159520209
L23	20	29915000	47385000	314	-0.051240797	0.965105928
L23	20	47395000	62845000	258	0.173783458	1.128012815
L23	21	14655000	25945000	172	0.382768628	1.303841615
L23	21	25985000	48005000	401	0.035862755	1.025169708
L23	22	17235000	44595000	443	0.228925244	1.171961555
L23	22	44825000	50995000	95	-0.430237293	0.742139709
L23	X	2755000	14955000	226	-0.255531308	0.837678582
L23	X	15185000	73695000	938	-0.07977492	0.946205256
L23	X	73805000	88195000	261	0.193229915	1.143320526
L23	X	88405000	143485000	939	-0.33128544	0.794827977
L23	X	143495000	152695000	159	0.035321592	1.024785233
M16	1	1305000	54705000	862	-0.083530304	0.943745455
M16	1	54805000	121335000	1130	-0.141293126	0.906706086
M16	1	121335001	145564999	5	0.53186721	1.445799212
M16	1	145565000	153105000	83	0.67949123	1.601574856
M16	1	153105001	153434999	6	0.556195654	1.470386733
M16	1	153435000	248035000	1628	0.621307738	1.538268921
M16	2	15000	23825000	428	-0.179164444	0.883214373
M16	2	23835000	44315000	365	-0.085150278	0.942686336
M16	2	44545000	143975000	1572	-0.131526942	0.912864767
M16	2	144005000	162655000	332	-0.117605906	0.921715932
M16	2	162835000	201645000	671	-0.132984305	0.911943086
M16	2	201705000	226225000	432	-0.107044301	0.928488341
M16	2	226505000	242975000	286	-0.149898161	0.901314083
M16	3	205000	197695000	3423	0.004216889	1.002927201
M16	4	115000	190795000	3186	-0.152938433	0.899416694
M16	5	105000	180645000	3060	0.009840528	1.00684425
M16	6	225000	62965000	928	0.009101321	1.006328496
M16	6	63145000	170875000	1906	0.255985276	1.194151
M16	7	355000	159095000	2564	0.307486294	1.237549553
M16	8	325000	146255000	2440	0.000556976	1.000386141
M16	9	335000	140995000	1931	-0.142245799	0.906107547
M16	10	155000	135425000	2234	-0.011256131	0.992228202
M16	11	205000	85695000	1366	0.025692793	1.017968411
M16	11	85865000	134735000	852	-0.341450166	0.789247578
M16	12	215000	133845000	2238	0.025803369	1.018046436
M16	13	19375000	103535000	1425	-0.096241777	0.935466712
M16	13	103765000	114975000	195	-0.154255184	0.898596169
M16	14	20505000	102735000	1446	0.023716021	1.016574552
M16	14	102905000	107215000	55	0.532745498	1.446679659

M16	15	22845000	96825000	1242	-0.036037019	0.975330434
M16	15	96835000	102355000	102	-0.114128698	0.923940147
M16	16	535000	3195000	25	0.393139356	1.313247971
M16	16	3255000	7275000	72	0.458216016	1.373841924
M16	16	7455000	90045000	1161	0.034927451	1.024505302
M16	17	75000	81055000	1209	0.082767048	1.059047317
M16	18	205000	77775000	1310	-0.155916252	0.897562152
M16	19	255000	59045000	810	0.079123763	1.056376244
M16	20	245000	1985000	32	-0.265368695	0.831986085
M16	20	2165000	62845000	1016	0.01977627	1.013802249
M16	21	14605000	48025000	576	0.032938958	1.02309418
M16	22	17305000	34145000	265	-0.083936895	0.943479519
M16	22	34295000	50995000	273	-0.114779468	0.923523471
M16	X	2745000	152565000	2529	-0.010461788	0.992774671
M28	1	1305000	119695000	1981	0.007936791	1.005516525
M28	1	119755000	248175000	1736	0.27192256	1.207415779
M28	2	5000	243045000	4099	-0.002094858	0.998549009
M28	3	265000	197765000	3422	0.002108133	1.001462314
M28	4	235000	190715000	3181	-0.002462485	0.998294592
M28	5	135000	180595000	3058	-0.002712547	0.998121572
M28	6	205000	170845000	2837	-0.001000467	0.999306769
M28	7	105000	158985000	2564	0.005339825	1.003708143
M28	8	205000	146125000	2441	0.005612435	1.00389782
M28	9	245000	141045000	1934	-0.001685768	0.998832197
M28	10	305000	135435000	2232	0.000605543	1.000419819
M28	11	605000	134925000	2222	-0.018338834	0.987368939
M28	12	205000	133805000	2237	0.0075914	1.005275826
M28	13	19205000	114935000	1625	-0.016050248	0.988936472
M28	14	19105000	107125000	1506	0.005023765	1.003488278
M28	15	20055000	102355000	1347	0.003641051	1.002526971
M28	16	275000	46915000	510	0.03690184	1.025908341
M28	16	47085000	90125000	754	-0.307317217	0.808143157
M28	17	145000	81085000	1208	0.020442249	1.01427035
M28	18	255000	77845000	1310	-0.008961267	0.993807775
M28	19	265000	58985000	809	0.025176714	1.017604329
M28	20	205000	62845000	1052	0.006545487	1.004547293
M28	21	14665000	48015000	574	-0.008084202	0.994412129
M28	22	17235000	51165000	542	-0.005138807	0.996444387
M28	X	2705000	147055000	2442	-0.014962388	0.989682457
M28	X	147225000	152665000	87	-0.099792866	0.933166961
M9	1	1305000	121235000	1992	-0.016728001	0.988471996
M9	1	145165000	248895000	1724	0.348294126	1.27305445
M9	2	125000	242915000	4094	-0.009800039	0.99323015
M9	3	105000	197775000	3426	0.049996866	1.035262675
M9	4	255000	190465000	3180	0.006294015	1.004372209
M9	5	95000	180605000	3059	0.000883862	1.000612834
M9	6	435000	170795000	2834	-0.010288917	0.992893637
M9	7	55000	158925000	2564	0.011505831	1.008007121

M9	8	155000	146105000	2441	9.61E-05	1.00006661
M9	9	235000	141015000	1933	-0.025770598	0.982295777
M9	10	255000	135305000	2230	0.005262075	1.003654052
M9	11	235000	134835000	2222	-0.011859346	0.991813422
M9	12	315000	133385000	2234	-0.020676831	0.985770128
M9	13	19215000	115045000	1627	-0.011320116	0.992184197
M9	14	20525000	107095000	1503	-0.000782869	0.999457504
M9	15	20175000	102315000	1345	-0.001804587	0.998749938
M9	16	195000	47545000	521	0.079777129	1.056854762
M9	16	47655000	90055000	743	-0.184496414	0.879956179
M9	17	85000	20725000	342	-0.17011698	0.888770613
M9	17	20955000	81065000	862	0.045660855	1.032155871
M9	18	205000	77895000	1312	-0.141909982	0.906318487
M9	19	375000	22605000	314	0.132543071	1.096224339
M9	19	22785000	59035000	490	0.064131357	1.045455284
M9	20	265000	62755000	1049	0.003755856	1.002606753
M9	21	14435000	40465000	440	0.004344844	1.003016156
M9	21	40555000	48075000	136	-0.101994597	0.931743919
M9	22	17355000	50975000	540	0.026039763	1.018213263
M9	X	2755000	152695000	2532	-0.0514492	0.964966524
L12	1	1305000	73185000	1195	-0.062873607	0.957355327
L12	1	73195000	110745000	635	-0.173614327	0.886618686
L12	1	110915000	249195000	1888	0.005054181	1.003509435
L12	2	105000	242895000	4094	0.001540641	1.001068462
L12	3	115000	29665000	540	-0.019967239	0.9862551
L12	3	29835000	89015000	1045	-0.163908379	0.892603656
L12	3	89025000	197635000	1835	-0.00967669	0.993315074
L12	4	155000	36085000	597	-0.391092207	0.762552088
L12	4	36255000	53845000	253	-0.082965584	0.944114941
L12	4	53855000	190745000	2331	0.179866405	1.132778984
L12	5	135000	149755000	2510	-0.036280585	0.975165786
L12	5	149925000	180565000	544	0.257918563	1.195752298
L12	6	435000	170795000	2834	0.005415801	1.003761002
L12	7	115000	159095000	2566	0.001323403	1.000917734
L12	8	315000	27675000	467	-0.380723913	0.768052102
L12	8	27895000	47095000	280	0.406335479	1.325315166
L12	8	47495000	139635000	1612	0.166933919	1.122669998
L12	8	139645000	146245000	75	0.209148409	1.156005618
L12	9	365000	30295000	546	-0.375503073	0.770836572
L12	9	30545000	140995000	1381	0.00011237	1.000077892
L12	10	155000	75205000	1192	-0.034096049	0.976643506
L12	10	75215000	135345000	1040	-0.150767646	0.900771042
L12	11	205000	5435000	64	-0.398986734	0.758390746
L12	11	5655000	15145000	172	0.294694236	1.226624979
L12	11	15215000	21715000	113	-0.03992214	0.972707441
L12	11	21905000	36785000	254	0.311274843	1.240803656
L12	11	36955000	48455000	212	-0.005241394	0.996373534
L12	11	48625000	51405000	17	-0.384198842	0.766204369

L12	11	55075000	68595000	220	-0.004806744	0.996673763
L12	11	68685000	72685000	61	0.369526479	1.291928725
L12	11	72855000	134915000	1090	-0.366752413	0.775526286
L12	12	385000	25615000	415	-0.377870807	0.769572522
L12	12	25785000	133455000	1813	-0.002387856	0.998346233
L12	13	19225000	115095000	1628	-0.369170524	0.77422751
L12	14	19145000	107205000	1505	-0.002060848	0.998572549
L12	15	22825000	102305000	1344	-0.040438261	0.97235952
L12	16	175000	90045000	1267	-0.021407544	0.985270971
L12	17	25000	18825000	317	-0.383937369	0.766343248
L12	17	18825001	19544999	8	0.654938812	1.574549171
L12	17	19545000	20205000	13	0.34656757	1.271531824
L12	17	20575000	49145000	334	0.446413101	1.362648159
L12	17	49145001	50764999	29	0.687958537	1.611002281
L12	17	50765000	59605000	145	-0.254043028	0.838543175
L12	17	59705000	80855000	355	0.53128385	1.445214716
L12	18	75000	13985000	253	-0.140142917	0.907429258
L12	18	13995000	77895000	1061	-0.018412435	0.987318568
L12	19	365000	59025000	808	0.004931758	1.003424284
L12	20	245000	53035000	899	-0.067781429	0.954104088
L12	20	53155000	62885000	151	0.224502105	1.168373956
L12	21	14655000	48045000	575	-0.012304095	0.991507716
L12	22	16935000	51105000	542	-0.030358343	0.979177055
L12	X	2825000	31385000	524	-0.374344493	0.771455854
L12	X	31605000	36745000	87	0.055934615	1.039532321
L12	X	36855000	40315000	60	-0.417151283	0.748901932
L12	X	40485000	98665000	888	0.003061437	1.002124279
L12	X	98665001	98884999	5	0.30161749	1.232525496
L12	X	98885000	152695000	959	0.256498972	1.194576273
L24	1	1305000	121335000	1994	0.003890273	1.002700171
L24	1	145455000	248865000	1721	0.376780431	1.298440973
L24	2	85000	243015000	4096	0.000431471	1.000299117
L24	3	235000	90205000	1606	-0.16250004	0.893475429
L24	3	93675000	106295000	221	0.064947995	1.046047232
L24	3	106385000	197635000	1589	0.060122391	1.042554202
L24	4	155000	190345000	3182	0.001562833	1.00108386
L24	5	65000	180645000	3061	0.004519717	1.003137741
L24	6	465000	170745000	2833	-0.042842236	0.970740618
L24	7	55000	159025000	2566	0.007290552	1.005066216
L24	8	245000	43345000	748	-0.183893871	0.88032377
L24	8	47065000	146225000	1690	0.177483658	1.130909637
L24	9	295000	141025000	1933	2.06E-05	1.000014276
L24	10	295000	7825000	147	0.012608316	1.008777719
L24	10	7995000	28745000	368	0.151462019	1.110694473
L24	10	28785000	135365000	1711	-0.004871768	0.996628843
L24	11	285000	72875000	1133	0.002465363	1.00171032
L24	11	73145000	78525000	92	0.122276547	1.088451064
L24	11	78695000	84355000	107	-0.227350435	0.854202227

L24	11	84525000	87215000	46	0.15216735	1.111237623
L24	11	87355000	134895000	832	-0.194524112	0.873861101
L24	12	335000	120095000	2002	0.024013625	1.016784276
L24	12	120225000	125545000	89	0.110966271	1.079951311
L24	12	125555000	133495000	141	-0.023840965	0.983610496
L24	13	19255000	53165000	587	-0.167724373	0.890245799
L24	13	53335000	69095000	252	-0.20166675	0.869545395
L24	13	69115000	114985000	782	-0.012105062	0.991644513
L24	14	20455000	107075000	1504	0.005195172	1.00360751
L24	15	20055000	102345000	1347	-0.003286754	0.997724389
L24	16	155000	90035000	1267	-0.016029426	0.988950745
L24	17	55000	46325000	628	-0.000558635	0.999612859
L24	17	46495000	80915000	575	0.629226061	1.546735019
L24	18	85000	77835000	1312	-0.000284189	0.999803035
L24	19	305000	58995000	808	0.042224507	1.029700309
L24	20	215000	62805000	1051	-0.006829159	0.995277574
L24	21	14625000	48005000	575	-0.077757337	0.947529433
L24	22	16905000	51155000	544	-0.040644446	0.972220563
L24	X	2705000	152555000	2530	-0.00071061	0.999507564
M22	1	1305000	121245000	1992	0.02993738	1.02096781
M22	1	145175000	248125000	1722	0.336824477	1.262973595
M22	2	5000	242995000	4098	-0.008397766	0.994196021
M22	3	145000	197755000	3424	-0.01105567	0.992366081
M22	4	235000	190465000	3180	-0.013866495	0.990434521
M22	5	95000	180685000	3061	-0.022949206	0.984218673
M22	6	515000	39645000	595	0.008509671	1.005915885
M22	6	39715000	76475000	562	-0.387476261	0.764465733
M22	6	76505000	78295000	35	0.02802268	1.019613712
M22	6	78495000	170855000	1638	-0.49054127	0.71175801
M22	7	335000	159075000	2564	-0.001968193	0.998636683
M22	8	305000	146095000	2438	-0.029513528	0.97975061
M22	9	225000	140995000	1934	0.002438674	1.001691789
M22	10	275000	135385000	2232	0.006030556	1.004188811
M22	11	465000	134805000	2220	-0.015806352	0.989103671
M22	12	235000	133755000	2235	0.001901083	1.001318599
M22	13	19285000	115015000	1624	-0.016406706	0.988692158
M22	14	20495000	107075000	1503	-0.000900589	0.999375954
M22	15	20155000	102335000	1346	0.029645835	1.02076151
M22	16	515000	46695000	504	0.006347791	1.004409647
M22	16	46855000	90105000	758	-0.486551046	0.713729324
M22	17	135000	81055000	1207	0.052264905	1.036891475
M22	18	235000	77845000	1310	-0.014349331	0.990103101
M22	19	325000	59005000	808	0.067223625	1.047698513
M22	20	235000	62785000	1050	-0.000485309	0.999663666
M22	21	14615000	48055000	576	0.018724685	1.013063555
M22	22	17335000	18025000	11	0.161795472	1.118678497
M22	22	18035000	51115000	529	-0.403937343	0.755792788
M22	X	2795000	152695000	2531	0.031582743	1.022132866

M15	1	1305000	6895000	70	0.206285358	1.153713781
M15	1	7085000	112075000	1782	0.354152529	1.278234497
M15	1	112155000	163945000	408	1.246594684	2.372806877
M15	1	163985000	186685000	409	0.749588205	1.681312857
M15	1	186695000	218645000	516	0.927263376	1.901665336
M15	1	218815000	248875000	526	0.683552695	1.606089951
M15	2	95000	43655000	779	-0.01981931	0.986356233
M15	2	43805000	123655000	1242	0.370043712	1.292391988
M15	2	123705000	143645000	336	0.249728639	1.188983454
M15	2	143825000	205715000	1082	0.358928555	1.282473091
M15	2	205885000	243025000	648	-0.000116152	0.999919493
M15	3	205000	14545000	256	0.394344764	1.314345682
M15	3	14605000	112015000	1676	-0.002477265	0.998284364
M15	3	112185000	113545000	24	0.679029791	1.601062682
M15	3	113725000	127865000	249	-0.023117521	0.984103855
M15	3	127905000	150765000	399	0.607417352	1.523529412
M15	3	150935000	197795000	809	0.823553991	1.769760323
M15	4	265000	130695000	2159	-0.056238216	0.961768636
M15	4	130755000	190735000	1022	-0.245757973	0.843372583
M15	5	55000	8285000	149	0.463817797	1.379186728
M15	5	8455000	18015000	176	0.639480505	1.557768127
M15	5	18185000	54175000	539	0.349812843	1.274395292
M15	5	54345000	68795000	261	-0.446538884	0.733801173
M15	5	70815000	73645000	54	0.356326191	1.280161824
M15	5	73915000	180615000	1866	0.001261189	1.000874571
M15	6	435000	15075000	267	0.357921795	1.281578451
M15	6	15245000	20725000	100	0.702258037	1.62704938
M15	6	20945000	25145000	80	0.056045591	1.039612288
M15	6	25365000	62405000	459	0.427564859	1.344961485
M15	6	62575000	69795000	116	0.792836586	1.732477465
M15	6	69925000	170845000	1799	0.888388464	1.851107223
M15	7	145000	30095000	506	0.043288755	1.030460179
M15	7	30235000	84885000	814	0.644981251	1.563718964
M15	7	85155000	99605000	247	0.011521683	1.008018197
M15	7	99825000	131325000	537	0.574313007	1.488968266
M15	7	131505000	132575000	18	0.47713779	1.391979332
M15	7	132745000	143145000	173	0.571419936	1.485985395
M15	7	143645000	157445000	231	-0.15084255	0.900724276
M15	7	157765000	159095000	21	0.466678034	1.381923768
M15	8	235000	6825000	124	0.248112387	1.187652181
M15	8	8145000	33105000	439	-0.487592178	0.713214442
M15	8	33275000	82165000	785	0.337226344	1.263325449
M15	8	82305000	83195000	16	0.848462627	1.800581157
M15	8	83365000	96615000	222	0.300849327	1.231869412
M15	8	96785000	102815000	110	0.630526135	1.548129476
M15	8	102985000	146145000	725	0.998311986	1.997661284
M15	9	1225000	34635000	605	1.517035564	2.862023592
M15	9	34635001	34954999	6	1.251790457	2.381367794

M15	9	34955000	37275000	44	0.094041216	1.067355831
M15	9	37445000	86095000	302	0.372900459	1.294953649
M15	9	86105000	140995000	956	0.040036216	1.028139635
M15	10	265000	12865000	241	0.309190489	1.239012282
M15	10	13035000	24195000	190	0.647179694	1.566103646
M15	10	24465000	65275000	600	0.357656354	1.281342676
M15	10	65445000	126495000	1051	-0.005561545	0.996152451
M15	10	126625000	129365000	45	0.57882522	1.493632495
M15	10	129535000	135315000	88	-0.120822022	0.919663493
M15	11	235000	8245000	115	0.182985948	1.135231045
M15	11	8355000	70795000	985	0.385148297	1.305994025
M15	11	70965000	134925000	1119	-0.039859129	0.972749926
M15	12	395000	2645000	35	0.375126855	1.296953589
M15	12	2755000	16905000	231	0.884197561	1.845737721
M15	12	17175000	18395000	24	0.32289428	1.250837416
M15	12	18655000	33885000	259	0.68383899	1.606408702
M15	12	34055000	39325000	25	0.362588726	1.285730903
M15	12	39495000	45615000	108	0.652668995	1.572073854
M15	12	45625000	47485000	33	0.420251085	1.338160426
M15	12	47655000	55995000	135	0.097687143	1.070056625
M15	12	56075000	76145000	343	0.349456332	1.27408041
M15	12	76205000	90115000	225	-0.472580499	0.720674399
M15	12	90155000	127345000	691	0.006913947	1.004803885
M15	12	127565000	133775000	105	0.232631973	1.174976558
M15	13	19295000	41765000	395	-0.008792826	0.993923812
M15	13	42135000	114985000	1225	0.608158512	1.5243123
M15	14	20455000	107245000	1506	0.009402922	1.006538895
M15	15	20155000	38715000	243	0.339684469	1.265479792
M15	15	38885000	73105000	599	0.056984699	1.040289233
M15	15	73255000	89145000	259	0.32978617	1.256827079
M15	15	89175000	102395000	240	0.611793215	1.528157471
M15	16	355000	2755000	21	0.497849095	1.412106691
M15	16	2925000	28915000	426	1.010772223	2.014989363
M15	16	29135000	47865000	72	0.377283733	1.298894029
M15	16	48035000	59165000	203	0.021627498	1.015103969
M15	16	59335000	67495000	142	-0.490113632	0.711969018
M15	16	67505000	90115000	387	0.007262436	1.005046629
M15	17	135000	53545000	751	0.075317328	1.053592754
M15	17	53715000	81075000	454	0.437019926	1.353804978
M15	18	245000	63265000	1059	0.346227871	1.271232462
M15	18	63355000	77845000	250	0.252286801	1.19109361
M15	19	315000	39795000	535	0.950745855	1.93287167
M15	19	40085000	52875000	178	0.116622794	1.084193899
M15	19	52885000	58985000	92	0.386993677	1.307665618
M15	20	205000	16315000	297	0.329700866	1.256752767
M15	20	16485000	30195000	185	0.544592508	1.4586083
M15	20	30305000	51965000	391	0.36010158	1.283516266
M15	20	52135000	62825000	169	0.613811042	1.530296325

M15	21	14645000	25135000	157	0.910644215	1.879884747
M15	21	25305000	38585000	243	0.355234317	1.279193326
M15	21	38755000	45345000	120	0.118863794	1.085879333
M15	21	45405000	48055000	48	0.466458698	1.381713688
M15	22	17325000	35735000	296	0.646833541	1.565727927
M15	22	35905000	37815000	33	-0.032024268	0.978047022
M15	22	38035000	51185000	207	0.637491789	1.555622266
M15	X	2855000	39235000	656	0.391385528	1.311652477
M15	X	39455000	43635000	75	0.678455199	1.600425143
M15	X	43805000	62655000	234	0.993065231	1.990409437
M15	X	62825000	83395000	364	0.516009405	1.429994308
M15	X	83565000	112595000	478	0.447687003	1.363851911
M15	X	112705000	141045000	505	0.599384981	1.515070557
M15	X	141195000	142465000	25	-0.098971925	0.933698115
M15	X	142635000	145845000	58	0.500688598	1.414888728
M15	X	145955000	149755000	65	0.919180098	1.891040286
M15	X	149975000	152595000	42	0.468007172	1.383197505
M23	1	1305000	47715000	750	0.037002269	1.025979759
M23	1	48135000	60235000	210	-0.040643666	0.972221089
M23	1	60255000	245345000	2701	0.017047309	1.011886382
M23	1	245405000	248885000	53	-0.110955534	0.925974562
M23	2	105000	15875000	286	-0.086624763	0.941723369
M23	2	15955000	74905000	1043	0.003484111	1.00241792
M23	2	74915000	155915000	1250	-0.048863339	0.966697665
M23	2	156185000	190095000	590	-0.055482046	0.962272866
M23	2	190105000	243045000	923	-0.105639002	0.929393202
M23	3	155000	60515000	1089	-0.115915922	0.92279627
M23	3	60655000	106285000	740	-0.044761614	0.969449992
M23	3	106455000	129445000	403	-0.134241535	0.911148724
M23	3	129475000	197765000	1186	-0.001352534	0.999062934
M23	4	205000	190795000	3184	-0.125316088	0.916803154
M23	5	265000	180635000	3057	-0.110543811	0.926238859
M23	6	455000	65895000	980	-0.009808324	0.993224446
M23	6	65905000	117445000	885	-0.094067443	0.936877649
M23	6	117765000	134675000	309	0.004145357	1.002877475
M23	6	134675001	134944999	5	0.2513938	1.190356573
M23	6	134945000	160085000	462	0.114233443	1.082399774
M23	6	160095000	170895000	192	-0.094510241	0.936590143
M23	7	335000	65055000	1015	-0.081190992	0.945276968
M23	7	65455000	152655000	1435	-0.028386537	0.980516262
M23	7	152665000	159095000	110	-0.083237096	0.943937278
M23	8	175000	40695000	705	-0.081034554	0.945379473
M23	8	40785000	146285000	1737	0.033795913	1.023702075
M23	9	355000	19355000	346	0.053369823	1.037685905
M23	9	19365000	72255000	379	-0.12075109	0.919708711
M23	9	72265000	140905000	1204	-0.007885577	0.994549045
M23	10	125000	72145000	1145	-0.022105642	0.984794329
M23	10	72155000	90325000	301	-0.055035681	0.962570637

M23	10	90335000	109265000	330	-0.01107702	0.992351395
M23	10	109275000	135355000	457	-0.135361445	0.910441708
M23	11	275000	12395000	189	-0.127334337	0.915521494
M23	11	12405000	77635000	1023	-0.011171497	0.992286412
M23	11	77805000	95935000	322	-0.117940943	0.921501908
M23	11	96105000	119085000	402	-0.053141605	0.9638352
M23	11	119255000	134895000	278	-0.146555049	0.903405092
M23	12	215000	28645000	470	-0.003583035	0.997519511
M23	12	28815000	133785000	1764	-0.115238352	0.923229768
M23	13	19305000	53535000	594	-0.070502575	0.952306196
M23	13	53605000	83645000	485	-0.005197204	0.996404054
M23	13	83655000	96665000	216	-0.115149109	0.92328688
M23	13	96705000	115015000	327	0.067943839	1.04822167
M23	14	20485000	38585000	308	-0.022156418	0.984759669
M23	14	38805000	107205000	1193	-0.112214948	0.925166577
M23	15	22825000	97875000	1262	0.002013233	1.001396441
M23	15	98005000	102365000	81	-0.093351535	0.93734267
M23	16	105000	11775000	186	-0.075611522	0.948939804
M23	16	11945000	75835000	835	-0.036570483	0.974969854
M23	16	76005000	89905000	238	-0.066184023	0.955161093
M23	17	25000	81025000	1210	0.006494931	1.004512092
M23	18	245000	29715000	461	-0.015941676	0.989010898
M23	18	29805000	77955000	848	-0.114637687	0.923614234
M23	19	375000	50495000	691	0.010472593	1.007285459
M23	19	50705000	58965000	112	-0.071423312	0.951698623
M23	20	185000	41855000	693	-0.096994187	0.934978965
M23	20	42005000	62865000	356	0.035768834	1.025102971
M23	21	14685000	48095000	575	-0.023971293	0.983521644
M23	22	16945000	50955000	541	-0.022178818	0.984744379
M23	X	2725000	11285000	160	-0.149784531	0.901385076
M23	X	11455000	152595000	2368	0.02094515	1.01462397
M1	1	1305000	29355000	438	0.041605572	1.029258649
M1	1	29575000	120395000	1549	-0.375842698	0.770655131
M1	1	121195000	248175000	1727	0.363302477	1.286367156
M1	2	45000	8475000	150	-0.274361132	0.826816376
M1	2	8485000	75915000	1200	-0.113394749	0.924410307
M1	2	75955000	84485000	137	-0.294773502	0.815200306
M1	2	84655000	100655000	150	-0.0587376	0.960103871
M1	2	100705000	120005000	320	-0.245483941	0.843532792
M1	2	120015000	124175000	72	-0.118254514	0.92130164
M1	2	124355000	133195000	141	-0.266521038	0.831321807
M1	2	133235000	239095000	1854	-0.105574234	0.929434927
M1	2	239265000	242945000	61	-0.275375488	0.826235247
M1	3	105000	197695000	3425	-0.005037019	0.996514692
M1	4	155000	190735000	3184	-0.024203274	0.98336351
M1	5	155000	7035000	123	-0.258219876	0.83611896
M1	5	7155000	180695000	2935	-0.004919896	0.996595596
M1	6	445000	63865000	942	0.031084323	1.021779802

M1	6	64005000	70095000	95	-0.858725484	0.551439499
M1	6	70205000	71645000	27	0.052132747	1.036796495
M1	6	71745000	81065000	169	-0.656804751	0.634281535
M1	6	81255000	84415000	56	0.07230535	1.051395416
M1	6	84585000	88535000	70	-1.01343799	0.49536437
M1	6	88545000	90445000	32	-0.119543336	0.920478968
M1	6	90725000	94645000	62	-0.767099868	0.587597488
M1	6	94815000	123975000	514	-0.397067323	0.759400407
M1	6	124195000	144645000	374	0.581175922	1.496068178
M1	6	144815000	170895000	472	-0.425283253	0.744692507
M1	7	325000	153405000	2469	-0.013993577	0.990347281
M1	7	153575000	158995000	91	-0.148652577	0.90209259
M1	8	155000	36945000	639	-1.02281564	0.492154899
M1	8	36955000	146205000	1803	1.598114468	3.027473785
M1	9	205000	140925000	1933	-0.009984386	0.993103244
M1	10	145000	127665000	2114	-0.397234526	0.7593124
M1	10	127835000	135305000	113	-0.701877027	0.614771834
M1	11	225000	8595000	123	-0.210297519	0.864358961
M1	11	8605000	55735000	734	-0.042110131	0.971233351
M1	11	56005000	56645000	10	0.607069772	1.523162402
M1	11	56755000	66255000	164	-0.839143324	0.558975392
M1	11	66425000	70845000	66	2.075058476	4.213614929
M1	11	70865000	134925000	1121	-0.990809123	0.503195483
M1	12	305000	120275000	2007	0.03610847	1.025344326
M1	12	120305000	125475000	86	0.213976957	1.159881128
M1	12	125645000	132345000	127	-0.330345697	0.795345881
M1	12	132445000	133785000	11	-0.041413117	0.9717027
M1	13	19255000	107545000	1501	-0.417395898	0.748774963
M1	13	107635000	114965000	121	-0.565516144	0.675713627
M1	14	19135000	107075000	1504	0.014728287	1.010261159
M1	15	20055000	102355000	1347	-0.003878219	0.997315433
M1	16	155000	25245000	390	0.538591599	1.452553799
M1	16	25465000	28025000	51	-0.21287034	0.862818886
M1	16	28195000	31085000	27	0.550708426	1.464804803
M1	16	31305000	52045000	129	0.678503269	1.60047847
M1	16	52055000	90075000	662	0.010896714	1.007581623
M1	17	55000	26615000	378	-0.896519795	0.537181008
M1	17	26835000	31245000	60	0.169071465	1.124334617
M1	17	31385000	35445000	64	-0.856536528	0.552276816
M1	17	35625000	39625000	39	0.19190291	1.142269372
M1	17	39995000	41545000	19	-0.800960336	0.573966987
M1	17	41715000	81025000	634	0.038742483	1.027218068
M1	18	195000	11215000	206	-0.295232222	0.814941146
M1	18	11385000	22045000	122	-0.17208987	0.887556047
M1	18	22115000	77995000	980	-0.30864038	0.80740231
M1	19	385000	3525000	27	-0.490958833	0.711552034
M1	19	3895000	4945000	11	0.171716618	1.126397954
M1	19	5155000	9795000	67	-0.741384125	0.598165196

M1	19	10015000	59085000	695	0.021857543	1.015265845
M1	20	305000	53025000	898	0.274001055	1.20915656
M1	20	53035000	62875000	153	0.108084948	1.077796606
M1	21	14695000	47965000	572	0.047178214	1.033242014
M1	22	16935000	51105000	542	0.026452344	1.018504493
M1	X	2755000	23945000	392	-0.967224144	0.511489261
M1	X	24205000	136155000	1845	-0.468117037	0.7229075
M1	X	136205000	152635000	290	-0.622145623	0.649703948
M2	1	1305000	5695000	54	-0.301230209	0.811560071
M2	1	5975000	21195000	235	-0.011788984	0.991861795
M2	1	21205000	29585000	150	0.379857168	1.301213024
M2	1	29765000	31145000	22	-0.491351805	0.711358243
M2	1	31215000	108145000	1325	0.003840869	1.002665835
M2	1	108235000	239735000	1768	0.380783797	1.302049049
M2	1	239965000	244405000	82	0.066855122	1.047430937
M2	1	244415000	248175000	71	0.331980795	1.258740418
M2	2	55000	7195000	126	0.230863424	1.173537077
M2	2	7315000	14325000	130	-0.408773923	0.753263264
M2	2	14505000	97765000	1336	0.32364387	1.25148749
M2	2	98345000	116395000	291	0.660479558	1.580607937
M2	2	116605000	122595000	109	-0.094463016	0.936620801
M2	2	122655000	128265000	98	-0.316674075	0.802918759
M2	2	128495000	166395000	662	-0.006166852	0.995734587
M2	2	166415000	169585000	58	0.233440454	1.175635195
M2	2	169755000	202695000	563	0.62509122	1.542308341
M2	2	202845000	204375000	26	-0.049154274	0.966502739
M2	2	204555000	243045000	673	-0.437417458	0.738455322
M2	3	245000	15815000	279	0.389702872	1.310123552
M2	3	15995000	98165000	1397	-0.021199471	0.985413081
M2	3	98175000	197635000	1741	0.293935251	1.225979836
M2	4	165000	38525000	645	-0.522380238	0.696222219
M2	4	38705000	41495000	52	-0.169457239	0.889177139
M2	4	41615000	91705000	794	-0.436276428	0.739039598
M2	4	91935000	132395000	686	0.318345669	1.246899915
M2	4	132605000	137345000	72	0.206075087	1.153545641
M2	4	137575000	141845000	76	0.911602023	1.88113322
M2	4	142025000	190455000	839	-0.41155618	0.751811985
M2	5	85000	45875000	789	0.559638842	1.473900201
M2	5	49705000	129275000	1352	-0.496599091	0.708775632
M2	5	129505000	134705000	88	-0.090941866	0.93890958
M2	5	134755000	136875000	39	-0.431511607	0.741484476
M2	5	137055000	151525000	268	-0.089488633	0.939855825
M2	5	151755000	163355000	218	-0.262708703	0.833521488
M2	5	163405000	180695000	293	-0.217922052	0.85980294
M2	6	405000	37415000	559	0.608361903	1.524527213
M2	6	37425000	57145000	333	0.322182978	1.250220859
M2	6	57635000	68215000	115	0.157492117	1.115346609
M2	6	68225000	122235000	945	0.297176725	1.228737487

M2	6	122245000	132495000	183	0.744724158	1.675653855
M2	6	132625000	146495000	255	0.362037723	1.285239943
M2	6	146675000	151075000	81	-0.38779022	0.764299388
M2	6	151255000	154895000	69	0.306300329	1.236532646
M2	6	155175000	156915000	34	-0.479392964	0.717279367
M2	6	157145000	160165000	55	0.204464189	1.152258324
M2	6	160345000	170855000	186	0.029488247	1.020650016
M2	7	55000	7445000	104	-0.283304349	0.821706823
M2	7	7505000	25435000	315	0.284172957	1.217711995
M2	7	25615000	70045000	685	-0.061689455	0.958141439
M2	7	70105000	85625000	228	-0.382742629	0.766978143
M2	7	85805000	133085000	804	0.001817171	1.00126036
M2	7	133255000	144545000	178	0.360111056	1.283524697
M2	7	144685000	148855000	73	-0.16014395	0.894935771
M2	7	148905000	158995000	164	-1.186066579	0.439499498
M2	8	155000	35395000	611	-0.510145815	0.702151467
M2	8	35405000	47095000	143	0.547605805	1.461658017
M2	8	47575000	60555000	229	-0.15412838	0.898675154
M2	8	60785000	97035000	618	0.308814939	1.238689795
M2	8	97215000	145245000	820	0.881459007	1.842237427
M2	9	245000	6745000	119	-0.387837981	0.764274086
M2	9	6775000	17465000	193	0.273986349	1.209144235
M2	9	17605000	129845000	1456	-0.04710729	0.967875045
M2	9	130025000	140895000	157	-0.378555696	0.769207271
M2	10	115000	135445000	2235	-0.452211302	0.730921663
M2	11	215000	61925000	966	-0.092581927	0.937842831
M2	11	62155000	78285000	257	0.297513586	1.229024424
M2	11	78515000	130935000	924	-0.026698579	0.981664141
M2	11	130945000	134815000	69	-0.487162734	0.713426775
M2	12	245000	33175000	545	0.35973464	1.283189855
M2	12	33455000	46015000	155	0.012660708	1.008814354
M2	12	46345000	54045000	127	0.189253471	1.140173575
M2	12	54325000	104135000	864	-0.017590589	0.987881164
M2	12	104315000	125565000	390	0.299054846	1.230338117
M2	12	125575000	133785000	142	-0.121742327	0.919077021
M2	13	19365000	31445000	212	0.190655566	1.141282201
M2	13	31495000	65195000	564	-0.610456858	0.654989254
M2	13	65305000	106945000	708	0.124885266	1.090421011
M2	13	107125000	115035000	134	0.784468541	1.722457685
M2	14	20515000	24885000	74	0.305574191	1.23591043
M2	14	25065000	30815000	100	0.096124032	1.068897883
M2	14	30825000	38545000	130	0.31948213	1.247882528
M2	14	38555000	107095000	1196	-0.461761733	0.726099048
M2	15	20075000	23795000	12	0.13564481	1.098583714
M2	15	23955000	27135000	56	-0.382868985	0.766910972
M2	15	27315000	102355000	1273	-0.026777124	0.981610697
M2	16	155000	4975000	59	0.46206525	1.377512346
M2	16	5155000	13645000	157	0.117274643	1.084683878

M2	16	13825000	17045000	38	0.378749413	1.300214288
M2	16	17055000	52395000	353	0.146705055	1.107038238
M2	16	52575000	75495000	401	0.284901228	1.21832685
M2	16	75655000	90035000	248	0.141104111	1.102748739
M2	17	65000	2585000	38	-0.207486835	0.866044562
M2	17	2655000	15535000	232	-0.493053805	0.710519522
M2	17	15545000	31195000	170	-0.331999332	0.794434768
M2	17	31375000	35635000	68	-0.603102718	0.658336587
M2	17	35865000	54665000	259	-0.216202557	0.860828318
M2	17	54895000	81065000	431	0.27478932	1.209817404
M2	18	55000	34235000	544	0.265019595	1.20165237
M2	18	34245000	45145000	196	0.095765616	1.068632364
M2	18	45405000	60485000	274	0.213637883	1.159608556
M2	18	60655000	77875000	295	-0.582093763	0.667993624
M2	19	355000	21645000	299	0.631713613	1.549404261
M2	19	21825000	24185000	31	-0.051130896	0.96517945
M2	19	28215000	31595000	63	-0.871917931	0.546419952
M2	19	31805000	59025000	406	-0.386899356	0.764771489
M2	20	255000	2455000	41	-0.177564502	0.884194398
M2	20	2635000	31925000	468	0.119893255	1.086654458
M2	20	32155000	62835000	535	0.709756005	1.635527486
M2	21	14405000	16335000	27	0.04673212	1.032922576
M2	21	16345000	47995000	549	0.265806418	1.202307911
M2	22	16905000	37635000	333	-0.030977637	0.978756822
M2	22	37965000	43575000	93	0.184301403	1.136266625
M2	22	43905000	47835000	66	-0.151822466	0.900112688
M2	22	48005000	51135000	43	-0.377995262	0.769506137
M2	X	2815000	51255000	857	-0.487374153	0.713322234
M2	X	51355000	152585000	1670	0.085323659	1.060925726
M5	1	1305000	60465000	968	-0.007628898	0.994726008
M5	1	60635000	121275000	1021	-0.237637511	0.848133038
M5	1	145195000	249195000	1724	0.843061146	1.793852347
M5	2	55000	243045000	4098	0.002333061	1.001618463
M5	3	105000	162365000	2828	0.233170935	1.175415587
M5	3	162735000	197785000	594	0.696727796	1.620824398
M5	4	105000	190745000	3185	-0.014236028	0.990180863
M5	5	155000	6255000	107	-0.019053552	0.986879913
M5	5	6265000	163835000	2669	0.253957653	1.192473869
M5	5	163845000	168825000	91	0.044546952	1.031359252
M5	5	168855000	180595000	191	0.201735944	1.150081375
M5	6	405000	3545000	58	0.302044289	1.232890173
M5	6	3605000	8125000	82	0.103873341	1.074654822
M5	6	8135000	35885000	392	0.276879764	1.211571683
M5	6	35895000	170755000	2301	0.023516059	1.016433661
M5	7	75000	47935000	827	0.235581022	1.177380813
M5	7	48105000	72735000	323	-0.021728614	0.985051724
M5	7	72755000	144445000	1169	0.241092881	1.181887635
M5	7	144495000	158995000	242	0.068507548	1.048631325

M5	8	215000	146255000	2442	-0.02317482	0.98406477
M5	9	305000	140995000	1932	-0.020163161	0.986121173
M5	10	255000	135375000	2232	-0.024002883	0.983500109
M5	11	205000	91945000	1465	0.228637894	1.171728151
M5	11	92065000	126435000	604	-0.294473081	0.815370077
M5	11	126445000	134735000	150	-0.447684984	0.733218461
M5	12	205000	125615000	2096	0.242340093	1.18290982
M5	12	125755000	133785000	138	-0.105313893	0.929602663
M5	13	19305000	28085000	153	-0.247613995	0.842288285
M5	13	28095000	115065000	1472	-0.164452566	0.892267028
M5	14	20535000	107075000	1502	-0.002282382	0.998419224
M5	15	20095000	35035000	184	0.029557566	1.020699058
M5	15	35405000	79245000	755	0.287212535	1.220280267
M5	15	79355000	95235000	271	0.156885864	1.114878013
M5	15	95405000	101935000	121	0.884714763	1.846399531
M5	16	105000	4925000	59	0.200253946	1.148900569
M5	16	4935000	90025000	1209	0.087039347	1.062188156
M5	17	5000	17495000	299	-0.210029117	0.864519783
M5	17	17655000	32675000	169	0.374779662	1.296641507
M5	17	32895000	81035000	736	0.493423013	1.40778109
M5	18	205000	7575000	135	0.043890421	1.030890015
M5	18	7745000	25695000	257	0.166821496	1.122582517
M5	18	25745000	77845000	915	0.102608807	1.07371329
M5	19	255000	59095000	811	0.0902645	1.064565339
M5	20	165000	21515000	396	0.218670658	1.163660861
M5	20	21525000	30045000	88	0.038710275	1.027195135
M5	20	30095000	50145000	361	0.23485441	1.176787975
M5	20	50155000	62755000	205	0.09628744	1.06901896
M5	21	14425000	47955000	575	-0.31541874	0.803617708
M5	22	16925000	51155000	544	-0.289523532	0.818172225
M5	X	2825000	152695000	2531	0.270551504	1.206268865
M3	1	1305000	143295000	1995	0.015911887	1.011090326
M3	1	145435000	248885000	1722	0.724202687	1.651987404
M3	2	105000	4245000	73	-0.485150652	0.714422463
M3	2	4285000	11015000	122	0.880201276	1.840632077
M3	2	11235000	17045000	106	-0.423877062	0.745418711
M3	2	17105000	44235000	483	-0.038689218	0.973539069
M3	2	44245000	46975000	51	0.271787516	1.207302763
M3	2	47145000	49585000	47	0.574743753	1.489412895
M3	2	49705000	64005000	250	0.378402101	1.299901314
M3	2	64175000	189235000	2019	0.009622653	1.006692208
M3	2	189455000	242935000	928	0.139323771	1.101388745
M3	3	105000	94365000	1623	0.307772012	1.237794667
M3	3	94605000	145375000	897	0.100208256	1.071928186
M3	3	145595000	179925000	594	0.333037045	1.259662325
M3	3	180095000	197765000	302	0.471153698	1.386217559
M3	4	235000	48735000	823	-0.059235131	0.959772824
M3	4	48755000	72395000	330	0.177210954	1.130695888

M3	4	72565000	79015000	114	0.255600924	1.193832905
M3	4	79105000	190455000	1908	-0.024874865	0.982905849
M3	5	55000	7695000	138	0.074733548	1.053166508
M3	5	7915000	36815000	490	0.158618778	1.11621797
M3	5	37105000	126985000	1469	-0.111657598	0.925524061
M3	5	126995000	159095000	584	-0.146090382	0.90369611
M3	5	159155000	180665000	373	0.620307051	1.537202312
M3	6	485000	111875000	1762	0.32719642	1.254573
M3	6	112045000	170735000	1067	0.038495167	1.02704199
M3	7	55000	95165000	1500	-0.015998846	0.988971707
M3	7	95335000	107295000	201	0.149458586	1.109153152
M3	7	107495000	159035000	859	0.068610408	1.048706092
M3	8	255000	33275000	570	-0.14038176	0.907279043
M3	8	33445000	41625000	148	0.28977659	1.222450959
M3	8	41795000	146235000	1717	0.804369868	1.74638285
M3	9	205000	4705000	83	-0.689732656	0.619968725
M3	9	4715000	15925000	204	0.164913407	1.121098786
M3	9	16095000	31135000	272	-0.365293848	0.77631074
M3	9	31355000	38655000	133	-0.050825568	0.965383739
M3	9	44875000	81735000	196	-0.385679931	0.765418178
M3	9	81905000	99345000	310	0.18983223	1.140631065
M3	9	99515000	140985000	721	-0.042013649	0.971298306
M3	10	255000	4615000	86	0.606977437	1.52306492
M3	10	4655000	7885000	62	0.24282106	1.183304245
M3	10	8105000	23765000	274	-0.028988327	0.980107346
M3	10	23935000	26145000	40	-0.488852711	0.712591554
M3	10	26305000	28095000	34	-0.123997827	0.917641264
M3	10	28255000	38595000	195	1.097270331	2.139495035
M3	10	42765000	135445000	1525	0.225767116	1.169398881
M3	11	255000	67445000	1054	0.210042522	1.156722277
M3	11	67855000	75715000	126	1.194433079	2.288548837
M3	11	76035000	81375000	95	0.801832361	1.743313896
M3	11	81545000	130975000	868	-0.026972885	0.98147751
M3	11	131145000	134915000	67	-0.143789743	0.905138367
M3	12	305000	9385000	148	0.968872886	1.957310836
M3	12	9855000	16945000	118	-0.026777588	0.981610381
M3	12	16945001	17714999	12	1.039398493	2.055370523
M3	12	17715000	19945000	39	0.985547723	1.980064907
M3	12	20105000	54685000	520	-0.041563851	0.971601181
M3	12	54905000	106775000	907	0.189164092	1.14010294
M3	12	106945000	119185000	231	-0.186353693	0.878824081
M3	12	119305000	133775000	247	0.127923413	1.09271973
M3	13	19295000	115095000	1626	0.275021506	1.210012127
M3	14	20565000	107235000	1504	0.010315292	1.007175638
M3	15	22805000	40165000	271	-0.148536365	0.902165258
M3	15	40435000	51695000	189	-0.360138694	0.779089678
M3	15	51755000	102295000	879	0.026658832	1.018650278
M3	16	385000	4125000	44	-0.218273182	0.859593702

M3	16	4495000	8895000	80	0.910089151	1.879161617
M3	16	8905000	13255000	80	0.114029233	1.082246574
M3	16	13265000	77635000	846	0.149240693	1.108985646
M3	16	77645000	90095000	211	0.089731072	1.064171795
M3	17	45000	65405000	948	-0.026196874	0.982005579
M3	17	65415000	81085000	262	0.309762686	1.239503793
M3	18	55000	4655000	80	0.256285414	1.194399456
M3	18	4755000	11335000	129	-0.316177564	0.803195135
M3	18	11505000	77845000	1099	-0.078541678	0.947014435
M3	19	315000	59045000	809	-0.047001272	0.967946173
M3	20	265000	62895000	1052	0.222836977	1.167026222
M3	21	14655000	47975000	574	0.131398338	1.095354864
M3	22	16945000	43895000	431	0.158484817	1.116114329
M3	22	44025000	50955000	108	0.059929992	1.042415175
M3	X	2725000	52595000	871	-0.474017615	0.719956869
M3	X	53065000	77195000	356	-0.16144562	0.89412868
M3	X	77205000	110665000	555	-0.127036087	0.915710781
M3	X	110835000	152605000	742	-0.135379715	0.910430178
M6	1	1305000	8385000	94	0.048413876	1.034127361
M6	1	8395000	14095000	82	0.324436623	1.252175365
M6	1	14175000	39235000	425	-0.128970604	0.914483723
M6	1	39405000	46385000	124	0.278990953	1.213345952
M6	1	46455000	51305000	77	0.069761281	1.049543004
M6	1	51355000	54415000	48	0.29315708	1.225318736
M6	1	54595000	84505000	541	0.100755872	1.072335145
M6	1	84785000	95495000	193	0.222798928	1.166995443
M6	1	95605000	107765000	185	0.084739073	1.060495922
M6	1	107945000	157035000	358	0.228991106	1.172015058
M6	1	157265000	159295000	34	0.013204291	1.009194529
M6	1	159305000	208125000	809	0.595672768	1.511177125
M6	1	208155000	213315000	97	0.371249976	1.293473032
M6	1	213495000	248885000	625	0.039002333	1.027403101
M6	2	5000	24125000	432	0.03570122	1.025054928
M6	2	24255000	75245000	906	0.218090412	1.163192936
M6	2	75425000	242905000	2754	-0.056773591	0.961411795
M6	3	135000	5135000	98	0.604473454	1.520423737
M6	3	5145000	41535000	656	0.404448121	1.323582499
M6	3	41545000	53365000	197	0.445960591	1.362220823
M6	3	53545000	84085000	558	-0.09872131	0.933860324
M6	3	84315000	119525000	553	0.347678804	1.272511596
M6	3	119755000	125535000	102	0.67679467	1.598584128
M6	3	125545000	158295000	573	0.359902869	1.283339493
M6	3	158475000	193395000	610	0.267187908	1.203459764
M6	3	193395001	193924999	9	1.848276212	3.600697027
M6	3	193925000	196665000	37	1.379262639	2.601353821
M6	4	145000	19985000	324	0.268722383	1.204740465
M6	4	20215000	25315000	97	0.097543174	1.069949847
M6	4	25495000	48945000	401	0.357429611	1.281141307

M6	4	52765000	54145000	27	-0.435407987	0.739484603
M6	4	54305000	56235000	33	0.758850028	1.692141281
M6	4	56465000	73395000	275	-0.511876082	0.70130986
M6	4	73625000	79375000	104	1.174999893	2.257928642
M6	4	79555000	83165000	63	-0.453554201	0.730241619
M6	4	83175000	95045000	205	-0.29035706	0.817699657
M6	4	95275000	108545000	231	0.251661512	1.190577481
M6	4	108665000	118055000	155	0.106577116	1.076670735
M6	4	118385000	131735000	229	0.196985883	1.146300969
M6	4	131745000	138165000	99	0.04519983	1.031826089
M6	4	138175000	163115000	444	0.210897956	1.157408349
M6	4	163125000	190475000	465	0.10682513	1.076855842
M6	5	105000	180645000	3060	0.331549832	1.258364461
M6	6	205000	170875000	2838	-0.054185035	0.963138357
M6	7	105000	47975000	827	0.260026644	1.19750082
M6	7	48155000	159095000	1736	-0.070396461	0.952376244
M6	8	375000	28565000	482	-0.480263451	0.716846708
M6	8	28575000	33845000	97	0.120083023	1.086797403
M6	8	33935000	37365000	63	0.546235971	1.460270837
M6	8	37545000	52065000	183	1.199746762	2.29699348
M6	8	52245000	57385000	89	0.54176767	1.455755097
M6	8	57395000	62245000	88	0.860049436	1.815100507
M6	8	62355000	145845000	1419	1.563811526	2.95633862
M6	9	325000	32375000	583	-0.426264777	0.744186035
M6	9	32385000	36735000	77	-0.307807879	0.807868353
M6	9	36755000	140935000	1271	0.360694495	1.284043871
M6	10	165000	26835000	485	0.107740957	1.07753965
M6	10	26845000	35455000	161	0.216190657	1.161662239
M6	10	35555000	70355000	472	0.071088601	1.050509058
M6	10	70685000	77905000	112	0.271088831	1.206718218
M6	10	77915000	135445000	998	0.077951488	1.055518224
M6	11	625000	50215000	841	0.087369616	1.062431345
M6	11	51455000	62605000	131	0.614342212	1.530859852
M6	11	62855000	66065000	51	0.560256144	1.474530991
M6	11	66245000	71195000	74	1.2941228	2.452278446
M6	11	71305000	87605000	288	0.005300729	1.003680943
M6	11	87755000	91595000	60	1.34008916	2.531669642
M6	11	91775000	129985000	675	0.041160077	1.028940869
M6	11	130215000	134945000	86	-0.313017718	0.804956252
M6	12	355000	3295000	47	0.32804974	1.25531527
M6	12	3585000	6115000	47	0.052180301	1.036830671
M6	12	6205000	42365000	536	0.305992909	1.236269185
M6	12	42455000	114905000	1267	0.614093577	1.530596045
M6	12	115085000	122695000	137	-0.0548093	0.96272169
M6	12	122905000	133795000	187	0.400129717	1.319626557
M6	13	19325000	89485000	1170	-0.13934758	0.907929649
M6	13	89495000	115035000	455	-0.261728404	0.834088051
M6	14	20515000	25165000	79	0.365857176	1.288647051

M6	14	25345000	29655000	74	-0.183098047	0.880809511
M6	14	29935000	39315000	160	0.337930116	1.263941872
M6	14	39495000	106875000	1177	-0.080883164	0.945478683
M6	15	20055000	34165000	170	-0.466397898	0.723769442
M6	15	34345000	54695000	348	0.089292619	1.06384843
M6	15	54755000	72675000	319	0.565748196	1.480154934
M6	15	73005000	102395000	503	-0.123883042	0.917714278
M6	16	355000	5245000	62	0.226204063	1.169753109
M6	16	5255000	8535000	64	-0.678705821	0.624725437
M6	16	8915000	90105000	1137	0.018681325	1.013033108
M6	17	135000	10005000	162	0.213835507	1.159767413
M6	17	10015000	13445000	67	-0.020356208	0.985989229
M6	17	13625000	47195000	408	0.302724204	1.233471348
M6	17	47375000	50395000	51	0.799969215	1.741063975
M6	17	50565000	54955000	79	0.025773678	1.018025485
M6	17	54965000	62665000	121	1.156870083	2.229731637
M6	17	62845000	80945000	304	0.248200108	1.187724397
M6	18	55000	12155000	222	0.076356391	1.054351849
M6	18	12385000	21365000	95	0.281427165	1.215396603
M6	18	21375000	77875000	993	0.075486869	1.053716576
M6	19	305000	12955000	161	0.128604118	1.093235428
M6	19	12965000	21185000	132	0.015908178	1.011087727
M6	19	21415000	32345000	118	-0.346070131	0.786724201
M6	19	32415000	46795000	228	0.001228363	1.000851799
M6	19	46965000	59065000	163	0.553640589	1.467784929
M6	20	295000	24895000	458	0.344050552	1.269315362
M6	20	24905000	42245000	241	0.797129772	1.737640666
M6	20	42455000	54155000	217	1.717495804	3.28865075
M6	20	54335000	62795000	127	-0.523871339	0.695503009
M6	21	14625000	35865000	353	0.1714373	1.126179894
M6	21	36005000	48035000	220	0.140439156	1.102240586
M6	22	17315000	32375000	231	0.187666644	1.138920183
M6	22	32555000	51175000	309	-0.046738705	0.968122354
M6	X	2855000	152665000	2529	0.387380768	1.308016526
M7	1	1305000	120345000	1989	0.011846285	1.008245024
M7	1	121245000	212555000	1083	0.296009834	1.227744053
M7	1	212565000	232495000	354	0.011810449	1.00821998
M7	1	232585000	248155000	286	0.217529805	1.162741026
M7	2	5000	243015000	4098	0.0124613	1.008674926
M7	3	245000	20125000	358	0.03679958	1.025835626
M7	3	20135000	94035000	1257	-0.250774828	0.840444916
M7	3	94055000	197795000	1808	0.032958578	1.023108094
M7	4	165000	70745000	1128	-0.297353043	0.813744029
M7	4	70905000	74755000	69	0.253204458	1.191851471
M7	4	74985000	80845000	103	-0.264684594	0.832380692
M7	4	81125000	90545000	168	0.162505623	1.11922929
M7	4	90555000	103345000	223	0.014379729	1.010017108
M7	4	103355000	140445000	614	-0.287345726	0.819408222

M7	4	140495000	190775000	871	-0.013607345	0.990612448
M7	5	205000	49725000	791	-0.016253609	0.988797082
M7	5	49755000	101475000	871	-0.248868364	0.841556265
M7	5	101655000	180635000	1393	0.02186051	1.015267933
M7	6	465000	170755000	2833	-0.257521655	0.836523714
M7	7	85000	158945000	2563	-0.01307258	0.990979707
M7	8	175000	37195000	644	-0.3449489	0.787335864
M7	8	37375000	52085000	188	-0.070865528	0.952066645
M7	8	52265000	103715000	890	0.568275901	1.482750544
M7	8	103955000	146085000	709	0.265450933	1.202011695
M7	9	215000	68325000	703	-0.290527644	0.817602978
M7	9	71105000	141015000	1228	0.005757675	1.00399889
M7	10	295000	49755000	777	0.199232748	1.148087618
M7	10	49935000	135285000	1448	-0.253195489	0.839035938
M7	11	205000	56435000	867	-0.295939998	0.814541439
M7	11	56445000	134845000	1356	0.000148072	1.000102641
M7	12	305000	38475000	569	-0.233678991	0.850463372
M7	12	38505000	100265000	1055	0.033496101	1.023489357
M7	12	100445000	133835000	609	-0.361661404	0.778267812
M7	13	19365000	115015000	1623	0.008754538	1.006086632
M7	14	20495000	107245000	1505	0.010299504	1.007164616
M7	15	22805000	69065000	773	-0.274420318	0.826782457
M7	15	69105000	72555000	63	0.435521026	1.352399161
M7	15	72565000	102395000	509	-0.248169181	0.841964213
M7	16	145000	90145000	1269	-0.077807106	0.947496746
M7	17	55000	19595000	325	-0.337189464	0.791581903
M7	17	19775000	65555000	623	0.003530958	1.002450471
M7	17	65735000	81015000	253	0.271856755	1.207360707
M7	18	155000	77835000	1312	-0.034625994	0.976284821
M7	19	315000	31185000	392	-0.350935624	0.78407544
M7	19	31195000	59095000	418	-0.076271307	0.948505926
M7	20	325000	2245000	36	-0.017657201	0.987835553
M7	20	2245001	2504999	5	0.665914208	1.586573335
M7	20	2505000	10195000	140	0.691084735	1.614496971
M7	20	10375000	12645000	43	-0.263817952	0.832880862
M7	20	12675000	23815000	210	0.328025031	1.255293771
M7	20	23995000	48145000	365	-0.00565942	0.996084873
M7	20	48255000	53765000	104	0.739697053	1.669825161
M7	20	54045000	62795000	133	-0.132971392	0.911951249
M7	21	14435000	33695000	313	0.016174196	1.011274178
M7	21	33775000	47965000	260	0.285877844	1.219151862
M7	22	16905000	50965000	542	-0.039495548	0.972995105
M7	X	2745000	152495000	2529	-0.32014386	0.800990002
LCM	1	1305000	121245000	1992	0.017142863	1.011953405
LCM	1	145165000	248875000	1724	0.806446688	1.748898651
LCM	2	145000	242995000	4095	0.001160916	1.000805009
LCM	3	205000	167405000	2900	-0.004943168	0.99657952
LCM	3	167415000	197795000	524	0.605253651	1.521246191

LCM	4	265000	190705000	3181	-0.003585205	0.99751801
LCM	5	125000	180655000	3060	-0.002787145	0.998069963
LCM	6	205000	170735000	2835	0.006192763	1.004301722
LCM	7	55000	159095000	2567	0.315943875	1.244825807
LCM	8	265000	24105000	400	-0.443604423	0.735295253
LCM	8	24275000	146205000	2037	0.313820044	1.242994613
LCM	9	275000	140995000	1933	0.002456305	1.001704031
LCM	10	265000	135365000	2231	-0.005598514	0.996126926
LCM	11	285000	134785000	2220	-0.001794186	0.998757138
LCM	12	205000	133485000	2236	0.00648932	1.004508185
LCM	13	19255000	115035000	1626	-0.002057443	0.998574906
LCM	14	20505000	107245000	1505	0.001205675	1.000836059
LCM	15	22865000	102315000	1343	0.01449977	1.01010115
LCM	16	185000	31935000	488	0.308423781	1.238353995
LCM	16	34305000	90045000	775	-0.419702706	0.747578661
LCM	17	35000	19665000	326	-0.326851696	0.797274429
LCM	17	19675000	21065000	22	0.337259955	1.263354882
LCM	17	21835000	80935000	855	0.036910762	1.025914686
LCM	18	55000	77895000	1314	-0.016416647	0.988685345
LCM	19	365000	59085000	809	0.049567445	1.034954573
LCM	20	305000	62755000	1048	-0.009984187	0.993103381
LCM	21	14425000	47935000	575	0.011503186	1.008005273
LCM	22	16905000	51145000	544	0.012335617	1.008587057
LCM	X	2815000	152645000	2530	-0.039118107	0.973249695