

DMR_coordinate	DMR size	z-score	Δ methylation (IUGR-AGA)	
chr20:60950552-60950644		92	9.76	0.616
chr7:39872970-39873071		101	12.75	0.562
chr18:73766095-73766169		74	6.16	0.56
chr19:18111601-18111624		23	4.29	0.515
chr4:132683695-132683768		73	8.19	0.508
chr16:85620235-85620254		19	7.98	0.508
chr10:10493533-10493590		57	5.87	0.5
chr19:12480152-12480245		93	8.89	0.495
chr10:133923015-133923061		46	7.35	0.492
chr22:41634641-41634708		67	5.21	0.486
chr2:204592301-204592358		57	4.02	0.477
chr21:29170494-29170584		90	5.24	0.473
chr20:49078681-49078762		81	6.38	0.465
chr2:222388858-222388939		81	7.34	0.438
chr12:124877140-124877197		57	4.7	0.435
chr8:143437093-143437183		90	4.78	0.432
chr15:40894318-40894381		63	6.16	0.42
chr15:45021622-45021671		49	4.72	0.415
chr1:2797592-2797661		69	6.88	0.415
chr10:12376347-12376414		67	6.31	0.408
chr1:28118046-28118108		62	4.61	0.408
chr1:245337245-245337305		60	6.05	0.407
chr22:19620031-19620099		68	5.93	0.407
chr19:12671669-12671715		46	5.77	0.407
chr6:125286439-125286509		70	5.25	0.405
chr1:216909713-216909776		63	4.99	0.403
chrY:4822710-4822750		40	5.44	0.403
chr10:63669122-63669171		49	4.69	0.398
chr19:12882618-12882650		32	4.44	0.397
chr2:154823159-154823177		18	4.98	0.395
chr19:831145-831184		39	4.9	0.395
chr21:44829483-44829557		74	4.86	0.395
chr13:104109559-104109599		40	4.65	0.394
chr8:112074877-112074911		34	4.25	0.393
chr19:12852361-12852443		82	6.81	0.39
chr4:147271271-147271342		71	6.9	0.384
chr1:94261930-94262006		76	7.02	0.383
chr14:104751257-104751291		34	4.73	0.375
chr1:228771891-228771949		58	5.23	0.371
chr6:8041964-8042130		166	7.15	0.37
chrX:48698000-48698018		18	4.79	0.37
chr11:116371571-116371591		20	6.66	0.369

chr2:207069312-207069376	64	6.05	0.367
chr14:24458195-24458233	38	6.38	0.367
chr15:32696981-32697047	66	5.53	0.367
chr1:6099124-6099157	33	5.16	0.365
chr16:89523397-89523437	40	4.58	0.365
chr8:144454655-144454725	70	6.22	0.364
chr6:142290823-142290863	40	5.46	0.363
chr5:102028776-102028858	82	5.93	0.362
chrY:1433003-1433037	34	5.16	0.362
chr4:165022241-165022333	92	4.45	0.361
chr11:2828162-2828249	87	4.57	0.36
chr16:29693270-29693345	75	5.31	0.357
chrY:13310708-13310722	14	4.97	0.357
chr10:61642483-61642575	92	5.61	0.356
chr7:1392101-1392154	53	5.64	0.355
chr1:87260637-87260721	84	6.88	0.353
chr10:83683239-83683257	18	4.92	0.348
chr19:30704000-30704049	49	4.24	0.348
chr2:237814044-237814133	89	6.2	0.347
chr18:77219587-77219673	86	5.78	0.347
chr17:48585421-48585486	65	5.76	0.347
chrX:134532748-134532784	36	4.25	0.346
chr19:7722381-7722479	98	4.14	0.346
chr16:1224971-1225066	95	5.56	0.345
chr11:98112927-98113005	78	5.01	0.345
chr1:206941320-206941367	47	5.48	0.344
chr20:29571910-29571966	56	4.5	0.343
chr17:56085810-56085899	89	6.12	0.34
chrX:67458975-67459069	94	5.48	0.34
chr10:134293880-134293965	85	6.01	0.338
chr15:52264741-52264876	135	6.42	0.337
chrX:118528291-118528309	18	4.53	0.336
chr7:57089012-57089054	42	4.48	0.335
chr3:81218952-81219024	72	4.28	0.335
chr2:225906662-225906751	89	4.43	0.335
chr4:43553249-43553331	82	5.68	0.334
chr2:97215928-97216029	101	12.66	0.333
chr6:38101249-38101327	78	5.95	0.333
chr10:35858323-35858410	87	4.41	0.333
chr21:44764673-44764713	40	4.07	0.333
chr20:62026243-62026321	78	5.81	0.332
chr3:6109823-6109895	72	6.19	0.331
chr8:52094031-52094140	109	4.94	0.33
chrY:18958981-18958999	18	5.74	0.33

chr19:33918820-33918869	49	4.14	0.33
chr1:1912712-1912811	99	5.3	0.329
chr10:27267871-27267917	46	5.62	0.328
chr1:3038591-3038678	87	5.29	0.327
chrY:13478030-13478105	75	5.8	0.325
chr7:148677970-148678030	60	5.86	0.324
chr16:1797290-1797383	93	4.38	0.323
chr10:133949951-133950019	68	4.29	0.323
chrX:103277229-103277254	25	5.53	0.322
chr13:47039931-47040082	151	5.97	0.321
chr6:167837078-167837158	80	6.27	0.32
chr4:37821661-37821714	53	4.95	0.32
chr2:225229444-225229543	99	4.36	0.32
chr8:116049919-116050018	99	4.69	0.318
chr7:98287154-98287196	42	4.36	0.318
chr13:64403541-64403617	76	5.5	0.318
chr5:81731049-81731140	91	9	0.318
chr6:9399392-9399487	95	5.16	0.316
chr21:41356546-41356638	92	6.06	0.315
chr17:39975485-39975602	117	6.4	0.314
chr8:34951917-34951924	7	4.31	0.314
chrX:24041077-24041148	71	4.43	0.313
chr8:2904130-2904239	109	5.09	0.312
chr5:135123847-135123906	59	5.53	0.31
chr19:6779842-6779938	96	5.48	0.31
chr2:64203122-64203160	38	4.72	0.31
chr8:1910891-1910915	24	4.57	0.31
chr2:131913165-131913251	86	5.2	0.309
chrY:5479875-5479935	60	4.16	0.307
chrX:48826005-48826048	43	5.76	0.305
chr1:939038-939129	91	6.91	0.302
chr18:77157487-77157520	33	5.29	0.302
chr2:148927666-148927762	96	8.15	0.301
chrX:136509398-136509493	95	4.87	0.301
chr17:19633634-19633696	62	5.73	0.3
chr9:137298389-137298483	94	4.96	0.3
chr7:72896087-72896163	76	4.38	0.3
chr9:139154078-139154159	81	4.18	0.3
chr4:75648489-75648565	76	5.77	0.299
chr6:15222942-15222999	57	5.63	0.298
chr14:95254585-95254649	64	4.47	0.298
chr10:50649667-50649757	90	5.76	0.297
chr17:48224832-48224890	58	5.18	0.297
chr11:6206677-6206848	171	11.38	0.297

chr4:5807907-5807953	46	4.03	0.297
chrY:18745835-18745978	143	5.89	0.297
chr16:79729506-79729563	57	4.38	0.295
chr1:223936360-223936442	82	7.74	0.295
chr6:17728998-17729091	93	7.34	0.294
chr16:1267893-1267994	101	7.15	0.293
chr17:17592483-17592569	86	5.41	0.292
chr16:85555499-85555538	39	4.68	0.292
chr5:31302252-31302333	81	4.19	0.292
chr9:38042043-38042098	55	4.33	0.292
chr2:138266193-138266236	43	4.84	0.29
chr10:50966567-50966615	48	6.01	0.29
chr6:27107000-27107099	99	5.63	0.29
chr13:20966048-20966133	85	5.3	0.29
chr15:71466625-71466634	9	4.56	0.29
chr3:145909700-145909786	86	6.87	0.289
chr1:6217838-6217930	92	4.48	0.288
chr22:49464807-49464840	33	6.85	0.288
chrX:17722652-17722710	58	5.2	0.288
chr3:87737838-87737856	18	5.25	0.288
chrX:133650399-133650450	51	5.01	0.287
chr2:73430550-73430703	153	8.15	0.287
chr9:140069339-140069424	85	6.4	0.287
chr10:134292468-134292572	104	5.32	0.286
chr16:435686-435770	84	4.82	0.286
chr19:47127190-47127273	83	10.4	0.285
chr22:17363339-17363357	18	5.19	0.285
chr5:104854679-104854719	40	4.78	0.285
chr9:92058146-92058175	29	4.78	0.284
chr8:22458181-22458210	29	4.39	0.283
chr3:151912005-151912148	143	8.03	0.282
chr22:50305326-50305334	8	5.12	0.28
chr19:55707925-55707979	54	4.73	0.28
chr7:66964710-66964770	60	4.61	0.28
chr22:49042254-49042289	35	5.94	0.28
chr9:136994689-136994759	70	6.96	0.279
chr12:131493229-131493313	84	4.63	0.278
chr5:1905794-1905833	39	4.17	0.278
chrX:18893074-18893162	88	8.65	0.277
chr10:8062158-8062221	63	4.49	0.277
chr9:136451014-136451086	72	7.41	0.276
chr1:149719435-149719532	97	6.55	0.276
chr18:76682855-76682951	96	4.83	0.276
chr3:125447970-125448023	53	5.42	0.274

chr13:84145366-84145450	84	4.87	0.273
chr1:27668482-27668569	87	4.68	0.273
chr8:9383902-9383968	66	4.65	0.273
chr22:29706834-29706916	82	4.48	0.273
chr6:130678469-130678565	96	5.26	0.272
chr12:33059929-33060007	78	4.39	0.272
chr13:21519921-21519955	34	8.68	0.27
chr22:44987350-44987474	124	6.22	0.27
chrY:10008738-10008767	29	5.87	0.27
chr19:17264078-17264173	95	5.7	0.27
chr7:154690187-154690209	22	4.19	0.27
chr12:31951633-31951706	73	4.07	0.27
chr19:2276455-2276542	87	4.26	0.269
chr3:190158577-190158673	96	7.73	0.268
chr20:61337036-61337086	50	6.89	0.268
chr10:14652099-14652158	59	5.56	0.268
chr7:1600390-1600429	39	5.98	0.268
chr20:36759745-36759814	69	5.07	0.268
chr21:38070283-38070395	112	5.49	0.267
chr19:47592385-47592456	71	4.28	0.267
chrX:5847227-5847365	138	6.21	0.267
chr14:101158158-101158252	94	5.68	0.267
chr7:96655723-96655817	94	5.28	0.267
chr9:112935137-112935213	76	6.71	0.266
chr1:201618320-201618399	79	5.88	0.266
chr11:1156458-1156510	52	5.56	0.266
chr2:27350344-27350408	64	4.58	0.265
chr4:102683051-102683139	88	4.44	0.265
chr5:156198337-156198432	95	5.57	0.264
chr15:90191761-90191856	95	6.79	0.264
chr7:63882880-63882931	51	4.5	0.264
chr12:128613838-128613882	44	4.03	0.264
chr8:138323698-138323765	67	5.48	0.264
chr8:11408825-11408882	57	4.18	0.264
chr15:55618829-55618922	93	10.36	0.263
chrX:52897219-52897304	85	6.6	0.263
chr17:77113173-77113249	76	4.89	0.263
chr7:157696689-157696779	90	4.79	0.263
chr10:57946169-57946270	101	4.7	0.263
chr1:1294111-1294205	94	6.73	0.262
chr10:37052567-37052659	92	6.11	0.26
chr21:40760020-40760080	60	5.55	0.26
chr4:132273644-132273725	81	5.15	0.26
chr7:35294461-35294523	62	4.98	0.26

chr7:101694274-101694399	125	4.77	0.26
chr2:70118973-70119053	80	4.51	0.26
chr9:26604945-26604983	38	4.29	0.26
chr3:13246368-13246430	62	4.19	0.26
chr2:241662006-241662042	36	4.12	0.26
chr2:170105362-170105417	55	4.09	0.26
chr6:28799969-28800093	124	4.91	0.26
chr1:43534118-43534216	98	10.06	0.259
chr17:13018934-13019010	76	6.91	0.259
chr1:12566799-12566897	98	5.39	0.258
chr13:20504999-20505075	76	4.03	0.258
chrX:49368586-49368652	66	4.72	0.258
chr4:151501296-151501379	83	4.83	0.258
chr9:135114362-135114393	31	4.65	0.258
chr12:132164886-132165005	119	7.36	0.257
chr12:131929237-131929353	116	4.49	0.257
chr1:22301168-22301186	18	5.4	0.256
chr2:241405481-241405532	51	5.34	0.256
chr5:65163838-65163892	54	5.5	0.255
chr2:19750689-19750762	73	4.7	0.255
chr2:122496310-122496363	53	4.22	0.255
chr12:130493006-130493078	72	4.25	0.254
chr20:56443396-56443435	39	4.09	0.254
chr21:47407230-47407318	88	4.53	0.253
chr11:22404913-22404989	76	4.15	0.253
chr8:136261831-136261903	72	4.98	0.253
chr15:95399528-95399625	97	4.51	0.253
chr5:151587092-151587168	76	4.17	0.253
chr3:66116551-66116692	141	6.81	0.253
chr3:153224397-153224463	66	6.02	0.253
chr9:135432019-135432058	39	4.11	0.252
chr9:82591894-82591984	90	4.09	0.252
chr7:23065640-23065704	64	4.1	0.252
chr7:128441352-128441527	175	6.02	0.252
chr1:86622240-86622331	91	6.96	0.251
chr11:17627607-17627656	49	6.22	0.251
chr9:8481027-8481110	83	5.41	0.25
chr5:2207882-2207955	73	6.05	0.25
chr8:144963112-144963212	100	5.25	0.25
chr3:170038090-170038146	56	5.15	0.25
chr5:32098080-32098125	45	4.83	0.25
chr11:73480817-73480893	76	4.37	0.25
chr16:2344215-2344273	58	4.34	0.25
chr4:190943147-190943172	25	4.28	0.25

chr4:140693117-140693209	92	4.19	0.25
chr22:25673833-25673880	47	4.19	0.25
chr21:46745329-46745383	54	4.03	0.25
chr8:2933427-2933527	100	4.55	0.249
chr15:98634899-98634962	63	4.73	0.248
chr1:45259906-45259997	91	5.02	0.248
chr7:6166259-6166365	106	6.71	0.247
chr2:39372073-39372152	79	4.51	0.247
chr5:118656667-118656687	20	4.09	0.246
chr22:43829578-43829643	65	5.33	0.246
chr9:33766185-33766219	34	4.67	0.245
chr19:37792521-37792568	47	6.07	0.245
chr7:4352591-4352677	86	5.01	0.245
chr9:44990566-44990627	61	4.98	0.245
chr9:140762178-140762249	71	4.73	0.245
chr10:70511872-70511965	93	4.62	0.245
chr6:5836262-5836326	64	4.41	0.245
chr2:225293088-225293160	72	7.22	0.243
chr20:61897984-61898085	101	4.75	0.243
chr11:1027068-1027095	27	4.43	0.242
chr1:53558445-53558512	67	4.24	0.242
chr8:99371459-99371501	42	5.07	0.242
chr6:393318-393342	24	4.64	0.242
chr7:644301-644368	67	6.19	0.242
chr22:24646897-24646933	36	4.95	0.242
chr11:94609497-94609587	90	5.45	0.242
chr18:20226268-20226296	28	4.72	0.242
chr11:314073-314113	40	4.16	0.242
chr2:201980507-201980583	76	5.64	0.241
chrX:30716675-30716775	100	5.46	0.241
chrX:15286731-15286837	106	6.18	0.24
chr5:483037-483104	67	4.65	0.24
chr11:8887747-8887796	49	4.39	0.24
chr6:26779194-26779266	72	4.38	0.24
chr9:96503672-96503730	58	6.1	0.24
chr11:65374482-65374563	81	5.87	0.24
chr4:29049426-29049496	70	5.17	0.24
chr15:31059076-31059159	83	4.45	0.24
chr11:2907625-2907672	47	4.35	0.24
chr19:3116306-3116384	78	5.66	0.239
chr7:18977938-18978000	62	5.36	0.239
chr6:125965813-125965951	138	11.3	0.239
chr2:121016388-121016475	87	4.46	0.238
chr11:124881292-124881378	86	4.29	0.238

chr19:3215558-3215604	46	4.15	0.238
chrX:43513182-43513269	87	6.3	0.238
chr18:76266025-76266094	69	4.48	0.238
chr2:78829699-78829788	89	4.34	0.238
chr8:142984451-142984473	22	4.71	0.238
chrX:54409186-54409234	48	4.12	0.238
chr19:55598103-55598182	79	8.7	0.238
chr11:125271699-125271742	43	4.7	0.238
chr7:17377618-17377680	62	5.46	0.237
chr7:1258544-1258581	37	4.98	0.237
chr10:105630607-105630647	40	4.4	0.237
chr22:29704266-29704315	49	4.33	0.237
chr19:3388046-3388140	94	5.97	0.236
chr1:208111424-208111462	38	5.69	0.235
chr1:161992284-161992335	51	5.16	0.235
chr16:78472639-78472725	86	5.15	0.235
chr19:55476638-55476721	83	8.64	0.235
chr2:200329018-200329030	12	5.01	0.235
chr2:159724877-159724922	45	4.8	0.235
chr7:4780511-4780549	38	4.78	0.235
chr12:71770965-71771382	417	13.07	0.235
chr14:83088937-83088960	23	4.83	0.234
chr5:134735636-134735702	66	4.4	0.234
chr6:27729907-27730003	96	4.59	0.233
chr22:22611653-22611749	96	5.67	0.233
chr4:188426754-188426821	67	4.82	0.233
chr11:123193484-123193622	138	4.6	0.233
chr14:44877919-44878015	96	6.76	0.233
chr1:44473759-44473791	32	4.51	0.233
chr12:34402396-34402409	13	4.31	0.233
chr3:44677517-44677578	61	4.78	0.232
chr7:1292064-1292125	61	5.71	0.232
chr12:82339758-82339863	105	4.39	0.232
chr5:140089831-140089965	134	7.59	0.232
chr17:4389757-4389851	94	4.51	0.232
chr7:12051688-12051764	76	6.57	0.231
chrX:153208327-153208443	116	7.82	0.231
chr11:73480654-73480730	76	5.15	0.23
chr2:209242438-209242499	61	4.72	0.23
chr1:190377273-190377364	91	6.16	0.23
chr4:141146052-141146116	64	6.1	0.23
chrX:18229758-18229828	70	5.56	0.23
chr22:39497387-39497487	100	4.75	0.23
chr11:71347030-71347081	51	4.55	0.23

chr17:76572668-76572723	55	4.53	0.23
chr5:495101-495150	49	4.21	0.23
chr9:136527775-136527868	93	4.2	0.23
chr12:133045471-133045489	18	4.03	0.23
chr5:161049177-161049268	91	5.4	0.229
chr9:124414704-124414782	78	4.42	0.228
chr3:129317964-129318003	39	6.9	0.228
chr11:22811166-22811213	47	5.31	0.228
chrY:7027878-7027942	64	4.26	0.228
chrX:40111212-40111290	78	5.28	0.228
chr15:97814454-97814473	19	4.45	0.228
chr8:74361348-74361368	20	4.12	0.228
chr9:136001916-136002007	91	4.02	0.227
chr5:31317769-31317868	99	4.36	0.227
chr14:103739630-103739765	135	12.06	0.227
chr20:12090253-12090345	92	10.22	0.227
chr12:132918303-132918474	171	6.48	0.226
chr17:14962937-14963013	76	5.07	0.226
chr5:13017807-13017883	76	5	0.226
chr14:104639822-104639890	68	5.45	0.226
chr10:134578028-134578085	57	5.31	0.226
chr19:5238767-5238784	17	4.64	0.226
chr4:182269454-182269502	48	4.43	0.226
chr16:1587319-1587392	73	4.03	0.226
chr1:145464355-145464491	136	4.55	0.225
chr6:33640725-33640774	49	5.79	0.225
chr15:78556977-78557049	72	5.06	0.225
chr16:86547335-86547379	44	4.65	0.225
chr17:7553230-7553306	76	4.38	0.225
chr2:11517266-11517425	159	7.69	0.225
chr4:41397478-41397550	72	7.58	0.224
chr11:23674068-23674101	33	4.5	0.224
chr12:42066665-42066731	66	4.92	0.224
chr1:3041726-3041804	78	4.2	0.224
chr2:52632799-52632857	58	4.74	0.223
chr16:57679686-57679776	90	4.44	0.223
chr14:54413929-54413983	54	4.79	0.223
chr18:33078516-33078608	92	6.1	0.222
chr8:138860765-138860837	72	5.41	0.222
chr16:28892044-28892109	65	5.21	0.222
chr2:107459378-107459432	54	4.8	0.222
chr5:180030621-180030720	99	5.73	0.221
chr15:76632342-76632400	58	7.35	0.221
chr1:2803301-2803461	160	7.7	0.221

chr4:4871913-4872018	105	7.62	0.221
chr19:42515627-42515699	72	7.5	0.22
chrX:40879406-40879536	130	5.58	0.22
chr11:67748555-67748624	69	4.69	0.22
chr5:148802146-148802234	88	4.59	0.22
chr21:43524016-43524089	73	4.36	0.22
chr12:127574366-127574418	52	4.05	0.22
chr14:93412797-93412820	23	5.03	0.22
chr11:61511240-61511406	166	4.62	0.22
chr18:12494643-12494695	52	4.49	0.22
chr6:65257853-65257903	50	4.32	0.22
chrX:145124034-145124130	96	5.01	0.219
chr10:7472772-7472836	64	4.68	0.219
chr16:3206838-3206901	63	4.82	0.218
chr12:131562055-131562148	93	4.73	0.218
chr18:77254090-77254235	145	5.95	0.218
chr13:90529338-90529356	18	4.24	0.218
chr7:1066633-1066708	75	4.22	0.218
chr7:157868188-157868268	80	4.11	0.218
chr13:68745078-68745203	125	8.32	0.218
chr13:87012876-87012900	24	4.67	0.218
chr1:17092247-17092316	69	4.63	0.217
chr11:1033798-1033875	77	5.54	0.217
chr7:157985784-157985819	35	5.82	0.217
chr17:40125251-40125326	75	4.66	0.217
chrX:99663132-99663180	48	4.15	0.217
chr8:99952869-99952969	100	7.01	0.217
chr13:59187558-59187620	62	5.03	0.216
chr17:73719829-73719932	103	4.11	0.216
chr1:228757953-228757985	32	4.28	0.216
chr17:66961158-66961238	80	6.49	0.216
chr16:1813712-1813809	97	11.07	0.215
chr6:20239411-20239673	262	6.69	0.215
chr1:17811677-17811749	72	5.12	0.215
chr8:2830683-2830794	111	4.51	0.215
chr17:40441393-40441412	19	4.22	0.215
chr17:17625519-17625612	93	4.19	0.215
chr12:110818523-110818575	52	5.23	0.214
chr21:26734382-26734436	54	4.76	0.214
chr4:9523633-9523653	20	4.55	0.214
chr10:22542042-22542121	79	5.14	0.214
chr17:66410099-66410145	46	4.76	0.214
chrX:15167004-15167066	62	4.74	0.214
chr12:22488165-22488230	65	4.87	0.213

chr1:1850129-1850208	79	4.73	0.213
chr9:67927032-67927094	62	4.31	0.213
chr13:114434327-114434394	67	4.19	0.213
chrX:6323634-6323724	90	4.46	0.213
chr3:89113723-89113781	58	5.39	0.213
chr19:40324108-40324224	116	5.4	0.213
chr1:37150355-37150373	18	5.1	0.213
chr12:131707990-131708089	99	5.86	0.212
chr1:36184861-36184894	33	4.65	0.212
chr17:71312305-71312412	107	6.28	0.212
chr10:1506541-1506548	7	4.39	0.212
chrX:145090160-145090248	88	4.27	0.211
chr8:145578247-145578325	78	4.58	0.211
chr5:95515460-95515556	96	5.47	0.211
chr18:11108378-11108442	64	5.49	0.21
chr9:66173517-66173579	62	4.28	0.21
chr4:38228240-38228282	42	4.27	0.21
chr6:170597427-170597494	67	4.27	0.21
chr7:91426866-91426917	51	4.19	0.21
chr5:132324572-132324608	36	4.14	0.21
chr9:140175890-140175984	94	7.3	0.21
chr2:36856390-36856487	97	6.15	0.21
chr16:31053725-31053788	63	4.83	0.21
chr13:102473497-102473550	53	4.43	0.21
chr1:31382930-31383043	113	9.08	0.209
chr2:81421701-81421785	84	4.98	0.209
chr11:61544843-61544927	84	7.35	0.209
chr6:149080749-149080841	92	5.93	0.209
chr10:130255427-130255511	84	4.81	0.209
chr7:70671811-70671887	76	5.65	0.208
chr7:52196418-52196454	36	4.74	0.208
chr7:158766598-158766642	44	5.95	0.208
chr17:47612908-47612970	62	5.47	0.208
chrX:29696618-29696732	114	4.62	0.208
chr14:25899700-25899755	55	4.16	0.208
chr2:69598693-69598765	72	4.11	0.208
chr10:74080850-74080965	115	4.75	0.208
chrX:13796317-13796467	150	6.61	0.208
chrX:47107395-47107492	97	5.42	0.208
chrX:97567639-97567691	52	4.13	0.208
chr19:37774634-37774702	68	4.13	0.208
chr12:99288997-99289032	35	4.24	0.207
chr17:60313796-60313860	64	4.68	0.207
chr7:149112488-149112527	39	4.16	0.207

chr19:17439909-17440001	92	6.18	0.207
chr1:65513345-65513377	32	4.25	0.207
chr4:9073514-9073602	88	6.83	0.207
chr1:92427479-92427559	80	4.21	0.207
chr20:57463946-57464039	93	6.35	0.206
chr11:74594325-74594481	156	4.91	0.206
chr19:554432-554527	95	6.4	0.206
chrY:2649522-2649577	55	5.11	0.206
chr11:2035281-2035355	74	6.02	0.206
chr15:30352072-30352138	66	4.5	0.205
chr1:3028249-3028338	89	5.11	0.205
chr4:187877052-187877147	95	4.37	0.205
chr16:1340835-1340861	26	4.85	0.204
chr4:182208005-182208082	77	4.81	0.204
chr11:2828445-2828474	29	4.5	0.204
chrX:117477028-117477120	92	6.58	0.204
chr14:85819297-85819389	92	5.08	0.204
chr7:23695171-23695347	176	8.4	0.204
chrX:64955208-64955217	9	6.59	0.203
chr6:84521449-84521569	120	6.09	0.203
chr8:23583574-23583625	51	5.64	0.203
chr6:28743691-28743778	87	5.29	0.203
chr6:170598475-170598541	66	6.64	0.203
chrX:28590710-28590806	96	5.87	0.203
chr13:57860712-57860804	92	5.94	0.203
chrX:96568857-96568935	78	4.63	0.203
chr11:9480839-9480921	82	4.2	0.203
chr10:1712844-1712926	82	6.76	0.202
chr16:2533258-2533317	59	4.45	0.202
chr14:104852295-104852383	88	5.57	0.202
chr2:65797307-65797358	51	5.54	0.202
chr9:136101839-136101923	84	4.69	0.202
chr8:120491927-120491967	40	5.43	0.202
chr18:26028085-26028177	92	7.86	0.202
chrX:5965307-5965444	137	5.97	0.202
chr19:684775-684865	90	4.81	0.202
chr16:29244914-29245003	89	4.69	0.202
chr19:16437425-16437594	169	8.13	0.202
chr11:2598680-2598757	77	5.23	0.201
chr15:96884288-96884424	136	5.58	0.201
chr16:29198112-29198253	141	6.07	0.201
chrX:39967641-39967738	97	5.03	0.201
chr19:51189823-51189918	95	9.16	0.2
chrY:10006694-10006786	92	4.68	0.2

chr5:78417362-78417445	83	4.54	0.2
chr17:78294228-78294246	18	4.16	0.2
chr5:154235830-154235906	76	5.96	0.2
chr1:181287557-181287643	86	5.18	0.2
chr17:87892777-8789366	89	4.76	0.2
chr2:198029067-198029119	52	4.76	0.2
chr5:30139517-30139566	49	4.27	0.2
chr4:8620241-8620264	23	4.2	0.2
chr16:5459875-5459918	43	4.19	0.2
chr19:19253207-19253292	85	4.02	0.2
chr2:861422-861475	53	-4.13	-0.2
chr1:41284751-41284848	97	-4.17	-0.2
chr4:1107148-1107171	23	-4.41	-0.2
chr1:41303972-41304040	68	-4.53	-0.2
chr16:1601118-1601213	95	-5.26	-0.2
chr10:127105552-127105579	27	-5.65	-0.2
chrX:63005039-63005080	41	-6.22	-0.2
chr6:32029355-32029449	94	-6.87	-0.2
chr16:15528314-15528364	50	-6.92	-0.2
chr13:46219491-46219543	52	-7.04	-0.2
chr10:31989394-31989454	60	-5.85	-0.2
chr13:98182866-98182952	86	-5.87	-0.2
chr19:54268584-54268768	184	-10.51	-0.201
chr15:94218912-94218980	68	-5.83	-0.201
chr13:33924442-33924575	133	-6.21	-0.202
chr5:132313454-132313550	96	-4.36	-0.202
chr1:165495963-165496051	88	-4.78	-0.202
chr10:37543702-37543826	124	-5.28	-0.202
chr22:50022155-50022252	97	-5.86	-0.202
chr7:55811575-55811635	60	-6.04	-0.202
chr9:98535017-98535168	151	-4.32	-0.202
chrX:124337874-124337921	47	-6.03	-0.202
chr19:46156235-46156314	79	-4.56	-0.202
chr2:220977430-220977523	93	-5.11	-0.202
chr9:132412323-132412345	22	-4.19	-0.203
chr1:22377780-22377831	51	-4.3	-0.203
chr5:2135413-2135494	81	-4.47	-0.203
chr8:142528623-142528671	48	-5.2	-0.203
chr14:24641075-24641155	80	-4.08	-0.203
chr8:91411409-91411503	94	-4.06	-0.203
chr14:101005199-101005329	130	-5	-0.204
chr12:124854572-124854653	81	-4.22	-0.204
chr11:1014972-1015021	49	-4.25	-0.204
chr20:60781370-60781580	210	-7.86	-0.204

chrX:9733705-9733804	99	-4.84	-0.205
chr11:34405077-34405149	72	-4.43	-0.205
chr17:61559039-61559136	97	-4.6	-0.205
chr5:60039636-60039677	41	-4.83	-0.205
chr22:50702646-50702738	92	-5.02	-0.205
chr10:72315216-72315237	21	-5.29	-0.205
chr19:38886529-38886750	221	-12.89	-0.205
chr10:11207632-11207710	78	-6.97	-0.205
chr5:175969381-175969447	66	-6.24	-0.207
chr5:58335590-58335684	94	-4.46	-0.207
chr16:73100401-73100507	106	-5.2	-0.207
chr20:31148761-31148849	88	-4.53	-0.207
chr16:3058107-3058183	76	-5.3	-0.207
chr12:133480516-133480582	66	-5.64	-0.207
chr4:63674892-63674950	58	-5.42	-0.208
chr8:11719452-11719641	189	-6.2	-0.208
chr12:123754350-123754431	81	-6.89	-0.208
chr14:86861487-86861553	66	-4.33	-0.208
chr4:3681902-3682000	98	-4.47	-0.208
chr8:1693043-1693117	74	-5.03	-0.208
chr21:46521101-46521157	56	-5.06	-0.209
chr14:72374990-72375125	135	-5.07	-0.209
chr16:31226126-31226186	60	-6.15	-0.209
chr19:57351923-57352012	89	-4.95	-0.21
chr12:111389282-111389344	62	-5.91	-0.21
chr9:70645553-70645638	85	-5.43	-0.21
chr12:133548187-133548236	49	-5.14	-0.21
chr18:71828962-71829050	88	-5.24	-0.21
chr11:624177-624202	25	-5.26	-0.21
chr5:25467186-25467249	63	-5.26	-0.21
chr2:185560110-185560186	76	-6.78	-0.211
chr17:33701379-33701476	97	-7.99	-0.211
chr11:129801553-129801769	216	-8.29	-0.211
chrX:153037159-153037224	65	-4.3	-0.212
chr7:149809178-149809261	83	-7.78	-0.212
chr11:62166120-62166172	52	-9.09	-0.212
chr21:45930741-45930767	26	-6.61	-0.212
chr4:63151845-63151904	59	-4.25	-0.212
chr22:49944536-49944628	92	-4.39	-0.212
chr9:100690507-100690559	52	-4.63	-0.212
chr7:4855803-4855892	89	-5.14	-0.212
chr10:132099227-132099327	100	-6.38	-0.212
chr5:153858684-153858921	237	-9.62	-0.212
chr4:8859938-8860023	85	-7.01	-0.212

chr1:232760958-232761044	86	-4.64	-0.212
chr9:116889160-116889171	11	-5.59	-0.212
chr16:15528767-15528779	12	-4.62	-0.213
chr19:1806747-1806812	65	-5.34	-0.213
chr13:113529575-113529666	91	-4.09	-0.213
chrY:15863080-15863135	55	-8.31	-0.213
chr12:30976188-30976350	162	-11.48	-0.214
chr21:27449127-27449195	68	-4.45	-0.214
chrX:135528387-135528424	37	-4.52	-0.214
chr11:68452593-68452622	29	-9.43	-0.214
chr5:140871676-140871757	81	-4.04	-0.215
chr5:2053011-2053049	38	-4.23	-0.215
chr2:1603195-1603242	47	-4.28	-0.215
chr14:27104337-27104361	24	-5.96	-0.215
chr4:147560391-147560490	99	-7.98	-0.215
chr7:100235685-100235712	27	-4.93	-0.216
chr16:86734133-86734224	91	-6.73	-0.216
chr1:192875107-192875160	53	-5.03	-0.216
chr7:76760074-76760149	75	-5.11	-0.216
chr6:138276953-138277009	56	-8.41	-0.216
chr2:58484404-58484476	72	-7.82	-0.216
chr1:200983312-200983361	49	-4.3	-0.217
chrX:51075401-51075545	144	-7.17	-0.217
chr19:55908809-55908841	32	-4.27	-0.217
chr19:281381-281445	64	-4.92	-0.217
chr7:155247520-155247553	33	-5.28	-0.217
chr22:49270939-49271019	80	-4.12	-0.218
chr5:180486420-180486597	177	-10.42	-0.218
chr11:850763-850833	70	-4.88	-0.218
chr1:228103683-228103782	99	-4.34	-0.218
chr10:77165442-77165512	70	-4.42	-0.218
chr19:33557541-33557728	187	-6.59	-0.219
chrX:138774238-138774307	69	-5.35	-0.219
chr12:3181005-3181126	121	-7.88	-0.219
chr20:3052738-3052864	126	-10.32	-0.22
chr6:19734653-19734711	58	-4.07	-0.22
chr1:106431886-106431953	67	-5.14	-0.22
chr22:18961795-18961811	16	-4.45	-0.22
chr10:99108945-99109105	160	-5.46	-0.22
chr7:157234762-157234783	21	-4.06	-0.22
chrY:28614200-28614279	79	-4.24	-0.22
chr16:85179448-85179478	30	-4.28	-0.22
chr9:92989603-92989619	16	-4.67	-0.22
chr14:101923129-101923181	52	-4.71	-0.22

chr17:7758220-7758291	71	-4.8	-0.22
chr12:2113365-2113453	88	-7.07	-0.22
chr6:77586619-77586690	71	-6.18	-0.22
chr3:197282714-197282828	114	-4.73	-0.221
chr11:60620383-60620478	95	-7.75	-0.221
chr7:27032204-27032301	97	-5.84	-0.221
chr3:175505155-175505320	165	-11.09	-0.221
chr20:3052975-3053039	64	-4.58	-0.221
chr1:188727208-188727289	81	-5.41	-0.221
chr2:16348012-16348092	80	-4.93	-0.222
chr4:14016802-14016878	76	-7.24	-0.222
chr1:17198591-17198677	86	-6.38	-0.222
chr1:248335584-248335789	205	-6.35	-0.222
chr7:612692-612782	90	-6.21	-0.222
chr19:33004238-33004290	52	-4.04	-0.223
chr10:125804007-125804108	101	-5.7	-0.223
chr4:491392-491459	67	-6.25	-0.223
chr4:1396541-1396588	47	-6.05	-0.223
chr1:45279458-45279550	92	-8.25	-0.224
chr16:54318143-54318275	132	-4.67	-0.224
chrX:37291580-37291619	39	-4.05	-0.224
chr8:143499565-143499639	74	-5.12	-0.224
chr8:143240188-143240201	13	-5.02	-0.225
chr1:20512874-20512987	113	-6.54	-0.225
chr11:119562653-119562681	28	-4.65	-0.225
chr6:127796586-127796680	94	-4.89	-0.226
chr12:30975738-30976085	347	-12.93	-0.226
chr6:41438536-41438593	57	-5.21	-0.226
chr4:72198369-72198445	76	-5.51	-0.227
chr6:87923068-87923116	48	-4.06	-0.227
chrY:23838533-23838669	136	-4.58	-0.227
chr2:203737271-203737298	27	-4.64	-0.227
chr2:142022588-142022624	36	-4.2	-0.228
chr1:109629182-109629232	50	-4.59	-0.228
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chrY:21729484-21729540	56	-5.07	-0.228
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chr19:391741-391955	214	-5.05	-0.231
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chr1:163662359-163662364	5	-4.02	-0.233
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chr22:46002085-46002177	92	-4.15	-0.233
chr1:91183993-91184027	34	-4.45	-0.233
chr7:39649452-39649531	79	-8.01	-0.234
chr3:29524357-29524418	61	-7.08	-0.234
chr11:109293118-109293216	98	-6.56	-0.234
chr5:111093473-111093564	91	-8.87	-0.234
chr14:75447598-75447650	52	-5.2	-0.234
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chr16:882434-882507	73	-4.35	-0.235
chr3:126135026-126135111	85	-4.92	-0.236
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chr22:20480487-20480571	84	-4.78	-0.237
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chr17:74823878-74823941	63	-4.32	-0.297
chr7:71203401-71203434	33	-4.48	-0.297
chr13:76869309-76869321	12	-4.34	-0.297
chr6:28983065-28983078	13	-4.62	-0.3
chr4:380169-380221	52	-4.74	-0.3
chr10:29773469-29773567	98	-4.74	-0.3
chr8:10456561-10456598	37	-6.02	-0.302
chr22:50002508-50002592	84	-5.76	-0.303
chr6:42695165-42695256	91	-5.24	-0.303
chr7:4873680-4873776	96	-6.07	-0.304
chr2:2871380-2871441	61	-4.25	-0.305
chr18:77905350-77905449	99	-8.77	-0.305
chr2:26951299-26951378	79	-7.12	-0.306
chr8:16527728-16527860	132	-7.41	-0.308
chr1:228778428-228778506	78	-7.63	-0.309
chr3:127634117-127634202	85	-8.22	-0.309
chr2:142042751-142042818	67	-4.13	-0.31
chr2:203941854-203941953	99	-4.38	-0.31
chr18:11533100-11533195	95	-6.44	-0.31
chr22:32602890-32602936	46	-4.77	-0.312
chr10:134811814-134811889	75	-5.79	-0.312
chr4:15843438-15843476	38	-4.07	-0.312
chr3:155818293-155818354	61	-4.66	-0.312
chr9:95546743-95546877	134	-6.63	-0.313
chrX:128978174-128978208	34	-8.95	-0.313
chr16:67851090-67851139	49	-5.37	-0.314

chr18:73168163-73168198	35	-4.64	-0.314
chr22:24255888-24256353	465	-11.76	-0.314
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chr2:14112581-14112633	52	-4.52	-0.318
chr1:63787046-63787095	49	-5.48	-0.319
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chr11:2929471-2929544	73	-4.45	-0.338
chr21:45903366-45903463	97	-5.41	-0.339
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chr4:6010142-6010234	92	-7.42	-0.343
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chr5:2169981-2170036	55	-4.84	-0.346
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chr4:3776913-3776933	20	-5.9	-0.353
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chr16:25717460-25717524	64	-5.66	-0.36
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chr10:18587220-18587255	35	-5.16	-0.363

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chr8:53852566-53852638	72	-5.43	-0.369
chr4:127121663-127121685	22	-4.57	-0.37
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chr10:112527533-112527585	52	-4.89	-0.372
chr19:37775646-37775736	90	-5.22	-0.373
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chr17:79400998-79401032	34	-4.43	-0.374
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chr13:50914873-50914973	100	-4.4	-0.376
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chr17:59532041-59532204	163	-9.7	-0.381
chr22:21200265-21200316	51	-4.87	-0.382
chr9:137830921-137830980	59	-4.8	-0.383
chr19:5891226-5891234	8	-4.19	-0.385
chr19:39899218-39899299	81	-5.79	-0.388
chr17:65332320-65332390	70	-4.3	-0.39
chr5:55931871-55931913	42	-4.8	-0.39
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chr22:41056546-41056579	33	-5.24	-0.395
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chr2:227926814-227926860	46	-4.58	-0.4
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chr1:110230044-110230103	59	-4.06	-0.408
chr1:106926074-106926108	34	-5.26	-0.415
chr4:7647755-7647793	38	-4.21	-0.417
chrX:33619994-33620072	78	-4.02	-0.418
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chr6:170055223-170055317	94	-8.66	-0.426
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chr4:187884196-187884290	94	-4.78	-0.429
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chr20:36050097-36050140	43	-4.19	-0.436
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chr11:68811737-68811759	22	-6.29	-0.443
chr2:114859659-114859725	66	-5.69	-0.444
chr8:143020765-143020830	65	-5.12	-0.45
chr9:135998620-135998721	101	-7.01	-0.47

chr3:192127390-192127480	90	-14.37	-0.481
chr4:184430838-184430935	97	-6.9	-0.49
chr7:4872426-4872507	81	-9.74	-0.53
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Associated_gene(s)

ARRDC2(pmt,NM_001025604),

ZNF442(pmt,NM_030824),
JAKMIP3(NM_001105521),
CHADL(NM_138481),
CD28(NM_001243078),CD28(NM_006139),CD28(NM_001243077),
MIR5009(NR_049807),

EPHA4(NM_004438),
NCOR2(NM_001077261),NCOR2(NM_001206654),NCOR2(NM_006312),
TSNARE1(NM_145003),
CASC5(NM_144508),CASC5(NM_170589),

STX12(NM_177424),
KIF26B(NM_018012),

RNF217(NM_001286398),STL(pmt,NR_026876),
ESRRG(NM_001134285),ESRRG(NM_001243509),ESRRG(NM_206595),ESRRG(NM_001243506),I

ARID5B(NM_032199),
HOOK2(NM_001100176),HOOK2(NM_013312),
GALNT13(NM_052917),
AZU1(NM_001700),

ASNA1(NM_004317),
SLC10A7(NM_001029998),
BCAR3(NM_001261408),

BLOC1S5-TXNDC5(NR_037616),BLOC1S5(NM_201280),EEF1E1-BLOC1S5(NR_037618),BLOC1S5(I
PCSK1N(pmt,NM_013271),

GPR1-AS(NR_104359),GPR1(NM_001261452),GPR1(NM_001098199),GPR1(NM_001261453),GF
DHRS4L2(NM_198083),DHRS4L2(NM_001193636),DHRS4L2(NM_001193637),DHRS4L2(NM_001
GOLGA8K(pmt,NM_001282493),
KCNAB2(NM_001199860),KCNAB2(NM_003636),KCNAB2(NM_172130),KCNAB2(NM_00119986
ANKRD11(NR_045839),ANKRD11(NM_013275),ANKRD11(NM_001256183),ANKRD11(NM_0012
RHPN1(NM_052924),RHPN1-AS1(pmt,NR_026785),

IL3RA(NM_002183),IL3RA(NM_001267713),
MARCH1(NM_001166373),
KCNQ1(NM_181798),KCNQ1(NM_000218),
QPRT(NM_014298),

CCDC6(NM_005436),

NRG3(NM_001165973),NRG3(NM_001165972),NRG3(NM_001010848),

NFATC1(NM_172388),NFATC1(NM_172390),NFATC1(NM_006162),NFATC1(NM_172389),NFATC
MYCBPAP(pmt,NM_032133),

CACNA1H(NM_021098),CACNA1H(NM_001005407),

IL10(NM_000572),

SRSF1(pmt,NR_034041),SRSF1(pmt,NM_006924),SRSF1(pmt,NM_001078166),
OPHN1(NM_002547),

LEO1(pmt,NM_138792),LEO1(pmt,NM_001286430),
SLC25A43(pmt,NM_145305),

DOCK10(NM_014689),

ARID5A(NM_212481),
ZFAND3(NM_021943),
CCNY(NM_001282852),CCNY(NM_145012),CCNY(NM_001282853),CCNY(NM_181698),CCNY(NM

PEPD(NM_001166056),PEPD(NM_001166057),PEPD(NM_000285),
KIAA1751(NM_001080484),

PRDM16(NM_022114),PRDM16(NM_199454),

MAPK8IP3(NM_001040439),MAPK8IP3(NM_015133),
JAKMIP3(NM_001105521),
MIR1256(NR_031657),

FKBP10(NM_021939),

KLHL15(NM_030624),
CSMD1(NM_033225),

VAV1(NM_001258207),VAV1(NM_001258206),VAV1(NM_005428),
VPS54(NM_001005739),VPS54(NM_016516),

PCDH11Y(NM_032973),
KCND1(NM_004979),
HES4(pmt,NM_001142467),HES4(pmt,NM_021170),
NFATC1(NM_172388),NFATC1(NM_172390),NFATC1(NM_006162),NFATC1(pmt,NM_00127867
MBD5(NM_018328),

RXRA(NM_002957),
BAZ1B(NM_032408),

PPP1R9B(NM_032595),

EVC(NM_153717),

CAPN2(NM_001146068),CAPN2(NM_001748),

CACNA1H(NM_021098),CACNA1H(NM_001005407),
RAI1(NM_030665),

CDH6(NM_004932),
SHB(NM_003028),
THSD7B(NM_001080427),
OGDHL(NM_001143997),OGDHL(NM_018245),OGDHL(NM_001143996),
HIST1H4I(pmt,NM_003495),HIST1H2BK(NM_080593),

LOC101929196(NR_120350),LOC101929196(NR_120351),THSD4(NM_024817),LOC101929196(N

CHD5(NM_015557),

NHS(NM_001136024),NHS(NM_198270),

NOTO(NM_001134462),
TMEM210(pmt,NM_001282477),ANAPC2(NM_013366),LRRC26(pmt,NM_001013653),

TMEM8A(pmt,NM_021259),LOC100134368(NR_024453),
PTGIR(NM_000960),

SEMA4D(NM_006378),SEMA4D(NM_001142287),
CCAR2(pmt,NM_021174),CCAR2(pmt,NR_033902),C8orf58(NM_001198827),C8orf58(NM_0010

ALG12(NM_024105),
PTPRH(NM_002842),PTPRH(NM_001161440),

FAM19A5(NM_001082967),FAM19A5(NM_015381),

GPR133(NM_198827),

SYTL1(NM_001193308),SYTL1(NM_032872),

GAS2L1(NM_006478),GAS2L1(NM_001278730),GAS2L1(NM_152236),
SAMMD3(NM_001258275),

LINC00367(NR_104058),

MYO9B(NM_004145),MYO9B(NM_001130065),

C19orf35(NM_198532),
TMEM207(NM_207316),
NTSR1(pmt,NM_002531),
FAM107B(NM_001282695),FAM107B(NM_031453),
TMEM184A(pmt,NM_001097620),
TGM2(NM_004613),
SIM2(pmt,NM_009586),SIM2(pmt,NM_005069),
ZC3H4(NM_015168),
NLGN4X(NM_020742),NLGN4X(NM_181332),NLGN4X(NM_001282146),NLGN4X(NM_00128214

DLX5(pmt,NM_005221),

NAV1(NM_020443),

ABHD1(NM_032604),

KIF7(NM_198525),

BLK(NM_001715),
PIGB(NM_004855),
XAGE3(pmt,NM_133179),XAGE3(pmt,NM_130776),
RBF3X(NM_001082575),
PTPRN2(NM_130842),PTPRN2(NM_130843),PTPRN2(NM_002847),

MXRA8(pmt,NM_001282585),MXRA8(pmt,NM_032348),MXRA8(NM_001282583),MXRA8(NM_

WRB(NM_004627),WRB(NM_001146218),

TBX20(pmt,NM_001166220),TBX20(pmt,NM_001077653),

CUX1(NM_001202546),CUX1(NM_001913),CUX1(NM_181500),CUX1(NM_001202545),CUX1(NM_001202545),SNRNP27(pmt,NR_037862),SNRNP27(pmt,NM_006857),

KIF1A(NM_004321),KIF1A(NM_001244008),
LRP2(NM_004525),

VPS13D(NM_018156),SNORA59A(pmt,NR_003025),SNORA59B(pmt,NR_003022),VPS13D(NM_018156),

GAGE1(NR_102272),GAGE1(NM_001040663),
LRBA(NM_001199282),LRBA(NM_006726),MAB21L2(pmt,NM_006439),
NTNG2(NM_032536),

CELA3B(pmt,NM_007352),
GPC1(NM_002081),

NIFK(pmt,NM_032390),

COL6A1(NM_001848),

LOC286094(NR_026706),
LOC440311(NR_077061),
CTB-12O2.1(NR_109876),
SLC25A26(pmt,NM_173471),

C9orf171(NM_207417),C9orf171(NM_001282957),

CCDC136(NM_022742),CCDC136(NM_001201372),
COL24A1(pmt,NM_152890),
OTOG(NM_001277269),
PTPRD(NM_130393),PTPRD(NM_001040712),PTPRD(NM_002839),PTPRD(NM_001171025),PTPRD(NM_001171025),

PDZD2(NM_178140),

ABCA3(NM_001089),

MAML3(NM_018717),

CSMD1(NM_033225),
LOC101927332(pmt,NR_120325),

USP42(NM_032172),

TNFAIP8(NM_001077654),TNFAIP8(NM_001286815),TNFAIP8(NM_001286817),
MPPED1(NM_001044370),
PRSS3(NM_001197098),PRSS3(NM_001197097),PRSS3(NM_007343),

FAM27A(NR_024060),FAM27C(NR_027421),

CCAR1(NM_018237),CCAR1(NM_001282959),CCAR1(NR_104262),SNORD98(pmt,NR_003076),C

MUC6(NM_005961),
SLC1A7(NM_006671),SLC1A7(NM_001287597),SLC1A7(NM_001287595),SLC1A7(NR_109858),

IRF4(NR_046000),IRF4(NM_002460),IRF4(NM_001195286),
PRKAR1B(NM_002735),PRKAR1B(NM_001164759),PRKAR1B(NM_001164762),PRKAR1B(NM_OC
POM121L9P(pmt,NR_003714),
AMOTL1(NM_130847),

IFITM1(NM_003641),
CFLAR(pmt,NM_001202517),CFLAR(pmt,NM_001202516),CFLAR(pmt,NM_001202519),CFLAR(p
GK(NM_001128127),GK(NM_203391),GK(NM_001205019),GK(NM_000167),
ASB9(NM_001168531),ASB9(NM_024087),ASB9(NM_001031739),ASB9(NM_001168530),
SLC9A3(NM_001284351),SLC9A3(NM_004174),
ST5(NM_005418),

MAP3K11(NM_002419),

LOC100288637(NR_038253),LOC100288637(NR_038255),LOC100288637(NR_038254),
CDKN1C(pmt,NM_000076),CDKN1C(pmt,NM_001122630),CDKN1C(pmt,NM_001122631),
GNA11(NM_002067),
HDAC9(NM_058176),HDAC9(NM_178425),HDAC9(NM_178423),

RALB(NM_002881),
CCDC15(NM_025004),

MAOA(pmt,NM_000240),MAOA(pmt,NM_001270458),

EPS8L1(NM_133180),EPS8L1(NM_017729),
PKNOX2(NM_022062),
AHR(NM_001621),

GAS2L1(NM_006478),GAS2L1(NM_001278730),GAS2L1(NM_152236),
NFIC(NM_005597),NFIC(NM_001245005),NFIC(NM_001245004),NFIC(NM_205843),NFIC(NM_0

OLFML2B(NM_015441),
WVOX(NM_016373),
NLRP2(pmt,NM_001174081),NLRP2(pmt,NM_001174083),NLRP2(pmt,NM_001174082),NLRP2(
SATB2(NM_001172517),SATB2-AS1(pmt,NR_026830),SATB2(NM_015265),

FOXK1(NM_001037165),

H2AFY(pmt,NM_138610),H2AFY(pmt,NM_001040158),H2AFY(pmt,NM_004893),H2AFY(pmt,NM
LOC100131289(NR_038929),

LOC339975(pmt,NR_038931),

SLC6A9(NM_201649),SLC6A9(NM_001024845),SLC6A9(NM_001261380),SLC6A9(NR_048548),S

ZNF197(NM_001024855),ZNF197(NM_006991),

VTRNA1-1(pmt,NR_026703),
SPNS3(NM_182538),

RENBP(NM_002910),

PTH2R(NR_073601),
BRINP3(NM_199051),

BEND2(NM_001184767),BEND2(NM_153346),
APOBEC3H(NM_181773),APOBEC3H(NM_001166004),APOBEC3H(NM_001166002),APOBEC3H(

DNAH17(NM_173628),
SLC9A3(NM_001284351),SLC9A3(NM_004174),

DAB2IP(NM_032552),
PLXND1(NM_015103),
GAS2(NM_177553),GAS2(NM_001143830),GAS2(NM_005256),

STAU2(NM_001164381),STAU2(NM_001164380),STAU2(NM_001164383),STAU2(NM_001164384),
RALGDS(NM_001042368),RALGDS(NM_001271774),RALGDS(NM_001271775),
CDH6(NM_004932),

KIF26A(NM_015656),
INPP5A(NM_005539),
PTPRS(NM_130853),PTPRS(NM_002850),PTPRS(NM_130854),PTPRS(NM_130855),

TMEM204(NM_024600),TMEM204(NM_001256541),IFT140(NM_014714),
NBPF20(NM_001278267),NBPF10(NM_001039703),POLR3GL(NM_032305),
ITPR3(NM_002224),
DNAJA4(pmt,NM_001130183),DNAJA4(pmt,NM_001130182),DNAJA4(NM_018602),
FENDRR(pmt,NR_036444),FOXF1(NM_001451),FENDRR(pmt,NR_033925),
ATP1B2(pmt,NM_001678),

LIMCH1(NM_001112718),LIMCH1(NM_001289122),LIMCH1(NM_001112717),LIMCH1(NM_001112716),

PRDM16(NM_022114),MIR4251(pmt,NR_036215),PRDM16(NM_199454),

GPR56(NM_001290143),GPR56(NM_001145770),GPR56(NM_001145771),GPR56(NM_201524),

INO80C(pmt,NM_194281),INO80C(pmt,NM_001098817),

ATP2A1(NM_004320),ATP2A1(NM_173201),LOC100289092(pmt,NR_046287),ATP2A1(NM_001142352),
ST6GAL2(NM_032528),ST6GAL2(NM_001142352),ST6GAL2(NM_001142351),
FLT4(NM_182925),
ISL2(NM_145805),

GRIK5(NM_002088),

MIR143HG(NR_105060),MIR143HG(NR_105059),
UMODL1(NM_001199528),UMODL1(NM_001004416),UMODL1(NM_173568),UMODL1(NM_00

ITPK1(NM_001142593),ITPK1(NM_014216),ITPK1(NM_001142594),
DAGLA(NM_006133),
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EYS(NM_001142800),

GPR133(NM_198827),
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C7orf50(NM_001134395),C7orf50(NM_001134396),MIR339(pmt,NR_029898),C7orf50(NM_032
PTPRN2(NM_130842),PTPRN2(NM_130843),PTPRN2(NM_002847),

MST1L(pmt,NM_001271733),
MUC6(NM_005961),
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CNP(NM_033133),
PCDH19(NM_001184880),PCDH19(NM_020766),PCDH19(NM_001105243),
STK3(NM_001256312),OSR2(pmt,NM_001286841),OSR2(pmt,NM_053001),OSR2(pmt,NM_001:

ITGB4(NM_000213),ITGB4(NM_001005731),ITGB4(pmt,NM_001005619),

MAPK8IP3(NM_001040439),MAPK8IP3(NM_015133),

CSMD1(NM_033225),
STAT5A(NM_003152),STAT5A(NM_001288719),STAT5A(NM_001288718),STAT5A(NM_0012887
RAI1(NM_030665),
ANAPC7(NM_016238),ANAPC7(NM_001137664),

LOC100130992(NR_038921),
ARSG(NM_001267727),ARSG(NM_014960),PRKAR1A(NM_001278433),

ST8SIA1(pmt,NM_003034),

TMEM52(NM_178545),
ANKRD20A3(NM_001012419),ANKRD20A1(NM_032250),
GRK1(NM_002929),

MIR6719(pmt,NR_106777),DYRK1B(NM_004714),DYRK1B(NM_006483),DYRK1B(NM_006484),

C1orf216(pmt,NM_152374),
CDC42EP4(pmt,NM_012121),
ADARB2(NM_018702),

SLC52A2(pmt,NR_045600),TMEM249(NR_047684),TMEM249(NM_001252402),SLC52A2(pmt,N

PIEZO2(NM_022068),

DLL1(NM_005618),FAM120B(pmt,NM_001286379),

TOR4A(NM_017723),

FGF14(NM_004115),FGF14(NM_175929),
SDC3(pmt,NM_014654),

MYRF(NM_013279),MYRF(NM_001127392),
UST(NM_005715),

WBSCR17(NM_022479),

LOC100288866(NR_103773),
IL1RAPL1(NM_014271),

GFPT1(NM_001244710),GFPT1(NM_002056),

GPM6B(NM_001001996),GPM6B(NM_001001995),GPM6B(NM_001001994),GPM6B(NM_0052
USP11(NM_004651),

ANKS1B(NM_001204066),ANKS1B(NM_152788),ANKS1B(NM_001204067),ANKS1B(pmt,NM_OC

ANO8(NM_020959),

BRDT(NM_001726),BRDT(NM_001242808),BRDT(NM_001242810),BRDT(NM_001242806),BRD1
GNAS(pmt,NM_080426),GNAS(NM_001077490),GNAS(pmt,NM_000516),GNAS(pmt,NM_00107
XRR1(NM_001270381),XRR1(NM_182969),XRR1(NM_001270380),

PRDM16(NM_022114),PRDM16(NM_199454),

KCNQ1(NM_181798),KCNQ1(NM_000218),
WDR44(pmt,NM_001184965),WDR44(pmt,NM_001184966),WDR44(pmt,NM_019045),

MSN(NM_002444),

DLL1(NM_005618),FAM120B(pmt,NM_001286379),

DIAPH2(NM_007309),DIAPH2(NM_006729),
ZNF143(pmt,NM_003442),ZNF143(pmt,NM_001282657),ZNF143(pmt,NM_001282656),
ADARB2(NM_018702),
TBC1D24(NM_001199107),TBC1D24(NM_020705),

NLGN4X(NM_020742),NLGN4X(NM_181332),NLGN4X(NM_001282146),NLGN4X(NM_00128214

KLF2(NM_016270),
KCNQ1(NM_181798),KCNQ1(NM_000218),

BCOR(NM_001123383),BCOR(NM_001123384),
SHANK1(NM_016148),

BHMT(NM_001713),
RNF213(NM_020954),RNF213(NM_001256071),
CNOT8(pmt,NM_004779),

PIK3R5(NM_001251855),PIK3R5(NM_001251853),PIK3R5(NM_001251852),PIK3R5(NM_001251851),
ANKRD44(NM_153697),ANKRD44(NM_001195144),

CPZ(NM_001014447),CPZ(NM_001014448),CPZ(NM_003652),

TMEM161A(pmt,NM_017814),TMEM161A(pmt,NM_001256766),
LINC01115(NR_033880),LINC01115(NR_111963),
KCNQ4(NM_004700),KCNQ4(NM_172163),
RNF212(NM_194439),RNF212(NM_001193318),RNF212(NM_001131034),
KCNQ4(NM_004700),KCNQ4(NM_172163),
TMEM204(NM_024600),TMEM204(NM_001256541),IFT140(NM_014714),

ARHGEF9(NM_001173479),
TNXB(NM_019105),
C16orf45(pmt,NM_033201),

STARD13(NM_001243476),

LOC400794(NR_026744),

C22orf34(NR_110522),C22orf34(NR_110523),C22orf34(NM_001289922),

CDC42(pmt,NM_001039802),CDC42(pmt,NM_044472),CDC42(pmt,NM_001791),

REC8(pmt,NM_005132),REC8(pmt,NM_001048205),

BEGAIN(NM_001159531),BEGAIN(NM_020836),
NCOR2(NM_001077261),NCOR2(NM_001206654),NCOR2(NM_006312),
MUC6(NM_005961),

GPR143(NM_000273),

ACE(NM_000789),ACE(pmt,NM_152830),ACE(pmt,NM_001178057),

MAPK12(pmt,NM_002969),MAPK11(NM_002751),MAPK11(NR_110887),

PALD1(NM_014431),

SPRED3(NM_001042522),SPRED3(NR_073032),

CELF2(NM_001025076),CELF2(NM_001025077),CELF2(NM_001083591),CELF2(NM_006561),

CDHR2(pmt,NM_001171976),RNF44(pmt,NM_014901),

PDE4D(pmt,NM_001197221),PDE4D(pmt,NM_001197222),PDE4D(NM_001197219),PDE4D(NM_

C20orf112(NM_001256798),

CLDN9(pmt,NM_020982),

CTSB(NM_001908),CTSB(NM_147783),CTSB(NM_147780),CTSB(NM_147781),CTSB(NM_147782),

CDK2AP1(NR_073007),CDK2AP1(NM_004642),CDK2AP1(pmt,NM_001270434),CDK2AP1(NR_07

LOC100133461(pmt,NR_034136),

ADARB1(NR_073200),ADARB1(NM_015834),ADARB1(NR_027674),ADARB1(NM_001112),ADARB1

TRIM72(NM_001008274),

ZIM2(NM_001146327),ZIM2(NM_015363),PEG3(NM_006210),PEG3(NM_001146185),MIMT1(p

CDHR5(NM_021924),CDHR5(NM_031264),CDHR5(NM_001171968),

ZNF804A(NM_194250),

SLFN11(pmt,NM_001104589),SLFN11(pmt,NM_001104588),SLFN11(pmt,NM_001104587),SLFN

PRDM10(NM_199438),PRDM10(NM_199437),PRDM10(NM_020228),PRDM10(NM_199439),

PLXNB3(NM_005393),PLXNB3(NM_001163257),

TSPEAR-AS1(NR_103707),TSPEAR(NM_144991),TSPEAR(NM_001272037),

C22orf34(NR_110522),C22orf34(NR_110523),

HEMGN(NM_197978),HEMGN(NM_018437),

RADIL(NM_018059),

HAND1(pmt,NM_004821),

C16orf45(NM_033201),
ATP8B3(NM_138813),ATP8B3(NR_047593),ATP8B3(NM_001178002),
ATP11A(NM_015205),ATP11A(NM_032189),

APP(NM_201413),APP(NM_000484),APP(NM_001136016),APP(NM_201414),APP(NM_0012043

GAL(NM_015973),
PCDHGB1(NM_018922),PCDHGA11(NM_032092),PCDHGC4(NM_018928),PCDHGA3(NM_01891

POU4F2(NM_004575),
TFR2(NM_003227),TFR2(pmt,NM_001206855),

CCDC146(NM_020879),

KIF21B(NM_001252103),KIF21B(NM_001252100),KIF21B(NM_017596),KIF21B(NM_001252102),
NUDT10(NM_153183),

PPAP2C(NM_177526),PPAP2C(NM_177543),PPAP2C(NM_003712),
EN2(pmt,NM_001427),
WI2-81516E3.1(NR_038944),
BTNL9(NM_152547),
TSPAN4(NM_001025239),TSPAN4(NM_001025238),TSPAN4(NM_003271),TSPAN4(NM_001025

LOC101929234(pmt,NR_110304),ZNF503-AS2(NR_024421),ZNF503-AS2(NR_110299),ZNF503-AS2(NR_110299),
RHPN2(pmt,NM_033103),
MCF2(NM_001099855),MCF2(NM_001171876),

OXT(NM_000915),

DGCR5(NR_045121),DGCR5(NR_110533),DGCR5(NR_002733),

LOC400548(NR_033984),

TMEM88(pmt,NM_203411),CYB5D1(pmt,NM_144607),
DCP1B(NM_152640),

BDH1(NM_203315),BDH1(NM_004051),BDH1(NM_203314),
PTGDR2(NM_004778),

NAALADL2(NM_207015),
OXT(NM_000915),

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UBXN10(NM_152376),UBXN10-AS1(pmt,NR_110078),
PVRL1(NM_002855),PVRL1(NM_203285),PVRL1(NM_203286),
SOGA3(NM_001012279),

SLC4A4(NM_001098484),SLC4A4(NM_001134742),
ZNF292(NM_015021),

ICA1L(pmt,NM_138468),ICA1L(pmt,NM_001288623),ICA1L(pmt,NM_001288622),
LRP1B(NM_018557),
TMEM167B(pmt,NM_020141),

TXLNG2P(NR_045129),TXLNG2P(NR_045128),

MIR548H4(NR_031680),NOX5(NR_033672),NOX5(NM_024505),NOX5(NR_033671),NOX5(NM_C
SIDT2(NM_001040455),
PHOX2B(NM_003924),
SLC6A3(NM_001044),
SLC38A8(NM_001080442),
KCNAB2(NM_001199863),KCNAB2(NM_001199860),KCNAB2(NM_001199861),KCNAB2(NM_00
PDX1-AS1(NR_047484),PDX1(pmt,NM_000209),

CSMD1(NM_033225),

C5orf58(NM_001102609),
SLC7A7(NR_040448),SLC7A7(NM_001126106),SLC7A7(NM_001126105),
KDM2B(NM_001005366),KDM2B(NM_032590),

COL4A6(NM_033641),COL4A5(pmt,NM_000495),COL4A6(NM_001287759),COL4A6(NM_001287759),
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BARHL2(pmt,NM_020063),
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RBMS3(NM_014483),RBMS3(NM_001003792),RBMS3(NM_001003793),RBMS3(NM_00117771),
C11orf87(NM_207645),
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CCDC37(NM_182628),

LCN15(pmt,NM_203347),

SYCE2(pmt,NM_001105578),
METRNL(NM_001004431),

GDA(NM_001242507),GDA(NM_001242505),GDA(NM_004293),GDA(NM_001242506),
NPY(NM_000905),

FIBCD1(pmt,NM_032843),FIBCD1(pmt,NM_001145106),

ZNF300(NM_052860),ZNF300(NM_001172831),ZNF300(NM_001172832),

BOK-AS1(NR_033346),
FBXO21(NM_033624),FBXO21(NM_015002),
LOC285696(NR_027253),

CSMD1(NM_033225),

PALM(NM_002579),PALM(NM_001040134),
POU3F2(pmt,NM_005604),

HSD17B7P2(NR_003086),
WNT7B(NM_058238),
KCNQ1(NM_000218),

MAFG(pmt,NM_002359),

TLL12(NM_015140),

ATRX(NM_138270),ATRX(NM_000489),

CCDC78(pmt,NM_001031737),HAGHL(NM_001290137),HAGHL(NM_001290139),HAGHL(NM_0

DCDC2C(pmt,NM_001287444),
TERT(NM_001193376),TERT(NM_198253),
METRNL(NM_001004431),
LRBA(NM_001199282),LRBA(NM_006726),MAB21L2(NM_006439),

GDF7(NM_182828),

PLEC(NM_000445),PLEC(NM_201378),PLEC(NM_201379),PLEC(pmt,NM_201380),

RGMA(NM_001166287),RGMA(pmt,NM_001166286),RGMA(NM_001166289),RGMA(NM_0011
AR(NM_000044),

ACSBG1(NM_015162),ACSBG1(NM_001199377),
RHO(pmt,NR_037962),DUSP5P1(pmt,NR_002834),

NOS3(NM_000603),
AGMO(NM_001004320),
ACSF2(NM_001288969),CHAD(pmt,NM_001267),ACSF2(NM_025149),ACSF2(NM_001288970),/

MNX1(NM_001165255),MNX1(NM_005515),

ZNF467(NM_207336),

TRPV1(NM_080706),TRPV1(NM_018727),TRPV1(NM_080705),TRPV1(NM_080704),

DIAPH2(NM_007309),DIAPH2(NM_006729),
CNTNAP5(NM_130773),
DGKG(NM_001346),DGKG(NM_001080744),DGKG(NM_001080745),

SARDH(NM_001134707),SARDH(NM_007101),
MIDN(NM_177401),
RBF3X3(NM_001082575),
EBPL(pmt,NM_001278636),EBPL(pmt,NR_103802),EBPL(pmt,NR_103803),EBPL(pmt,NM_03256
ST8SIA3(NM_015879),

CNTN4(NM_175607),CNTN4(NM_001206955),

CRTC1(NM_015321),CRTC1(NM_001098482),
OCIAD2(NM_001286774),OCIAD2(NM_152398),OCIAD2(NR_104589),OCIAD2(NM_001014446),
MAP6D1(NM_024871),

CHGA(NM_001275),

OSMR-AS1(NR_109951),

PRKAR1B(NM_002735),PRKAR1B(NM_001164759),PRKAR1B(NM_001164762),PRKAR1B(NM_OC
YTHDF1(NM_017798),
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KIF26B(NM_018012),
LINC00554(NR_047483),
TMEM175(NM_032326),

C5orf66(pmt,NM_001277348),PITX1(NM_002653),

CASC5(NM_144508),CASC5(NM_170589),

CRISPLD2(NM_031476),

CCDC85A(NM_001080433),
RPH3AL(NM_006987),RPH3AL(NM_001190412),RPH3AL(NM_001190413),RPH3AL(NM_001190414),
SLC27A1(pmt,NM_198580),

RASA3(NM_007368),
ANKRD27(pmt,NM_032139),RGS9BP(NM_207391),
COPB2(NM_004766),COPB2(NR_023350),
SORCS2(NM_020777),

RAP1GAP2(NM_015085),RAP1GAP2(NM_001100398),

ITPKA(NM_002220),
EGR4(NM_001965),
SKI(NM_003036),
CRMP1(pmt,NM_001288661),CRMP1(pmt,NM_001288662),CRMP1(NM_001014809),CRMP1(pmt,NM_001014809),
TMED7-TICAM2(NM_001164469),TICAM2(NM_021649),LOC101927100(NR_109874),LOC101927100(NR_109874),
SNRPN(NM_022807),SNRPN(NM_022806),SNRPN(NM_022808),SNRPN(NM_022805),
SLC12A5(NM_001134771),SLC12A5(NM_020708),

MUC20(NM_020790),MUC20(NM_001291833),MUC20(NM_001282506),MUC20(NM_152673),
CPSF1(pmt,NM_013291),SLC39A4(NM_130849),SLC39A4(NM_001280557),SLC39A4(NM_01776),
TEAD4(NM_201443),TEAD4(NM_003213),TEAD4(NM_201441),
KCNG2(NM_012283),
SPACA6P(NR_024330),
CUX1(NM_001202546),CUX1(NM_001913),CUX1(NM_181500),CUX1(NM_001202545),CUX1(NM_001202545),

CACNA1H(NM_021098),CACNA1H(NM_001005407),
TENM4(NM_001098816),
FANCA(NM_001286167),FANCA(NM_000135),FANCA(NM_001018112),
NARS(pmt,NM_004539),
PDE9A(NM_001001578),PDE9A(NM_001001579),PDE9A(NM_001001585),PDE9A(NM_001001585),

GPR153(NM_207370),
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TPO(NM_000547),TPO(NM_175719),TPO(NM_001206745),TPO(NM_001206744),TPO(NM_175719),
ALOX5(NM_000698),ALOX5(NM_001256153),ALOX5(NM_001256154),

TBC1D3P1-DHX40P1(NR_002924),
CRIP2(NR_073081),CRIP2(NM_001312),CRIP2(NR_073084),CRIP2(NR_073083),CRIP2(NR_073083),
IGSF3(NM_001007237),IGSF3(NM_001542),

IGSF9B(NM_001277285),

LINC00941(NR_040245),
CST9(pmt,NM_001008693),

VIPR2(pmt,NM_003382),
FAM19A5(NM_001082967),FAM19A5(NM_015381),

NUBPL(NM_001201573),NUBPL(NM_025152),

LOC102724316(NR_110922),SVIL(NM_021738),LOC102724316(NR_110927),SVIL(NM_003174),I

C22orf34(NR_110522),C22orf34(NR_110523),
ATP6V0CP3(pmt,NR_037141),PRPH2(pmt,NM_000322),
RADIL(NM_018059),

PARD6G-AS1(pmt,NR_028339),PARD6G-AS1(pmt,NR_028340),
KCNK3(NM_002246),

RHOU(pmt,NR_037962),DUSP5P1(pmt,NR_002834),

LRP1B(NM_018557),
NBEAL1(NM_001114132),

RFPL2(pmt,NM_001098527),RFPL2(pmt,NM_001159546),RFPL2(pmt,NM_001159545),

CD38(NM_001775),

ZDHHC9(pmt,NM_001008222),ZDHHC9(pmt,NM_016032),
TSNAXIP1(NM_018430),TSNAXIP1(NM_001288990),TSNAXIP1(NM_001288991),TSNAXIP1(NM_

LINC00466(pmt,NR_038252),FOXD3(pmt,NM_012183),
CASKIN1(NM_020764),
RGP3(NM_001144013),
USP17L21(pmt,NM_001256862),USP17L11(NM_001256854),USP17L12(pmt,NM_001256853),U
TRAPPC5(NM_001042462),TRAPPC5(NM_001042461),TRAPPC5(NM_174894),

FZD8(NM_031866),

DIP2C(NM_014974),

AGRN(NM_198576),

ISPD-AS1(NR_038946),ISPD-AS1(NR_038947),ISPD(NM_001101417),ISPD(NM_001101426),
MXRA5(NM_015419),
SLC22A18(NM_183233),SLC22A18(NM_002555),SLC22A18AS(pmt,NM_007105),

CALCB(NM_000728),

B9D1(NM_001243475),B9D1(NM_001243473),MIR1180(pmt,NR_031591),B9D1(NM_015681),

POM121L9P(NR_003714),

DKKL1(NM_001197302),DKKL1(NM_001197301),LOC101928295(NR_110729),DKKL1(NM_01441

LOC101927421(NR_109882),

ESPNL(NM_194312),

CUX2(NM_015267),

ARMCX2(NM_177949),ARMCX2(NM_014782),ARMCX2(NM_001282231),

MTMR4(NM_004687),

HS3ST4(NM_006040),

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CACNB2(NM_000724),CACNB2(NM_201571),CACNB2(NM_201596),CACNB2(NM_201597),CACI

ZSWIM1(NM_080603),

NPBWR1(NM_005285),

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ZBTB46(NM_025224),

BAHCC1(NM_001291324),BAHCC1(NM_001080519),

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DLEU1(NR_109974),

TBX4(pmt,NM_018488),

PI4KA(NM_058004),

ZFP36(NM_003407),PLEKHG2(pmt,NM_022835),

GGT5(pmt,NM_004121),GGT5(pmt,NM_001099781),GGT5(pmt,NM_001099782),

COL4A4(NM_000092),

CASZ1(NM_001079843),

TTYH2(NM_032646),TTYH2(NM_052869),

GSTM1(pmt,NM_000561),GSTM1(pmt,NM_146421),

SORCS2(NM_020777),

IGFBP7-AS1(NR_034081),

WDR27(NM_182552),WDR27(NM_001202550),

SRPK2(NM_182692),

KRT8(NR_045962),KRT8(NM_001256282),KRT8(NM_001256293),KRT8(pmt,NM_002273),

TPCN2(pmt,NM_139075),

RALGDS(pmt,NM_001271776),RALGDS(NM_001271774),RALGDS(NM_001271775),RALGDS(pmt

FGF12(NM_004113),FGF12(pmt,NM_021032),
ING2(NM_001564),
RADIL(NM_018059),
ASPG(NM_001080464),

ESRRG(NM_001243507),ESRRG(NM_001243510),ESRRG(NM_001243505),ESRRG(NM_206594),E

NM_001199322),BLOC1S5(NM_001199323),

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31(NM_001278673),NFATC1(NM_172387),NFATC1(NM_001278672),NFATC1(NM_001278670),N

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NR_120348),LOC101929196(NR_120349),

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RD(NM_130391),PTPRD(NM_130392),

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A_138609),

LC6A9(NR_048549),SLC6A9(NM_006934),

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GPR56(NM_201525),GPR56(NM_005682),GPR56(NM_001145774),GPR56(NM_001145773),GPF

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Γ(NM_207189),BRDT(NM_001242807),BRDT(NM_001242805),
7489),GNAS(pmt,NR_003259),GNAS(pmt,NM_001077488),GNAS(NM_080425),GNAS(NM_0165

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B1(NM_001160230),ADARB1(NR_027672),ADARB1(NR_027673),ADARB1(NM_015833),

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01),APP(NM_001204303),APP(NM_001136131),APP(NM_001136129),APP(NM_001136130),AP

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S2(NR_110301),ZNF503-AS2(NR_024422),ZNF503-AS2(NR_110302),ZNF503(pmt,NM_032772),Z

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66288),RGMA(NM_020211),RGMA(NM_001166283),

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)1164760),PRKAR1B(NM_001164761),LOC101926963(NR_110054),LOC101926963(NR_110055),

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722),TPO(NM_175721),

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13(NM_206945),TRPM3(NM_206944),TRPM3(NM_206947),

NB2(NM_201593),CACNB2(NM_201572),CACNB2(NM_001167945),

t,NM_006266),RALGDS(NM_001042368),

ESRRG(NM_001243512),ESRRG(NM_001243513),ESRRG(NM_001243514),ESRRG(NM_00124351

√FATC1(NM_001278669),NFATC1(NM_001278675),

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i92),

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M_032403),PCDHGA7(NM_018920),PCDHGA11(NM_018914),PCDHGA4(NM_018917),PCDHGB7

M_001001569),

'(NM_018927),

DMR_coordinate	DMR size	z-score	Δ methylation (LGA-AGA)	
chr20:49078681-49078762		81	7.81	0.615
chr19:10923392-10923449		57	7.03	0.52
chr7:2958176-2958274		98	7.43	0.5
chr16:4999854-4999888		34	5.74	0.487
chr2:2476829-2476838		9	5	0.477
chr8:92209891-92209958		67	10.09	0.468
chr22:19527146-19527220		74	5.21	0.465
chr2:65527599-65527652		53	5.57	0.461
chr20:50268651-50268740		89	6.16	0.453
chr17:77011912-77011963		51	5.09	0.452
chrX:108674697-108674724		27	4.91	0.452
chr18:73766095-73766169		74	6.03	0.445
chr18:77609956-77610031		75	9.28	0.443
chr2:204592293-204592358		65	5.19	0.442
chr12:6638149-6638218		69	6.34	0.435
chr16:73864022-73864098		76	4.57	0.434
chr2:126570011-126570057		46	6.17	0.432
chr14:19552727-19552828		101	12.24	0.432
chr5:178898870-178898916		46	4.61	0.425
chr7:135013892-135013955		63	4.73	0.422
chr2:194445117-194445150		33	4.55	0.418
chr6:38101245-38101327		82	8.61	0.417
chr5:102028776-102028858		82	5.3	0.413
chr10:134908989-134909025		36	4.59	0.408
chr7:502321-502350		29	8.72	0.408
chr9:137126619-137126668		49	5.52	0.403
chrX:10697844-10697895		51	4.81	0.4
chr11:128694463-128694537		74	8.04	0.399
chr21:44163639-44163717		78	5.54	0.396
chr17:54936608-54936680		72	6.94	0.395
chr8:101766235-101766286		51	4.19	0.395
chr11:71511987-71512075		88	7.51	0.394
chr16:1265184-1265231		47	4.25	0.388
chr18:21911390-21911454		64	4.76	0.388
chr20:47002073-47002162		89	7.25	0.388
chr10:50649667-50649757		90	5.39	0.386
chrX:119035737-119035913		176	6.47	0.385
chr1:236206818-236206894		76	4.08	0.382
chr15:40894318-40894381		63	8.92	0.382

chr20:60950552-60950644	92	7.13	0.378
chr1:206189477-206189542	65	7.07	0.378
chr8:101117947-101118030	83	6.01	0.377
chr10:74304021-74304057	36	5.5	0.375
chrX:64628392-64628449	57	5.18	0.375
chr1:206941320-206941367	47	4.64	0.374
chrX:27416589-27416688	99	7.13	0.373
chr13:112910306-112910394	88	7.39	0.372
chr19:50731746-50731837	91	7.15	0.37
chr4:173350135-173350224	89	5.1	0.37
chr10:46970274-46970295	21	5.31	0.367
chr6:104937437-104937519	82	4.55	0.367
chr9:74578571-74578656	85	4.28	0.367
chrX:118867851-118867941	90	4.22	0.367
chr4:27383045-27383089	44	4.9	0.366
chr10:94834832-94834918	86	6.69	0.364
chr15:83866554-83866644	90	4.17	0.364
chr12:109049468-109049497	29	6.42	0.363
chr12:131258125-131258176	51	4.01	0.357
chr18:54995081-54995108	27	4.69	0.355
chr18:11817745-11817834	89	5.02	0.354
chr2:220180349-220180383	34	7.18	0.353
chr2:70118973-70119053	80	6.41	0.351
chr6:8041964-8042130	166	6.19	0.35
chr5:180641381-180641419	38	4.86	0.35
chr1:43534061-43534216	155	8.99	0.348
chr19:5215290-5215364	74	4.16	0.348
chr4:177475783-177475835	52	4.7	0.345
chr1:17367984-17368028	44	4.47	0.345
chr21:38042410-38042430	20	5.02	0.345
chr4:177613470-177613542	72	5.96	0.343
chr19:42515627-42515699	72	8.32	0.341
chr6:164506665-164506692	27	4.95	0.34
chr11:65236074-65236168	94	5.92	0.34
chr7:96655723-96655817	94	5.66	0.339
chr19:10615299-10615390	91	5.39	0.337
chr19:38346613-38346669	56	5.39	0.336
chr19:47910804-47910890	86	7.38	0.336
chr6:5269463-5269560	97	4.28	0.336
chr19:6319976-6320068	92	6.39	0.335
chr9:94766860-94766892	32	5.12	0.333

chr16:25928144-25928162	18	5.05	0.333
chr16:18214434-18214496	62	5.26	0.332
chr1:45259906-45259997	91	6.27	0.331
chr8:9383902-9383968	66	5.71	0.33
chr12:111450197-111450214	17	6.99	0.33
chr20:46391525-46391613	88	6.54	0.33
chr13:113009134-113009193	59	4.85	0.329
chr12:132692530-132692613	83	4.42	0.328
chr2:33572139-33572179	40	4.08	0.328
chr2:130174667-130174719	52	4.54	0.327
chr7:158166660-158166747	87	5.19	0.326
chr5:180085444-180085533	89	4.03	0.326
chr4:1497765-1497827	62	4.01	0.324
chr15:62516369-62516413	44	4.81	0.323
chr9:137483793-137483891	98	5.8	0.321
chrX:134532692-134532800	108	5.14	0.32
chr14:101542251-101542306	55	5.87	0.32
chr16:572814-572853	39	5.59	0.32
chr14:101017568-101017686	118	4.84	0.319
chr4:655960-656011	51	4.52	0.318
chr5:81731049-81731140	91	4.02	0.318
chr10:8062129-8062221	92	4.87	0.317
chr1:154188343-154188407	64	4.3	0.316
chr15:51715136-51715212	76	4.59	0.316
chr16:29693270-29693345	75	5.09	0.315
chr15:73573657-73573756	99	5.27	0.314
chr18:77543101-77543164	63	5.73	0.314
chr19:10398701-10398777	76	4.79	0.312
chr19:418286-418334	48	4.67	0.312
chr2:97505414-97505464	50	4.65	0.312
chr20:45999342-45999380	38	4.12	0.312
chr1:3432001-3432077	76	6.66	0.312
chr2:92031304-92031398	94	4.63	0.31
chr16:14404717-14404830	113	4.1	0.308
chr7:102223316-102223381	65	5.32	0.308
chr3:139023931-139023958	27	4.19	0.307
chr4:42348276-42348317	41	4.18	0.307
chr11:6291910-6291993	83	5.62	0.306
chr2:240597327-240597441	114	5.25	0.304
chr18:13981582-13981658	76	4.25	0.304
chr1:92406746-92406802	56	5.19	0.303

chr20:61898026-61898085	59	4.58	0.303
chr8:141429251-141429265	14	4.48	0.3
chr8:62033885-62033962	77	4.16	0.3
chr3:55085976-55086021	45	5.17	0.298
chr2:232113242-232113292	50	4.78	0.298
chrX:118528220-118528304	84	6.83	0.297
chr10:1284186-1284243	57	4.9	0.296
chr9:139403687-139403769	82	7.27	0.295
chr8:116049919-116050018	99	4.97	0.293
chr10:1206495-1206556	61	6.29	0.292
chr5:171007376-171007438	62	4.98	0.292
chr6:72596564-72596634	70	5.59	0.291
chr7:4368221-4368273	52	5.02	0.29
chr6:43251562-43251641	79	4.54	0.29
chr12:73683140-73683178	38	4.51	0.29
chr8:8328528-8328746	218	4.93	0.289
chr8:102690433-102690479	46	4.78	0.288
chr16:5459789-5459974	185	8.24	0.288
chr16:88939068-88939081	13	5.02	0.288
chr10:133075050-133075082	32	4.36	0.287
chr18:76978923-76978984	61	6.34	0.285
chr4:138940696-138940772	76	7	0.284
chr1:4045023-4045071	48	5.82	0.284
chr5:134048651-134048715	64	6.08	0.283
chr19:903396-903483	87	7.74	0.282
chr21:43524016-43524071	55	4.58	0.282
chr22:49387225-49387284	59	4.58	0.282
chr3:75656072-75656134	62	4.16	0.282
chr5:19161675-19161751	76	5.38	0.281
chr16:31053695-31053788	93	7.65	0.281
chr17:48585396-48585486	90	6.14	0.281
chr18:12287555-12287624	69	8.14	0.28
chr10:134050444-134050543	99	7.52	0.28
chr12:32325946-32326021	75	4.04	0.28
chr22:37460210-37460318	108	5.98	0.28
chr11:124881292-124881428	136	5.7	0.279
chr17:74524803-74524866	63	4.8	0.279
chr17:76582488-76582585	97	4.37	0.278
chr12:8830955-8831020	65	4.82	0.277
chr2:64870861-64870925	64	4.21	0.277
chr14:105518211-105518301	90	4.5	0.277

chr7:157959009-157959065	56	4.16	0.276
chr10:37004753-37004792	39	6.68	0.275
chr12:131624147-131624160	13	6.28	0.275
chr2:43216868-43216908	40	4.29	0.275
chr13:112547998-112548072	74	6.89	0.275
chr2:95658953-95659122	169	6.58	0.275
chr3:70236747-70236833	86	5.69	0.274
chrY:7536075-7536146	71	5.13	0.274
chr2:211815699-211815718	19	5.03	0.274
chr15:83890690-83890768	78	4.98	0.274
chr5:3417841-3417906	65	4.81	0.274
chr12:55182455-55182536	81	4.26	0.274
chr4:140693117-140693209	92	4.41	0.273
chr1:2361877-2361968	91	4.15	0.273
chr10:26565558-26565597	39	5.35	0.272
chr8:145925442-145925524	82	7.32	0.271
chr10:133606107-133606129	22	4.6	0.27
chr13:20496711-20496800	89	4.16	0.27
chr16:102720-102760	40	5.6	0.27
chr19:47127190-47127273	83	8.54	0.269
chr21:35303748-35303779	31	4.41	0.268
chr13:31876766-31876828	62	4.46	0.268
chr19:3116280-3116384	104	7.23	0.268
chr7:36232722-36232764	42	4.32	0.268
chrX:92267514-92267610	96	4.36	0.267
chr1:91192434-91192460	26	4.96	0.265
chr22:33577878-33577903	25	4.35	0.265
chr1:6442193-6442389	196	12.97	0.264
chr1:176283361-176283407	46	4.12	0.264
chr10:132576222-132576294	72	4.94	0.263
chrX:48698000-48698018	18	4.72	0.263
chr1:228464099-228464167	68	7.42	0.262
chr16:4640073-4640142	69	5.93	0.262
chr19:46466047-46466094	47	4.38	0.262
chr2:159723858-159723940	82	4.54	0.262
chr11:2113757-2113931	174	6.18	0.262
chr22:21051499-21051581	82	5.53	0.262
chr17:34814900-34814972	72	4.58	0.262
chr1:152285811-152285870	59	4.13	0.261
chr17:39975485-39975678	193	6.68	0.26
chr3:65534583-65534601	18	6.34	0.258

chr18:43173211-43173276	65	4.44	0.258
chr17:26173635-26173698	63	4.72	0.258
chr1:10828176-10828262	86	4.12	0.258
chr17:41402012-41402204	192	8.41	0.258
chr9:871674-871774	100	4.62	0.258
chrX:5147646-5147697	51	7.11	0.257
chr16:64091859-64091899	40	4.5	0.257
chr4:132651420-132651493	73	4.58	0.257
chr8:34951917-34951924	7	4.35	0.256
chr16:87695887-87695926	39	6.11	0.256
chr19:17439909-17440001	92	8.91	0.256
chr4:60924561-60924627	66	4.44	0.255
chrX:136509415-136509493	78	5.37	0.255
chr2:131608690-131608714	24	4.77	0.255
chr3:87737838-87737856	18	4.51	0.255
chr17:72937857-72937902	45	6.45	0.254
chr19:39722203-39722258	55	4.72	0.254
chr1:221320633-221320688	55	4.29	0.254
chrX:136671791-136671809	18	4.47	0.253
chr6:142136206-142136293	87	5.83	0.252
chr5:175617832-175617933	101	6.58	0.252
chr17:33166963-33167056	93	5	0.252
chr14:101158158-101158252	94	5.75	0.252
chr19:15580592-15580649	57	5.74	0.252
chr1:6464493-6464564	71	7.95	0.251
chr6:209787-209857	70	4.2	0.251
chr14:74273503-74273581	78	4.17	0.251
chr10:46186774-46186822	48	5.75	0.25
chr16:75360888-75360982	94	4.38	0.25
chr22:48578967-48579013	46	4.56	0.25
chr5:167023723-167023749	26	4.32	0.25
chr4:7210967-7210986	19	4.15	0.25
chr11:1216365-1216443	78	4.09	0.25
chr8:59313850-59313912	62	4.96	0.249
chr11:2103058-2103112	54	5.19	0.249
chr4:141146052-141146116	64	6.51	0.248
chr4:132671642-132671716	74	4.88	0.248
chr9:112935137-112935213	76	5.77	0.248
chr17:75038124-75038186	62	4.89	0.247
chr18:48255763-48255843	80	4.4	0.247
chr22:49134225-49134280	55	4.53	0.246

chr17:925752-925781	29	4.28	0.246
chrX:153127524-153127609	85	4.56	0.245
chr7:157466910-157466959	49	4.33	0.245
chr1:158205108-158205166	58	4.1	0.245
chr20:43096336-43096397	61	5.46	0.244
chr15:97814454-97814513	59	5.25	0.244
chr17:63859605-63859734	129	9.69	0.244
chr8:143361312-143361400	88	5.96	0.244
chr22:45327146-45327212	66	4.7	0.243
chr12:131929237-131929353	116	4.09	0.243
chr19:56864858-56864909	51	4.4	0.243
chr11:44324978-44325040	62	4.57	0.243
chr12:131614060-131614123	63	4.05	0.242
chr8:120491927-120491967	40	5.46	0.242
chr9:82591894-82591984	90	4.8	0.242
chr3:20353474-20353573	99	4.49	0.242
chr7:18977938-18978000	62	5.36	0.241
chr19:47600931-47601029	98	5.77	0.24
chr11:67496106-67496163	57	5.58	0.24
chr15:65462161-65462260	99	5.19	0.24
chr21:10522554-10522600	46	4.77	0.24
chr12:14861170-14861204	34	4.26	0.24
chr16:10968916-10968971	55	4.23	0.24
chr10:133915784-133915881	97	4.18	0.24
chr16:1270455-1270476	21	4.1	0.24
chr20:47100863-47100918	55	4.03	0.24
chr1:161122762-161122834	72	6.64	0.238
chr11:70676583-70676669	86	5.07	0.238
chr17:7116206-7116300	94	4.98	0.238
chr19:6414448-6414522	74	4.28	0.238
chr21:46072279-46072312	33	5.01	0.237
chr8:145647642-145647674	32	4.02	0.237
chr7:36007074-36007310	236	4.83	0.237
chr8:120177320-120177379	59	4.33	0.237
chrY:16737981-16738038	57	4.69	0.237
chr7:128837502-128837558	56	4.13	0.237
chr19:17346462-17346567	105	5.93	0.236
chr12:101373628-101373754	126	5.71	0.236
chr12:739931-739954	23	4.7	0.236
chr4:165780128-165780179	51	4.9	0.236
chr1:152191065-152191133	68	5.33	0.235

chr22:29704266-29704337	71	5.07	0.235
chr8:15439536-15439612	76	4.97	0.235
chr7:140767534-140767586	52	4.92	0.234
chr3:102152393-102152458	65	4.57	0.234
chr18:49267101-49267181	80	4.82	0.234
chr12:39227480-39227576	96	4.74	0.233
chr9:140762178-140762249	71	4.84	0.232
chr9:79482706-79482730	24	4.4	0.232
chr10:43133977-43134077	100	4.15	0.232
chr1:164079017-164079172	155	4.83	0.232
chr7:68947851-68947899	48	4.31	0.232
chr16:1038281-1038318	37	6.17	0.232
chr7:157778564-157778633	69	4.3	0.231
chr22:43685716-43685804	88	4.83	0.231
chr12:31951316-31951394	78	4.69	0.231
chr11:23675034-23675057	23	4.73	0.23
chr16:67709820-67709903	83	6.36	0.23
chr6:27665001-27665029	28	4.31	0.23
chr22:48845852-48845870	18	4.29	0.23
chr1:158006408-158006456	48	4.02	0.23
chr10:105630607-105630647	40	5.96	0.23
chr1:227982842-227982936	94	5.63	0.23
chr12:1627916-1628021	105	4.87	0.23
chr3:140812858-140812943	85	4.52	0.23
chr6:52156860-52156920	60	4.07	0.23
chr2:213697125-213697223	98	7.47	0.229
chr8:42863824-42863896	72	5.42	0.228
chr5:67113703-67113865	162	9.06	0.228
chr11:69527078-69527166	88	5.01	0.228
chr6:166944381-166944460	79	4	0.228
chr18:27058488-27058585	97	5.94	0.228
chr20:16511156-16511198	42	4.86	0.228
chr19:56679118-56679164	46	5.48	0.227
chr1:145385456-145385640	184	7.13	0.227
chr4:3716947-3717060	113	5.63	0.227
chr9:45449720-45449778	58	5.51	0.227
chr18:12893533-12893626	93	4.07	0.227
chr3:125632701-125632757	56	5.2	0.226
chr14:61527683-61527706	23	4.03	0.226
chr4:180733413-180733460	47	5.45	0.226
chr16:65134495-65134598	103	4.48	0.226

chr1:3275097-3275213	116	4.7	0.226
chr7:44069070-44069130	60	4.21	0.225
chrX:22380759-22380860	101	4.64	0.225
chr10:123353348-123353418	70	4.25	0.225
chr12:132295821-132295902	81	4.27	0.225
chr2:195938094-195938130	36	4.57	0.224
chr9:124414704-124414782	78	5.52	0.223
chr9:140416776-140416843	67	4.36	0.223
chr6:56689074-56689172	98	4.94	0.223
chrY:6134965-6135074	109	4.62	0.223
chr22:25673805-25673880	75	4.58	0.223
chr5:17924717-17924784	67	4.58	0.223
chr21:44602508-44602587	79	4.59	0.223
chrX:147064182-147064229	47	4.12	0.223
chr19:48047944-48048040	96	5.1	0.223
chr2:239931413-239931446	33	4.3	0.223
chr16:28892044-28892109	65	5.31	0.222
chr19:1983313-1983346	33	4.41	0.222
chr12:9410858-9410910	52	4.29	0.222
chr8:125640235-125640386	151	5.35	0.221
chr4:1046931-1047026	95	4.93	0.221
chr1:3350064-3350155	91	5.48	0.22
chr8:20482239-20482313	74	4.06	0.22
chr7:157937049-157937104	55	5.39	0.22
chr12:12566522-12566555	33	4.61	0.22
chr22:20995013-20995069	56	4.13	0.22
chr7:73616404-73616496	92	4.03	0.22
chr15:32314136-32314146	10	4.17	0.22
chr18:70329381-70329472	91	4.1	0.22
chr8:138860765-138860893	128	5.36	0.22
chr1:236269543-236269620	77	4.22	0.219
chr4:5177963-5178011	48	4.64	0.219
chrX:138285520-138285669	149	6.77	0.219
chr1:12566799-12566897	98	4.82	0.218
chr20:60540842-60540919	77	4.55	0.218
chr1:1020685-1020714	29	4.05	0.218
chr16:59566873-59566924	51	6.34	0.217
chr22:38706384-38706473	89	6.15	0.217
chrY:13328685-13328766	81	5.54	0.217
chr15:77925333-77925411	78	9.18	0.217
chr9:77620547-77620625	78	8.13	0.217

chr7:97281238-97281286	48	4.21	0.217
chr15:84560619-84560810	191	7.64	0.216
chr1:196194224-196194300	76	4.55	0.216
chr2:128453128-128453303	175	8.25	0.216
chr14:105531139-105531167	28	6.25	0.216
chrX:73012764-73012840	76	4.93	0.216
chr22:44987350-44987539	189	4.66	0.216
chr14:104394851-104394930	79	5.11	0.216
chr7:111749958-111750050	92	6.2	0.216
chrX:112890205-112890349	144	4.64	0.215
chr19:46966251-46966446	195	7.14	0.215
chr22:20257992-20258058	66	4.48	0.215
chr14:76082086-76082137	51	4.21	0.215
chr8:92562784-92562839	55	7.1	0.215
chr6:30605894-30605950	56	6.07	0.215
chr16:83766980-83767022	42	5.14	0.215
chr16:820830-820913	83	4.01	0.215
chr19:7926857-7926914	57	5.74	0.215
chr19:13617128-13617219	91	6.93	0.215
chr19:58862070-58862118	48	4.73	0.214
chr2:127643777-127643833	56	5.12	0.214
chr3:52837553-52837634	81	4.39	0.214
chr19:4839217-4839316	99	4.2	0.214
chr18:77336437-77336522	85	5.81	0.214
chr16:78472632-78472725	93	4.9	0.214
chr9:33766154-33766219	65	4.39	0.213
chr22:29846274-29846391	117	4.24	0.213
chr13:48893442-48893529	87	4.58	0.213
chr19:17952506-17952592	86	4.04	0.213
chr2:39372073-39372152	79	4.2	0.213
chr8:144963112-144963212	100	5.48	0.213
chr14:72220828-72220941	113	6.86	0.213
chr18:75361106-75361144	38	5.88	0.213
chrX:32603676-32603742	66	4.14	0.213
chr22:33724210-33724305	95	4.52	0.212
chr21:46925769-46925863	94	5.02	0.212
chr2:121119745-121119817	72	4.64	0.212
chrY:9438331-9438404	73	4.35	0.212
chr3:140795794-140795874	80	4.28	0.212
chr17:81039654-81039728	74	4.26	0.212
chr8:15742702-15742766	64	4.24	0.212

chr16:86069740-86069839	99	4.4	0.212
chr3:185094184-185094271	87	4.4	0.212
chr12:57636337-57636376	39	4.22	0.211
chr12:131836957-131837110	153	5.61	0.211
chr5:1594909-1594996	87	5.04	0.211
chr15:98586520-98586598	78	5.18	0.21
chr13:87012876-87012943	67	4.48	0.21
chr16:966361-966401	40	4.3	0.21
chr10:134976631-134976672	41	5.47	0.21
chr17:42461883-42461946	63	4.62	0.21
chr2:126569019-126569067	48	4.56	0.21
chr17:26173367-26173438	71	4.15	0.21
chr8:3097607-3097690	83	4.01	0.21
chr22:43829578-43829667	89	4.86	0.209
chr19:16437495-16437594	99	4.23	0.209
chr3:186530024-186530092	68	5.04	0.209
chr21:43819907-43820023	116	4.19	0.208
chr7:710812-710867	55	4.54	0.208
chr4:64215183-64215246	63	4.36	0.208
chr5:77147541-77147584	43	4.59	0.208
chr5:1522529-1522603	74	4.26	0.208
chr4:683441-683528	87	4.59	0.207
chr2:202370816-202370883	67	4.42	0.207
chr22:17363339-17363435	96	6.47	0.207
chr10:61691752-61691844	92	4.95	0.207
chrX:73756095-73756193	98	6.06	0.206
chr20:62072074-62072173	99	4.4	0.206
chr1:182921849-182921938	89	7.58	0.206
chr10:133058495-133058540	45	4.93	0.205
chr17:40275232-40275318	86	5.25	0.205
chrX:64955212-64955217	5	5.05	0.205
chrX:134570173-134570209	36	4.66	0.205
chr10:104409148-104409213	65	4.66	0.205
chr14:102069926-102069975	49	4.35	0.205
chr1:1874608-1874663	55	4.11	0.205
chr9:116327876-116327936	60	6.7	0.205
chr13:47038028-47038121	93	4.98	0.205
chr7:2158660-2158715	55	4.72	0.205
chr16:87878073-87878167	94	4.6	0.205
chr19:1042226-1042296	70	4.52	0.205
chr7:157224016-157224063	47	4.11	0.205

chr16:88947745-88947910	165	6.36	0.204
chr9:37007513-37007559	46	5.24	0.204
chr1:176206475-176206527	52	4.54	0.204
chr2:72356139-72356240	101	4.52	0.204
chr13:102712072-102712187	115	4.4	0.204
chrX:53748525-53748568	43	4.18	0.203
chr4:2059051-2059110	59	5.27	0.203
chrX:30716675-30716775	100	5.23	0.203
chr19:16443746-16443841	95	4.26	0.203
chr11:110016870-110016959	89	5.55	0.203
chr17:9088442-9088504	62	4.34	0.203
chr6:98864658-98864726	68	8.17	0.202
chr9:91691813-91691889	76	5.53	0.202
chr17:8601943-8602014	71	4.95	0.202
chr11:1140394-1140469	75	4.41	0.201
chr4:29049426-29049500	74	4.79	0.201
chrX:122964804-122964883	79	5.64	0.2
chr2:241586138-241586192	54	5.26	0.2
chr2:1880366-1880401	35	4.84	0.2
chr18:26979118-26979153	35	4.6	0.2
chr10:46050425-46050480	55	4.41	0.2
chr4:7488051-7488139	88	4.03	0.2
chr6:32313882-32313948	66	-4.36	-0.2
chr17:74912326-74912354	28	-4.39	-0.2
chr16:354915-354974	59	-4.64	-0.2
chr2:237082628-237082707	79	-4.91	-0.2
chr1:11105721-11105782	61	-5.26	-0.2
chr19:30020290-30020312	22	-6.28	-0.2
chr1:228766208-228766294	86	-7.82	-0.2
chr19:33726654-33726741	87	-5.78	-0.201
chr18:76766026-76766197	171	-6.33	-0.201
chr2:176952761-176952836	75	-6.76	-0.201
chr14:74101032-74101124	92	-8.36	-0.201
chr6:159360103-159360149	46	-4.37	-0.202
chr18:76298153-76298247	94	-4.63	-0.202
chr12:2903462-2903593	131	-5.4	-0.202
chrX:119445007-119445095	88	-8.76	-0.202
chr19:38886517-38886750	233	-13.57	-0.202
chr1:2762625-2762696	71	-4.7	-0.202
chr5:170516618-170516695	77	-7.4	-0.202
chr11:797203-797244	41	-4.26	-0.202

chr12:2030316-2030331	15	-4.39	-0.203
chr17:68590991-68591143	152	-5.54	-0.203
chr12:110207149-110207248	99	-7.49	-0.203
chr6:126091613-126091759	146	-8.29	-0.203
chr22:18099743-18099808	65	-4.28	-0.203
chr8:53610825-53610960	135	-7.5	-0.203
chr1:41849021-41849106	85	-4.62	-0.204
chr6:99279482-99279506	24	-4.48	-0.205
chr7:149411016-149411094	78	-4.75	-0.205
chr2:10615764-10615834	70	-5.07	-0.205
chr18:12420081-12420158	77	-5.47	-0.205
chr2:156981567-156981620	53	-4.05	-0.205
chr22:38811830-38811904	74	-4.66	-0.205
chr5:180397403-180397470	67	-5.06	-0.206
chr3:24136674-24136750	76	-6.53	-0.206
chr12:74635677-74635772	95	-5.09	-0.206
chr12:751458-751558	100	-6.37	-0.206
chr4:66159674-66159750	76	-4.51	-0.206
chr19:33143312-33143406	94	-4.65	-0.207
chr19:37797776-37797926	150	-6.3	-0.207
chr19:16437694-16437763	69	-6.5	-0.207
chr10:71626578-71626668	90	-4.06	-0.207
chr13:114785743-114785818	75	-4.51	-0.207
chr2:240668459-240668515	56	-4.09	-0.208
chr11:70281192-70281209	17	-4.9	-0.208
chr7:16542006-16542130	124	-6.68	-0.208
chr17:171328-171339	11	-4.18	-0.208
chr7:27252809-27252842	33	-4.62	-0.208
chr1:157165203-157165304	101	-5.63	-0.209
chr1:113774581-113774687	106	-4.19	-0.21
chr2:159519409-159519479	70	-4.03	-0.21
chr8:11567809-11567891	82	-5.73	-0.21
chr19:3106131-3106223	92	-5.33	-0.21
chr16:4377589-4377767	178	-6.1	-0.21
chr8:179558-179691	133	-8.09	-0.21
chr7:148636094-148636190	96	-4.69	-0.211
chr7:57710956-57711041	85	-6.46	-0.211
chr14:100745121-100745142	21	-4.32	-0.211
chr1:3056149-3056208	59	-4.73	-0.211
chr5:153858720-153858925	205	-11.3	-0.212
chr22:25043024-25043119	95	-4.41	-0.212

chr17:42015993-42016069	76	-5.14	-0.212
chrX:128978174-128978208	34	-5.42	-0.212
chr20:58508048-58508119	71	-4.19	-0.212
chr22:46367846-46367901	55	-4.21	-0.212
chr21:47423079-47423163	84	-4.41	-0.212
chr20:62049170-62049229	59	-4.76	-0.212
chr9:126154352-126154442	90	-6.23	-0.212
chr17:29239095-29239191	96	-7.18	-0.213
chr4:491392-491452	60	-4.49	-0.213
chr10:5715840-5715906	66	-4.58	-0.213
chr2:242004531-242004602	71	-4.61	-0.213
chr3:142805793-142805827	34	-4.86	-0.214
chr5:95826959-95827052	93	-4.32	-0.214
chr3:5372838-5372991	153	-6.24	-0.214
chr20:61366068-61366173	105	-5.44	-0.214
chr4:132666938-132667037	99	-5.73	-0.214
chrX:39987626-39987724	98	-4.02	-0.215
chr20:44686589-44686644	55	-7.75	-0.215
chr3:27504843-27504915	72	-4.56	-0.215
chr5:126070165-126070224	59	-5.94	-0.216
chr4:2378989-2379041	52	-6.19	-0.216
chr4:1542408-1542463	55	-4.39	-0.216
chr9:95546759-95546836	77	-5.26	-0.216
chr13:48894381-48894475	94	-9.67	-0.217
chr22:32014109-32014161	52	-4.37	-0.217
chr2:47313246-47313332	86	-4.75	-0.217
chr4:7363508-7363515	7	-4.1	-0.217
chr8:145104261-145104348	87	-9.72	-0.218
chr20:42218551-42218650	99	-5.02	-0.218
chr13:71789627-71789681	54	-4.18	-0.218
chrY:7428197-7428220	23	-4.14	-0.218
chr12:111618852-111618938	86	-4.49	-0.219
chr4:74735121-74735228	107	-5.27	-0.219
chr5:16989622-16989692	70	-4.08	-0.22
chr17:78322979-78323027	48	-5.35	-0.22
chr9:95882653-95882716	63	-4.52	-0.22
chr13:60376900-60376977	77	-4.9	-0.22
chr8:55016747-55016846	99	-7.56	-0.22
chr11:134156819-134156912	93	-8.12	-0.22
chr16:58983996-58984106	110	-6.65	-0.221
chr14:104179094-104179160	66	-7.88	-0.221

chr6:136389590-136389655	65	-4.93	-0.222
chr12:2113349-2113453	104	-10.23	-0.222
chr4:31998259-31998425	166	-10.83	-0.222
chr11:63531207-63531376	169	-6.52	-0.222
chr6:3428126-3428166	40	-4.19	-0.222
chr3:125437908-125437964	56	-6.55	-0.222
chr19:46156234-46156314	80	-6.93	-0.223
chr18:77659862-77659900	38	-4.12	-0.224
chr5:172106373-172106426	53	-4.49	-0.224
chr15:25161255-25161318	63	-4.99	-0.224
chr11:111169764-111169808	44	-8.5	-0.224
chr8:10555406-10555488	82	-4.45	-0.224
chr6:26145894-26146031	137	-5.4	-0.224
chr4:132647036-132647094	58	-4	-0.225
chr14:99573968-99574027	59	-4.24	-0.225
chr10:88703270-88703290	20	-4.78	-0.225
chr9:138613081-138613182	101	-4.79	-0.225
chr12:118706667-118706727	60	-5.3	-0.225
chr21:10597416-10597471	55	-7.74	-0.226
chr5:111093473-111093564	91	-6.79	-0.226
chr15:69325339-69325544	205	-6.62	-0.226
chr11:100322820-100322896	76	-5.48	-0.227
chr22:50058352-50058437	85	-4.69	-0.227
chr7:132262340-132262418	78	-7.45	-0.227
chr3:195916387-195916451	64	-5.46	-0.227
chr4:83376653-83376708	55	-4.63	-0.227
chr18:12873566-12873655	89	-5.27	-0.228
chr2:242710856-242710926	70	-6.95	-0.228
chr9:133710562-133710609	47	-4.26	-0.228
chr13:21562306-21562363	57	-4.27	-0.228
chr8:141108288-141108342	54	-4.3	-0.228
chrX:9603004-9603111	107	-5.5	-0.228
chr13:20990209-20990290	81	-5.56	-0.228
chr12:52676240-52676316	76	-4.16	-0.229
chrX:49007144-49007202	58	-7.5	-0.229
chr1:24229143-24229252	109	-4.9	-0.229
chr2:185490686-185490744	58	-4.19	-0.23
chr2:241872618-241872674	56	-4.85	-0.23
chr1:226037742-226037851	109	-4.01	-0.23
chr7:127233632-127233681	49	-6.1	-0.23
chr16:9684071-9684123	52	-6.22	-0.23

chr11:15095435-15095506	71	-4.6	-0.23
chr15:22026481-22026509	28	-4.72	-0.23
chrX:66765349-66765447	98	-6.36	-0.231
chr19:7923124-7923198	74	-7.63	-0.231
chr11:363322-363352	30	-4.23	-0.232
chr9:122132021-122132054	33	-5.04	-0.232
chr19:15581699-15581835	136	-6.04	-0.232
chr12:130877510-130877528	18	-4.19	-0.232
chr12:53660757-53660829	72	-4.53	-0.234
chr7:101632519-101632618	99	-11.09	-0.234
chr1:1234491-1234571	80	-4.66	-0.234
chr6:33500359-33500431	72	-5.5	-0.234
chr1:201619080-201619121	41	-5.4	-0.234
chrX:17673436-17673493	57	-5.73	-0.234
chr11:16996397-16996458	61	-4.55	-0.235
chr10:2978382-2978422	40	-4.62	-0.235
chr10:125803652-125803880	228	-6.14	-0.235
chr18:77659295-77659322	27	-4.55	-0.236
chr12:122356142-122356456	314	-6.05	-0.237
chrX:72289646-72289700	54	-4.14	-0.237
chrY:13585592-13585624	32	-6.72	-0.237
chr13:98182856-98182952	96	-7.56	-0.237
chr8:10573937-10574027	90	-4.08	-0.237
chr6:36635067-36635099	32	-6.84	-0.237
chr1:228757265-228757351	86	-4.63	-0.238
chr19:37768302-37768319	17	-5.71	-0.238
chr8:91411435-91411503	68	-4.52	-0.238
chr11:2104949-2105001	52	-5.01	-0.238
chr16:27491241-27491337	96	-6.49	-0.238
chr22:20709501-20709582	81	-5.95	-0.238
chr1:2224243-2224339	96	-4.21	-0.238
chr18:77918009-77918102	93	-5.37	-0.239
chr4:3287719-3287777	58	-4.19	-0.24
chrX:135528356-135528424	68	-4.36	-0.24
chr8:145162956-145163045	89	-5.41	-0.24
chr14:37048930-37048982	52	-5.54	-0.24
chr19:56645104-56645231	127	-5.57	-0.24
chr5:122422342-122422422	80	-4.1	-0.24
chr1:26651768-26651819	51	-4.19	-0.24
chr15:37172588-37172679	91	-4.81	-0.241
chr13:48894733-48894796	63	-4.71	-0.241

chr7:157919057-157919107	50	-5.66	-0.242
chr16:1037383-1037439	56	-4.12	-0.242
chr1:79825988-79826027	39	-6.13	-0.242
chr1:180910334-180910403	69	-5.06	-0.242
chr2:107083717-107083763	46	-4.64	-0.242
chr11:82044080-82044177	97	-5.41	-0.242
chr20:55200408-55200506	98	-7.04	-0.243
chr3:128710429-128710530	101	-6.03	-0.243
chr22:37171984-37172101	117	-7.62	-0.244
chr6:1245188-1245248	60	-4.04	-0.244
chr5:401043-401127	84	-5.42	-0.244
chr10:134811814-134811889	75	-5.63	-0.244
chr3:9906503-9906579	76	-5.78	-0.245
chr4:48059695-48059747	52	-4.53	-0.245
chr2:73519144-73519155	11	-6.81	-0.245
chr22:41331906-41332028	122	-4.43	-0.246
chr13:113640299-113640352	53	-4.03	-0.246
chr2:233279374-233279446	72	-4.05	-0.246
chr14:101292535-101292608	73	-4.08	-0.247
chr13:100310659-100310726	67	-4.69	-0.247
chr1:6338077-6338173	96	-6.6	-0.247
chr16:88905057-88905106	49	-4.27	-0.247
chr13:73673034-73673082	48	-4.95	-0.248
chr7:592472-592564	92	-4.14	-0.248
chr13:113763574-113763664	90	-5.23	-0.248
chr19:16182790-16182889	99	-4.97	-0.249
chr7:99729303-99729322	19	-6.6	-0.249
chr8:12654118-12654201	83	-5.86	-0.249
chr5:66084568-66084642	74	-6.55	-0.25
chr18:61693372-61693418	46	-4.35	-0.25
chrY:16636505-16636560	55	-4.8	-0.25
chr7:158963976-158964000	24	-4.85	-0.25
chr14:105531179-105531237	58	-5.01	-0.25
chr6:170055103-170055317	214	-5.37	-0.25
chr11:124628852-124628906	54	-5.44	-0.25
chr18:14998207-14998241	34	-4.47	-0.25
chr2:242491493-242491580	87	-9.35	-0.25
chr2:11724899-11724998	99	-5.69	-0.251
chr16:88706290-88706368	78	-7.25	-0.252
chr10:102974210-102974264	54	-4.34	-0.252
chr11:96240837-96240932	95	-5.87	-0.252

chr9:139265882-139265953	71	-5.99	-0.252
chr12:120320600-120320647	47	-4.01	-0.253
chr8:146042932-146042978	46	-4.95	-0.253
chr8:84606308-84606324	16	-5.24	-0.253
chr12:70172913-70172989	76	-7.86	-0.254
chr1:228760703-228760753	50	-4.12	-0.254
chr8:21647681-21647765	84	-4.63	-0.254
chr19:39482098-39482188	90	-4.12	-0.255
chr4:190017589-190017650	61	-4.98	-0.255
chr17:74524685-74524779	94	-4.68	-0.256
chr19:55768789-55768848	59	-4.04	-0.256
chr17:19786572-19786621	49	-5.17	-0.256
chr5:30346068-30346085	17	-4.15	-0.257
chr17:80805798-80805872	74	-4.02	-0.257
chr11:2225362-2225452	90	-4.42	-0.258
chr17:46663734-46663773	39	-4.7	-0.258
chr3:191337537-191337611	74	-6.25	-0.258
chr1:228767426-228767462	36	-4.68	-0.258
chr7:152440202-152440251	49	-4.95	-0.258
chr17:161425-161474	49	-5	-0.258
chr4:185205120-185205186	66	-5.93	-0.258
chr7:155260316-155260358	42	-5.77	-0.259
chr5:56275978-56276057	79	-6.41	-0.259
chr4:49277388-49277451	63	-6.74	-0.259
chr15:85876171-85876267	96	-6.03	-0.259
chr7:157918847-157918895	48	-4.48	-0.26
chr2:75944434-75944533	99	-4.72	-0.26
chr14:101831657-101831722	65	-6.33	-0.26
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chr2:135264627-135264697	70	-4.93	-0.26
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chr18:55020698-55020782	84	-5.52	-0.262
chr22:50002511-50002564	53	-4.71	-0.262
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chr11:132760611-132760677	66	-4.56	-0.263
chr10:134186856-134186906	50	-4.6	-0.263
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chr4:8860466-8860516	50	-4.36	-0.265

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chr16:33278075-33278165	90	-7.14	-0.266
chr17:16355328-16355346	18	-7.94	-0.266
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chr10:2037075-2037142	67	-4.15	-0.268
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chr4:174427944-174428018	74	-4.49	-0.268
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chr4:72223751-72223813	62	-4.06	-0.312
chr18:60263389-60263463	74	-6.6	-0.312
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chr13:46219420-46219472	52	-4.37	-0.34
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chr10:123922715-123922789	74	-7.84	-0.34
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chr5:155107503-155107529	26	-4.98	-0.355
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chr19:1254122-1254191	69	-6.99	-0.358
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chr16:2229009-2229109	100	-14.43	-0.367
chr7:1328889-1329000	111	-6.52	-0.371
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chr1:154958714-154958786	72	-4.41	-0.376
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associated_gene(s)

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PTPRN2(NM_130842),PTPRN2(NM_130843),PTPRN2(NM_002847),
LOH12CR1(NM_058169),

STK32B(NM_018401),
FGF13(NM_001139500),FGF13(NM_001139498),FGF13(NM_001139501),
VPS13D(NM_018156),SNORA59A(pmt,NR_003025),SNORA59B(pmt,NR_003022),VPS13D(NM_

C1orf159(NM_017891),

CSNK1E(NM_152221),CSNK1E(NM_001894),CSNK1E(NM_001289912),

LINGO1(pmt,NM_032808),
C9orf41(NM_152420),

ADAMTSL3(NM_207517),

GPR132(NM_001278694),GPR132(NM_001278695),GPR132(NM_013345),GPR132(NM_001278695),
TSIX(NR_003255),

TDRD9(NM_153046),
DOCK4(NM_014705),

RTN4R(pmt,NM_023004),
FLVCR2(NM_017791),FLVCR2(NM_001195283),

ATAT1(NM_024909),ATAT1(NM_001254952),ATAT1(NM_001031722),
CDH13(NM_001220488),CDH13(NM_001220490),CDH13(NM_001257),CDH13(NM_001220488)

EVI5L(NM_145245),EVI5L(NM_001159944),
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A1BG-AS1(pmt,NR_015380),A1BG(NM_130786),

ITIH3(NM_002217),
PLIN3(NM_001164189),PLIN3(NM_001164194),PLIN3(NM_005817),

WWOX(NM_016373),
PRSS3(NM_001197098),PRSS3(NM_001197097),PRSS3(NM_007343),

RB1(NM_000321),
JAK3(NM_000215),

DMD(NM_000109),DMD(NM_004006),DMD(NM_004010),DMD(NM_004009),
LARGE(NM_004737),LARGE(NM_133642),
COL18A1(NM_030582),COL18A1(NM_130445),

SPSB4(NM_080862),
METRNL(NM_001004431),

MAP3K13(NM_004721),MAP3K13(NM_001242317),MAP3K13(NM_001242314),
NDUFA4L2(pmt,NM_020142),
LOC338797(NR_103736),
SDHAP3(pmt,NR_003263),

LOC101929387(pmt,NR_110946),LOC101929387(pmt,NR_110945),LMF1(NM_022773),LMF1(NM_022773),
KNDC1(NM_152643),
ITGA2B(NM_000419),

CSMD1(NM_033225),
MPPED1(NM_001044370),
KLF2(NM_016270),

UBASH3A(pmt,NM_001001895),TMPRSS3(pmt,NM_024022),TMPRSS3(pmt,NR_046020),TMPI
PRKAR1B(NM_002735),PRKAR1B(NM_001164760),PRKAR1B(NM_001164762),PRKAR1B(NM_001164762),

LPCAT1(NM_024830),
MFSD7(pmt,NM_032219),
ALS2CR11(NM_001168216),ALS2CR11(NM_152525),ALS2CR11(NM_001168221),

KCNQ2(NM_172108),KCNQ2(NM_004518),KCNQ2(NM_172106),KCNQ2(NM_172107),KCNQ2(NM_172107),
SHCBP1L(NM_030933),
TCERG1L(NM_174937),
HSPB9(NM_033194),KAT2A(pmt,NM_021078),
MSN(NM_002444),

TRIM8(NM_030912),

RGS3(NM_130795),RGS3(NM_144488),RGS3(NM_001282923),RGS3(NM_134427),RGS3(NM_134427),

MAD1L1(NM_001013837),MAD1L1(NM_003550),MAD1L1(NM_001013836),
SLC7A5(NM_003486),
ABCA7(NM_019112),

CBFA2T3(NM_005187),CBFA2T3(NM_175931),
PAX5(NM_001280549),PAX5(NM_001280548),PAX5(NM_001280555),PAX5(NM_001280547),

FGF14(NM_175929),

NAT8L(pmt,NM_178557),
GK(NM_001128127),GK(NM_203391),GK(NM_001205019),GK(NM_000167),

ZC3H12C(NM_033390),
NTN1(NM_004822),

SHC3(NM_016848),

MYT1L(NM_015025),

MARCH8(NM_145021),
SORCS2(NM_020777),
C6orf10(NM_006781),C6orf10(NM_001286475),C6orf10(NM_001286474),
MGAT5B(NM_144677),MGAT5B(NM_198955),MGAT5B(NM_001199172),
AXIN1(NM_003502),AXIN1(NM_181050),

MASP2(NM_139208),MASP2(NM_006610),
VSTM2B(NM_001146339),LOC284395(pmt,NR_040029),

HOXD13(pmt,NM_000523),EVX2(pmt,NM_001080458),

FKBP4(pmt,NM_002014),
TMEM255A(NM_001104544),TMEM255A(NM_001104545),TMEM255A(NM_017938),
SPRED3(NM_001042522),SPRED3(NR_073032),

RANBP17(NM_022897),
SLC25A22(pmt,NM_024698),SLC25A22(NM_001191061),SLC25A22(NM_001191060),

CACNA2D4(pmt,NM_172364),

FAM222A-AS1(NR_026661),FAM222A-AS1(NR_026662),FAM222A(NM_032829),

ATP6V1E1(NM_001039367),ATP6V1E1(NM_001039366),ATP6V1E1(NM_001696),

RB1CC1(NM_001083617),RB1CC1(NM_014781),

FOXO6(NM_001291281),

POU3F2(pmt,NM_005604),

KRBA1(pmt,NM_032534),KRBA1(pmt,NM_001290187),

SLMO1(NM_001142405),SLMO1(NM_006553),

AC093375.1(NR_110249),AC093375.1(NR_110250),

LOC100507377(NR_038300),

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ANKRD27(NM_032139),

KLF2(NM_016270),

COL13A1(NM_080800),COL13A1(NM_080801),COL13A1(NM_001130103),COL13A1(NM_0808

RASA3(NM_007368),

CTTN(NM_001184740),CTTN(NM_005231),CTTN(NM_138565),

RPH3AL(NM_006987),RPH3AL(NM_001190412),RPH3AL(NM_001190413),RPH3AL(NM_00119

PKP4(NM_003628),PKP4(NM_001005476),

GATA4(NM_002052),

GNA11(NM_002067),

GLIS2(pmt,NM_032575),LOC101926896(NR_110901),

ZNF596(pmt,NM_001287254),ZNF596(pmt,NM_001287255),ZNF596(pmt,NM_001042415),ZN

YY1(NM_003403),

PRDM16(NM_022114),PRDM16(NM_199454),

HAND1(pmt,NM_004821),

POM121L10P(NR_024593),BCRP3(NR_024494),

ZDHHC9(pmt,NM_001008222),ZDHHC9(pmt,NM_016032),
FAM217B(pmt,NM_001190826),SYCP2(pmt,NM_014258),
WNT7B(NM_058238),
COL6A1(NM_001848),
KCNQ2(NM_172108),KCNQ2(NM_004518),KCNQ2(NM_172106),KCNQ2(NM_172107),
DENND1A(NM_020946),

PIGG(pmt,NM_001289052),PIGG(pmt,NR_110293),PIGG(pmt,NM_001289053),PIGG(pmt,NM_
SNED1(NM_001080437),

NTSR1(NM_002531),

BCOR(NM_001123383),BCOR(NM_001123384),
SLC12A5(NM_001134771),SLC12A5(NM_020708),
SLC4A7(NM_001258379),

ZFYVE28(NM_001172658),ZFYVE28(NM_001172656),ZFYVE28(NM_020972),ZFYVE28(NM_001

RB1(NM_000321),
SFI1(NM_001258327),SFI1(NM_001258325),SFI1(NM_001007467),SFI1(NM_001258326),SFI1(

SORCS2(NM_020777),

IFT52(pmt,NM_016004),

CUX2(NM_015267),
CXCL1(NM_001511),CXCL1(NR_046035),

RNF213(NM_001256071),

DIAPH3(NM_001258369),DIAPH3(NM_030932),DIAPH3(NM_001258368),DIAPH3(NM_001258
LYPLA1(pmt,NM_001279359),LYPLA1(pmt,NM_001279358),LYPLA1(pmt,NM_001279357),LYP
GLB1L3(NM_001080407),

ZFYVE21(pmt,NM_001198953),XRCC3(NM_001100118),XRCC3(NM_001100119),ZFYVE21(pmt

PDE7B(NM_018945),
DCP1B(NM_152640),

C11orf95(NM_001144936),
SLC22A23(NM_001286455),SLC22A23(NR_104448),SLC22A23(NM_021945),SLC22A23(NM_01

NEURL1B(NM_001142651),
SNRPN(NM_022807),SNRPN(NM_022806),SNRPN(NM_022808),SNRPN(NM_022805),
COLCA2(pmt,NM_001136105),COLCA1(NR_034154),COLCA2(NM_001271457),COLCA2(NM_001136105),
C8orf74(NM_001040032),

MMRN2(NM_024756),
KCNT1(NM_001272003),KCNT1(NM_020822),
TAOK3(NM_016281),

NREP(NM_001142474),NREP(pmt,NM_001142478),NREP(NM_001142475),NREP(NM_001142474),
MIR548H4(NR_031680),NOX5(NR_033672),NOX5(NM_024505),NOX5(NR_033671),NOX5(NM_024505)

PLXNA4(pmt,NM_001105543),PLXNA4(NM_181775),PLXNA4(pmt,NM_020911),

ENOPH1(NM_021204),
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ABL1(NM_007313),ABL1(pmt,NM_005157),
LATS2(NM_014572),
TRAPPC9(NM_031466),TRAPPC9(NM_001160372),
TBL1X(NM_001139466),TBL1X(NM_001139467),TBL1X(NM_001139468),TBL1X(NM_005647),
CRYL1(NM_015974),

CNR2(NM_001841),
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RGPD3(NM_001144013),

TFAP2C(pmt,NM_003222),
KIAA1257(NM_020741),
IFT27(NM_006860),IFT27(NR_033531),IFT27(NM_001177701),

AHRR(NM_020731),AHRR(NM_001242412),

EGR4(NM_001965),

MCF2L(NM_001112732),

MEG3(NR_046465),MEG3(NR_002766),MEG3(NR_046466),MEG3(NR_046467),MEG3(NR_046
CLYBL(NR_104592),CLYBL(NM_206808),
ACOT7(NM_181864),ACOT7(NM_181865),ACOT7(NM_007274),ACOT7(NM_181866),
GALNS(NM_000512),

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TPM4(NM_001145160),TPM4(pmt,NM_003290),

LOC340357(NR_015383),LINC00681(NR_102423),
MAST4(NM_001164664),MAST4(NM_001290228),MAST4(NM_198828),

NLGN4Y(NM_014893),NLGN4Y(NR_028319),NLGN4Y(NR_046355),NLGN4Y(NM_001206850),

GPR132(NM_001278694),GPR132(NM_001278695),GPR132(NM_013345),GPR132(NM_00127
WDR27(NM_182552),WDR27(NM_001202550),
ESAM(NM_138961),

BOK-AS1(NR_033346),
GREB1(NM_033090),GREB1(NM_014668),GREB1(NM_148903),
IL17C(NM_013278),

JRKL-AS1(pmt,NR_047481),

CARD9(NM_052814),CARD9(NM_052813),

RAB3IP(NR_103520),RAB3IP(NR_103519),RAB3IP(NM_022456),RAB3IP(NM_175624),RAB3IP(N

GFRA2(pmt,NM_001165038),GFRA2(pmt,NM_001165039),GFRA2(pmt,NM_001495),

PRCD(NR_033357),CYGB(NM_134268),

PPP6R1(NM_014931),

TBCD(NM_005993),

HOXB-AS3(pmt,NR_033201),HOXB-AS3(pmt,NR_110331),HOXB-AS3(pmt,NR_033202),

RPH3AL(NM_006987),RPH3AL(NM_001190412),RPH3AL(NM_001190413),RPH3AL(NM_00119

PTPRN2(NM_130842),PTPRN2(NM_130843),PTPRN2(NM_002847),

TMEM163(NM_030923),

INPP5A(NM_005539),

COL23A1(NM_173465),

ST8SIA3(NM_015879),

C22orf34(NR_110522),C22orf34(NR_110523),

OPCML(NM_002545),OPCML(NM_001012393),

LRRC27(NM_030626),LRRC27(NM_001143757),

CDHR5(NM_021924),CDHR5(NM_031264),CDHR5(NM_001171968),

SARDH(NM_001134707),SARDH(NM_007101),
U2AF2(pmt,NM_007279),U2AF2(pmt,NM_001012478),CCDC106(NM_013301),

LRRC75A-AS1(NR_027177),LRRC75A(NM_001113567),LRRC75A-AS1(NR_027176),LRRC75A-AS:

OLFM2(NM_058164),
FLYWCH1(NM_032296),FLYWCH1(NM_020912),
SKOR1(NM_001258024),

SEC14L1(NM_003003),SEC14L1(NM_001204410),SEC14L1(NM_001144001),SEC14L1(NM_001
PCDH19(NM_001184880),PCDH19(NM_020766),PCDH19(NM_001105243),
PRRG3(NM_024082),PRRG3(pmt,NR_033262),
ALPPL2(NM_031313),
FAM167A(NM_053279),

RGS12(pmt,NM_002926),RGS12(pmt,NM_198229),
COL28A1(NM_001037763),
DGKK(NM_001013742),

LINC00305(NR_027245),LOC284294(NR_033881),
EPSTI1(NM_001002264),EPSTI1(NM_033255),
GALNT12(NM_024642),
HCN2(NM_001194),

CDKN2A(NM_058197),CDKN2A(NM_058195),CDKN2A(NM_001195132),CDKN2A(NM_000077),
ACTN4(NM_004924),

CLSTN3(NM_014718),
BZRAP1-AS1(NR_038411),BZRAP1-AS1(NR_038413),BZRAP1-AS1(NR_038412),MIR142(pmt,NR

RNF128(NM_024539),

RADIL(NM_018059),PAPOLB(pmt,NM_020144),

ZNF257(pmt,NM_033468),
MBD5(NM_018328),

FAM20C(NM_020223),
RAI1(NM_030665),
ATP8B3(NM_138813),ATP8B3(NR_047593),ATP8B3(NM_001178002),
C20orf112(NM_001256798),
NTM(NM_001048209),
TPO(NM_000547),TPO(NM_175719),TPO(NM_001206745),TPO(NM_001206744),TPO(NM_17
NHSL2(NM_001013627),

CHID1(NM_023947),CHID1(NM_001142674),CHID1(NM_001142677),CHID1(NM_001142676),
LOC101929234(pmt,NR_110304),ZNF503-AS2(NR_024421),ZNF503-AS2(NR_110299),ZNF503-
CASZ1(NM_001079843),
ZNF232(NM_014519),
TAF1(NR_104396),TAF1(NR_104391),TAF1(NR_104388),TAF1(NR_104389),TAF1(NR_104395),

TTL(NM_153712),

KATNB1(NM_005886),
FBRSL1(NM_001142641),
ZBTB6(pmt,NM_006626),

TUNAR(NR_038861),
DBH-AS1(NR_102735),DBH(NM_000787),
BDH1(NM_203315),BDH1(NM_004051),BDH1(NM_203314),
ING2(NM_001564),
GALNT9(NM_001122636),

DOCK11(NM_144658),

CELSR1(NM_014246),
PSTPIP1(NM_003978),

ZBTB46(NM_025224),
SLC4A4(NM_001098484),SLC4A4(NM_001134742),SLC4A4(NM_003759),

LOC101927421(NR_109882),
KCNK17(NM_031460),KCNK17(NM_001135111),

PFKFB3(NM_001282630),PFKFB3(NM_001145443),PFKFB3(NM_004566),
GNA11(NM_002067),
C7orf50(NM_001134395),C7orf50(NM_001134396),MIR339(pmt,NR_029898),C7orf50(NM_001134395),
BAIAP2(NM_017450),BAIAP2(NM_006340),BAIAP2(NM_017451),BAIAP2(NM_001144888),
NKX2-8(pmt,NM_014360),
TTY23B(pmt,NR_003593),TTY23(pmt,NR_001540),
STK32C(NM_173575),

OCIAD2(NM_001286774),OCIAD2(NM_152398),OCIAD2(NR_104589),OCIAD2(NM_001014446),
GEMIN5(pmt,NM_001252156),MRPL22(pmt,NM_001014990),GEMIN5(pmt,NM_015465),MRPL22(pmt,NM_001014990),
EBF3(pmt,NM_001005463),

SLC12A5(NM_001134771),SLC12A5(NM_020708),

LINC00359(NR_051966),
BAHCC1(NM_001291324),BAHCC1(NM_001080519),
ARMCX6(NM_019007),ARMCX6(NR_033669),ARMCX6(NR_033670),ARMCX6(NM_001009584),
KCNN4(NM_002250),
ZWILCH(pmt,NM_017975),ZWILCH(pmt,NM_001287822),ZWILCH(pmt,NM_001287823),ZWILCH(pmt,NM_001287823),
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TACC2(pmt,NM_206860),TACC2(NM_206861),TACC2(pmt,NM_006997),TACC2(NM_206862),
SHC4(NM_203349),
DIAPH2(NM_007309),DIAPH2(NM_006729),

MNX1(NM_001165255),MNX1(NM_005515),
SDHA(NM_004168),CCDC127(pmt,NM_145265),
SRMS(NM_080823),PTK6(pmt,NM_001256358),PTK6(pmt,NM_005975),

LCN15(pmt,NM_203347),
LOC101929387(NR_110946),LMF1(NR_033646),LOC101929387(NR_110945),LMF1(NR_033646),
EPHX3(NM_001142886),EPHX3(pmt,NM_024794),

MIDN(NM_177401),
FIBCD1(NM_032843),FIBCD1(NM_001145106),

LEPR(NM_001003680),LEPR(NM_001198689),LEPR(NM_001198687),LEPR(NM_001198688),LE
HIST1H4I(NM_003495),HIST1H2BK(NM_080593),
CASKIN1(NM_020764),

NRG3(pmt,NM_001165973),NRG3(NM_001165972),NRG3(NM_001010848),

FLAD1(NM_201398),FLAD1(NM_025207),FLAD1(NM_001184891),FLAD1(NM_001184892),
NUBPL(NM_025152),

SUN1(NM_001130965),SUN1(NM_001171944),SUN1(NM_025154),
CACNA1H(NM_021098),CACNA1H(NM_001005407),

MARCH3(NM_178450),

SCARB1(NM_005505),SCARB1(NM_001082959),
PGLYRP1(NM_005091),
TMEM240(pmt,NM_001114748),SSU72(NM_014188),

TBX4(pmt,NM_018488),

GABBR2(NM_005458),

HORMAD1(NM_032132),HORMAD1(NM_001199829),
C11orf87(NM_207645),

EOGT(NR_103826),EOGT(NM_001278689),EOGT(NM_173654),
RFWD2(NM_001286644),RFWD2(NM_022457),RFWD2(NM_001001740),SCARNA3(pmt,NR_00
ERICH1-AS1(NR_073397),
FGF12(NM_004113),FGF12(pmt,NM_021032),
ARMCX2(NM_177949),ARMCX2(NM_014782),ARMCX2(NM_001282231),

OSR2(NM_001286841),OSR2(NM_053001),OSR2(NM_001142462),

KCTD15(NM_001129994),KCTD15(NM_024076),KCTD15(NM_001129995),

MAGI1(NM_001033057),MAGI1(NM_015520),MAGI1(NM_004742),

KRT8(NR_045962),KRT8(NM_001256282),KRT8(NM_001256293),KRT8(pmt,NM_002273),

PIK3R5(NM_001251855),PIK3R5(NM_001251852),PIK3R5(NM_001251853),PIK3R5(NM_001251854)

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IM_138740),UBAP2L(pmt,NM_014847),UBAP2L(pmt,NM_001287816),C1orf43(NM_001098616),

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R2(NM_000141),FGFR2(NM_001144916),FGFR2(NM_001144918),FGFR2(NM_001144919),FGFR:

1286075),LOC100289092(pmt,NR_046289),LOC100289092(pmt,NR_046290),LOC100289092(pr

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RSS3(pmt,NM_001256317),UBASH3A(pmt,NM_018961),TMPRSS3(pmt,NM_032405),UBASH3A(p
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NM_172109),

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PAX5(NR_103999),PAX5(NM_001280550),PAX5(NM_016734),PAX5(NM_001280556),PAX5(NM_

05),COL13A1(NM_080802),COL13A1(NM_080798),

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IF596(pmt,NM_001287256),ZNF596(pmt,NM_173539),ZNF596(pmt,NM_001287399),ZNF596(pn

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DMR_coordinate	DMR size	z-score	Δ methylation (LGA-IUGR)	
chr16:967919-967972		53	7.75	0.612
chrY:13656095-13656161		66	5.61	0.568
chr22:41331906-41331962		56	7.02	0.562
chr2:148927666-148927762		96	8.5	0.543
chr7:158584014-158584106		92	5.68	0.515
chr22:41634621-41634708		87	10.06	0.49
chr8:138323698-138323795		97	6.36	0.488
chr21:24401706-24401753		47	4.61	0.473
chr9:46115342-46115411		69	7.92	0.47
chr4:93103550-93103628		78	6.43	0.468
chr3:138656627-138656685		58	7.2	0.462
chr12:132918303-132918372		69	7.43	0.46
chr18:77291033-77291117		84	8.93	0.447
chr3:28100833-28100914		81	6.16	0.442
chr19:4058767-4058815		48	6.12	0.44
chr8:99960164-99960244		80	8.9	0.44
chrY:20835437-20835477		40	6.54	0.438
chr1:245337245-245337305		60	5.66	0.435
chr6:27107287-27107373		86	13	0.431
chr1:228771891-228771949		58	6.02	0.429
chr2:132585387-132585411		24	5.52	0.427
chr16:21770086-21770180		94	4.91	0.427
chr22:47018284-47018392		108	5.93	0.425
chr1:229721521-229721585		64	4.74	0.425
chr8:107789104-107789175		71	4.89	0.422
chr14:103569638-103569670		32	4.47	0.42
chr4:35834335-35834364		29	5.62	0.416
chr11:1077726-1077814		88	4.67	0.415
chr19:44278301-44278399		98	9.55	0.411
chr15:49184286-49184348		62	6.01	0.409
chr19:12671669-12671715		46	6.63	0.407
chrX:100309354-100309416		62	5.94	0.405
chr8:10261943-10262021		78	5.07	0.405
chr10:134940287-134940373		86	5.2	0.403
chr6:17728998-17729051		53	8.17	0.399
chr12:121190083-121190138		55	6.77	0.398
chr9:47288065-47288098		33	4.21	0.397
chr1:8913580-8913630		50	6.41	0.397
chr5:177792412-177792511		99	10.28	0.39

chr16:981326-981382	56	6.95	0.386
chr10:134639455-134639531	76	5.41	0.386
chr13:88997786-88997850	64	5.98	0.385
chr2:174569830-174569906	76	4.69	0.384
chr12:113059229-113059305	76	6.68	0.381
chr10:1233066-1233132	66	6.74	0.38
chr4:149747834-149747934	100	4.7	0.379
chr4:24503100-24503160	60	5.26	0.375
chr22:46913295-46913360	65	5.57	0.372
chr4:31998259-31998425	166	18.15	0.37
chr20:2801235-2801292	57	5.18	0.37
chr17:212292-212335	43	6.65	0.367
chr16:33421602-33421684	82	5.54	0.366
chr21:34998722-34998768	46	4.21	0.365
chr10:6254147-6254238	91	4.89	0.363
chr5:165469580-165469614	34	6.8	0.363
chr8:146042932-146042978	46	7.17	0.36
chr8:11871079-11871134	55	5.14	0.36
chr14:99482361-99482413	52	6.1	0.36
chr4:33252967-33253034	67	6.85	0.359
chr11:2828445-2828484	39	6.55	0.359
chr6:20024309-20024357	48	6.98	0.358
chr16:21533530-21533593	63	4.78	0.358
chrX:3867973-3868013	40	5.95	0.357
chr16:2834634-2834709	75	5.13	0.357
chr5:171591768-171591845	77	4.98	0.357
chr6:63962974-63963069	95	5.75	0.356
chr7:3319955-3319995	40	6.13	0.355
chr18:45662358-45662427	69	4.78	0.355
chr13:20966048-20966133	85	6.45	0.354
chr21:44167127-44167192	65	4.1	0.353
chrX:43431782-43431904	122	6.08	0.351
chrY:9386236-9386310	74	6.47	0.35
chr3:65534684-65534778	94	10.81	0.349
chr8:145806459-145806554	95	5.35	0.349
chr16:1147435-1147530	95	4.18	0.347
chr12:111265818-111265856	38	4.57	0.345
chr13:53452233-53452289	56	4.1	0.345
chr7:5435725-5435756	31	5.57	0.345
chrX:50172410-50172449	39	4.84	0.345
chr7:63882880-63882931	51	7.47	0.344

chrX:44420418-44420492	74	4.87	0.344
chr19:33143312-33143406	94	6.06	0.343
chr7:12151528-12151622	94	6.12	0.343
chr11:2946949-2947003	54	5.12	0.342
chr5:150614448-150614543	95	5.14	0.342
chr8:143262198-143262233	35	4.15	0.338
chr9:89517722-89517809	87	4.29	0.337
chr9:138664682-138664765	83	4.22	0.335
chr14:76446159-76446250	91	7.88	0.334
chr1:242017041-242017124	83	4.71	0.333
chr10:32039062-32039157	95	6	0.33
chr15:26884002-26884054	52	4.51	0.33
chr17:21477417-21477517	100	6.05	0.329
chr2:204483105-204483175	70	4.57	0.328
chr1:204056270-204056340	70	4.46	0.328
chr13:20802823-20802919	96	5.5	0.325
chr7:27197205-27197262	57	5.14	0.325
chr7:101694274-101694344	70	5.51	0.325
chr11:17627607-17627656	49	7.74	0.325
chr17:74321210-74321306	96	8.21	0.324
chr11:96240883-96240976	93	6.4	0.324
chr17:5019250-5019301	51	4.01	0.324
chr11:73480654-73480730	76	7.24	0.323
chr2:23657018-23657061	43	5.66	0.323
chr11:46388927-46389011	84	4.44	0.323
chrX:128655113-128655155	42	4.31	0.322
chr17:46674834-46674889	55	5.45	0.32
chr9:29213421-29213464	43	5.04	0.32
chr12:52243299-52243330	31	4.08	0.32
chr2:54378098-54378174	76	4.46	0.319
chr2:207069312-207069376	64	5.21	0.318
chr3:129317983-129318057	74	5.54	0.316
chr17:42082468-42082576	108	7.58	0.316
chrX:40879406-40879536	130	8.01	0.315
chr17:39685080-39685115	35	4.67	0.315
chr12:131956968-131957062	94	5.29	0.314
chrX:92567811-92567873	62	5.65	0.314
chr18:9434218-9434273	55	4.16	0.314
chr1:158169402-158169582	180	6.6	0.313
chr2:177053813-177053848	35	4.77	0.312
chr15:90191761-90191841	80	7.66	0.311

chrX:39730953-39731021	68	5.48	0.31
chrY:420668-420731	63	5.4	0.31
chr2:113246054-113246132	78	5.87	0.31
chr2:145180114-145180195	81	7.53	0.309
chr21:29170494-29170584	90	5.31	0.307
chr2:132585599-132585659	60	7.09	0.305
chr10:83635647-83635710	63	6.41	0.305
chr20:62173600-62173678	78	4.85	0.304
chr13:88213615-88213693	78	6.77	0.304
chr9:132160810-132160911	101	5.41	0.304
chr16:29193279-29193359	80	5.43	0.303
chrY:9745306-9745415	109	4.77	0.303
chr17:47174205-47174248	43	6.85	0.302
chr2:234389694-234389764	70	5.13	0.302
chr19:3964967-3964988	21	4.74	0.302
chr8:179560-179691	131	12.12	0.302
chrX:46934930-46935024	94	4.01	0.302
chr8:4607770-4607824	54	4.42	0.3
chr19:5915241-5915342	101	5.01	0.3
chr14:59097009-59097055	46	4.43	0.3
chrX:96589275-96589354	79	4.43	0.3
chr10:77158971-77159048	77	5.9	0.299
chr10:70376805-70376872	67	4.4	0.298
chrY:10032612-10032670	58	5.46	0.298
chr18:76189810-76189845	35	4.27	0.298
chr3:190842943-190842981	38	5.07	0.297
chr4:1519837-1519865	28	4.49	0.297
chr10:48156178-48156226	48	4.14	0.297
chr19:643435-643496	61	5.26	0.297
chr11:48875103-48875174	71	5.19	0.296
chr18:75509314-75509354	40	4.48	0.296
chr15:65708763-65708771	8	4.72	0.295
chr1:159255839-159255851	12	6.89	0.294
chr19:40421602-40421700	98	5.61	0.293
chr12:113643741-113643817	76	5.57	0.293
chrY:9747779-9747910	131	4.45	0.293
chr10:42854039-42854117	78	5.27	0.293
chr4:8948181-8948215	34	5.36	0.292
chrY:13926207-13926225	18	4.84	0.292
chr6:6002293-6002331	38	4.64	0.292
chr3:147129812-147129887	75	4.09	0.292

chr5:99696422-99696473	51	5.72	0.292
chr7:2802247-2802394	147	4.85	0.292
chr18:31423483-31423538	55	4.08	0.292
chr22:29075729-29075771	42	5.45	0.291
chr9:132221620-132221700	80	4.27	0.291
chr6:115496643-115496695	52	4.73	0.29
chrX:131623657-131623744	87	7.83	0.29
chr19:37792521-37792568	47	6.5	0.29
chr17:56085810-56085899	89	5.85	0.29
chr8:90105816-90105871	55	4.44	0.288
chr1:79825964-79826004	40	6.57	0.288
chr16:1035691-1035775	84	4.04	0.287
chr18:9470271-9470358	87	4.84	0.287
chr1:105392179-105392255	76	5.99	0.286
chr20:62688389-62688452	63	6.44	0.286
chr8:9487433-9487488	55	4.57	0.286
chr12:81467210-81467280	70	4.11	0.286
chr14:107100786-107100858	72	6.44	0.286
chr6:170598485-170598541	56	7.58	0.286
chr6:121484124-121484162	38	4.07	0.285
chr7:2958282-2958325	43	4.48	0.283
chr1:3352882-3352947	65	4.33	0.283
chr3:75653550-75653638	88	4.6	0.283
chr2:133426659-133426682	23	4.74	0.282
chr13:113763574-113763657	83	4.4	0.282
chr2:170105362-170105417	55	4.33	0.282
chr1:191254439-191254515	76	4.15	0.282
chr4:129627676-129627776	100	5	0.281
chr13:79675294-79675431	137	6.44	0.281
chr7:30972920-30973019	99	9.56	0.28
chr14:75419817-75419893	76	9.08	0.28
chr12:64910321-64910393	72	7.54	0.28
chrX:138136375-138136475	100	5.3	0.28
chr7:43484954-43485015	61	4.86	0.279
chr10:134672822-134672882	60	6.09	0.279
chr21:29535269-29535294	25	4.03	0.278
chr1:228075487-228075572	85	6.55	0.278
chr10:99481812-99481891	79	4.3	0.278
chr5:220791-220828	37	4.2	0.278
chr16:89900138-89900195	57	5.84	0.277
chr19:1881077-1881169	92	4.8	0.277

chr3:24136674-24136750	76	7.17	0.276
chr8:8559990-8560085	95	6.48	0.276
chrX:48870137-48870233	96	7.29	0.276
chr15:66274675-66274726	51	10.05	0.276
chr1:2256363-2256421	58	4.5	0.275
chr20:61391049-61391121	72	6.15	0.275
chr19:3097121-3097182	61	4.79	0.274
chr6:140268489-140268571	82	5.12	0.274
chr12:132834397-132834467	70	5.12	0.274
chr1:3346154-3346274	120	5.93	0.273
chr1:216909713-216909776	63	4.43	0.273
chr19:554432-554531	99	9.16	0.273
chr13:26761323-26761378	55	4.8	0.273
chr2:151261811-151261883	72	5.34	0.272
chr9:137710259-137710318	59	6.93	0.271
chr12:108523648-108523849	201	8.3	0.27
chr2:201980507-201980553	46	5.95	0.27
chr1:2771863-2771914	51	5.4	0.27
chrY:18745876-18745978	102	5	0.27
chr7:148735907-148735955	48	4.43	0.27
chr13:99760800-99760847	47	4.23	0.27
chr11:2014748-2014824	76	4.1	0.27
chr18:14748107-14748198	91	8.51	0.269
chr10:17874608-17874680	72	6.79	0.269
chr17:26711968-26712047	79	6.04	0.268
chrX:69677662-69677717	55	4.6	0.268
chr12:109246226-109246296	70	4.24	0.267
chrY:9706564-9706648	84	5.52	0.266
chr19:17264078-17264173	95	5.49	0.266
chr9:136454723-136454767	44	4.13	0.266
chr22:39753946-39754032	86	11.21	0.266
chr7:157744916-157744938	22	5.31	0.265
chr16:1210308-1210390	82	4.5	0.265
chr5:145562986-145563049	63	6.52	0.264
chr6:50817733-50817804	71	6.13	0.264
chr15:22026481-22026534	53	4.32	0.263
chr5:40681874-40681973	99	6.41	0.263
chr12:131707989-131708089	100	6.97	0.262
chr19:52206905-52207005	100	5.55	0.262
chr10:98537361-98537417	56	4.35	0.262
chr1:175048759-175048874	115	6.25	0.261

chr3:151912005-151912148	143	7.55	0.26
chr16:2753710-2753769	59	5.85	0.26
chr22:37622729-37622772	43	4.66	0.26
chr18:67361018-67361090	72	6.42	0.258
chr4:185205120-185205186	66	6.98	0.258
chr6:20239411-20239673	262	6.65	0.258
chr7:809042-809110	68	4.03	0.258
chr12:57177788-57177822	34	6.03	0.258
chr11:1027438-1027464	26	5.43	0.258
chr12:3329914-3329967	53	4.84	0.258
chr11:67746323-67746369	46	4.53	0.258
chr8:144390914-144390970	56	4.45	0.258
chr5:108586448-108586538	90	4.36	0.257
chr19:36757763-36757923	160	7.71	0.257
chr5:177209373-177209445	72	7.9	0.257
chr22:45412748-45412770	22	4.68	0.256
chr10:2978330-2978422	92	7.63	0.256
chr4:184278124-184278193	69	7.57	0.255
chr17:47295480-47295547	67	4.27	0.255
chr9:139166269-139166361	92	5.32	0.254
chr9:138603616-138603639	23	4.86	0.254
chr4:25326795-25326858	63	4.1	0.254
chr20:277040-277095	55	5.08	0.253
chr8:62186404-62186424	20	4.53	0.253
chrX:130863888-130864026	138	8.01	0.253
chr10:78579005-78579111	106	4.65	0.253
chr3:147138916-147138951	35	5.06	0.253
chr2:159519409-159519479	70	4.91	0.253
chr13:113648881-113648930	49	4.3	0.253
chrX:99151541-99151568	27	4.29	0.253
chr19:18761387-18761480	93	4.87	0.25
chr1:145573478-145573562	84	4.91	0.25
chr16:10934645-10934656	11	4.18	0.25
chr12:114846694-114846788	94	4.89	0.249
chr19:7923124-7923198	74	7.6	0.249
chr21:46786484-46786563	79	4.1	0.248
chr7:989199-989229	30	5.43	0.248
chr10:45923598-45923618	20	4.84	0.248
chr3:193894513-193894591	78	5.83	0.248
chr12:70172913-70173015	102	8.65	0.247
chr1:17051581-17051627	46	4.3	0.247

chr11:48922049-48922117	68	7	0.247
chr7:158937826-158937837	11	4.61	0.246
chrX:103287158-103287234	76	5.16	0.246
chr1:214846486-214846656	170	9.22	0.245
chr11:2454559-2454675	116	4.56	0.245
chr10:89120046-89120098	52	5.29	0.245
chr2:170826293-170826355	62	4.23	0.245
chr2:208632215-208632303	88	6.19	0.244
chr17:8073739-8073839	100	5.52	0.244
chr4:96573524-96573575	51	4.82	0.244
chr1:106122844-106122953	109	5.31	0.244
chr3:109787410-109787458	48	5.3	0.244
chr7:150706058-150706100	42	4.89	0.244
chr7:148677960-148678024	64	4.16	0.244
chr9:136994689-136994789	100	8.27	0.243
chr20:61337036-61337101	65	6.61	0.243
chr12:15496725-15496808	83	5.48	0.243
chr4:132670447-132670498	51	4.25	0.243
chr1:146375060-146375071	11	5.61	0.242
chr20:36012782-36012806	24	4.67	0.242
chr7:53761604-53761684	80	4.03	0.242
chr11:1891883-1891952	69	4.49	0.242
chr10:106390430-106390510	80	4.54	0.241
chr2:11515107-11515206	99	4.16	0.241
chr5:140810501-140810583	82	6.58	0.241
chr10:23293869-23293958	89	5.48	0.24
chr1:227793866-227793948	82	4.71	0.24
chr1:17186261-17186331	70	7.21	0.24
chr19:56160420-56160485	65	5	0.24
chr5:13017807-13017869	62	4.61	0.24
chr6:27408502-27408599	97	4.41	0.239
chr19:58908082-58908128	46	6.56	0.238
chr14:104569027-104569116	89	4.48	0.238
chr2:236397274-236397408	134	9.37	0.238
chr10:4572582-4572652	70	4.75	0.238
chrY:8121318-8121333	15	4.37	0.238
chr5:178657416-178657500	84	4.22	0.238
chrX:84627123-84627177	54	4.1	0.238
chr13:88629136-88629200	64	6.12	0.237
chr3:197606838-197606886	48	5.03	0.237
chr12:131172747-131172788	41	5.19	0.236

chr6:33500359-33500431	72	4.97	0.236
chr19:307875-307933	58	4.38	0.235
chr6:960812-960869	57	5.44	0.235
chr22:40526709-40526765	56	5.2	0.235
chr16:68390395-68390485	90	5.09	0.235
chr10:83683249-83683303	54	4.34	0.235
chr1:204329003-204329091	88	4.31	0.235
chr3:121902480-121902510	30	4.21	0.235
chr21:47546053-47546211	158	11.57	0.235
chr17:46796018-46796171	153	6.22	0.235
chr13:113636050-113636134	84	4.76	0.234
chrX:39607393-39607468	75	5.11	0.234
chr4:132647036-132647106	70	5.22	0.234
chr11:132951898-132951984	86	4.6	0.234
chr8:60787901-60788035	134	5.2	0.233
chr10:42837821-42837906	85	5.79	0.233
chrY:16897369-16897501	132	5.58	0.233
chr2:232266056-232266118	62	4.36	0.233
chr16:31363804-31363854	50	4.52	0.233
chrX:106394980-106395026	46	4.54	0.232
chr21:21552336-21552443	107	4.66	0.232
chr11:2014545-2014645	100	5.8	0.232
chr7:151385425-151385494	69	4.87	0.232
chr20:2775904-2775985	81	4.24	0.232
chr1:154474799-154474862	63	4.33	0.231
chr19:1227926-1227940	14	8.99	0.23
chr5:95826954-95827052	98	4.73	0.23
chr2:98340852-98340909	57	4.16	0.23
chr6:31163625-31163667	42	4.46	0.23
chr22:40041383-40041420	37	4.12	0.23
chr17:15849356-15849454	98	4.76	0.229
chr11:129686297-129686456	159	5.03	0.229
chr22:26149086-26149187	101	4.93	0.229
chr1:39980539-39980584	45	4.84	0.229
chr10:124908191-124908244	53	7	0.229
chr8:99371459-99371510	51	4.5	0.229
chr10:110967868-110967930	62	5.48	0.229
chr2:83390856-83390903	47	4.79	0.228
chr16:26495622-26495673	51	4.32	0.228
chr4:779400-779481	81	5.27	0.228
chr21:41135452-41135566	114	4.2	0.228

chr19:4544457-4544548	91	5.29	0.227
chr1:145464419-145464495	76	6.04	0.227
chr7:67423866-67423928	62	5.33	0.227
chr10:1156718-1156750	32	4.52	0.227
chrY:3311820-3311884	64	5.52	0.227
chr21:47476579-47476638	59	5.99	0.226
chr17:44972034-44972051	17	4.85	0.226
chr7:52181323-52181367	44	4.53	0.226
chr18:54240712-54240732	20	4.43	0.226
chr22:44546406-44546465	59	4.41	0.226
chr2:75944472-75944634	162	8.31	0.226
chr4:80885808-80886228	420	11.96	0.225
chr18:13491623-13491712	89	5.2	0.225
chr1:957621-957664	43	4.13	0.225
chr10:126136260-126136384	124	10.91	0.224
chr2:172945010-172945228	218	7.9	0.224
chr12:122356207-122356456	249	7.17	0.224
chr18:77240733-77240812	79	4.66	0.224
chr10:133961946-133962003	57	4.75	0.224
chr5:3213375-3213437	62	4.99	0.224
chr19:54277641-54277772	131	8.57	0.224
chr6:10881846-10881926	80	6.22	0.223
chr7:7504862-7505029	167	6.73	0.223
chr7:55683001-55683081	80	5.2	0.223
chr21:47545481-47545538	57	5.53	0.223
chr14:103576325-103576395	70	4.76	0.223
chr1:163363441-163363484	43	4.03	0.222
chr15:96889072-96889270	198	12.4	0.222
chr12:131622488-131622585	97	4.72	0.222
chr11:61511260-61511341	81	4.57	0.222
chr13:59808732-59808803	71	4.63	0.221
chr7:66086878-66086942	64	4	0.221
chr1:67550222-67550296	74	5.63	0.221
chr6:50787477-50787737	260	13.59	0.221
chr18:26028069-26028177	108	4.86	0.22
chr1:223566734-223566855	121	5.68	0.22
chr4:9499876-9499937	61	5.17	0.22
chr7:148736109-148736160	51	4.61	0.22
chr5:177280622-177280673	51	5.82	0.22
chr10:3805336-3805415	79	5.71	0.22
chr9:137107741-137107807	66	5.58	0.22

chr7:136878782-136878848	66	4.69	0.22
chr2:220312993-220313069	76	5.4	0.219
chr1:1353652-1353732	80	5.38	0.219
chr12:130342962-130343054	92	5.16	0.218
chr12:34261578-34261650	72	4.55	0.218
chr4:151501296-151501379	83	5.63	0.218
chr20:35886478-35886538	60	4.35	0.218
chr19:50312549-50312647	98	7.83	0.217
chr4:132463802-132463874	72	4.5	0.217
chr19:40324102-40324224	122	6.95	0.217
chr6:20239028-20239259	231	9.14	0.217
chr19:5192313-5192401	88	4.32	0.217
chr5:155108262-155108357	95	9.74	0.216
chr1:86622240-86622310	70	5.26	0.216
chr7:1553564-1553608	44	4.84	0.216
chr16:86547305-86547375	70	4.89	0.216
chr17:4479057-4479158	101	5.28	0.215
chr5:179859204-179859209	5	4.86	0.215
chr19:419851-419975	124	4.19	0.215
chr11:1156425-1156510	85	5.02	0.215
chr14:54413929-54413983	54	5	0.215
chr18:60278531-60278591	60	4.7	0.215
chrX:49368586-49368610	24	4.22	0.215
chr14:39012422-39012532	110	4.56	0.215
chr12:126345728-126345924	196	6.55	0.214
chr1:2390327-2390412	85	5.57	0.214
chr4:174427949-174428061	112	4.37	0.214
chr13:53174187-53174407	220	7.11	0.214
chrX:13309320-13309417	97	5.01	0.213
chr5:66084564-66084635	71	4.04	0.213
chr11:1464581-1464621	40	5.3	0.213
chr17:17597176-17597233	57	6.52	0.213
chr11:59810617-59810669	52	6.4	0.212
chr4:9534636-9534655	19	4.31	0.212
chr7:5342325-5342389	64	8.17	0.212
chr4:132657972-132658058	86	5.54	0.212
chr6:447469-447575	106	5.17	0.212
chrX:145177909-145177988	79	4.73	0.212
chr8:12654115-12654201	86	6.72	0.212
chr19:5229509-5229571	62	5.34	0.211
chr4:169798952-169799011	59	5.59	0.211

chr4:132648018-132648104	86	6.85	0.21
chrX:39938003-39938102	99	5.7	0.21
chr8:10573937-10574027	90	5	0.21
chrX:129378475-129378547	72	4.39	0.21
chr1:1912754-1912800	46	4.33	0.21
chr17:35007383-35007401	18	4.15	0.21
chr8:105439401-105439500	99	4.13	0.21
chr1:52072440-52072536	96	5.41	0.21
chr8:137806001-137806097	96	5.39	0.21
chr7:750312-750376	64	4.84	0.21
chr20:26232234-26232329	95	4.75	0.21
chr1:7191104-7191162	58	4.2	0.21
chr19:3539061-3539159	98	4.06	0.21
chr20:62439900-62439962	62	4.02	0.21
chr12:9892160-9892247	87	6.91	0.209
chr7:82143636-82143720	84	6.45	0.209
chr18:77171124-77171171	47	5.58	0.209
chr10:123001880-123002084	204	5.65	0.209
chr19:12880686-12880776	90	6.18	0.209
chr1:149719435-149719493	58	4.34	0.209
chr19:1170411-1170512	101	6.24	0.208
chr13:112338149-112338219	70	4.1	0.208
chr10:15471953-15472017	64	4.02	0.208
chr4:146654445-146654531	86	4.35	0.208
chr20:42143379-42143466	87	8.3	0.208
chr19:838980-839036	56	8.61	0.208
chr11:2602931-2603011	80	4.32	0.208
chr4:9523587-9523678	91	4.27	0.208
chr20:44686589-44686644	55	6.62	0.207
chr15:59158695-59158782	87	5.12	0.207
chr6:10882800-10882850	50	5.11	0.207
chr14:99793933-99793992	59	5.09	0.207
chr4:179337164-179337262	98	4.82	0.207
chr8:144788612-144788674	62	4.21	0.207
chr20:1874525-1874567	42	4.05	0.207
chr7:71965303-71965359	56	7.27	0.207
chr6:10883022-10883115	93	5.68	0.207
chr10:71626579-71626668	89	4.28	0.207
chr4:132679463-132679524	61	4.03	0.206
chr1:62624369-62624478	109	4.02	0.206
chr4:132680310-132680438	128	7.41	0.206

chr6:64630989-64631084	95	5.26	0.206
chr13:80929895-80930063	168	5.85	0.206
chr5:113077139-113077204	65	4.17	0.205
chr19:55586011-55586104	93	6.68	0.205
chr6:39271536-39271591	55	4.46	0.205
chr19:52207159-52207213	54	8.18	0.205
chr6:130588971-130589047	76	4.28	0.205
chr2:119592703-119592756	53	5.93	0.204
chr5:131281289-131281363	74	4.59	0.204
chr14:57278958-57279032	74	4.79	0.204
chr2:97215928-97216026	98	7.64	0.204
chr6:150311604-150311639	35	6.24	0.204
chrX:39764864-39764977	113	6.13	0.203
chr17:684406-684456	50	4.43	0.203
chr1:92946708-92946788	80	5.8	0.203
chr13:53174535-53174674	139	9.91	0.203
chr7:101944128-101944551	423	18.62	0.203
chr15:73592796-73592836	40	4.43	0.203
chr15:101924512-101924577	65	4.73	0.202
chr16:28635279-28635295	16	4.38	0.202
chr2:236401819-236401899	80	4.58	0.202
chr10:131694777-131694868	91	4.29	0.202
chr13:114825686-114825786	100	4.11	0.202
chr16:10972790-10972889	99	7.09	0.202
chr12:131433149-131433209	60	6.85	0.202
chr16:64984895-64984977	82	4.91	0.201
chr12:3310069-3310151	82	4.75	0.201
chr2:11724899-11725011	112	6.51	0.201
chr9:137594789-137594882	93	4.54	0.2
chr1:174321187-174321242	55	5.27	0.2
chr3:27754663-27754713	50	4.07	0.2
chr11:118505568-118505630	62	4.05	0.2
chr2:763520-763588	68	-4.38	-0.2
chr11:68883599-68883637	38	-4.64	-0.2
chr9:92112254-92112307	53	-4.21	-0.2
chr15:72736345-72736417	72	-4.94	-0.201
chr6:32116892-32116964	72	-4.07	-0.202
chr13:112710252-112710333	81	-4.1	-0.202
chr15:53087304-53087359	55	-4.14	-0.202
chr7:55541062-55541162	100	-4.36	-0.202
chr19:14729388-14729467	79	-4.71	-0.202

chr22:43701140-43701229	89	-5.69	-0.202
chr17:78500005-78500111	106	-8.08	-0.202
chr17:15197509-15197566	57	-4.12	-0.202
chr4:1649415-1649495	80	-4.5	-0.202
chr4:151504163-151504262	99	-6.1	-0.202
chr17:28088204-28088302	98	-4.15	-0.203
chr7:6116001-6116055	54	-4.72	-0.203
chr2:3118674-3118719	45	-4.79	-0.203
chr7:145123607-145123706	99	-5.17	-0.203
chr7:1475464-1475560	96	-5.2	-0.203
chr10:70014234-70014280	46	-5.33	-0.203
chr1:194252765-194252889	124	-7.48	-0.203
chr11:23673926-23673970	44	-5.45	-0.203
chr13:105607917-105608033	116	-4.06	-0.203
chr7:3221329-3221397	68	-7.31	-0.203
chr5:176077109-176077228	119	-5.54	-0.204
chr9:139403218-139403294	76	-4.19	-0.204
chr16:83679934-83680027	93	-4.42	-0.204
chr8:73065372-73065495	123	-5.28	-0.205
chr7:5338884-5338901	17	-4.3	-0.205
chr5:87911779-87911826	47	-6.52	-0.205
chr1:89568920-89568982	62	-4.06	-0.205
chr22:33502063-33502127	64	-4.29	-0.205
chr6:21702370-21702495	125	-4.43	-0.205
chr8:34308894-34308921	27	-4.67	-0.205
chr13:29105372-29105576	204	-6.28	-0.205
chr3:153036166-153036305	139	-7.59	-0.205
chr3:125417321-125417386	65	-4.85	-0.206
chr1:1369156-1369257	101	-4.07	-0.206
chr7:157937049-157937104	55	-4.12	-0.206
chrY:28614200-28614279	79	-4.3	-0.206
chr19:4071087-4071127	40	-5.87	-0.206
chr5:488373-488521	148	-7.04	-0.206
chr1:11947264-11947298	34	-4.54	-0.206
chr15:42174330-42174428	98	-5.02	-0.207
chr22:51043856-51043954	98	-4.09	-0.208
chr2:226077814-226077912	98	-4.53	-0.208
chr10:132576130-132576275	145	-5.6	-0.208
chr3:145726253-145726616	363	-8.78	-0.208
chr2:231575777-231575833	56	-4.6	-0.209
chr14:44067372-44067444	72	-4.51	-0.209

chr1:164078965-164079128	163	-4.97	-0.209
chr4:189191175-189191306	131	-5.14	-0.209
chr2:26951289-26951369	80	-6.21	-0.209
chr13:112814082-112814156	74	-5.39	-0.21
chr3:70236775-70236838	63	-4.17	-0.21
chr19:13995545-13995606	61	-4.4	-0.21
chr17:73554238-73554293	55	-5.24	-0.21
chr2:127936001-127936006	5	-5.73	-0.21
chr1:235517174-235517208	34	-4.15	-0.21
chr1:239138790-239138824	34	-4.25	-0.21
chr11:6435283-6435333	50	-4.62	-0.21
chr11:1368339-1368391	52	-4.71	-0.21
chr6:169192581-169192649	68	-5.06	-0.21
chr14:22230010-22230025	15	-5.54	-0.21
chr4:177613209-177613262	53	-5.82	-0.211
chr6:5038790-5038860	70	-6.68	-0.211
chr17:79131879-79131975	96	-4.74	-0.211
chr19:38876349-38876392	43	-4.17	-0.212
chr14:104927011-104927120	109	-4.27	-0.212
chr1:1957289-1957374	85	-5.1	-0.212
chr22:49295394-49295444	50	-5.79	-0.212
chr22:50008764-50008858	94	-5.35	-0.212
chr5:67113703-67113865	162	-8.24	-0.212
chr20:15966162-15966386	224	-6.62	-0.212
chr5:112737817-112737864	47	-4.18	-0.212
chr3:129290099-129290175	76	-4.36	-0.213
chr4:28118089-28118158	69	-4.49	-0.213
chr8:44647-44781	134	-5.06	-0.213
chrX:139847059-139847133	74	-4.46	-0.213
chr14:23276342-23276403	61	-5.7	-0.213
chr5:89369204-89369352	148	-7.26	-0.214
chr22:49579791-49579852	61	-10.29	-0.214
chr8:77767073-77767133	60	-9.6	-0.214
chr5:55334913-55334983	70	-4.17	-0.214
chr5:153967847-153967905	58	-4.19	-0.214
chr4:619583-619656	73	-4.36	-0.214
chr3:6126855-6126907	52	-4.93	-0.214
chr7:137943382-137943446	64	-5.31	-0.214
chr18:77659275-77659313	38	-4.17	-0.214
chr16:941451-941520	69	-4.65	-0.214
chr6:27988671-27988721	50	-5.51	-0.214

chr19:42928385-42928444	59	-5.35	-0.214
chr9:139233107-139233189	82	-5.2	-0.215
chr12:90930631-90930687	56	-4.54	-0.215
chr7:633050-633101	51	-4.54	-0.215
chr14:76334380-76334455	75	-4.88	-0.215
chr16:85410001-85410042	41	-5.1	-0.215
chr16:83640778-83640820	42	-4.02	-0.215
chr9:45449686-45449764	78	-5.05	-0.215
chr4:113600630-113600686	56	-5.77	-0.215
chr18:77306995-77307094	99	-5.64	-0.215
chr16:10346287-10346358	71	-5.19	-0.216
chr20:19764618-19764719	101	-4.42	-0.216
chr1:3080725-3080780	55	-4.34	-0.216
chrX:125594123-125594254	131	-5.35	-0.216
chr5:60152823-60152855	32	-4.1	-0.217
chrX:124748782-124748863	81	-4.16	-0.217
chr1:1475062-1475189	127	-7.4	-0.217
chr8:4248194-4248359	165	-7.91	-0.217
chr11:92819310-92819370	60	-6.11	-0.217
chr22:31120925-31120957	32	-4.48	-0.217
chr15:40396019-40396066	47	-4.7	-0.217
chr4:95762740-95762834	94	-6.17	-0.217
chr19:8176937-8177005	68	-4.23	-0.218
chr1:6159645-6159677	32	-5.05	-0.218
chr17:1085691-1085755	64	-4.05	-0.218
chr12:57183772-57183795	23	-4.2	-0.218
chr6:52156860-52157009	149	-6.44	-0.218
chr16:89040343-89040406	63	-4.63	-0.218
chr10:131583737-131583779	42	-4.85	-0.218
chr6:170472110-170472140	30	-4.16	-0.22
chr20:55389779-55389859	80	-4.31	-0.22
chrX:40005389-40005398	9	-4.53	-0.22
chr12:131077156-131077191	35	-4.69	-0.22
chr19:10615299-10615398	99	-5.58	-0.22
chr2:136905035-136905081	46	-4.96	-0.22
chr1:6442193-6442389	196	-9.55	-0.221
chrX:153584447-153584626	179	-4.28	-0.221
chr8:142537429-142537527	98	-4.44	-0.222
chr7:147179760-147179770	10	-4.43	-0.222
chr18:77336437-77336485	48	-4.35	-0.222
chr17:8629421-8629445	24	-4.38	-0.222

chr11:3536763-3536848	85	-5.85	-0.222
chrX:40936042-40936162	120	-7.85	-0.222
chr16:31230634-31230740	106	-6.34	-0.222
chr18:25691214-25691268	54	-4.33	-0.222
chr22:33724210-33724305	95	-4.08	-0.223
chr15:101096298-101096349	51	-4.21	-0.223
chr18:27058488-27058585	97	-5.64	-0.223
chr1:19146693-19146712	19	-4.61	-0.223
chr16:84911684-84911784	100	-6.07	-0.223
chr8:89448837-89448889	52	-4.22	-0.224
chr20:31565612-31565670	58	-4.37	-0.224
chr2:128453128-128453319	191	-15.15	-0.224
chr7:4133309-4133391	82	-5.09	-0.225
chr21:33449587-33449646	59	-4.71	-0.225
chr16:1079315-1079373	58	-5.08	-0.225
chr5:179172893-179172975	82	-4.65	-0.225
chr5:19573575-19573622	47	-4.27	-0.226
chr1:248335584-248335754	170	-5.57	-0.227
chr10:83068817-83068862	45	-4	-0.227
chr16:5047167-5047193	26	-4.4	-0.227
chr10:135390548-135390800	252	-6.24	-0.227
chr1:11773709-11773763	54	-4.02	-0.228
chr22:40405797-40405858	61	-4.11	-0.228
chr1:46005208-46005282	74	-6.01	-0.228
chr16:52836364-52836438	74	-4.56	-0.228
chr19:36002187-36002255	68	-4.39	-0.228
chr1:2038376-2038454	78	-4.42	-0.229
chr22:23776027-23776238	211	-6.72	-0.229
chr10:25871969-25872057	88	-5.03	-0.23
chr1:19408049-19408118	69	-5.5	-0.23
chr21:46521101-46521146	45	-4.21	-0.23
chrX:140705651-140705751	100	-4.55	-0.23
chr7:73306080-73306092	12	-4.65	-0.23
chr3:155028911-155028986	75	-5.13	-0.23
chr17:704715-704779	64	-5.28	-0.23
chr20:10348883-10348935	52	-5.38	-0.23
chr2:233210792-233210949	157	-6.49	-0.23
chr9:124987723-124987813	90	-9.31	-0.23
chr10:43133977-43134077	100	-4.08	-0.23
chr16:11072863-11072947	84	-4.5	-0.23
chr6:98864475-98864744	269	-12.33	-0.231

chr17:41402012-41402204	192	-6.35	-0.231
chr10:134942296-134942373	77	-4.75	-0.232
chr16:78063972-78064036	64	-4.34	-0.232
chr22:33729164-33729304	140	-4.85	-0.232
chr1:2747459-2747492	33	-4.04	-0.232
chr17:77011912-77011963	51	-4.61	-0.232
chr4:58306229-58306317	88	-4.02	-0.232
chr11:133796460-133796500	40	-4.54	-0.232
chr7:44801335-44801389	54	-4.76	-0.232
chr2:45303114-45303190	76	-4.39	-0.233
chr19:49934430-49934486	56	-4.44	-0.233
chr18:77340766-77340862	96	-4.56	-0.233
chr18:14377619-14377759	140	-4.58	-0.233
chr4:7758476-7758517	41	-4.68	-0.233
chr3:136688257-136688394	137	-5.22	-0.234
chr13:46894376-46894434	58	-4.3	-0.234
chr1:8148828-8148879	51	-6.25	-0.234
chr14:80890375-80890513	138	-5.48	-0.234
chr8:8328637-8328746	109	-4.75	-0.235
chr22:24256199-24256353	154	-6.83	-0.235
chr15:73806515-73806559	44	-4.09	-0.236
chr4:8006899-8006962	63	-5.1	-0.237
chr16:81224835-81224882	47	-6.53	-0.237
chr3:20276348-20276409	61	-4.09	-0.238
chr8:3027971-3028020	49	-4.56	-0.238
chr13:50266288-50266384	96	-6.1	-0.238
chr12:116008212-116008282	70	-6.34	-0.238
chr12:4223495-4223550	55	-4.72	-0.238
chr1:115568990-115569056	66	-4.08	-0.24
chr9:132954639-132954731	92	-4.26	-0.24
chr20:35187689-35187711	22	-4.35	-0.24
chr19:688400-688427	27	-6.6	-0.24
chr22:20480487-20480571	84	-5.78	-0.24
chr9:137714735-137714788	53	-4.88	-0.24
chr17:42420319-42420380	61	-5.02	-0.24
chr5:1074968-1075046	78	-4.17	-0.241
chr10:19430865-19430958	93	-6.13	-0.241
chr10:31700415-31700510	95	-4.54	-0.242
chr1:175097861-175097892	31	-4.14	-0.242
chr9:87162112-87162190	78	-4.36	-0.242
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chr22:36975991-36976043	52	-4.25	-0.242
chr1:54729004-54729029	25	-4.43	-0.242
chr1:240907966-240908006	40	-4.67	-0.242
chr9:75456665-75456706	41	-5.1	-0.242
chr10:1284153-1284243	90	-5.12	-0.242
chr7:149809178-149809261	83	-7.75	-0.243
chr9:76918011-76918109	98	-4.79	-0.244
chrX:34961656-34961692	36	-6.11	-0.244
chrX:33620014-33620072	58	-4.37	-0.244
chr11:2017781-2017859	78	-7.24	-0.244
chr9:117762484-117762585	101	-4.89	-0.245
chrX:3746101-3746147	46	-5.73	-0.245
chr2:239023705-239023764	59	-4.55	-0.245
chr14:105518005-105518092	87	-8.62	-0.245
chrY:28507815-28507880	65	-4.85	-0.246
chr9:15139643-15139744	101	-4.69	-0.247
chr13:48654360-48654458	98	-5	-0.247
chr22:48112286-48112330	44	-4.15	-0.247
chr5:6575888-6575948	60	-4.3	-0.247
chrX:89367675-89367745	70	-5.33	-0.247
chr6:64042808-64042819	11	-5.51	-0.247
chr16:14879610-14879710	100	-4.17	-0.248
chr5:178744620-178744719	99	-5.29	-0.248
chr21:35303743-35303779	36	-4.59	-0.249
chr10:133953880-133954056	176	-6.41	-0.249
chr16:50300426-50300512	86	-4.47	-0.249
chr6:104143646-104143701	55	-4.03	-0.25
chr8:92540044-92540096	52	-4.2	-0.25
chr1:15127613-15127629	16	-4.49	-0.25
chr1:1962485-1962538	53	-4.6	-0.25
chr1:41303941-41304040	99	-5.51	-0.25
chr3:140795794-140795874	80	-6.09	-0.25
chr9:70638601-70638697	96	-8	-0.25
chrY:9930147-9930241	94	-6.54	-0.251
chr20:59934298-59934404	106	-6.18	-0.251
chr5:140480793-140480941	148	-4.45	-0.251
chr3:119689488-119689591	103	-4.72	-0.252
chr1:106926066-106926108	42	-5.26	-0.252
chr16:29141844-29141916	72	-5.51	-0.252
chr16:936981-936994	13	-4.36	-0.253
chr4:1661932-1662028	96	-4.41	-0.253

chr1:7496256-7496365	109	-4.47	-0.253
chr17:72443154-72443226	72	-5.33	-0.253
chr14:105622188-105622281	93	-8.1	-0.253
chr17:63859605-63859734	129	-8.62	-0.254
chr10:134908989-134909025	36	-4.96	-0.254
chr8:4256117-4256213	96	-5.3	-0.254
chr3:177687266-177687330	64	-5	-0.254
chr1:200983236-200983361	125	-5.37	-0.255
chr18:77219013-77219065	52	-4.43	-0.255
chr6:28983065-28983145	80	-6.27	-0.256
chr3:75655039-75655096	57	-6.94	-0.256
chr22:34060780-34060830	50	-5.19	-0.256
chr20:58062070-58062146	76	-4.45	-0.257
chr18:76695274-76695360	86	-4.59	-0.257
chr13:67197103-67197167	64	-4.12	-0.258
chr1:155075632-155075728	96	-4.34	-0.258
chr8:4449397-4449533	136	-4.78	-0.258
chr19:4767032-4767099	67	-5.02	-0.258
chr22:49387233-49387284	51	-5.98	-0.258
chr5:150834295-150834367	72	-6.67	-0.258
chr18:77543073-77543164	91	-5.55	-0.258
chr14:104675098-104675132	34	-5.48	-0.258
chr9:72092274-72092318	44	-5.55	-0.258
chr7:22398163-22398249	86	-6.15	-0.258
chr15:62516340-62516426	86	-6.64	-0.26
chr2:154870076-154870114	38	-4.01	-0.26
chr4:46285822-46285862	40	-4.14	-0.26
chr7:100887197-100887280	83	-4.27	-0.26
chr22:40026448-40026532	84	-4.63	-0.26
chr8:139833558-139833618	60	-5.02	-0.26
chr15:84547091-84547150	59	-5.05	-0.26
chr13:112758807-112758897	90	-6.52	-0.26
chr10:132099227-132099372	145	-7.16	-0.261
chr19:29931151-29931222	71	-4.53	-0.262
chr13:107668933-107668989	56	-5.14	-0.262
chr8:9006632-9006689	57	-6.26	-0.262
chr13:112914805-112914895	90	-6.35	-0.262
chr9:130498662-130498694	32	-4.35	-0.262
chr1:165325237-165325258	21	-4.46	-0.263
chr16:5459814-5459878	64	-5.28	-0.263
chr10:134218212-134218301	89	-4.75	-0.263

chr13:114805144-114805226	82	-6.2	-0.264
chr12:101826285-101826337	52	-4.05	-0.264
chrX:80699438-80699474	36	-4.35	-0.264
chr20:56138380-56138432	52	-4.04	-0.265
chr7:150094391-150094488	97	-4.21	-0.266
chr11:68622202-68622275	73	-4.88	-0.266
chr12:22488267-22488369	102	-4.32	-0.266
chr5:17924748-17924781	33	-4.28	-0.267
chr17:4439681-4439755	74	-4.55	-0.267
chr11:16755338-16755390	52	-4.83	-0.267
chr20:16618712-16618808	96	-4.03	-0.268
chr22:20219134-20219210	76	-4.14	-0.268
chr19:3793279-3793329	50	-4.27	-0.268
chr1:2490086-2490148	62	-4.43	-0.268
chr7:152419446-152419510	64	-4.95	-0.268
chr12:114886100-114886177	77	-4.08	-0.268
chr19:57351921-57352012	91	-8.61	-0.269
chr16:78549043-78549099	56	-4.51	-0.27
chrX:95318546-95318610	64	-4.62	-0.27
chr5:71716018-71716094	76	-4.73	-0.27
chr9:133072284-133072340	56	-4.88	-0.27
chr11:126048090-126048144	54	-5.01	-0.27
chrX:117597170-117597242	72	-5.4	-0.27
chr4:39790059-39790173	114	-5.68	-0.271
chr19:41354528-41354605	77	-5.83	-0.272
chrX:37291580-37291619	39	-4.75	-0.272
chr11:2050599-2050746	147	-4.19	-0.273
chr8:145024948-145025047	99	-7.05	-0.273
chrX:39864845-39864932	87	-4.5	-0.273
chr10:3864275-3864344	69	-4.22	-0.274
chr16:1261313-1261355	42	-4.72	-0.274
chr20:43384033-43384106	73	-4.3	-0.275
chr2:175198662-175198716	54	-5.71	-0.275
chrX:12804860-12804908	48	-4.1	-0.276
chr8:53852850-53852893	43	-4.15	-0.276
chr18:10699012-10699097	85	-5.01	-0.276
chr19:545597-545627	30	-4.45	-0.277
chr4:30242485-30242494	9	-4.02	-0.278
chr14:105944277-105944310	33	-4.81	-0.278
chr1:143277220-143277269	49	-7.43	-0.278
chr4:177613470-177613542	72	-4.72	-0.279

chr7:1351474-1351616	142	-6.08	-0.279
chr8:143441863-143441933	70	-4.19	-0.28
chr10:36179010-36179151	141	-6.25	-0.282
chr5:171756786-171756837	51	-5.11	-0.282
chr14:74179570-74179661	91	-5.63	-0.282
chr2:152961720-152961821	101	-4.99	-0.282
chr4:3311613-3311629	16	-4.85	-0.283
chrX:79470409-79470441	32	-4.86	-0.283
chr20:45380395-45380441	46	-5.09	-0.283
chr3:57306847-57306923	76	-4.78	-0.283
chr4:987716-987799	83	-4.26	-0.284
chr12:131930990-131931047	57	-4.69	-0.285
chr1:228522449-228522542	93	-5.37	-0.285
chr20:23589052-23589096	44	-4.3	-0.285
chr22:21200265-21200311	46	-4.36	-0.287
chr21:47374565-47374584	19	-6.2	-0.288
chr18:66475914-66475957	43	-4.39	-0.288
chr2:35620690-35620753	63	-5.53	-0.288
chr17:239946-240026	80	-4.48	-0.288
chr4:64215182-64215228	46	-4.63	-0.289
chr10:97657162-97657232	70	-5.36	-0.289
chrX:130518035-130518166	131	-9.15	-0.289
chr22:26148176-26148224	48	-5.07	-0.29
chr21:21272770-21272822	52	-5.05	-0.29
chr6:168963374-168963449	75	-5.66	-0.29
chrY:24513251-24513347	96	-5.1	-0.291
chr13:76869303-76869359	56	-5.42	-0.292
chr13:112910306-112910394	88	-6.73	-0.292
chr19:2864472-2864519	47	-5.31	-0.292
chr4:7210967-7210986	19	-4.16	-0.292
chr20:56146504-56146536	32	-6.05	-0.293
chr6:43251562-43251641	79	-6.24	-0.293
chr1:32149708-32149737	29	-4.5	-0.295
chr4:187850689-187850731	42	-4.58	-0.295
chr19:1288314-1288406	92	-5.23	-0.295
chr5:3417899-3417978	79	-5.97	-0.295
chr5:77147541-77147584	43	-5.14	-0.296
chr17:56582885-56582981	96	-4.44	-0.296
chr12:46019713-46019814	101	-6.07	-0.297
chr12:55877893-55877985	92	-5.1	-0.298
chr12:30975777-30975867	90	-7.85	-0.299

chr22:26385468-26385564	96	-6.17	-0.299
chr9:137483793-137483883	90	-5.41	-0.3
chr4:91602556-91602604	48	-5.78	-0.3
chr1:1657004-1657076	72	-6.07	-0.3
chr3:58828132-58828184	52	-5.52	-0.302
chr8:143443158-143443220	62	-4.24	-0.302
chr14:101017568-101017686	118	-4.37	-0.302
chr14:101048245-101048330	85	-4.45	-0.304
chr7:644981-645070	89	-5.18	-0.304
chr11:132813039-132813074	35	-4.63	-0.304
chr11:128694465-128694522	57	-4.19	-0.305
chr11:613954-613991	37	-4.23	-0.305
chr12:122107244-122107335	91	-7.16	-0.306
chr18:77609973-77610028	55	-5.73	-0.306
chr8:101117950-101118030	80	-4.77	-0.31
chr17:77242960-77243037	77	-4.04	-0.31
chr11:11054422-11054449	27	-4.14	-0.31
chr14:72220828-72220864	36	-8.02	-0.31
chr2:207036664-207036732	68	-5.23	-0.311
chr2:71123889-71123943	54	-5.24	-0.312
chr4:1538214-1538266	52	-4.44	-0.312
chr14:106286035-106286084	49	-4.85	-0.312
chrY:6134944-6135074	130	-6.11	-0.313
chr18:27679771-27679789	18	-4.89	-0.315
chr7:140039738-140039834	96	-5.37	-0.315
chr10:55064010-55064097	87	-4.77	-0.316
chr16:86527816-86527901	85	-6.52	-0.317
chrX:69353825-69353870	45	-5.71	-0.32
chr2:1554832-1554870	38	-5.06	-0.32
chr4:127121663-127121716	53	-6.68	-0.32
chr14:77960320-77960416	96	-5.88	-0.321
chr1:245753601-245753635	34	-5.5	-0.322
chr16:1580749-1580823	74	-4.62	-0.323
chr19:39899218-39899299	81	-4.23	-0.323
chr15:75987122-75987203	81	-4.75	-0.324
chr16:1991283-1991327	44	-7.05	-0.324
chr12:51965400-51965482	82	-4.12	-0.325
chr9:71732632-71732704	72	-4.82	-0.326
chr8:114389118-114389207	89	-5.76	-0.327
chr1:4623422-4623508	86	-4.73	-0.33
chr5:10533558-10533655	97	-7.7	-0.33

chr14:105864119-105864204	85	-4.93	-0.332
chr13:48892382-48892474	92	-5.43	-0.332
chr11:2113757-2113931	174	-7.9	-0.332
chr2:130444230-130444292	62	-4.71	-0.332
chr22:49635103-49635124	21	-4.94	-0.332
chr12:56628651-56628739	88	-6.46	-0.333
chr19:47621448-47621537	89	-6.6	-0.333
chr3:111718467-111718519	52	-4.2	-0.336
chr13:107827269-107827301	32	-4.68	-0.336
chr16:65732297-65732356	59	-4.95	-0.336
chr6:19704589-19704661	72	-5.19	-0.338
chr20:62173761-62173812	51	-7.73	-0.338
chr13:100219304-100219397	93	-4.91	-0.34
chr11:68811737-68811759	22	-4.87	-0.34
chr12:87316718-87316764	46	-5.12	-0.343
chr11:2103058-2103112	54	-7.36	-0.343
chr19:407324-407400	76	-5.57	-0.344
chr18:77905446-77905537	91	-7.52	-0.346
chr5:1663996-1664036	40	-5.81	-0.348
chr1:117170223-117170280	57	-6.85	-0.348
chr1:17367984-17368072	88	-5.54	-0.348
chr4:177433982-177434022	40	-4.7	-0.35
chr1:3647830-3647887	57	-5.03	-0.35
chr19:52206289-52206369	80	-5.3	-0.35
chr19:1535177-1535205	28	-4.5	-0.352
chr13:50914873-50914973	100	-5.14	-0.352
chr19:7891714-7891752	38	-4.07	-0.355
chr6:86714484-86714560	76	-4.88	-0.356
chr5:134103829-134103893	64	-4.1	-0.358
chr16:3641291-3641329	38	-7.32	-0.358
chr8:16527728-16527809	81	-7.87	-0.359
chr4:92899617-92899657	40	-4.25	-0.36
chr6:55234084-55234114	30	-8.42	-0.362
chr13:113009134-113009215	81	-7.69	-0.364
chr19:15343867-15343946	79	-4.4	-0.365
chr7:104988939-104989031	92	-6.87	-0.365
chr21:10772504-10772580	76	-4.69	-0.367
chr4:19085246-19085322	76	-5.77	-0.367
chr19:9204246-9204257	11	-4.39	-0.367
chr2:199467881-199467916	35	-5.33	-0.367
chr5:38175326-38175379	53	-4.36	-0.368

chr14:104556868-104556890	22	-4.04	-0.37
chr2:106747579-106747634	55	-4.94	-0.37
chr11:46542400-46542445	45	-5.18	-0.37
chr3:10492476-10492553	77	-5.37	-0.378
chrX:40908514-40908560	46	-4.39	-0.378
chrX:27416589-27416688	99	-7.05	-0.378
chr2:101221920-101221992	72	-4.55	-0.382
chr10:1546732-1546762	30	-4.52	-0.383
chr10:1230792-1230837	45	-5.58	-0.384
chr22:43628339-43628410	71	-4.21	-0.385
chrX:27872445-27872485	40	-4.98	-0.385
chr3:54319125-54319170	45	-6.37	-0.387
chr14:48656516-48656592	76	-7.39	-0.391
chr16:67511722-67511793	71	-4.07	-0.393
chr4:120036071-120036170	99	-4.44	-0.394
chr5:1564437-1564483	46	-4.09	-0.395
chr5:140812550-140812614	64	-4.16	-0.398
chr7:87681744-87681809	65	-6.14	-0.4
chr8:112550459-112550486	27	-4.51	-0.405
chr11:1103789-1103847	58	-4.93	-0.405
chr14:19552727-19552828	101	-10.2	-0.407
chr8:50482399-50482459	60	-4.93	-0.407
chr20:23733222-23733328	106	-5.62	-0.42
chr3:192358993-192359105	112	-9.23	-0.424
chr3:142666208-142666298	90	-10.35	-0.43
chr21:42218928-42219029	101	-10.01	-0.436
chr2:86888084-86888136	52	-5.37	-0.44
chr8:142633422-142633489	67	-5.94	-0.446
chr5:756251-756344	93	-4.22	-0.45
chr9:137126619-137126636	17	-4.94	-0.45
chr17:42392155-42392208	53	-6.19	-0.452
chr12:13715925-13715942	17	-4.36	-0.463
chr2:194445095-194445179	84	-8.71	-0.463
chr8:54506795-54506873	78	-5.07	-0.466
chr2:237214422-237214453	31	-6.52	-0.473
chr10:74304021-74304057	36	-4.25	-0.488
chr2:30216490-30216551	61	-5.64	-0.497
chr6:3225061-3225127	66	-6.38	-0.505
chr11:4258811-4258864	53	-4.42	-0.512
chr2:171573980-171574053	73	-5.2	-0.518

associated_gene(s)

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HIST1H4I(NM_003495),HIST1H2BK(NM_080593),

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GRAMD4(pmt,NM_015124),

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KCNN4(NM_002250),
SHC4(NM_203349),

TRMT2B(pmt,NM_024917),TRMT2B(pmt,NM_001167972),TRMT2B(pmt,NM_001167971),TRMT2B(pmt,NM_001167970),
MSRA(NM_012331),MSRA(NM_001135671),MSRA(NM_001135670),MSRA(NM_001199729),
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OTOG(NM_001277269),
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CCDC185(NM_152610),

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FUZ(NM_025129),FUZ(NM_001171937),FUZ(NR_033269),

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NOTCH1(NM_017617),
CDH13(NM_001220488),CDH13(NM_001220490),CDH13(NM_001257),CDH13(NM_001220489),

SLC29A4(NM_001040661),SLC29A4(NM_153247),
LINC00461(NR_015436),

CASC15(NR_015410),

VWA1(pmt,NM_022834),VWA1(pmt,NM_199121),
PTPRN2(NM_130842),PTPRN2(NM_130843),PTPRN2(NM_002847),

ZBTB7A(pmt,NM_015898),
SLC9A3(NM_001284351),SLC9A3(NM_004174),

SPTBN5(NM_016642),
MAPK8IP2(NM_012324),

CAB39(pmt,NM_001130849),CAB39(pmt,NM_001130850),CAB39(pmt,NM_016289),

KCNK3(NM_002246),

C19orf57(NM_024323),
LLGL2(NM_004524),LLGL2(NM_001015002),LLGL2(NM_001031803),

APBB1(NR_047512),APBB1(NM_145689),APBB1(NM_001164),

VEGFC(NM_005429),

AATK(NM_001080395),
SPRED3(pmt,NM_001042522),SPRED3(pmt,NR_073032),GGN(NM_152657),

GABRD(NM_000815),

C22orf34(NR_110522),C22orf34(NR_110523),

MACROD2(NM_001033087),MACROD2(NM_080676),
MCC(NM_001085377),
PLXND1(NM_015103),

LINC00632(NR_104228),
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ZFHX4(NM_024721),

PDE6B(NM_001145291),PDE6B(NM_000283),

KCNG2(NM_012283),
LMF1(NM_022773),LMF1(NR_033645),LMF1(NR_033646),

LIPE-AS1(NR_073180),LIPE-AS1(NR_073179),LIPE(NM_005357),
GPSM1(NM_001145638),GPSM1(NM_015597),

PRKAR1B(NM_002735),PRKAR1B(NM_001164760),PRKAR1B(NM_001164762),PRKAR1B(NM_001164764),
TTLL5(NM_015072),

CDH13(NM_001220488),CDH13(NM_001220490),CDH13(NM_001257),CDH13(NM_001220489),

PRDM16(NM_022114),PRDM16(NM_199454),

TMEM240(NM_001114748),
CSMD1(NM_033225),

OSBP2(NM_001282739),OSBP2(NM_030758),OSBP2(NM_001282738),
BMF(NM_033503),BMF(NM_001003940),BMF(NM_001003942),BMF(NM_001003943),
BMPR1B(NM_001203),
FBN3(NM_032447),
KCNAB2(NM_001199863),KCNAB2(NM_001199860),KCNAB2(NM_001199861),KCNAB2(NM_003636),
ABR(NM_001159746),ABR(pmt,NM_021962),

CBFA2T3(NM_005187),

BCOR(NM_001123383),BCOR(NM_001123384),

KEAP1(pmt,NM_012289),KEAP1(pmt,NM_203500),

ACOT7(NM_181864),ACOT7(NM_007274),
FLNA(NM_001110556),FLNA(NM_001456),

MIR54814(NR_031690),CNTNAP2(NM_014141),

PYDC1(pmt,NM_152901),TRIM72(NM_001008274),
CDH2(NM_001792),
LARGE(NM_004737),LARGE(NM_133642),
PRKXP1(NR_073405),

CRISPLD2(NM_031476),

SDK1(NM_152744),

MAML1(NM_014757),
CDH18(NM_001167667),CDH18(NM_004934),

SEC14L5(NM_014692),

DRAXIN(NM_198545),
FAM83F(NM_138435),

DMKN(NM_033317),DMKN(NM_001126058),DMKN(NM_001190349),DMKN(pmt,NR_033746),DMKN(
PRKCZ(NM_002744),PRKCZ(NM_001033581),PRKCZ(NM_001033582),PRKCZ(NM_001242874),
LOC101929374(NR_110538),
GPR158(NM_020752),
UBR4(NM_020765),
ADARB1(NR_073200),ADARB1(NM_015834),ADARB1(NR_027674),ADARB1(NM_001112),ADARB1(NM_
SPANXA2-OT1(NR_037183),

NXN(NM_001205319),NXN(NM_022463),

LHX6(NM_199160),LHX6(NM_001242334),LHX6(NM_014368),LHX6(pmt,NM_001242335),LHX6(NM_0
ZNF33B(pmt,NM_006955),
CLEC16A(NM_001243403),CLEC16A(NM_015226),

GPR123(NM_001083909),GPR123(NM_001291085),
CLEC3A(NM_001244755),CLEC3A(NM_005752),
LARGE(NM_004737),LARGE(NM_133642),

IGSF9B(NM_001277285),
ZMIZ2(NM_031449),ZMIZ2(NM_174929),

SLC17A7(NM_020309),

AFAP1-AS1(NR_026892),
IL2ORB(NM_144717),

DIO2-AS1(NR_038355),

C15orf60(NM_001042367),
ABLIM2(NM_001130086),ABLIM2(NM_001130084),ABLIM2(NM_001130085),ABLIM2(NM_001286688
PKD1L2(NM_052892),PKD1L2(NM_001076780),

CSMD1(NM_033225),
EBPL(pmt,NM_001278636),EBPL(pmt,NR_103802),EBPL(pmt,NR_103803),EBPL(pmt,NM_032565),

TSHB(pmt,NM_000549),
NCS1(NM_014286),
LOC101926987(NR_109939),
PRSS57(NM_214710),

COL5A1(NM_000093),COL5A1(NM_001278074),LOC101448202(NR_103451),
GRN(pmt,NM_002087),
SLC12A7(NM_006598),
MALRD1(NM_001142308),
ZEB1(NM_001128128),ZEB1(NM_030751),ZEB1(NM_001174093),ZEB1(NM_001174095),ZEB1(NM_001
TNN(NM_022093),

ABCA2(NM_212533),ABCA2(NM_001606),

CACNG2(NM_006078),
SSBP3(NM_145716),SSBP3(NM_018070),SSBP3(NM_001009955),

ADARB2(NM_018702),

MIR6130(NR_106746),
FAM47B(NM_152631),

H19(NR_002196),

LOC389906(NR_034031),
ESPNL(NM_194312),
GPR132(NM_001278694),GPR132(NM_001278695),GPR132(NM_013345),GPR132(NM_001278696),

MED4(NM_001270629),MED4(NM_014166),

ADAMTS2(NM_021599),ADAMTS2(NM_014244),
LINC00649(NR_038883),
JAKMIP3(NM_001105521),
ADCY7(pmt,NM_001286057),

KAZN(NM_015209),KAZN(NM_201628),

KCNQ4(NM_004700),KCNQ4(NM_172163),
SPSB4(NM_080862),

CDH4(NM_001794),
PCDHB3(NM_018937),
GSK3B(NM_001146156),GSK3B(NM_002093),

LMF1(NM_022773),LMF1(NR_033645),LMF1(NR_033646),
FAM53A(NM_001174070),FAM53A(NM_001013622),

CAMTA1(NM_015215),
GPRC5C(NM_018653),GPRC5C(NM_022036),
JAG2(NM_002226),MIR6765(pmt,NR_106823),JAG2(NM_145159),
CEP112(NM_145036),CEP112(NM_001199165),
GPR123(NM_001083909),
CSMD1(NM_033225),

KIF21B(NM_001252103),KIF21B(NM_001252100),KIF21B(NM_017596),KIF21B(NM_001252102),
NFATC1(NM_172388),NFATC1(NM_172390),NFATC1(NM_006162),NFATC1(NM_172389),NFATC1(NM_

LARGE(NM_004737),LARGE(NM_133642),

PCDH9(NM_020403),PCDH9(NM_203487),

CSMD1(NM_033225),
MIR7-3(pmt,NR_029607),MIR7-3HG(pmt,NR_027148),

SLC36A1(NM_078483),

APBA1(NM_001163),
RAPGEF5(pmt,NM_012294),

GALNT13(NM_052917),
GABRA2(NM_001114175),GABRA2(NM_000807),GABRA2(NM_001286827),
FIS1(NM_016068),
CACNA1I(NM_001003406),CACNA1I(NM_021096),
COL22A1(NM_152888),
ADAMTSL3(NM_207517),

LOC284395(NR_040029),

PPP1R3B(NM_001201329),PPP1R3B(NM_024607),

TOR2A(pmt,NM_001252021),TOR2A(pmt,NM_001085347),TOR2A(pmt,NM_001134430),TOR2A(pmt,N
LMX1A(NM_177398),LMX1A(NM_001174069),

PWWP2B(NM_001098637),PWWP2B(NM_138499),

RASA3(NM_007368),

PCK1(NM_002591),
ZNF775(NM_173680),

ST8SIA1(pmt,NM_003034),

SPNS2(NM_001124758),
C11orf58(pmt,NM_014267),

MATK(NM_002378),
LOC100133445(pmt,NR_037844),TNFRSF14(NM_003820),

ZIM2(NM_001146327),ZIM2(NM_015363),PEG3(NM_006210),PEG3(NM_001146185),MIMT1(pmt,NR_001146327),WWOX(NM_016373),

HMCN2(NM_001291815),

CYP2A6(NM_000762),
PRRG1(NM_001173490),PRRG1(NM_001173489),PRRG1(NM_000950),PRRG1(NM_001173486),PRRG1

PLEC(NM_000445),PLEC(NM_201378),PLEC(NM_201379),PLEC(pmt,NM_201380),

CACNA1H(NM_021098),CACNA1H(NM_001005407),
RIMS4(NM_001205317),RIMS4(NM_182970),
SP9(pmt,NM_001145250),
PRPS2(pmt,NM_001039091),PRPS2(pmt,NM_002765),
NPBWR1(NM_005285),
PIEZO2(NM_022068),
GZMM(NM_001258351),GZMM(NM_005317),

CRIP2(NR_073081),CRIP2(NM_001312),CRIP2(NR_073084),CRIP2(NR_073083),CRIP2(NR_073082),CRIP

VEGFC(NM_005429),

TSNARE1(NM_145003),

PNMA1(NM_006029),

RGS12(pmt,NM_002926),RGS12(pmt,NM_198229),

ASB14(NM_130387),ASB14(NM_001142733),APPL1(NM_012096),
SLC26A1(pmt,NM_134425),SLC26A1(pmt,NM_022042),SLC26A1(pmt,NM_213613),IDUA(NR_110313),I

OBSCN(NM_001098623),OBSCN(NM_001271223),OBSCN(NM_052843),
CST9(pmt,NM_001008693),
PI4KA(NM_058004),

CCDC102B(NM_024781),CCDC102B(NM_001093729),

ENTPD1-AS1(NR_038444),

MYO18B(NM_032608),

SMOC2(NM_001166412),SMOC2(NM_022138),
RBM1Y1F(NM_152585),

ZNF556(pmt,NM_024967),
SORCS2(NM_020777),

TTBK1(NM_032538),
COL16A1(NM_001856),

EFNA2(NM_001405),
LINC01019(NR_033898),

MTMR4(NM_004687),

MYO18B(NM_032608),

CCSER1(NM_001145065),CCSER1(NM_207491),
CDK11B(pmt,NM_033493),CDK11A(pmt,NM_033529),CDK11B(pmt,NM_033492),CDK11B(pmt,NM_03:
C3orf67-AS1(NR_110820),C3orf67(NM_198463),
TSNARE1(NM_145003),
BEGAIN(NM_001159531),BEGAIN(NM_020836),

PRKAR1B(NM_002735),PRKAR1B(NM_001164759),PRKAR1B(NM_001164762),PRKAR1B(NM_00116476:
OPCML(NM_001012393),OPCML(pmt,NM_002545),

IRF7(NM_004031),IRF7(NM_001572),IRF7(NM_004029),
MORN3(NM_173855),

RGS22(NM_001286692),RGS22(pmt,NM_001286693),RGS22(NM_015668),
RBF3X3(NM_001082575),

VAX2(pmt,NM_012476),

SLC37A3(NM_032295),SLC37A3(NM_207113),SLC37A3(NM_001287498),

FENDRR(NR_036444),FENDRR(NR_033925),
IGBP1(NM_001551),

ISM2(NM_182509),ISM2(NM_199296),
KIF26B(NM_018012),
TMEM204(NM_001256541),TMEM204(pmt,NM_024600),IFT140(NM_014714),
ZFP36(NM_003407),PLEKHG2(pmt,NM_022835),
CSPG4(NM_001897),
MSRB1(NM_016332),

TJP2(pmt,NM_001170414),
CSMD3(NM_052900),CSMD3(NM_198124),CSMD3(NM_198123),

PACS2(NM_001243127),PACS2(NM_015197),TEX22(pmt,NM_001195082),PACS2(NM_001100913),
RB1(NM_000321),

SLC39A5(NM_173596),SLC39A5(NM_001135195),
ZC3H4(pmt,NM_015168),
TAGLN3(NM_013259),TAGLN3(NM_001008272),TAGLN3(NM_001008273),
FAM155A(NM_001080396),

SRMS(NM_080823),

TPCN2(pmt,NM_139075),

C2CD4C(NM_001136263),
PARD6G-AS1(pmt,NR_028339),PARD6G-AS1(pmt,NR_028340),

IGSF3(NM_001007237),IGSF3(NM_001542),
SDHB(NM_003000),

TP73(NM_001126242),TP73(NM_001204188),TP73(NM_005427),TP73(NM_001204184),TP73(NM_001204184),
SPACA6P(NR_024330),
PLK5(NM_001243079),
DLEU1(NR_109974),
EVI5L(pmt,NM_145245),

DDX46(NM_014829),
SLX4(NM_032444),

GFRAL(NM_207410),

EPHX3(pmt,NM_024794),EPHX3(pmt,NM_001142886),
SRPK2(NM_182692),

OR1M1(NM_001004456),

ASPG(NM_001080464),
UXS1(NR_045607),UXS1(NM_001253876),UXS1(NM_001253875),UXS1(NM_025076),
AMBRA1(NM_001267782),AMBRA1(NM_001267783),AMBRA1(NM_017749),
ATP2B2(NM_001001331),ATP2B2(NM_001683),

ADARB2(NM_018702),
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SCUBE1(NM_173050),

CACNA2D3(NM_018398),

ATP6V0D1(NM_004691),

PCDHGA1(NM_018912),PCDHGA11(NM_032092),PCDHGB2(NM_018923),PCDHGA6(NM_018919),PCD
ADAM22(NM_016351),ADAM22(NM_021721),ADAM22(NM_004194),ADAM22(NM_021723),ADAM22

MUC2(NM_002457),
POTEG(pmt,NM_001005356),POTEG(pmt,NR_027480),

CST1(pmt,NM_001898),
FGF12(NM_004113),

DSCAM(NM_001389),DSCAM(NM_001271534),DSCAM(NR_073202),
RNF103-CHMP3(NM_001198954),

RUNDC3A(NM_001144826),RUNDC3A(NM_001144825),RUNDC3A(NM_006695),
GRIN2B(NM_000834),

MIR1256(NR_031657),MICU1(NM_001195518),MICU1(NM_006077),

TUBB2B(NM_178012),

LOC101926913(NR_110185),SP5(NM_001003845),LINC01124(pmt,NR_027433),

45),LMF1(NR_033646),

t,NM_001167970),

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E9A(NM_001001584),PDE9A(NM_001001576),PDE9A(NM_001001582),PDE9A(NM_001001567).

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AS3(NR_033202),HOXB-AS3(NR_110331),HOXB-AS3(NR_033204),HOXB-AS3(NR_110330),HOXB-AS3(NR_033203),

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14501),HOXD-AS1(pmt,NR_110465),HOXD-AS1(pmt,NR_110459),HOXD-AS1(pmt,NR_033979),

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2(pmt,NR_110299),ZNF503-AS2(pmt,NR_110302),ZNF503-AS2(pmt,NR_024422),ZNF503(NM_03

NM_001243507),ESRRG(NM_001243510),ESRRG(NM_001243505),ESRRG(NM_206594),ESRRG(N

_003879),CFLAR(pmt,NM_001127183),CFLAR(pmt,NM_001127184),

pmt,NR_109801),

525),RAB3IP(NM_001278402),RAB3IP(NM_001024647),RAB3IP(NM_175623),

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VM_172387),NFATC1(NM_001278672),NFATC1(NM_001278670),NFATC1(NM_001278669),

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59),PRKAR1B(NM_001164758),PRKAR1B(NM_001164761),

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13A1(NM_080802),COL13A1(NM_080798),

9385),OTX2(pmt,NM_021728),

),PCSK6(NM_138319),PCSK6(NM_001291309),PCSK6(NM_002570),PCSK6(NM_138320),

r2(pmt,NM_001204103),

59),PRKAR1B(NM_001164758),PRKAR1B(NM_001164761),

⟨CNAB2(NM_001199862),KCNAB2(NM_172130),

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_024059),PEG3(NM_001146187),ZIM2(NM_001146326),PEG3(NM_001146184),

.(NM_001142395),

2(NM_001270837),CRIP2(NR_073085),CRIP2(NM_001270841),

IDUA(NM_000203),

3490),CDK11A(pmt,NM_024011),CDK11B(pmt,NM_033487),CDK11B(pmt,NM_001291345),CDK1

50),PRKAR1B(NM_001164761),LOC101926963(NR_110054),LOC101926963(NR_110055),PRKAR1

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HGA5(NM_018918),PCDHGB3(NM_018924),PCDHGA3(NM_018916),PCDHGB1(NM_018922),PCDHGB2(NM_021722),

,PDE9A(NM_001001572),PDE9A(NM_002606),PDE9A(NM_001001574),PDE9A(NM_001001575),

AS3(NR_110329),HOXB-AS3(NR_033205),

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PHGB4(NM_003736),PCDHGA7(NM_018920),PCDHGB7(NM_018927),PCDHGA12(NM_003735),P

.NM_001278669),NFATC1(NM_001278675),

.DMKN(NM_001190347),

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2023),

.1B(pmt,NM_033486),CDK11B(pmt,NM_033488),CDK11B(pmt,NM_001787),SLC35E2(NM_00119

.B(NM_001164758),

4187),TP73(NM_001204192),TP73(NM_001204186),TP73(NM_001204190),TP73(NM_00120418

PHGB4(NM_003736),PCDHGA7(NM_018920),PCDHGB7(NM_018927),PCDHGA12(NM_003735),P

.PDE9A(NM_001001583),PDE9A(NM_001001568),PDE9A(NM_001001570),PDE9A(NM_0010015

CDHGA4(NM_018917),PCDHGA10(NM_018913),PCDHGA11(NM_018914),PCDHGA9(NM_01892

19787),CDK11B(pmt,NM_033489),

39),

'CDHGA4(NM_018917),PCDHGA10(NM_018913),PCDHGA11(NM_018914),PCDHGA9(NM_01892

71),PDE9A(NM_001001573),PDE9A(NM_001001581),PDE9A(NM_001001580),PDE9A(NM_001001580)

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01569),

915),PCDHGB6(NM_018926),

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