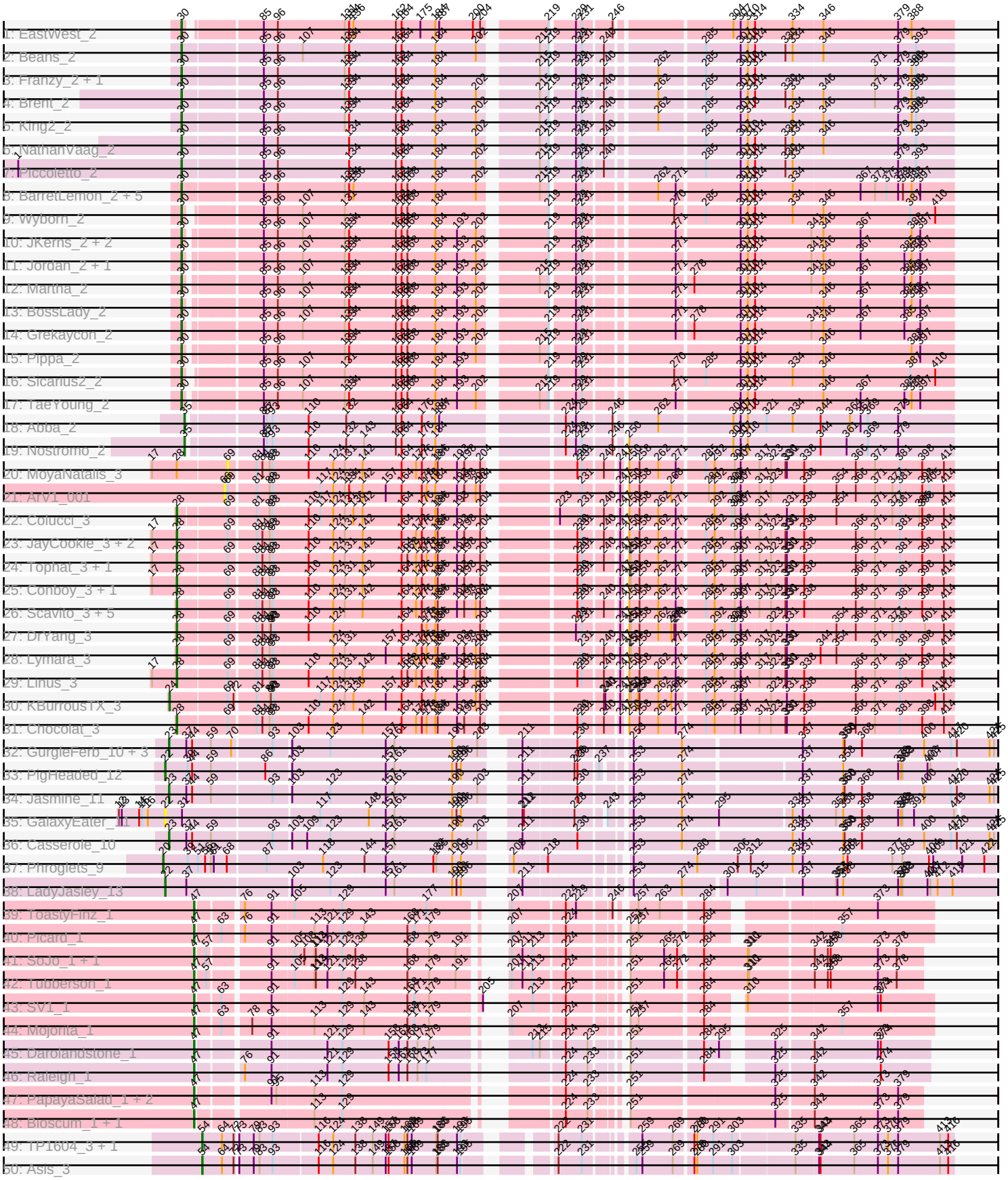
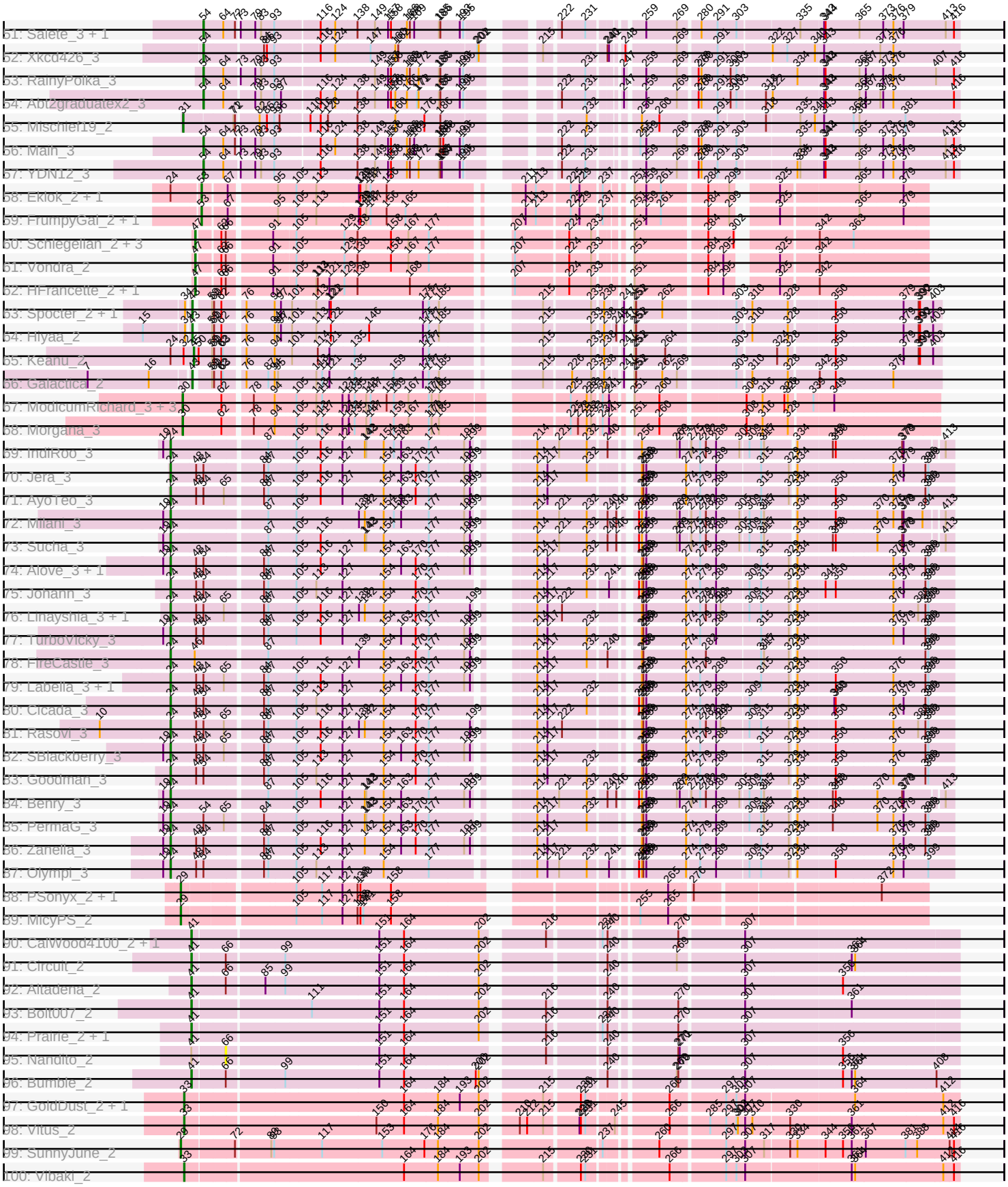
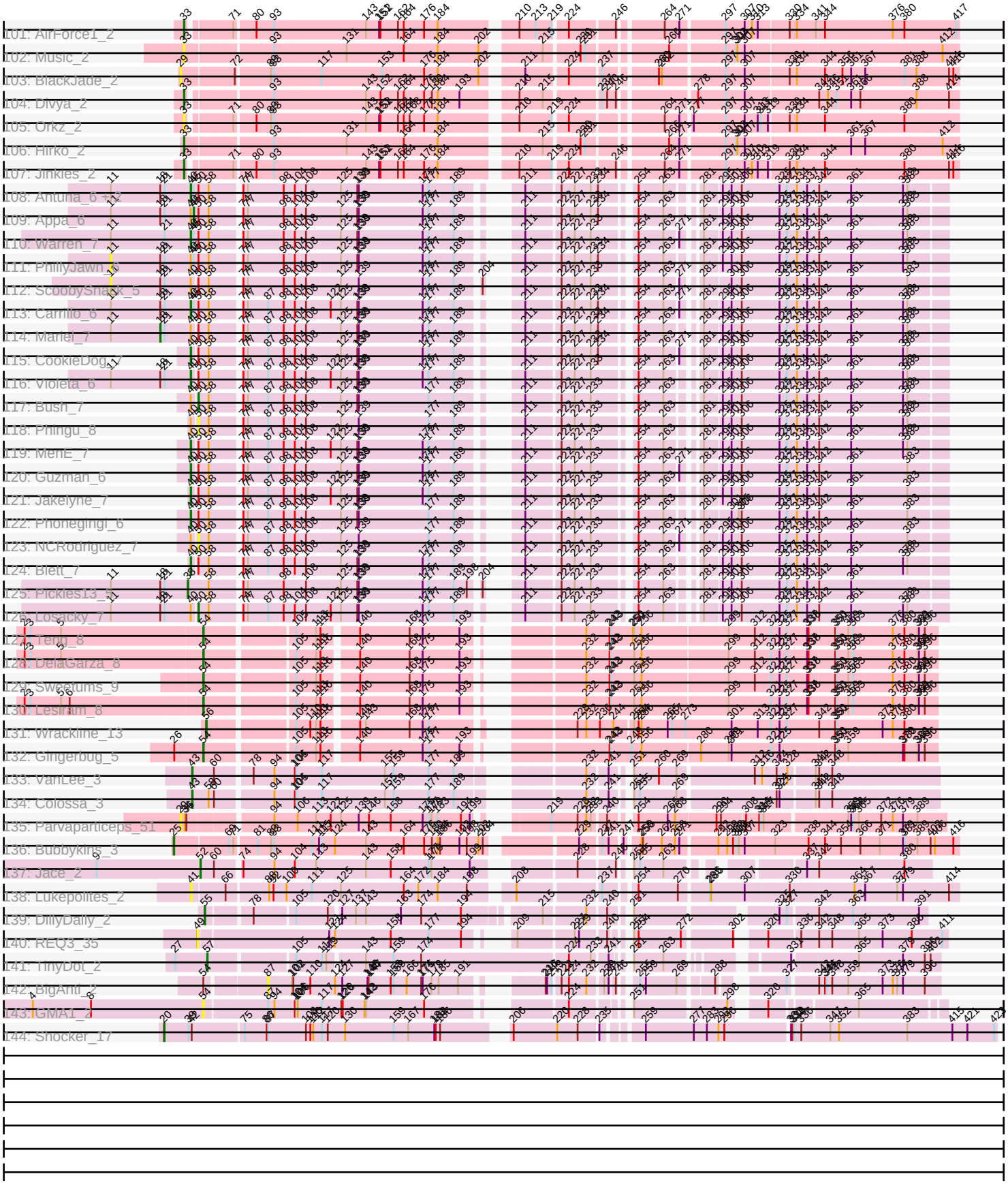
Pham 345406


1: EastWest_2
2: Beans_2
3: Franzy_2 + 1
4: Brent_2
5: King2_2
6: NathanVaag_2
7: Piccoletto_2
8: BarretLemon_2 + 5
9: Wyborn_2
10: JKerns_2 + 2
11: Jordan_2 + 1
12: Martha_2
13: BossLady_2
14: Grekaycon_2
15: Pippa_2
16: Sicarius2_2
17: TaeYoung_2
18: Abba_2
19: Nostromo_2
20: MoyaNatalis_3
21: ARV1_001
22: Colucci_3
23: JayCookie_3 + 2
24: Tophat_3 + 1
25: Conboy_3 + 1
26: Scavito_3 + 5
27: DrYang_3
28: Lymara_3
29: Linus_3
30: KBurrousTX_3
31: Chocolat_3
32: GurgleFerb_10 + 3
33: PigHeaded_12
34: Jasmine_11
35: GalaxyEater_11
36: Casserole_10
37: Phroglets_9
38: LadyJasley_13
39: ToastyFinz_1
40: Picard_1
41: SoJo_1 + 1
42: Tubberson_1
43: SV1_1
44: Mojorita_1
45: DarolandStone_1
46: Raleigh_1
47: PapayaSalad_1 + 2
48: Bioscum_1 + 1
49: TP1604_3 + 1
50: Asis_3

Pham 345406


51: Salete_3 + 1
52: Xkcd426_3
53: RainyPolka_3
54: Abtzgraduatex2_3
55: Mischief19_2
56: Main_3
57: YDN12_3
58: Eklok_2 + 1
59: FrumpyGal_2 + 1
60: Schlegelian_2 + 3
61: Vondra_2
62: HFrancette_2 + 1
63: Specter_2 + 1
64: Hiyaa_2
65: Keanu_2
66: Galactica_2
67: ModicumRichard_3 + 3
68: Morgana_3
69: IndiRoo_3
70: Jera_3
71: AyoTeo_3
72: Mhani_3
73: Sucha_3
74: Alove_3 + 1
75: Johann_3
76: Linayshia_3 + 1
77: TurboVicky_3
78: FireCastle_3
79: Labella_3 + 1
80: Cicada_3
81: Rasovi_3
82: SBlackberry_3
83: Goodman_3
84: Benry_3
85: PermaG_3
86: Zanella_3
87: Olympi_3
88: PSonyx_2 + 1
89: MicyPS_2
90: CalWood4100_2 + 1
91: Circuit_2
92: Altadena_2
93: Bolt007_2
94: Prairie_2 + 1
95: Nandito_2
96: Bumble_2
97: GoldDust_2 + 1
98: Vitus_2
99: SunnyJune_2
100: Vibaki_2

Pham 345406


I01: AirForce1_2
I02: Music_2
I03: BlackJade_2
I04: Divya_2
I05: Orkz_2
I06: Hirko_2
I07: Jinkies_2
I08: Antuna_6
I09: Appa_6
I10: Warren_7
I11: PhillyJawn_6
I12: ScoobySnack_5
I13: Carmilo_6
I14: Mariel_7
I15: CookieDog_7
I16: Violeta_6
I17: Bush_7
I18: Phingu_8
I19: MeiE_7
I20: Guzman_6
I21: Jakelyne_7
I22: Phonegingi_6
I23: NCRodriguez_7
I24: Blett_7
I25: Pickles13_5
I26: Losacky_7
I27: Tenji_8
I28: DelaGarza_8
I29: Swaelums_9
I30: Lesham_8
I31: Wrackline_13
I32: Gingerbug_5
I33: VanLee_3
I34: Colossa_3
I35: Parvaparticeps_51
I36: Bubbykins_3
I37: Jace_2
I38: Lukepolites_2
I39: DillyDally_2
I40: REQ3_35
I41: TinyDot_2
I42: BigAmi_2
I43: IGMA1_2
I44: Shocker_17

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 345406 Report

This analysis was run 11/14/26 on database version 672.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 345406 has 190 members, 19 are drafts.

Phages represented in each track:
- Track 1 : EastWest_2
- Track 2 : Beans_2
- Track 3 : Franzy_2, Jawnski_2
- Track 4 : Brent_2
- Track 5 : King2_2
- Track 6 : NathanVaag_2
- Track 7 : Piccoletto_2
- Track 8 : BarretLemon_2, GravityBall_2, BigDome_2, Timinator_2, StevieBAY_2, LeeroyJ_2
- Track 9 : Wyborn_2
- Track 10 : JKerns_2, Shade_2, Sonny_2
- Track 11 : Jordan_2, Zartrosa_2
- Track 12 : Martha_2
- Track 13 : BossLady_2
- Track 14 : Grekaycon_2
- Track 15 : Pippa_2
- Track 16 : Sicarius2_2
- Track 17 : TaeYoung_2
- Track 18 : Abba_2
- Track 19 : Nostromo_2
- Track 20 : MoyaNatalis_3
- Track 21 : ArV1_001
- Track 22 : Colucci_3
- Track 23 : JayCookie_3, Chubster_3, PrincessTrina_3
- Track 24 : Tophat_3, Chipper1996_30
- Track 25 : Conboy_3, EdgarPoe_3
- Track 26 : Scavito_3, JaNo_3, HumptyDumpty_3, RosiePosie_3, Mordred_3, Kabreeze_3
- Track 27 : DrYang_3
- Track 28 : Lymara_3
- Track 29 : Linus_3
- Track 30 : KBurrousTX_3
- Track 31 : Chocolat_3

• Track 32 : GurgleFerb_10, Brad_10, Adat_10, Nellie_10
• Track 33 : PigHeaded_12
• Track 34 : Jasmine_11
• Track 35 : GalaxyEater_11
• Track 36 : Casserole_10
• Track 37 : Phroglets_9
• Track 38 : LadyJasley_13
• Track 39 : ToastyFinz_1
• Track 40 : Picard_1
• Track 41 : SoJo_1, DaRealMyers_1
• Track 42 : Tubberson_1
• Track 43 : SV1_1
• Track 44 : Mojorita_1
• Track 45 : Darolandstone_1
• Track 46 : Raleigh_1
• Track 47 : PapayaSalad_1, Lishka_1, Austintatious_1
• Track 48 : Bioscum_1, Ididsumtinwong_1
• Track 49 : TP1604_3, BabyGotBac_3
• Track 50 : Asis_3
• Track 51 : Salete_3, BayC_3
• Track 52 : Xkcd426_3
• Track 53 : RainyPolka_3
• Track 54 : Abt2graduatex2_3
• Track 55 : Mischief19_2
• Track 56 : Maih_3
• Track 57 : YDN12_3
• Track 58 : Eklok_2, AxeJC_2
• Track 59 : FrumpyGal_2, Eastland_2
• Track 60 : Schlegelian_2, ArizonaGT_2, Cumberbatch_2, Piccadilly_2
• Track 61 : Vondra_2
• Track 62 : HFrancette_2, Ignacio_2
• Track 63 : Spocter_2, Kokushibo_2
• Track 64 : Hiyaa_2
• Track 65 : Keanu_2
• Track 66 : Galactica_2
• Track 67 : ModicumRichard_3, ObLaDi_3, Cafasso_3, Aleemily_3
• Track 68 : Morgana_3
• Track 69 : IndiRoo_3
• Track 70 : Jera_3
• Track 71 : AyoTeo_3
• Track 72 : Milani_3
• Track 73 : Sucha_3
• Track 74 : Alove_3, Rootkit7_3
• Track 75 : Johann_3
• Track 76 : Linayshia_3, Htur_3
• Track 77 : TurboVicky_3
• Track 78 : FireCastle_3
• Track 79 : Labella_3, Typher_3
• Track 80 : Cicada_3
• Track 81 : Rasovi_3
• Track 82 : SBlackberry_3
• Track 83 : Goodman_3
• Track 84 : Benry_3

• Track 85 : PermaG_3
• Track 86 : Zanella_3
• Track 87 : Olympi_3
• Track 88 : PSonyx_2, Taotie_2
• Track 89 : MicyPS_2
• Track 90 : CalWood4100_2, Lilmac1015_2
• Track 91 : Circuit_2
• Track 92 : Altadena_2
• Track 93 : Bolt007_2
• Track 94 : Prairie_2, Klevey_2
• Track 95 : Nandito_2
• Track 96 : Bumble_2
• Track 97 : GoldDust_2, Gooberta_2
• Track 98 : Vitus_2
• Track 99 : SunnyJune_2
• Track 100 : Vibaki_2
• Track 101 : AirForce1_2
• Track 102 : Music_2
• Track 103 : BlackJade_2
• Track 104 : Divya_2
• Track 105 : Orkz_2
• Track 106 : Hirko_2
• Track 107 : Jinkies_2
• Track 108 : Antuna_6, Dropshot_6, Winchester007_6
• Track 109 : Appa_6
• Track 110 : Warren_7
• Track 111 : PhillyJawn_6
• Track 112 : ScoobySnack_5
• Track 113 : Carrillo_6
• Track 114 : Mariel_7
• Track 115 : CookieDog_7
• Track 116 : Violeta_6
• Track 117 : Bush_7
• Track 118 : Phingu_8
• Track 119 : MenE_7
• Track 120 : Guzman_6
• Track 121 : Jakelyne_7
• Track 122 : Phonegingi_6
• Track 123 : NCRodriguez_7
• Track 124 : Blett_7
• Track 125 : Pickles13_5
• Track 126 : Losacky_7
• Track 127 : Teng_8
• Track 128 : DelaGarza_8
• Track 129 : Sweetums_9
• Track 130 : Lesiram_8
• Track 131 : Wrackline_13
• Track 132 : Gingerbug_5
• Track 133 : VanLee_3
• Track 134 : Colossa_3
• Track 135 : Parvaparticeps_51
• Track 136 : Bubbykins_3
• Track 137 : Jace_2

• Track 138 : Lukepolites_2
• Track 139 : DillyDally_2
• Track 140 : REQ3_35
• Track 141 : TinyDot_2
• Track 142 : BigAnti_2
• Track 143 : GMA1_2
• Track 144 : Shocker_17

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 30, it was called in 31 of the 171 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aleemily_3, BarretLemon_2, Beans_2, BigDome_2, BossLady_2, Brent_2, Cafasso_3, EastWest_2, Franzy_2, GravityBall_2, Grekaycon_2, JKerns_2, Jawnski_2, Jordan_2, King2_2, LeeroyJ_2, Martha_2, ModicumRichard_3, Morgana_3, NathanVaag_2, ObLaDi_3, Piccoletto_2, Pippa_2, Shade_2, Sicarius2_2, Sonny_2, StevieBAY_2, TaeYoung_2, Timinator_2, Wyborn_2, Zartrosa_2,

Genes that have the "Most Annotated" start but do not call it:
•

Genes that do not have the "Most Annotated" start:
• Abba_2, Abt2graduatex2_3, Adat_10, AirForce1_2, Alove_3, Altadena_2, Antuna_6, Appa_6, ArV1_001, ArizonaGT_2, Asis_3, Austintatious_1, AxeJC_2, AyoTeo_3, BabyGotBac_3, BayC_3, Benry_3, BigAnti_2, Bioscum_1, BlackJade_2, Blett_7, Bolt007_2, Brad_10, Bubbykins_3, Bumble_2, Bush_7, CalWood4100_2, Carrillo_6, Casserole_10, Chipper1996_30, Chocolat_3, Chubster_3, Cicada_3, Circuit_2, Colossa_3, Colucci_3, Conboy_3, CookieDog_7, Cumberbatch_2, DaRealMyers_1, Darolandstone_1, DelaGarza_8, DillyDally_2, Divya_2, DrYang_3, Dropshot_6, Eastland_2, EdgarPoe_3, Eklok_2, FireCastle_3, FrumpyGal_2, GMA1_2, Galactica_2, GalaxyEater_11, Gingerbug_5, GoldDust_2, Gooberta_2, Goodman_3, GurgleFerb_10, Guzman_6, HFrancette_2, Hirko_2, Hiyaa_2, Htur_3, HumptyDumpty_3, Ididsumtinwong_1, Ignacio_2, IndiRoo_3, JaNo_3, Jace_2, Jakelyne_7, Jasmine_11, JayCookie_3, Jera_3, Jinkies_2, Johann_3, KBurrousTX_3, Kabreeze_3, Keanu_2, Klevey_2, Kokushibo_2, Labella_3, LadyJasley_13, Lesiram_8, Lilmac1015_2, Linayshia_3, Linus_3, Lishka_1, Losacky_7, Lukepolites_2, Lymara_3, Maih_3, Mariel_7, MenE_7, MicyPS_2, Milani_3, Mischief19_2, Mojorita_1, Mordred_3, MoyaNatalis_3, Music_2, NCRodriguez_7, Nandito_2, Nellie_10, Nostromo_2, Olympi_3, Orkz_2, PSonyx_2, PapayaSalad_1, Parvaparticeps_51, PermaG_3, PhillyJawn_6, Phingu_8, Phonegingi_6, Phroglets_9, Picard_1, Piccadilly_2, Pickles13_5, PigHeaded_12, Prairie_2, PrincessTrina_3, REQ3_35, RainyPolka_3, Raleigh_1, Rasovi_3, Rootkit7_3, RosiePosie_3, SBlackberry_3, SV1_1, Salete_3, Scavito_3, Schlegelian_2, ScoobySnack_5, Shocker_17, SoJo_1, Spocter_2, Sucha_3, SunnyJune_2, Sweetums_9, TP1604_3, Taotie_2, Teng_8, TinyDot_2, ToastyFinz_1, Tophat_3, Tubberson_1, TurboVicky_3, Typher_3, VanLee_3, Vibaki_2, Violeta_6, Vitus_2, Vondra_2, Warren_7, Winchester007_6, Wrackline_13, Xkcd426_3, YDN12_3, Zanella_3,

Summary by start number:

Start 11:
• Found in 12 of 190 (6.3%) of genes in pham
• No Manual Annotations of this start.
• Called 16.7% of time when present
• Phage (with cluster) where this start called: PhillyJawn_6 (GA), ScoobySnack_5 (GA),

Start 18:
• Found in 11 of 190 (5.8%) of genes in pham
• Manual Annotations of this start: 1 of 171
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Mariel_7 (GA),

Start 20:
• Found in 2 of 190 (1.1%) of genes in pham
• Manual Annotations of this start: 2 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phroglets_9 (AV), Shocker_17 (singleton),

Start 22:
• Found in 3 of 190 (1.6%) of genes in pham
• Manual Annotations of this start: 2 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GalaxyEater_11 (AV), LadyJasley_13 (AV), PigHeaded_12 (AV),

Start 23:
• Found in 6 of 190 (3.2%) of genes in pham
• Manual Annotations of this start: 6 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adat_10 (AV), Brad_10 (AV), Casserole_10 (AV), GurgleFerb_10 (AV), Jasmine_11 (AV), Nellie_10 (AV),

Start 24:
• Found in 26 of 190 (13.7%) of genes in pham
• Manual Annotations of this start: 22 of 171
• Called 88.5% of time when present
• Phage (with cluster) where this start called: Alove_3 (EJ), AyoTeo_3 (EJ), Benry_3 (EJ), Cicada_3 (EJ), FireCastle_3 (EJ), Goodman_3 (EJ), Htur_3 (EJ), IndiRoo_3 (EJ), Jera_3 (EJ), Johann_3 (EJ), KBurrousTX_3 (AR), Labella_3 (EJ), Linayshia_3 (EJ), Milani_3 (EJ), Olympi_3 (EJ), PermaG_3 (EJ), Rasovi_3 (EJ), Rootkit7_3 (EJ), SBlackberry_3 (EJ), Sucha_3 (EJ), TurboVicky_3 (EJ), Typher_3 (EJ), Zanella_3 (EJ),

Start 25:
• Found in 1 of 190 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bubbykins_3 (UNK),

Start 28:
• Found in 19 of 190 (10.0%) of genes in pham
• Manual Annotations of this start: 18 of 171
• Called 94.7% of time when present
• Phage (with cluster) where this start called: Chipper1996_30 (AR), Chocolat_3 (AR), Chubster_3 (AR), Colucci_3 (AR), Conboy_3 (AR), DrYang_3 (AR), EdgarPoe_3 (AR), HumptyDumpty_3 (AR), JaNo_3 (AR), JayCookie_3 (AR), Kabreeze_3 (AR), Linus_3 (AR), Lymara_3 (AR), Mordred_3 (AR), PrincessTrina_3 (AR), RosiePosie_3 (AR), Scavito_3 (AR), Tophat_3 (AR),

Start 29:
• Found in 6 of 190 (3.2%) of genes in pham
• Manual Annotations of this start: 3 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlackJade_2 (FL), MicyPS_2 (EQ), PSonyx_2 (EQ), Parvaparticeps_51 (UNK), SunnyJune_2 (FL), Taotie_2 (EQ),

Start 30:
• Found in 31 of 190 (16.3%) of genes in pham
• Manual Annotations of this start: 31 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aleemily_3 (DZ), BarretLemon_2 (AO2), Beans_2 (AO1), BigDome_2 (AO2), BossLady_2 (AO2), Brent_2 (AO1), Cafasso_3 (DZ), EastWest_2 (AO), Franzy_2 (AO1), GravityBall_2 (AO2), Grekaycon_2 (AO2), JKerns_2 (AO2), Jawnski_2 (AO1), Jordan_2 (AO2), King2_2 (AO1), LeeroyJ_2 (AO2), Martha_2 (AO2), ModicumRichard_3 (DZ), Morgana_3 (DZ), NathanVaag_2 (AO1), ObLaDi_3 (DZ), Piccoletto_2 (AO1), Pippa_2 (AO2), Shade_2 (AO2), Sicarius2_2 (AO2), Sonny_2 (AO2), StevieBAY_2 (AO2), TaeYoung_2 (AO2), Timinator_2 (AO2), Wyborn_2 (AO2), Zartrosa_2 (AO2),

Start 31:
• Found in 2 of 190 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 171
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Mischief19_2 (BG),

Start 33:
• Found in 10 of 190 (5.3%) of genes in pham
• Manual Annotations of this start: 8 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AirForce1_2 (FL), Divya_2 (FL), GoldDust_2 (FL), Gooberta_2 (FL), Hirko_2 (FL), Jinkies_2 (FL), Music_2 (FL), Orkz_2 (FL), Vibaki_2 (FL), Vitus_2 (FL),

Start 35:
• Found in 2 of 190 (1.1%) of genes in pham
• Manual Annotations of this start: 2 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abba_2 (AO3), Nostromo_2 (AO3),

Start 38:
• Found in 1 of 190 (0.5%) of genes in pham

• Manual Annotations of this start: 1 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pickles13_5 (GA),

Start 40:
• Found in 20 of 190 (10.5%) of genes in pham
• Manual Annotations of this start: 12 of 171
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Antuna_6 (GA), Blett_7 (GA), Carrillo_6 (GA), CookieDog_7 (GA), Dropshot_6 (GA), Guzman_6 (GA), Jakelyne_7 (GA), MenE_7 (GA), Phonegingi_6 (GA), Violeta_6 (GA), Warren_7 (GA), Winchester007_6 (GA),

Start 41:
• Found in 10 of 190 (5.3%) of genes in pham
• Manual Annotations of this start: 7 of 171
• Called 90.0% of time when present
• Phage (with cluster) where this start called: Altadena_2 (FH), Bolt007_2 (FH), Bumble_2 (FH), CalWood4100_2 (FH), Circuit_2 (FH), Klevey_2 (FH), Lilmac1015_2 (FH), Lukepolites_2 (singleton), Prairie_2 (FH),

Start 43:
• Found in 6 of 190 (3.2%) of genes in pham
• Manual Annotations of this start: 6 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Colossa_3 (KA), Galactica_2 (BQ), Hiyaa_2 (BQ), Kokushibo_2 (BQ), Spocter_2 (BQ), VanLee_3 (KA),

Start 45:
• Found in 8 of 190 (4.2%) of genes in pham
• Manual Annotations of this start: 2 of 171
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Appa_6 (GA), Keanu_2 (BQ),

Start 47:
• Found in 21 of 190 (11.1%) of genes in pham
• Manual Annotations of this start: 21 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ArizonaGT_2 (BP), Austintatious_1 (BC3), Bioscum_1 (BC3), Cumberbatch_2 (BP), DaRealMyers_1 (BC1), Darolandstone_1 (BC2), HFrancette_2 (BP), Ididsumtinwong_1 (BC3), Ignacio_2 (BP), Lishka_1 (BC3), Mojorita_1 (BC1), PapayaSalad_1 (BC3), Picard_1 (BC1), Piccadilly_2 (BP), Raleigh_1 (BC2), SV1_1 (BC1), Schlegelian_2 (BP), SoJo_1 (BC1), ToastyFinz_1 (BC1), Tubberson_1 (BC1), Vondra_2 (BP),

Start 49:
• Found in 1 of 190 (0.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: REQ3_35 (singleton),

Start 50:
• Found in 21 of 190 (11.1%) of genes in pham

• Manual Annotations of this start: 2 of 171
• Called 19.0% of time when present
• Phage (with cluster) where this start called: Bush_7 (GA), Losacky_7 (GA), NCRodriguez_7 (GA), Phingu_8 (GA),

Start 52:
• Found in 1 of 190 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jace_2 (singleton),

Start 53:
• Found in 4 of 190 (2.1%) of genes in pham
• Manual Annotations of this start: 4 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AxeJC_2 (BP), Eastland_2 (BP), Eklok_2 (BP), FrumpyGal_2 (BP),

Start 54:
• Found in 34 of 190 (17.9%) of genes in pham
• Manual Annotations of this start: 15 of 171
• Called 47.1% of time when present
• Phage (with cluster) where this start called: Abt2graduatex2_3 (BG), Asis_3 (BG), BabyGotBac_3 (BG), BayC_3 (BG), DelaGarza_8 (GF), GMA1_2 (singleton), Gingerbug_5 (GF), Lesiram_8 (GF), Maih_3 (BG), RainyPolka_3 (BG), Salete_3 (BG), Sweetums_9 (GF), TP1604_3 (BG), Teng_8 (GF), Xkcd426_3 (BG), YDN12_3 (BG),

Start 55:
• Found in 1 of 190 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 171
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DillyDally_2 (singleton),

Start 56:
• Found in 2 of 190 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 171
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Wrackline_13 (GF),

Start 57:
• Found in 4 of 190 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 171
• Called 25.0% of time when present
• Phage (with cluster) where this start called: TinyDot_2 (singleton),

Start 66:
• Found in 13 of 190 (6.8%) of genes in pham
• No Manual Annotations of this start.
• Called 15.4% of time when present
• Phage (with cluster) where this start called: ArV1_001 (AR), Nandito_2 (FH),

Start 69:

• Found in 22 of 190 (11.6%) of genes in pham
• No Manual Annotations of this start.
• Called 4.5% of time when present
• Phage (with cluster) where this start called: MoyaNatalis_3 (AR),

Start 87:
• Found in 41 of 190 (21.6%) of genes in pham
• No Manual Annotations of this start.
• Called 2.4% of time when present
• Phage (with cluster) where this start called: BigAnti_2 (singleton),

Summary by clusters:

There are 22 clusters represented in this pham: singleton, BG, GA, BP, BQ, FH, FL, EJ, AO, GF, AR, AO3, AO2, AO1, AV, UNK, EQ, KA, DZ, BC1, BC2, BC3,

Info for manual annotations of cluster AO:
•Start number 30 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:
•Start number 30 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:
•Start number 30 was manually annotated 18 times for cluster AO2.

Info for manual annotations of cluster AO3:
•Start number 35 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AR:
•Start number 24 was manually annotated 1 time for cluster AR.
•Start number 28 was manually annotated 18 times for cluster AR.

Info for manual annotations of cluster AV:
•Start number 20 was manually annotated 1 time for cluster AV.
•Start number 22 was manually annotated 2 times for cluster AV.
•Start number 23 was manually annotated 6 times for cluster AV.

Info for manual annotations of cluster BC1:
•Start number 47 was manually annotated 7 times for cluster BC1.

Info for manual annotations of cluster BC2:
•Start number 47 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:
•Start number 47 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BG:
•Start number 31 was manually annotated 1 time for cluster BG.
•Start number 54 was manually annotated 10 times for cluster BG.

Info for manual annotations of cluster BP:
•Start number 47 was manually annotated 7 times for cluster BP.
•Start number 53 was manually annotated 4 times for cluster BP.

Info for manual annotations of cluster BQ:
•Start number 43 was manually annotated 4 times for cluster BQ.
•Start number 45 was manually annotated 1 time for cluster BQ.

Info for manual annotations of cluster DZ:
•Start number 30 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster EJ:
•Start number 24 was manually annotated 21 times for cluster EJ.

Info for manual annotations of cluster EQ:
•Start number 29 was manually annotated 2 times for cluster EQ.

Info for manual annotations of cluster FH:
•Start number 41 was manually annotated 7 times for cluster FH.

Info for manual annotations of cluster FL:
•Start number 29 was manually annotated 1 time for cluster FL.
•Start number 33 was manually annotated 8 times for cluster FL.

Info for manual annotations of cluster GA:
•Start number 18 was manually annotated 1 time for cluster GA.
•Start number 38 was manually annotated 1 time for cluster GA.
•Start number 40 was manually annotated 12 times for cluster GA.
•Start number 45 was manually annotated 1 time for cluster GA.
•Start number 50 was manually annotated 2 times for cluster GA.

Info for manual annotations of cluster GF:
•Start number 54 was manually annotated 5 times for cluster GF.
•Start number 56 was manually annotated 1 time for cluster GF.

Info for manual annotations of cluster KA:
•Start number 43 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster UNK:
•Start number 25 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: Abba_2 Start: 452, Stop: 1900, Start Num: 35
Candidate Starts for Abba_2:
(Start: 35 @452 has 2 MA's), (85, 587), (87, 593), (93, 605), (110, 674), (132, 752), (162, 854), (164, 866), (176, 908), (184, 935), (187, 941), (224, 1157), (229, 1178), (246, 1241), (262, 1313), (304, 1457), (307, 1472), (310, 1487), (321, 1523), (334, 1577), (344, 1631), (364, 1688), (367, 1709), (369, 1724), (379, 1787),

Gene: Abt2graduatex2_3 Start: 1167, Stop: 2537, Start Num: 54
Candidate Starts for Abt2graduatex2_3:
(Start: 54 @1167 has 15 MA's), (64, 1206), (79, 1263), (83, 1275), (93, 1302), (97, 1314), (116, 1383), (124, 1413), (138, 1455), (149, 1491), (157, 1518), (158, 1524), (160, 1533), (166, 1557), (171, 1578),

(172, 1581), (185, 1623), (186, 1626), (193, 1665), (195, 1671), (222, 1800), (231, 1848), (247, 1899), (259, 1929), (269, 1992), (278, 2025), (280, 2031), (291, 2064), (300, 2091), (303, 2103), (318, 2157), (322, 2166), (343, 2268), (344, 2271), (365, 2340), (367, 2352), (371, 2382), (373, 2388), (376, 2409), (416, 2526),

Gene: Adat_10 Start: 4571, Stop: 6154, Start Num: 23
Candidate Starts for Adat_10:
(Start: 23 @4571 has 6 MA's), (37, 4604), (44, 4616), (59, 4655), (70, 4697), (93, 4775), (103, 4808), (123, 4883), (157, 4994), (161, 5012), (190, 5132), (203, 5183), (211, 5231), (230, 5333), (253, 5420), (274, 5519), (337, 5756), (358, 5837), (360, 5840), (368, 5876), (400, 6005), (417, 6059), (420, 6071), (424, 6137), (425, 6146),

Gene: AirForce1_2 Start: 503, Stop: 1945, Start Num: 33
Candidate Starts for AirForce1_2:
(Start: 33 @503 has 8 MA's), (71, 581), (80, 620), (93, 656), (143, 839), (151, 866), (152, 869), (162, 905), (164, 917), (176, 959), (184, 986), (210, 1121), (213, 1151), (219, 1184), (224, 1208), (246, 1292), (264, 1370), (271, 1400), (297, 1484), (307, 1523), (310, 1538), (313, 1550), (330, 1610), (334, 1625), (341, 1664), (344, 1679), (376, 1814), (380, 1838), (417, 1940),

Gene: Aleemily_3 Start: 964, Stop: 2316, Start Num: 30
Candidate Starts for Aleemily_3:
(Start: 30 @964 has 31 MA's), (62, 1039), (78, 1090), (94, 1132), (105, 1171), (113, 1207), (117, 1219), (127, 1258), (133, 1270), (135, 1282), (143, 1306), (147, 1315), (156, 1348), (159, 1363), (167, 1393), (177, 1432), (179, 1438), (185, 1453), (225, 1648), (232, 1681), (233, 1690), (237, 1705), (241, 1714), (251, 1738), (260, 1789), (308, 1951), (316, 1984), (326, 2029), (328, 2035), (339, 2074), (349, 2113),

Gene: Alove_3 Start: 857, Stop: 2269, Start Num: 24
Candidate Starts for Alove_3:
(19, 842), (Start: 24 @857 has 22 MA's), (48, 908), (Start: 54 @923 has 15 MA's), (84, 1034), (87, 1043), (105, 1094), (116, 1139), (127, 1181), (154, 1265), (163, 1301), (170, 1328), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (217, 1517), (232, 1598), (256, 1670), (258, 1673), (259, 1679), (274, 1760), (279, 1784), (289, 1817), (315, 1901), (329, 1958), (334, 1964), (376, 2144), (379, 2165), (396, 2210), (399, 2216),

Gene: Altadena_2 Start: 428, Stop: 1876, Start Num: 41
Candidate Starts for Altadena_2:
(Start: 41 @428 has 7 MA's), (66, 497), (85, 569), (99, 608), (151, 797), (164, 848), (202, 998), (240, 1205), (307, 1454), (356, 1646),

Gene: Antuna_6 Start: 1339, Stop: 2682, Start Num: 40
Candidate Starts for Antuna_6:
(11, 1177), (Start: 18 @1279 has 1 MA's), (21, 1288), (Start: 40 @1339 has 12 MA's), (Start: 45 @1345 has 2 MA's), (Start: 50 @1354 has 2 MA's), (58, 1375), (74, 1429), (77, 1438), (98, 1510), (104, 1531), (108, 1549), (125, 1618), (138, 1651), (139, 1654), (175, 1783), (177, 1795), (189, 1846), (211, 1918), (222, 1981), (227, 2008), (233, 2041), (234, 2056), (254, 2107), (263, 2158), (281, 2206), (295, 2239), (301, 2257), (306, 2278), (325, 2356), (327, 2371), (334, 2392), (337, 2410), (342, 2431), (361, 2497), (379, 2596), (383, 2605),

Gene: Appa_6 Start: 1363, Stop: 2700, Start Num: 45
Candidate Starts for Appa_6:
(11, 1195), (Start: 18 @1297 has 1 MA's), (21, 1306), (Start: 40 @1357 has 12 MA's), (Start: 45 @1363 has 2 MA's), (Start: 50 @1372 has 2 MA's), (58, 1393), (74, 1447), (77, 1456), (98, 1528), (104, 1549), (108, 1567), (125, 1636), (138, 1669), (139, 1672), (175, 1801), (177, 1813), (189, 1864), (211, 1936),

(222, 1999), (227, 2026), (233, 2059), (234, 2074), (254, 2125), (263, 2176), (281, 2224), (295, 2257), (301, 2275), (306, 2296), (325, 2374), (327, 2389), (334, 2410), (337, 2428), (342, 2449), (361, 2515), (379, 2614), (383, 2623),

Gene: ArV1_001 Start: 1, Stop: 1386, Start Num: 66
Candidate Starts for ArV1_001:
(66, 1), (69, 7), (81, 58), (89, 85), (93, 91), (117, 184), (124, 211), (131, 235), (134, 244), (142, 271), (157, 319), (164, 352), (176, 394), (178, 403), (184, 421), (193, 463), (198, 478), (202, 502), (204, 511), (231, 676), (247, 733), (250, 739), (258, 760), (268, 826), (287, 892), (292, 904), (303, 940), (305, 946), (307, 958), (317, 997), (323, 1021), (338, 1090), (354, 1150), (366, 1189), (371, 1228), (377, 1264), (381, 1279), (398, 1321), (405, 1336), (414, 1366),

Gene: ArizonaGT_2 Start: 538, Stop: 1776, Start Num: 47
Candidate Starts for ArizonaGT_2:
(Start: 47 @538 has 21 MA's), (62, 577), (66, 586), (91, 667), (105, 709), (129, 799), (138, 826), (158, 895), (167, 931), (177, 970), (207, 1069), (224, 1168), (233, 1213), (251, 1255), (284, 1390), (302, 1438), (342, 1564), (363, 1630),

Gene: Asis_3 Start: 1180, Stop: 2550, Start Num: 54
Candidate Starts for Asis_3:
(Start: 54 @1180 has 15 MA's), (64, 1219), (72, 1243), (73, 1246), (79, 1276), (83, 1288), (93, 1315), (116, 1396), (124, 1426), (138, 1468), (149, 1504), (157, 1531), (158, 1537), (166, 1570), (168, 1576), (169, 1585), (185, 1636), (186, 1639), (193, 1678), (195, 1684), (222, 1813), (231, 1861), (255, 1930), (259, 1942), (269, 2005), (278, 2038), (280, 2044), (291, 2077), (303, 2116), (335, 2236), (343, 2281), (344, 2284), (365, 2353), (373, 2401), (376, 2422), (379, 2443), (413, 2524), (416, 2539),

Gene: Austintatious_1 Start: 1, Stop: 1272, Start Num: 47
Candidate Starts for Austintatious_1:
(Start: 47 @1 has 21 MA's), (91, 130), (95, 139), (113, 208), (129, 262), (224, 631), (233, 676), (251, 718), (325, 994), (342, 1060), (373, 1180), (379, 1222),

Gene: AxeJC_2 Start: 551, Stop: 1783, Start Num: 53
Candidate Starts for AxeJC_2:
(Start: 24 @497 has 22 MA's), (Start: 53 @551 has 4 MA's), (67, 596), (95, 683), (105, 716), (113, 752), (139, 836), (140, 839), (143, 851), (147, 860), (156, 893), (211, 1097), (213, 1115), (225, 1178), (229, 1196), (237, 1235), (251, 1262), (259, 1283), (261, 1313), (284, 1397), (299, 1436), (325, 1505), (365, 1649), (379, 1733),

Gene: AyoTeo_3 Start: 857, Stop: 2269, Start Num: 24
Candidate Starts for AyoTeo_3:
(Start: 24 @857 has 22 MA's), (48, 908), (Start: 54 @923 has 15 MA's), (65, 965), (84, 1034), (87, 1043), (105, 1094), (116, 1139), (127, 1181), (154, 1265), (163, 1301), (170, 1328), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (217, 1517), (256, 1670), (258, 1673), (259, 1679), (274, 1760), (279, 1784), (289, 1817), (315, 1901), (329, 1958), (334, 1964), (350, 2036), (376, 2144), (396, 2210), (399, 2216),

Gene: BabyGotBac_3 Start: 1180, Stop: 2550, Start Num: 54
Candidate Starts for BabyGotBac_3:
(Start: 54 @1180 has 15 MA's), (64, 1219), (72, 1243), (73, 1246), (79, 1276), (83, 1288), (93, 1315), (116, 1396), (124, 1426), (138, 1468), (149, 1504), (157, 1531), (158, 1537), (166, 1570), (168, 1576), (169, 1585), (185, 1636), (186, 1639), (193, 1678), (195, 1684), (222, 1813), (231, 1861), (259, 1942), (269, 2005), (278, 2038), (280, 2044), (291, 2077), (303, 2116), (335, 2236), (343, 2281), (344, 2284), (365, 2353), (373, 2401), (376, 2422), (379, 2443), (413, 2524), (416, 2539),

Gene: BarretLemon_2 Start: 467, Stop: 1936, Start Num: 30
Candidate Starts for BarretLemon_2:
(Start: 30 @467 has 31 MA's), (85, 620), (96, 647), (131, 782), (134, 791), (136, 800), (162, 887), (164, 899), (168, 911), (184, 968), (202, 1049), (215, 1148), (219, 1166), (229, 1211), (231, 1223), (262, 1346), (271, 1382), (307, 1505), (310, 1520), (314, 1535), (334, 1613), (367, 1745), (371, 1775), (375, 1799), (379, 1823), (384, 1832), (388, 1850), (397, 1868),

Gene: BayC_3 Start: 1180, Stop: 2550, Start Num: 54
Candidate Starts for BayC_3:
(Start: 54 @1180 has 15 MA's), (64, 1219), (72, 1243), (73, 1246), (79, 1276), (83, 1288), (93, 1315), (116, 1396), (124, 1426), (138, 1468), (149, 1504), (157, 1531), (158, 1537), (166, 1570), (168, 1576), (169, 1585), (185, 1636), (186, 1639), (193, 1678), (195, 1684), (222, 1813), (231, 1861), (259, 1942), (269, 2005), (280, 2044), (291, 2077), (303, 2116), (335, 2236), (343, 2281), (344, 2284), (365, 2353), (373, 2401), (376, 2422), (379, 2443), (413, 2524), (416, 2539),

Gene: Beans_2 Start: 471, Stop: 1940, Start Num: 30
Candidate Starts for Beans_2:
(Start: 30 @471 has 31 MA's), (85, 621), (96, 648), (107, 696), (131, 783), (134, 792), (162, 888), (164, 900), (184, 969), (202, 1050), (215, 1149), (219, 1167), (229, 1212), (231, 1224), (240, 1257), (285, 1434), (307, 1506), (310, 1521), (314, 1536), (330, 1599), (334, 1614), (346, 1674), (379, 1827), (393, 1863),

Gene: Benry_3 Start: 857, Stop: 2254, Start Num: 24
Candidate Starts for Benry_3:
(19, 842), (Start: 24 @857 has 22 MA's), (87, 1043), (105, 1094), (116, 1139), (127, 1181), (142, 1226), (143, 1229), (154, 1265), (163, 1301), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (221, 1541), (232, 1598), (240, 1628), (246, 1646), (254, 1664), (256, 1670), (259, 1679), (269, 1742), (271, 1748), (275, 1766), (279, 1784), (282, 1796), (289, 1817), (305, 1862), (309, 1877), (315, 1901), (317, 1907), (334, 1964), (348, 2030), (350, 2036), (370, 2111), (378, 2162), (379, 2165), (413, 2237),

Gene: BigAnti_2 Start: 600, Stop: 1736, Start Num: 87
Candidate Starts for BigAnti_2:
(Start: 54 @483 has 15 MA's), (87, 600), (101, 642), (102, 645), (110, 675), (124, 726), (127, 738), (145, 789), (146, 792), (147, 795), (158, 837), (159, 843), (166, 870), (174, 897), (175, 900), (179, 918), (185, 933), (191, 972), (216, 1074), (217, 1077), (219, 1086), (222, 1098), (224, 1113), (232, 1149), (239, 1176), (241, 1182), (246, 1191), (255, 1212), (259, 1224), (269, 1287), (288, 1347), (327, 1449), (342, 1497), (344, 1509), (345, 1512), (348, 1524), (359, 1554), (373, 1617), (376, 1638), (377, 1647), (379, 1659), (396, 1704),

Gene: BigDome_2 Start: 467, Stop: 1936, Start Num: 30
Candidate Starts for BigDome_2:
(Start: 30 @467 has 31 MA's), (85, 620), (96, 647), (131, 782), (134, 791), (136, 800), (162, 887), (164, 899), (168, 911), (184, 968), (202, 1049), (215, 1148), (219, 1166), (229, 1211), (231, 1223), (262, 1346), (271, 1382), (307, 1505), (310, 1520), (314, 1535), (334, 1613), (367, 1745), (371, 1775), (375, 1799), (379, 1823), (384, 1832), (388, 1850), (397, 1868),

Gene: Bioscum_1 Start: 1, Stop: 1272, Start Num: 47
Candidate Starts for Bioscum_1:
(Start: 47 @1 has 21 MA's), (113, 208), (129, 262), (224, 631), (233, 676), (251, 718), (325, 994), (342, 1060), (373, 1180), (379, 1222),

Gene: BlackJade_2 Start: 511, Stop: 1968, Start Num: 29

Candidate Starts for BlackJade_2:
(Start: 29 @511 has 3 MA's), (72, 607), (89, 673), (93, 679), (117, 772), (153, 895), (176, 982), (184, 1009), (202, 1090), (211, 1156), (224, 1231), (237, 1291), (260, 1381), (262, 1387), (297, 1507), (307, 1546), (330, 1633), (334, 1648), (344, 1702), (356, 1735), (361, 1753), (367, 1780), (381, 1861), (388, 1885), (414, 1948), (416, 1957),

Gene: Blett_7 Start: 1512, Stop: 2849, Start Num: 40
Candidate Starts for Blett_7:
(Start: 40 @1512 has 12 MA's), (Start: 50 @1521 has 2 MA's), (58, 1542), (74, 1596), (77, 1605), (87, 1647), (98, 1677), (104, 1698), (108, 1716), (125, 1785), (138, 1818), (139, 1821), (175, 1950), (177, 1962), (189, 2013), (211, 2085), (222, 2148), (227, 2175), (233, 2208), (254, 2274), (263, 2325), (281, 2373), (295, 2406), (301, 2424), (306, 2445), (325, 2523), (327, 2538), (334, 2559), (337, 2577), (342, 2598), (361, 2664), (379, 2763), (383, 2772),

Gene: Bolt007_2 Start: 428, Stop: 1867, Start Num: 41
Candidate Starts for Bolt007_2:
(Start: 41 @428 has 7 MA's), (111, 653), (151, 791), (164, 842), (202, 992), (216, 1097), (240, 1199), (270, 1322), (307, 1448), (361, 1658),

Gene: BossLady_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for BossLady_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (107, 690), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (219, 1161), (229, 1206), (231, 1218), (271, 1377), (307, 1500), (310, 1515), (314, 1530), (346, 1668), (367, 1743), (385, 1833), (388, 1848), (397, 1866),

Gene: Brad_10 Start: 4569, Stop: 6152, Start Num: 23
Candidate Starts for Brad_10:
(Start: 23 @4569 has 6 MA's), (37, 4602), (44, 4614), (59, 4653), (70, 4695), (93, 4773), (103, 4806), (123, 4881), (157, 4992), (161, 5010), (190, 5130), (203, 5181), (211, 5229), (230, 5331), (253, 5418), (274, 5517), (337, 5754), (358, 5835), (360, 5838), (368, 5874), (400, 6003), (417, 6057), (420, 6069), (424, 6135), (425, 6144),

Gene: Brent_2 Start: 471, Stop: 1940, Start Num: 30
Candidate Starts for Brent_2:
(Start: 30 @471 has 31 MA's), (85, 621), (96, 648), (131, 783), (134, 792), (162, 888), (164, 900), (184, 969), (202, 1050), (215, 1149), (219, 1167), (229, 1212), (231, 1224), (240, 1257), (262, 1347), (285, 1434), (307, 1506), (310, 1521), (314, 1536), (330, 1599), (334, 1614), (346, 1674), (371, 1779), (379, 1827), (388, 1854), (393, 1863),

Gene: Bubbykins_3 Start: 1285, Stop: 2766, Start Num: 25
Candidate Starts for Bubbykins_3:
(Start: 25 @1285 has 1 MA's), (69, 1390), (71, 1399), (81, 1441), (89, 1468), (93, 1474), (111, 1546), (115, 1561), (117, 1567), (124, 1594), (143, 1657), (164, 1735), (176, 1777), (180, 1792), (184, 1804), (186, 1807), (193, 1846), (198, 1861), (202, 1885), (204, 1894), (229, 2047), (237, 2086), (241, 2095), (247, 2116), (256, 2140), (258, 2143), (262, 2182), (268, 2209), (271, 2218), (292, 2287), (298, 2305), (302, 2317), (303, 2323), (305, 2329), (307, 2341), (323, 2404), (338, 2473), (344, 2503), (354, 2533), (366, 2572), (371, 2611), (379, 2659), (381, 2662), (389, 2683), (402, 2710), (406, 2719), (416, 2755),

Gene: Bumble_2 Start: 428, Stop: 1870, Start Num: 41
Candidate Starts for Bumble_2:
(Start: 41 @428 has 7 MA's), (66, 491), (99, 602), (151, 791), (164, 842), (200, 986), (202, 992), (240, 1199), (269, 1319), (270, 1322), (307, 1448), (356, 1640), (361, 1658), (364, 1664), (408, 1826),

Gene: Bush_7 Start: 1527, Stop: 2855, Start Num: 50
Candidate Starts for Bush_7:
(Start: 40 @1518 has 12 MA's), (Start: 50 @1527 has 2 MA's), (58, 1548), (74, 1602), (77, 1611), (87, 1653), (98, 1683), (104, 1704), (108, 1722), (125, 1791), (138, 1824), (139, 1827), (177, 1968), (189, 2019), (211, 2091), (222, 2154), (227, 2181), (233, 2214), (254, 2280), (263, 2331), (281, 2379), (295, 2412), (301, 2430), (306, 2451), (325, 2529), (327, 2544), (334, 2565), (337, 2583), (342, 2604), (361, 2670), (379, 2769), (383, 2778),

Gene: Cafasso_3 Start: 964, Stop: 2316, Start Num: 30
Candidate Starts for Cafasso_3:
(Start: 30 @964 has 31 MA's), (62, 1039), (78, 1090), (94, 1132), (105, 1171), (113, 1207), (117, 1219), (127, 1258), (133, 1270), (135, 1282), (143, 1306), (147, 1315), (156, 1348), (159, 1363), (167, 1393), (177, 1432), (179, 1438), (185, 1453), (225, 1648), (232, 1681), (233, 1690), (237, 1705), (241, 1714), (251, 1738), (260, 1789), (308, 1951), (316, 1984), (326, 2029), (328, 2035), (339, 2074), (349, 2113),

Gene: CalWood4100_2 Start: 428, Stop: 1867, Start Num: 41
Candidate Starts for CalWood4100_2:
(Start: 41 @428 has 7 MA's), (151, 791), (164, 842), (202, 992), (216, 1097), (237, 1193), (240, 1199), (270, 1322), (307, 1448),

Gene: Carrillo_6 Start: 1351, Stop: 2694, Start Num: 40
Candidate Starts for Carrillo_6:
(11, 1189), (Start: 18 @1291 has 1 MA's), (21, 1300), (Start: 40 @1351 has 12 MA's), (Start: 45 @1357 has 2 MA's), (Start: 50 @1366 has 2 MA's), (58, 1387), (74, 1441), (77, 1450), (87, 1492), (98, 1522), (104, 1543), (108, 1561), (122, 1612), (125, 1630), (138, 1663), (139, 1666), (175, 1795), (177, 1807), (189, 1858), (211, 1930), (222, 1993), (227, 2020), (233, 2053), (234, 2068), (254, 2119), (263, 2170), (271, 2194), (281, 2218), (295, 2251), (301, 2269), (306, 2290), (325, 2368), (327, 2383), (334, 2404), (337, 2422), (342, 2443), (361, 2509), (379, 2608), (383, 2617),

Gene: Casserole_10 Start: 4632, Stop: 6215, Start Num: 23
Candidate Starts for Casserole_10:
(Start: 23 @4632 has 6 MA's), (37, 4665), (44, 4677), (59, 4716), (93, 4836), (103, 4869), (109, 4896), (123, 4944), (157, 5055), (161, 5073), (190, 5193), (203, 5244), (211, 5292), (230, 5394), (253, 5481), (274, 5580), (334, 5796), (337, 5817), (358, 5898), (360, 5901), (368, 5937), (400, 6066), (417, 6120), (420, 6132), (424, 6198), (425, 6207),

Gene: Chipper1996_30 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for Chipper1996_30:
(17, 1240), (Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (168, 1744), (172, 1762), (176, 1774), (178, 1783), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (251, 2122), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Chocolat_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for Chocolat_3:
(Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (178, 1783), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704),

(414, 2749),

Gene: Chubster_3 Start: 1288, Stop: 2766, Start Num: 28
Candidate Starts for Chubster_3:
(17, 1237), (Start: 28 @1288 has 18 MA's), (69, 1384), (81, 1435), (84, 1447), (89, 1462), (93, 1468), (110, 1537), (124, 1588), (131, 1612), (142, 1648), (164, 1729), (172, 1759), (176, 1771), (184, 1798), (186, 1801), (193, 1840), (198, 1855), (204, 1888), (230, 2044), (231, 2053), (240, 2086), (247, 2110), (250, 2116), (258, 2137), (262, 2176), (271, 2212), (285, 2263), (292, 2281), (305, 2323), (307, 2335), (317, 2374), (323, 2398), (330, 2428), (331, 2431), (338, 2467), (366, 2569), (371, 2608), (381, 2659), (398, 2701), (414, 2746),

Gene: Cicada_3 Start: 872, Stop: 2284, Start Num: 24
Candidate Starts for Cicada_3:
(Start: 24 @872 has 22 MA's), (48, 923), (Start: 54 @938 has 15 MA's), (84, 1049), (87, 1058), (105, 1109), (113, 1145), (127, 1196), (154, 1280), (170, 1343), (177, 1370), (214, 1511), (217, 1532), (232, 1613), (254, 1679), (256, 1685), (258, 1688), (259, 1694), (274, 1775), (279, 1799), (289, 1832), (309, 1892), (329, 1973), (334, 1979), (349, 2048), (350, 2051), (376, 2159), (379, 2180), (396, 2225), (399, 2231),

Gene: Circuit_2 Start: 428, Stop: 1870, Start Num: 41
Candidate Starts for Circuit_2:
(Start: 41 @428 has 7 MA's), (66, 491), (99, 602), (151, 791), (164, 842), (202, 992), (240, 1199), (269, 1319), (307, 1448), (361, 1658), (364, 1664),

Gene: Colossa_3 Start: 893, Stop: 2227, Start Num: 43
Candidate Starts for Colossa_3:
(Start: 43 @893 has 6 MA's), (58, 923), (60, 932), (94, 1040), (104, 1079), (105, 1082), (117, 1130), (155, 1256), (159, 1274), (177, 1343), (189, 1394), (232, 1592), (241, 1625), (251, 1649), (255, 1661), (269, 1736), (324, 1922), (325, 1928), (341, 1988), (342, 1991), (348, 2018),

Gene: Colucci_3 Start: 1297, Stop: 2766, Start Num: 28
Candidate Starts for Colucci_3:
(Start: 28 @1297 has 18 MA's), (69, 1387), (81, 1438), (89, 1465), (93, 1471), (110, 1540), (117, 1564), (124, 1591), (131, 1615), (136, 1633), (142, 1651), (164, 1732), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (204, 1891), (223, 2011), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (292, 2284), (303, 2320), (305, 2326), (307, 2338), (317, 2377), (331, 2434), (338, 2470), (354, 2530), (371, 2608), (377, 2644), (381, 2659), (395, 2695), (398, 2701), (414, 2746),

Gene: Conboy_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for Conboy_3:
(17, 1240), (Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (204, 1891), (230, 2047), (231, 2056), (247, 2113), (250, 2119), (251, 2122), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: CookieDog_7 Start: 1518, Stop: 2855, Start Num: 40
Candidate Starts for CookieDog_7:
(Start: 40 @1518 has 12 MA's), (Start: 50 @1527 has 2 MA's), (58, 1548), (74, 1602), (77, 1611), (87, 1653), (98, 1683), (104, 1704), (108, 1722), (125, 1791), (138, 1824), (139, 1827), (175, 1956), (177, 1968), (189, 2019), (211, 2091), (222, 2154), (227, 2181), (233, 2214), (234, 2229), (254, 2280), (263, 2331), (271, 2355), (281, 2379), (295, 2412), (301, 2430), (306, 2451), (325, 2529), (327, 2544), (334,

2565), (337, 2583), (342, 2604), (361, 2670), (379, 2769), (383, 2778),

Gene: Cumberbatch_2 Start: 538, Stop: 1776, Start Num: 47
Candidate Starts for Cumberbatch_2:
(Start: 47 @538 has 21 MA's), (62, 577), (66, 586), (91, 667), (105, 709), (129, 799), (138, 826), (158, 895), (167, 931), (177, 970), (207, 1069), (224, 1168), (233, 1213), (251, 1255), (284, 1390), (302, 1438), (342, 1564), (363, 1630),

Gene: DaRealMyers_1 Start: 1, Stop: 1272, Start Num: 47
Candidate Starts for DaRealMyers_1:
(Start: 47 @1 has 21 MA's), (Start: 57 @19 has 1 MA's), (91, 130), (105, 172), (108, 187), (113, 208), (114, 211), (121, 235), (129, 262), (138, 289), (168, 397), (179, 439), (191, 493), (207, 532), (211, 553), (213, 571), (224, 631), (251, 718), (265, 784), (272, 811), (284, 853), (310, 940), (311, 943), (342, 1060), (348, 1087), (350, 1093), (373, 1180), (378, 1219),

Gene: Darolandstone_1 Start: 1, Stop: 1254, Start Num: 47
Candidate Starts for Darolandstone_1:
(Start: 47 @1 has 21 MA's), (91, 130), (121, 235), (129, 262), (158, 358), (163, 379), (168, 397), (173, 415), (179, 439), (213, 571), (215, 586), (224, 631), (233, 676), (251, 718), (284, 853), (295, 880), (325, 961), (342, 1027), (373, 1147), (374, 1153),

Gene: DelaGarza_8 Start: 2189, Stop: 3538, Start Num: 54
Candidate Starts for DelaGarza_8:
(2, 1832), (3, 1844), (5, 1907), (Start: 54 @2189 has 15 MA's), (105, 2354), (113, 2390), (116, 2399), (140, 2462), (168, 2564), (175, 2588), (193, 2663), (232, 2834), (242, 2882), (243, 2885), (251, 2933), (256, 2948), (299, 3119), (312, 3173), (321, 3206), (325, 3224), (327, 3239), (337, 3281), (338, 3284), (350, 3335), (351, 3338), (359, 3362), (363, 3371), (376, 3446), (380, 3470), (389, 3497), (391, 3500), (396, 3512),

Gene: DillyDally_2 Start: 425, Stop: 1705, Start Num: 55
Candidate Starts for DillyDally_2:
(Start: 55 @425 has 1 MA's), (78, 506), (105, 584), (120, 644), (127, 659), (137, 686), (143, 707), (163, 779), (174, 818), (194, 899), (215, 1034), (232, 1115), (240, 1145), (251, 1172), (325, 1427), (327, 1442), (342, 1493), (363, 1559), (391, 1688),

Gene: Divya_2 Start: 497, Stop: 1939, Start Num: 33
Candidate Starts for Divya_2:
(Start: 33 @497 has 8 MA's), (93, 650), (143, 833), (152, 863), (162, 899), (164, 911), (176, 953), (180, 968), (184, 980), (193, 1022), (210, 1115), (215, 1160), (237, 1262), (240, 1268), (246, 1286), (278, 1421), (297, 1478), (307, 1517), (342, 1661), (346, 1679), (351, 1694), (361, 1724), (366, 1742), (388, 1856), (414, 1919),

Gene: DrYang_3 Start: 1291, Stop: 2760, Start Num: 28
Candidate Starts for DrYang_3:
(Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (90, 1468), (93, 1471), (110, 1540), (124, 1591), (164, 1732), (176, 1774), (178, 1783), (184, 1801), (186, 1804), (204, 1891), (229, 2044), (231, 2056), (247, 2113), (250, 2119), (251, 2122), (258, 2140), (262, 2179), (268, 2206), (270, 2212), (271, 2215), (292, 2284), (303, 2320), (305, 2326), (307, 2338), (323, 2395), (331, 2428), (354, 2524), (366, 2563), (371, 2602), (377, 2638), (381, 2653), (401, 2701), (414, 2740),

Gene: Dropshot_6 Start: 1357, Stop: 2700, Start Num: 40
Candidate Starts for Dropshot_6:

(11, 1195), (Start: 18 @1297 has 1 MA's), (21, 1306), (Start: 40 @1357 has 12 MA's), (Start: 45 @1363 has 2 MA's), (Start: 50 @1372 has 2 MA's), (58, 1393), (74, 1447), (77, 1456), (98, 1528), (104, 1549), (108, 1567), (125, 1636), (138, 1669), (139, 1672), (175, 1801), (177, 1813), (189, 1864), (211, 1936), (222, 1999), (227, 2026), (233, 2059), (234, 2074), (254, 2125), (263, 2176), (281, 2224), (295, 2257), (301, 2275), (306, 2296), (325, 2374), (327, 2389), (334, 2410), (337, 2428), (342, 2449), (361, 2515), (379, 2614), (383, 2623),

Gene: EastWest_2 Start: 444, Stop: 1892, Start Num: 30
Candidate Starts for EastWest_2:
(Start: 30 @444 has 31 MA's), (85, 576), (96, 603), (131, 738), (134, 747), (136, 756), (162, 843), (164, 855), (175, 894), (184, 924), (187, 930), (200, 999), (204, 1014), (219, 1122), (229, 1167), (231, 1179), (246, 1230), (304, 1446), (307, 1461), (310, 1476), (314, 1491), (334, 1569), (346, 1629), (379, 1779), (388, 1806),

Gene: Eastland_2 Start: 545, Stop: 1777, Start Num: 53
Candidate Starts for Eastland_2:
(Start: 53 @545 has 4 MA's), (67, 590), (95, 677), (105, 710), (113, 746), (139, 830), (140, 833), (143, 845), (147, 854), (156, 887), (165, 926), (211, 1091), (213, 1109), (225, 1172), (229, 1190), (237, 1229), (251, 1256), (259, 1277), (261, 1307), (284, 1391), (299, 1430), (325, 1499), (365, 1643), (379, 1727),

Gene: EdgarPoe_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for EdgarPoe_3:
(17, 1240), (Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (204, 1891), (230, 2047), (231, 2056), (247, 2113), (250, 2119), (251, 2122), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Eklok_2 Start: 551, Stop: 1783, Start Num: 53
Candidate Starts for Eklok_2:
(Start: 24 @497 has 22 MA's), (Start: 53 @551 has 4 MA's), (67, 596), (95, 683), (105, 716), (113, 752), (139, 836), (140, 839), (143, 851), (147, 860), (156, 893), (211, 1097), (213, 1115), (225, 1178), (229, 1196), (237, 1235), (251, 1262), (259, 1283), (261, 1313), (284, 1397), (299, 1436), (325, 1505), (365, 1649), (379, 1733),

Gene: FireCastle_3 Start: 857, Stop: 2269, Start Num: 24
Candidate Starts for FireCastle_3:
(Start: 24 @857 has 22 MA's), (46, 905), (87, 1043), (139, 1214), (154, 1265), (170, 1328), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (217, 1517), (232, 1598), (240, 1628), (256, 1670), (258, 1673), (274, 1760), (282, 1796), (315, 1901), (317, 1907), (329, 1958), (334, 1964), (396, 2210), (399, 2216),

Gene: Franzy_2 Start: 471, Stop: 1940, Start Num: 30
Candidate Starts for Franzy_2:
(Start: 30 @471 has 31 MA's), (85, 621), (96, 648), (131, 783), (134, 792), (162, 888), (164, 900), (184, 969), (215, 1149), (219, 1167), (229, 1212), (231, 1224), (240, 1257), (262, 1347), (285, 1434), (307, 1506), (310, 1521), (314, 1536), (371, 1779), (379, 1827), (388, 1854), (393, 1863),

Gene: FrumpyGal_2 Start: 545, Stop: 1777, Start Num: 53
Candidate Starts for FrumpyGal_2:
(Start: 53 @545 has 4 MA's), (67, 590), (95, 677), (105, 710), (113, 746), (139, 830), (140, 833), (143, 845), (147, 854), (156, 887), (165, 926), (211, 1091), (213, 1109), (225, 1172), (229, 1190), (237,

1229), (251, 1256), (259, 1277), (261, 1307), (284, 1391), (299, 1430), (325, 1499), (365, 1643), (379, 1727),

Gene: GMA1_2 Start: 437, Stop: 1684, Start Num: 54
Candidate Starts for GMA1_2:
(4, 89), (8, 209), (Start: 54 @437 has 15 MA's), (87, 563), (94, 575), (104, 611), (105, 614), (106, 617), (117, 662), (126, 698), (128, 701), (142, 746), (143, 749), (176, 866), (224, 1076), (251, 1163), (298, 1334), (320, 1385), (365, 1529),

Gene: Galactica_2 Start: 611, Stop: 1909, Start Num: 43
Candidate Starts for Galactica_2:
(7, 410), (16, 536), (Start: 43 @611 has 6 MA's), (59, 638), (60, 641), (62, 656), (63, 659), (76, 692), (87, 737), (94, 749), (95, 755), (113, 824), (117, 836), (121, 851), (135, 902), (159, 983), (175, 1040), (177, 1052), (185, 1073), (215, 1205), (226, 1256), (233, 1295), (238, 1313), (247, 1334), (251, 1337), (252, 1340), (262, 1394), (269, 1424), (303, 1529), (310, 1553), (328, 1622), (342, 1670), (350, 1703), (376, 1811),

Gene: GalaxyEater_11 Start: 5173, Stop: 6732, Start Num: 22
Candidate Starts for GalaxyEater_11:
(12, 5077), (13, 5083), (14, 5119), (15, 5125), (16, 5137), (Start: 22 @5173 has 2 MA's), (Start: 31 @5203 has 1 MA's), (117, 5470), (148, 5569), (157, 5602), (161, 5620), (190, 5740), (192, 5749), (196, 5758), (211, 5839), (212, 5842), (228, 5935), (243, 5983), (253, 6016), (274, 6115), (295, 6190), (334, 6334), (337, 6355), (353, 6421), (358, 6436), (368, 6475), (379, 6550), (382, 6556), (383, 6559), (391, 6583), (419, 6661),

Gene: Gingerbug_5 Start: 1344, Stop: 2693, Start Num: 54
Candidate Starts for Gingerbug_5:
(26, 1284), (Start: 54 @1344 has 15 MA's), (105, 1509), (113, 1545), (116, 1554), (140, 1617), (175, 1743), (177, 1755), (193, 1818), (242, 2037), (243, 2040), (249, 2082), (256, 2103), (280, 2217), (299, 2274), (301, 2280), (321, 2361), (325, 2379), (350, 2490), (351, 2493), (359, 2517), (379, 2622), (380, 2625), (389, 2652), (391, 2655), (396, 2667),

Gene: GoldDust_2 Start: 468, Stop: 1919, Start Num: 33
Candidate Starts for GoldDust_2:
(Start: 33 @468 has 8 MA's), (164, 891), (184, 960), (193, 1002), (202, 1041), (215, 1140), (230, 1206), (231, 1215), (266, 1353), (297, 1458), (303, 1479), (307, 1497), (364, 1710), (412, 1887),

Gene: Gooberta_2 Start: 468, Stop: 1919, Start Num: 33
Candidate Starts for Gooberta_2:
(Start: 33 @468 has 8 MA's), (164, 891), (184, 960), (193, 1002), (202, 1041), (215, 1140), (230, 1206), (231, 1215), (266, 1353), (297, 1458), (303, 1479), (307, 1497), (364, 1710), (412, 1887),

Gene: Goodman_3 Start: 872, Stop: 2284, Start Num: 24
Candidate Starts for Goodman_3:
(Start: 24 @872 has 22 MA's), (48, 923), (Start: 54 @938 has 15 MA's), (84, 1049), (87, 1058), (105, 1109), (113, 1145), (127, 1196), (154, 1280), (170, 1343), (177, 1370), (214, 1511), (217, 1532), (232, 1613), (256, 1685), (258, 1688), (259, 1694), (274, 1775), (279, 1799), (289, 1832), (315, 1916), (329, 1973), (334, 1979), (350, 2051), (376, 2159), (396, 2225), (399, 2231),

Gene: GravityBall_2 Start: 467, Stop: 1936, Start Num: 30
Candidate Starts for GravityBall_2:
(Start: 30 @467 has 31 MA's), (85, 620), (96, 647), (131, 782), (134, 791), (136, 800), (162, 887), (164, 899), (168, 911), (184, 968), (202, 1049), (215, 1148), (219, 1166), (229, 1211), (231, 1223), (262,

1346), (271, 1382), (307, 1505), (310, 1520), (314, 1535), (334, 1613), (367, 1745), (371, 1775), (375, 1799), (379, 1823), (384, 1832), (388, 1850), (397, 1868),

Gene: Grekaycon_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for Grekaycon_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (107, 690), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (219, 1161), (229, 1206), (231, 1218), (271, 1377), (278, 1404), (307, 1500), (310, 1515), (314, 1530), (341, 1647), (346, 1668), (367, 1743), (385, 1833), (397, 1866),

Gene: GurgleFerb_10 Start: 4570, Stop: 6153, Start Num: 23
Candidate Starts for GurgleFerb_10:
(Start: 23 @4570 has 6 MA's), (37, 4603), (44, 4615), (59, 4654), (70, 4696), (93, 4774), (103, 4807), (123, 4882), (157, 4993), (161, 5011), (190, 5131), (203, 5182), (211, 5230), (230, 5332), (253, 5419), (274, 5518), (337, 5755), (358, 5836), (360, 5839), (368, 5875), (400, 6004), (417, 6058), (420, 6070), (424, 6136), (425, 6145),

Gene: Guzman_6 Start: 1351, Stop: 2688, Start Num: 40
Candidate Starts for Guzman_6:
(Start: 40 @1351 has 12 MA's), (Start: 50 @1360 has 2 MA's), (58, 1381), (74, 1435), (77, 1444), (87, 1486), (98, 1516), (104, 1537), (108, 1555), (125, 1624), (138, 1657), (139, 1660), (175, 1789), (177, 1801), (189, 1852), (211, 1924), (222, 1987), (227, 2014), (233, 2047), (254, 2113), (263, 2164), (271, 2188), (281, 2212), (295, 2245), (301, 2263), (306, 2284), (325, 2362), (327, 2377), (334, 2398), (337, 2416), (342, 2437), (361, 2503), (383, 2611),

Gene: HFrancette_2 Start: 538, Stop: 1776, Start Num: 47
Candidate Starts for HFrancette_2:
(Start: 47 @538 has 21 MA's), (62, 577), (66, 586), (91, 667), (105, 709), (113, 745), (114, 748), (121, 772), (129, 799), (138, 826), (168, 934), (207, 1069), (224, 1168), (233, 1213), (251, 1255), (284, 1390), (295, 1417), (325, 1498), (342, 1564),

Gene: Hirko_2 Start: 468, Stop: 1919, Start Num: 33
Candidate Starts for Hirko_2:
(Start: 33 @468 has 8 MA's), (93, 630), (131, 774), (164, 891), (184, 960), (215, 1140), (230, 1206), (231, 1215), (266, 1353), (271, 1374), (297, 1458), (303, 1479), (304, 1482), (307, 1497), (361, 1704), (367, 1731), (412, 1887),

Gene: Hiyaa_2 Start: 605, Stop: 1903, Start Num: 43
Candidate Starts for Hiyaa_2:
(15, 518), (34, 599), (Start: 43 @605 has 6 MA's), (59, 632), (60, 635), (62, 650), (76, 686), (94, 743), (95, 749), (97, 755), (101, 773), (113, 818), (122, 848), (146, 926), (175, 1034), (177, 1046), (185, 1067), (215, 1199), (233, 1289), (238, 1307), (246, 1322), (247, 1328), (251, 1331), (252, 1334), (303, 1523), (310, 1547), (328, 1616), (350, 1697), (379, 1826), (390, 1856), (392, 1859), (403, 1886),

Gene: Htur_3 Start: 869, Stop: 2281, Start Num: 24
Candidate Starts for Htur_3:
(Start: 24 @869 has 22 MA's), (48, 920), (Start: 54 @935 has 15 MA's), (65, 977), (84, 1046), (87, 1055), (105, 1106), (116, 1151), (127, 1193), (139, 1226), (142, 1238), (154, 1277), (170, 1340), (177, 1367), (199, 1451), (214, 1508), (217, 1529), (222, 1559), (256, 1682), (258, 1685), (259, 1691), (274, 1772), (279, 1796), (282, 1808), (289, 1829), (293, 1835), (309, 1889), (315, 1913), (329, 1970), (334, 1976), (376, 2156), (389, 2207), (396, 2222), (399, 2228),

Gene: HumptyDumpty_3 Start: 1291, Stop: 2769, Start Num: 28

Candidate Starts for HumptyDumpty_3:
(Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (202, 1882), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Ididsumtinwong_1 Start: 1, Stop: 1272, Start Num: 47
Candidate Starts for Ididsumtinwong_1:
(Start: 47 @1 has 21 MA's), (113, 208), (129, 262), (224, 631), (233, 676), (251, 718), (325, 994), (342, 1060), (373, 1180), (379, 1222),

Gene: Ignacio_2 Start: 538, Stop: 1776, Start Num: 47
Candidate Starts for Ignacio_2:
(Start: 47 @538 has 21 MA's), (62, 577), (66, 586), (91, 667), (105, 709), (113, 745), (114, 748), (121, 772), (129, 799), (138, 826), (168, 934), (207, 1069), (224, 1168), (233, 1213), (251, 1255), (284, 1390), (295, 1417), (325, 1498), (342, 1564),

Gene: IndiRoo_3 Start: 857, Stop: 2254, Start Num: 24
Candidate Starts for IndiRoo_3:
(19, 842), (Start: 24 @857 has 22 MA's), (87, 1043), (105, 1094), (116, 1139), (127, 1181), (142, 1226), (143, 1229), (154, 1265), (159, 1286), (163, 1301), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (221, 1541), (232, 1598), (240, 1628), (256, 1670), (269, 1742), (271, 1748), (275, 1766), (279, 1784), (282, 1796), (289, 1817), (305, 1862), (309, 1877), (315, 1901), (317, 1907), (334, 1964), (348, 2030), (350, 2036), (378, 2162), (379, 2165), (413, 2237),

Gene: JKerns_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for JKerns_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (107, 690), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (219, 1161), (229, 1206), (231, 1218), (271, 1377), (307, 1500), (310, 1515), (314, 1530), (341, 1647), (346, 1668), (367, 1743), (388, 1848), (397, 1866),

Gene: JaNo_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for JaNo_3:
(Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (202, 1882), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Jace_2 Start: 729, Stop: 1988, Start Num: 52
Candidate Starts for Jace_2:
(9, 519), (Start: 52 @729 has 1 MA's), (60, 753), (74, 798), (94, 858), (104, 897), (113, 936), (143, 1035), (158, 1086), (177, 1161), (179, 1167), (199, 1245), (228, 1404), (246, 1470), (251, 1479), (255, 1491), (263, 1539), (337, 1749), (342, 1770), (380, 1935),

Gene: Jakelyne_7 Start: 1512, Stop: 2849, Start Num: 40
Candidate Starts for Jakelyne_7:
(Start: 40 @1512 has 12 MA's), (Start: 50 @1521 has 2 MA's), (58, 1542), (74, 1596), (77, 1605), (87, 1647), (98, 1677), (104, 1698), (108, 1716), (122, 1767), (125, 1785), (138, 1818), (139, 1821), (175,

1950), (177, 1962), (189, 2013), (211, 2085), (222, 2148), (227, 2175), (233, 2208), (254, 2274), (263, 2325), (281, 2373), (295, 2406), (301, 2424), (306, 2445), (325, 2523), (327, 2538), (334, 2559), (337, 2577), (342, 2598), (361, 2664), (383, 2772),

Gene: Jasmine_11 Start: 4672, Stop: 6255, Start Num: 23
Candidate Starts for Jasmine_11:
(Start: 23 @4672 has 6 MA's), (37, 4705), (44, 4717), (59, 4756), (93, 4876), (103, 4909), (123, 4984), (157, 5095), (161, 5113), (190, 5233), (203, 5284), (211, 5332), (230, 5434), (253, 5521), (274, 5620), (337, 5857), (358, 5938), (360, 5941), (368, 5977), (400, 6106), (417, 6160), (420, 6172), (424, 6238), (425, 6247),

Gene: Jawnski_2 Start: 471, Stop: 1940, Start Num: 30
Candidate Starts for Jawnski_2:
(Start: 30 @471 has 31 MA's), (85, 621), (96, 648), (131, 783), (134, 792), (162, 888), (164, 900), (184, 969), (215, 1149), (219, 1167), (229, 1212), (231, 1224), (240, 1257), (262, 1347), (285, 1434), (307, 1506), (310, 1521), (314, 1536), (371, 1779), (379, 1827), (388, 1854), (393, 1863),

Gene: JayCookie_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for JayCookie_3:
(17, 1240), (Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Jera_3 Start: 857, Stop: 2269, Start Num: 24
Candidate Starts for Jera_3:
(Start: 24 @857 has 22 MA's), (48, 908), (Start: 54 @923 has 15 MA's), (84, 1034), (87, 1043), (105, 1094), (116, 1139), (127, 1181), (154, 1265), (163, 1301), (170, 1328), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (217, 1517), (232, 1598), (256, 1670), (258, 1673), (259, 1679), (274, 1760), (279, 1784), (289, 1817), (315, 1901), (329, 1958), (334, 1964), (376, 2144), (379, 2165), (396, 2210), (399, 2216),

Gene: Jinkies_2 Start: 503, Stop: 1945, Start Num: 33
Candidate Starts for Jinkies_2:
(Start: 33 @503 has 8 MA's), (71, 581), (80, 620), (93, 656), (143, 839), (151, 866), (152, 869), (162, 905), (164, 917), (176, 959), (184, 986), (210, 1121), (219, 1184), (224, 1208), (246, 1292), (264, 1370), (271, 1400), (297, 1484), (307, 1523), (310, 1538), (313, 1550), (319, 1571), (330, 1610), (334, 1625), (344, 1679), (380, 1838), (414, 1925), (416, 1934),

Gene: Johann_3 Start: 872, Stop: 2284, Start Num: 24
Candidate Starts for Johann_3:
(Start: 24 @872 has 22 MA's), (48, 923), (Start: 54 @938 has 15 MA's), (84, 1049), (87, 1058), (105, 1109), (113, 1145), (127, 1196), (154, 1280), (170, 1343), (177, 1370), (214, 1511), (217, 1532), (232, 1613), (241, 1646), (254, 1679), (256, 1685), (258, 1688), (259, 1694), (274, 1775), (279, 1799), (289, 1832), (309, 1892), (315, 1916), (329, 1973), (334, 1979), (344, 2030), (350, 2051), (376, 2159), (379, 2180), (396, 2225), (399, 2231),

Gene: Jordan_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for Jordan_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (107, 690), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (219, 1161), (229, 1206), (231, 1218), (271,

1377), (307, 1500), (310, 1515), (314, 1530), (341, 1647), (346, 1668), (367, 1743), (385, 1833), (388, 1848), (397, 1866),

Gene: KBurrousTX_3 Start: 1300, Stop: 2793, Start Num: 24
Candidate Starts for KBurrousTX_3:
(Start: 24 @1300 has 22 MA's), (69, 1411), (72, 1423), (81, 1462), (89, 1489), (90, 1492), (93, 1495), (117, 1588), (124, 1615), (131, 1639), (136, 1657), (157, 1723), (164, 1756), (176, 1798), (184, 1825), (193, 1867), (202, 1906), (204, 1915), (240, 2113), (241, 2116), (247, 2137), (250, 2143), (251, 2146), (256, 2161), (258, 2164), (262, 2203), (268, 2230), (271, 2239), (285, 2290), (292, 2308), (305, 2350), (307, 2362), (323, 2425), (331, 2458), (338, 2494), (366, 2596), (371, 2635), (381, 2686), (410, 2755), (414, 2773),

Gene: Kabreeze_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for Kabreeze_3:
(Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (202, 1882), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Keanu_2 Start: 626, Stop: 1933, Start Num: 45
Candidate Starts for Keanu_2:
(Start: 24 @581 has 22 MA's), (32, 608), (Start: 45 @626 has 2 MA's), (Start: 50 @635 has 2 MA's), (59, 662), (60, 665), (62, 680), (63, 683), (76, 716), (94, 773), (101, 803), (114, 851), (121, 875), (135, 926), (175, 1064), (177, 1076), (215, 1229), (233, 1319), (238, 1337), (247, 1358), (251, 1361), (252, 1364), (264, 1424), (303, 1553), (324, 1625), (328, 1646), (350, 1727), (379, 1856), (390, 1886), (392, 1889), (403, 1916),

Gene: King2_2 Start: 471, Stop: 1940, Start Num: 30
Candidate Starts for King2_2:
(Start: 30 @471 has 31 MA's), (85, 621), (96, 648), (131, 783), (134, 792), (162, 888), (164, 900), (184, 969), (202, 1050), (215, 1149), (219, 1167), (229, 1212), (231, 1224), (240, 1257), (262, 1347), (285, 1434), (307, 1506), (310, 1521), (334, 1614), (346, 1674), (379, 1827), (388, 1854), (393, 1863),

Gene: Klevey_2 Start: 428, Stop: 1867, Start Num: 41
Candidate Starts for Klevey_2:
(Start: 41 @428 has 7 MA's), (151, 791), (164, 842), (202, 992), (216, 1097), (237, 1193), (240, 1199), (270, 1322), (307, 1448),

Gene: Kokushibo_2 Start: 605, Stop: 1903, Start Num: 43
Candidate Starts for Kokushibo_2:
(34, 599), (Start: 43 @605 has 6 MA's), (59, 632), (60, 635), (62, 650), (76, 686), (94, 743), (97, 755), (101, 773), (113, 818), (121, 845), (122, 848), (175, 1034), (177, 1046), (185, 1067), (215, 1199), (233, 1289), (238, 1307), (247, 1328), (251, 1331), (252, 1334), (262, 1388), (303, 1523), (310, 1547), (328, 1616), (350, 1697), (379, 1826), (390, 1856), (392, 1859), (403, 1886),

Gene: Labella_3 Start: 860, Stop: 2272, Start Num: 24
Candidate Starts for Labella_3:
(Start: 24 @860 has 22 MA's), (48, 911), (Start: 54 @926 has 15 MA's), (65, 968), (84, 1037), (87, 1046), (105, 1097), (116, 1142), (127, 1184), (154, 1268), (163, 1304), (170, 1331), (177, 1358), (197, 1430), (199, 1442), (214, 1499), (217, 1520), (256, 1673), (258, 1676), (259, 1682), (274, 1763), (279, 1787), (289, 1820), (315, 1904), (329, 1961), (334, 1967), (350, 2039), (376, 2147), (396, 2213), (399,

2219),

Gene: LadyJasley_13 Start: 5497, Stop: 7053, Start Num: 22
Candidate Starts for LadyJasley_13:
(Start: 22 @5497 has 2 MA's), (37, 5536), (103, 5740), (123, 5815), (157, 5926), (161, 5944), (190, 6064), (192, 6073), (196, 6082), (211, 6163), (253, 6340), (274, 6439), (301, 6520), (315, 6580), (337, 6667), (353, 6733), (355, 6736), (358, 6748), (379, 6862), (382, 6868), (383, 6871), (403, 6919), (407, 6925), (412, 6940), (418, 6970),

Gene: LeeroyJ_2 Start: 467, Stop: 1936, Start Num: 30
Candidate Starts for LeeroyJ_2:
(Start: 30 @467 has 31 MA's), (85, 620), (96, 647), (131, 782), (134, 791), (136, 800), (162, 887), (164, 899), (168, 911), (184, 968), (202, 1049), (215, 1148), (219, 1166), (229, 1211), (231, 1223), (262, 1346), (271, 1382), (307, 1505), (310, 1520), (314, 1535), (334, 1613), (367, 1745), (371, 1775), (375, 1799), (379, 1823), (384, 1832), (388, 1850), (397, 1868),

Gene: Lesiram_8 Start: 2165, Stop: 3514, Start Num: 54
Candidate Starts for Lesiram_8:
(2, 1808), (3, 1820), (5, 1883), (6, 1901), (Start: 54 @2165 has 15 MA's), (105, 2330), (113, 2366), (116, 2375), (140, 2438), (168, 2540), (175, 2564), (193, 2639), (232, 2810), (242, 2858), (243, 2861), (251, 2909), (256, 2924), (299, 3095), (321, 3182), (325, 3200), (327, 3215), (337, 3257), (338, 3260), (350, 3311), (351, 3314), (359, 3338), (363, 3347), (376, 3422), (380, 3446), (389, 3473), (391, 3476), (396, 3488),

Gene: Lilmac1015_2 Start: 428, Stop: 1867, Start Num: 41
Candidate Starts for Lilmac1015_2:
(Start: 41 @428 has 7 MA's), (151, 791), (164, 842), (202, 992), (216, 1097), (237, 1193), (240, 1199), (270, 1322), (307, 1448),

Gene: Linayshia_3 Start: 869, Stop: 2281, Start Num: 24
Candidate Starts for Linayshia_3:
(Start: 24 @869 has 22 MA's), (48, 920), (Start: 54 @935 has 15 MA's), (65, 977), (84, 1046), (87, 1055), (105, 1106), (116, 1151), (127, 1193), (139, 1226), (142, 1238), (154, 1277), (170, 1340), (177, 1367), (199, 1451), (214, 1508), (217, 1529), (222, 1559), (256, 1682), (258, 1685), (259, 1691), (274, 1772), (279, 1796), (282, 1808), (289, 1829), (293, 1835), (309, 1889), (315, 1913), (329, 1970), (334, 1976), (376, 2156), (389, 2207), (396, 2222), (399, 2228),

Gene: Linus_3 Start: 1288, Stop: 2766, Start Num: 28
Candidate Starts for Linus_3:
(17, 1237), (Start: 28 @1288 has 18 MA's), (69, 1384), (81, 1435), (84, 1447), (89, 1462), (93, 1468), (110, 1537), (124, 1588), (131, 1612), (142, 1648), (164, 1729), (168, 1741), (172, 1759), (176, 1771), (184, 1798), (186, 1801), (193, 1840), (198, 1855), (202, 1879), (204, 1888), (230, 2044), (231, 2053), (240, 2086), (247, 2110), (250, 2116), (258, 2137), (262, 2176), (271, 2212), (285, 2263), (292, 2281), (305, 2323), (307, 2335), (317, 2374), (323, 2398), (330, 2428), (331, 2431), (338, 2467), (366, 2569), (371, 2608), (381, 2659), (398, 2701), (414, 2746),

Gene: Lishka_1 Start: 1, Stop: 1272, Start Num: 47
Candidate Starts for Lishka_1:
(Start: 47 @1 has 21 MA's), (91, 130), (95, 139), (113, 208), (129, 262), (224, 631), (233, 676), (251, 718), (325, 994), (342, 1060), (373, 1180), (379, 1222),

Gene: Losacky_7 Start: 1518, Stop: 2846, Start Num: 50
Candidate Starts for Losacky_7:

(11, 1347), (Start: 18 @1449 has 1 MA's), (21, 1458), (Start: 40 @1509 has 12 MA's), (Start: 50 @1518 has 2 MA's), (58, 1539), (74, 1593), (77, 1602), (87, 1644), (98, 1674), (104, 1695), (108, 1713), (122, 1764), (125, 1782), (138, 1815), (139, 1818), (175, 1947), (177, 1959), (189, 2010), (211, 2082), (222, 2145), (227, 2172), (233, 2205), (254, 2271), (263, 2322), (281, 2370), (295, 2403), (301, 2421), (306, 2442), (325, 2520), (327, 2535), (334, 2556), (337, 2574), (342, 2595), (361, 2661), (379, 2760), (383, 2769),

Gene: Lukepolites_2 Start: 524, Stop: 1957, Start Num: 41
Candidate Starts for Lukepolites_2:
(Start: 41 @524 has 7 MA's), (66, 587), (88, 665), (92, 674), (100, 701), (111, 749), (125, 809), (164, 938), (172, 968), (184, 1007), (198, 1064), (208, 1136), (237, 1289), (254, 1337), (270, 1418), (285, 1469), (286, 1472), (307, 1541), (330, 1628), (364, 1757), (367, 1778), (377, 1844), (379, 1856), (414, 1937),

Gene: Lymara_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for Lymara_3:
(Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (124, 1591), (131, 1615), (157, 1699), (164, 1732), (172, 1762), (176, 1774), (178, 1783), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (202, 1882), (204, 1891), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (251, 2122), (258, 2140), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (344, 2500), (354, 2533), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Maih_3 Start: 1180, Stop: 2550, Start Num: 54
Candidate Starts for Maih_3:
(Start: 54 @1180 has 15 MA's), (64, 1219), (72, 1243), (73, 1246), (79, 1276), (83, 1288), (93, 1315), (116, 1396), (124, 1426), (138, 1468), (149, 1504), (157, 1531), (158, 1537), (166, 1570), (168, 1576), (169, 1585), (185, 1636), (186, 1639), (188, 1645), (193, 1678), (195, 1684), (222, 1813), (231, 1861), (255, 1930), (259, 1942), (269, 2005), (278, 2038), (280, 2044), (291, 2077), (303, 2116), (335, 2236), (343, 2281), (344, 2284), (365, 2353), (373, 2401), (376, 2422), (379, 2443), (413, 2524), (416, 2539),

Gene: Mariel_7 Start: 1458, Stop: 2855, Start Num: 18
Candidate Starts for Mariel_7:
(11, 1356), (Start: 18 @1458 has 1 MA's), (21, 1467), (Start: 40 @1518 has 12 MA's), (Start: 50 @1527 has 2 MA's), (58, 1548), (74, 1602), (77, 1611), (87, 1653), (98, 1683), (104, 1704), (108, 1722), (125, 1791), (138, 1824), (139, 1827), (175, 1956), (177, 1968), (189, 2019), (211, 2091), (222, 2154), (227, 2181), (233, 2214), (234, 2229), (254, 2280), (263, 2331), (281, 2379), (295, 2412), (301, 2430), (306, 2451), (325, 2529), (327, 2544), (334, 2565), (337, 2583), (342, 2604), (361, 2670), (379, 2769), (383, 2778),

Gene: Martha_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for Martha_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (107, 690), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (215, 1143), (219, 1161), (229, 1206), (231, 1218), (271, 1377), (278, 1404), (307, 1500), (310, 1515), (314, 1530), (341, 1647), (346, 1668), (367, 1743), (385, 1833), (388, 1848), (397, 1866),

Gene: MenE_7 Start: 1518, Stop: 2855, Start Num: 40
Candidate Starts for MenE_7:
(Start: 40 @1518 has 12 MA's), (Start: 50 @1527 has 2 MA's), (58, 1548), (74, 1602), (77, 1611), (87, 1653), (98, 1683), (104, 1704), (108, 1722), (122, 1773), (125, 1791), (138, 1824), (139, 1827), (175, 1956), (177, 1968), (189, 2019), (211, 2091), (222, 2154), (227, 2181), (233, 2214), (254, 2280), (263, 2331), (281, 2379), (295, 2412), (301, 2430), (306, 2451), (325, 2529), (327, 2544), (334, 2565), (337,

2583), (342, 2604), (361, 2670), (379, 2769), (383, 2778),

Gene: MicyPS_2 Start: 683, Stop: 2014, Start Num: 29
Candidate Starts for MicyPS_2:
(Start: 29 @683 has 3 MA's), (105, 890), (117, 938), (127, 977), (138, 1007), (140, 1013), (141, 1019), (158, 1076), (255, 1487), (265, 1544),

Gene: Milani_3 Start: 857, Stop: 2254, Start Num: 24
Candidate Starts for Milani_3:
(19, 842), (Start: 24 @857 has 22 MA's), (87, 1043), (105, 1094), (139, 1214), (142, 1226), (154, 1265), (159, 1286), (163, 1301), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (221, 1541), (232, 1598), (240, 1628), (246, 1646), (254, 1664), (256, 1670), (259, 1679), (269, 1742), (271, 1748), (275, 1766), (279, 1784), (282, 1796), (289, 1817), (305, 1862), (309, 1877), (315, 1901), (317, 1907), (334, 1964), (350, 2036), (370, 2111), (376, 2144), (378, 2162), (379, 2165), (394, 2204), (413, 2237),

Gene: Mischief19_2 Start: 547, Stop: 1950, Start Num: 31
Candidate Starts for Mischief19_2:
(Start: 31 @547 has 1 MA's), (71, 643), (72, 646), (82, 688), (86, 703), (93, 718), (96, 727), (110, 778), (116, 799), (120, 814), (138, 871), (160, 949), (176, 1009), (186, 1042), (232, 1267), (256, 1339), (260, 1375), (291, 1483), (318, 1570), (335, 1636), (340, 1666), (343, 1681), (363, 1741), (365, 1753), (381, 1846),

Gene: ModicumRichard_3 Start: 964, Stop: 2316, Start Num: 30
Candidate Starts for ModicumRichard_3:
(Start: 30 @964 has 31 MA's), (62, 1039), (78, 1090), (94, 1132), (105, 1171), (113, 1207), (117, 1219), (127, 1258), (133, 1270), (135, 1282), (143, 1306), (147, 1315), (156, 1348), (159, 1363), (167, 1393), (177, 1432), (179, 1438), (185, 1453), (225, 1648), (232, 1681), (233, 1690), (237, 1705), (241, 1714), (251, 1738), (260, 1789), (308, 1951), (316, 1984), (326, 2029), (328, 2035), (339, 2074), (349, 2113),

Gene: Mojorita_1 Start: 1, Stop: 1257, Start Num: 47
Candidate Starts for Mojorita_1:
(Start: 47 @1 has 21 MA's), (63, 43), (78, 91), (91, 130), (113, 208), (129, 262), (143, 307), (168, 397), (171, 409), (179, 439), (207, 532), (224, 631), (251, 718), (257, 733), (284, 853), (357, 1081),

Gene: Mordred_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for Mordred_3:
(Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (202, 1882), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Morgana_3 Start: 969, Stop: 2321, Start Num: 30
Candidate Starts for Morgana_3:
(Start: 30 @969 has 31 MA's), (62, 1044), (78, 1095), (94, 1137), (105, 1176), (113, 1212), (117, 1224), (127, 1263), (133, 1275), (135, 1287), (143, 1311), (147, 1320), (159, 1368), (167, 1398), (177, 1437), (179, 1443), (185, 1458), (225, 1653), (228, 1668), (232, 1686), (233, 1695), (237, 1710), (241, 1719), (251, 1743), (260, 1794), (308, 1956), (316, 1989), (328, 2040),

Gene: MoyaNatalis_3 Start: 1387, Stop: 2769, Start Num: 69
Candidate Starts for MoyaNatalis_3:

(17, 1240), (Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Music_2 Start: 468, Stop: 1919, Start Num: 33
Candidate Starts for Music_2:
(Start: 33 @468 has 8 MA's), (93, 630), (131, 774), (164, 891), (184, 960), (202, 1041), (215, 1140), (230, 1206), (231, 1215), (266, 1353), (297, 1458), (303, 1479), (304, 1482), (307, 1497), (412, 1887),

Gene: NCRodriguez_7 Start: 1530, Stop: 2858, Start Num: 50
Candidate Starts for NCRodriguez_7:
(Start: 40 @1521 has 12 MA's), (Start: 50 @1530 has 2 MA's), (58, 1551), (74, 1605), (77, 1614), (87, 1656), (98, 1686), (104, 1707), (108, 1725), (125, 1794), (139, 1830), (177, 1971), (189, 2022), (211, 2094), (222, 2157), (227, 2184), (233, 2217), (254, 2283), (263, 2334), (271, 2358), (281, 2382), (295, 2415), (301, 2433), (306, 2454), (325, 2532), (327, 2547), (334, 2568), (337, 2586), (342, 2607), (361, 2673), (383, 2781),

Gene: Nandito_2 Start: 491, Stop: 1867, Start Num: 66
Candidate Starts for Nandito_2:
(Start: 41 @428 has 7 MA's), (66, 491), (151, 791), (164, 842), (216, 1097), (240, 1199), (270, 1322), (271, 1325), (307, 1448), (356, 1640),

Gene: NathanVaag_2 Start: 471, Stop: 1940, Start Num: 30
Candidate Starts for NathanVaag_2:
(Start: 30 @471 has 31 MA's), (85, 621), (96, 648), (134, 792), (162, 888), (164, 900), (184, 969), (202, 1050), (215, 1149), (219, 1167), (229, 1212), (231, 1224), (240, 1257), (285, 1434), (307, 1506), (310, 1521), (314, 1536), (330, 1599), (334, 1614), (346, 1674), (379, 1827), (393, 1863),

Gene: Nellie_10 Start: 4571, Stop: 6154, Start Num: 23
Candidate Starts for Nellie_10:
(Start: 23 @4571 has 6 MA's), (37, 4604), (44, 4616), (59, 4655), (70, 4697), (93, 4775), (103, 4808), (123, 4883), (157, 4994), (161, 5012), (190, 5132), (203, 5183), (211, 5231), (230, 5333), (253, 5420), (274, 5519), (337, 5756), (358, 5837), (360, 5840), (368, 5876), (400, 6005), (417, 6059), (420, 6071), (424, 6137), (425, 6146),

Gene: Nostromo_2 Start: 461, Stop: 1909, Start Num: 35
Candidate Starts for Nostromo_2:
(Start: 35 @461 has 2 MA's), (85, 596), (87, 602), (93, 614), (110, 683), (132, 761), (143, 797), (162, 863), (164, 875), (176, 917), (184, 944), (224, 1166), (229, 1187), (231, 1199), (246, 1250), (250, 1262), (304, 1466), (307, 1481), (310, 1496), (344, 1640), (361, 1691), (369, 1733), (379, 1796),

Gene: ObLaDi_3 Start: 964, Stop: 2316, Start Num: 30
Candidate Starts for ObLaDi_3:
(Start: 30 @964 has 31 MA's), (62, 1039), (78, 1090), (94, 1132), (105, 1171), (113, 1207), (117, 1219), (127, 1258), (133, 1270), (135, 1282), (143, 1306), (147, 1315), (156, 1348), (159, 1363), (167, 1393), (177, 1432), (179, 1438), (185, 1453), (225, 1648), (232, 1681), (233, 1690), (237, 1705), (241, 1714), (251, 1738), (260, 1789), (308, 1951), (316, 1984), (326, 2029), (328, 2035), (339, 2074), (349, 2113),

Gene: Olympi_3 Start: 857, Stop: 2269, Start Num: 24
Candidate Starts for Olympi_3:

(19, 842), (Start: 24 @857 has 22 MA's), (48, 908), (Start: 54 @923 has 15 MA's), (84, 1034), (87, 1043), (105, 1094), (113, 1130), (127, 1181), (154, 1265), (177, 1355), (214, 1496), (217, 1517), (221, 1541), (232, 1598), (241, 1631), (254, 1664), (256, 1670), (258, 1673), (259, 1679), (274, 1760), (279, 1784), (289, 1817), (309, 1877), (315, 1901), (329, 1958), (334, 1964), (350, 2036), (376, 2144), (379, 2165), (399, 2216),

Gene: Orkz_2 Start: 497, Stop: 1939, Start Num: 33
Candidate Starts for Orkz_2:
(Start: 33 @497 has 8 MA's), (71, 575), (80, 614), (89, 644), (93, 650), (143, 833), (151, 860), (152, 863), (162, 899), (164, 911), (168, 923), (176, 953), (184, 980), (210, 1115), (219, 1178), (224, 1202), (264, 1364), (271, 1394), (277, 1412), (297, 1478), (307, 1517), (313, 1544), (315, 1550), (319, 1565), (330, 1604), (334, 1619), (344, 1673), (380, 1832),

Gene: PSonyx_2 Start: 833, Stop: 2164, Start Num: 29
Candidate Starts for PSonyx_2:
(Start: 29 @833 has 3 MA's), (105, 1040), (117, 1088), (127, 1127), (138, 1157), (140, 1163), (158, 1226), (265, 1694), (276, 1733), (372, 2069),

Gene: PapayaSalad_1 Start: 1, Stop: 1272, Start Num: 47
Candidate Starts for PapayaSalad_1:
(Start: 47 @1 has 21 MA's), (91, 130), (95, 139), (113, 208), (129, 262), (224, 631), (233, 676), (251, 718), (325, 994), (342, 1060), (373, 1180), (379, 1222),

Gene: Parvaparticeps_51 Start: 39684, Stop: 38329, Start Num: 29
Candidate Starts for Parvaparticeps_51:
(Start: 29 @39684 has 3 MA's), (34, 39675), (36, 39672), (94, 39519), (106, 39477), (113, 39444), (122, 39414), (125, 39396), (139, 39360), (146, 39339), (158, 39294), (175, 39231), (177, 39219), (179, 39213), (183, 39201), (194, 39153), (199, 39135), (219, 39048), (228, 38994), (232, 38976), (233, 38967), (240, 38946), (254, 38910), (265, 38850), (268, 38835), (290, 38757), (294, 38751), (308, 38709), (314, 38682), (315, 38679), (317, 38673), (359, 38520), (361, 38514), (363, 38511), (365, 38499), (372, 38460), (376, 38436), (379, 38415), (389, 38385),

Gene: PermaG_3 Start: 863, Stop: 2275, Start Num: 24
Candidate Starts for PermaG_3:
(19, 848), (Start: 24 @863 has 22 MA's), (Start: 54 @929 has 15 MA's), (65, 971), (84, 1040), (105, 1100), (127, 1187), (142, 1232), (143, 1235), (154, 1271), (163, 1307), (170, 1334), (177, 1361), (214, 1502), (217, 1523), (232, 1604), (256, 1676), (258, 1679), (259, 1685), (274, 1766), (289, 1823), (309, 1883), (315, 1907), (317, 1913), (329, 1964), (334, 1970), (348, 2036), (370, 2117), (376, 2150), (379, 2171), (396, 2216), (399, 2222),

Gene: PhillyJawn_6 Start: 1195, Stop: 2700, Start Num: 11
Candidate Starts for PhillyJawn_6:
(11, 1195), (Start: 18 @1297 has 1 MA's), (21, 1306), (Start: 40 @1357 has 12 MA's), (Start: 45 @1363 has 2 MA's), (Start: 50 @1372 has 2 MA's), (58, 1393), (74, 1447), (77, 1456), (98, 1528), (104, 1549), (108, 1567), (125, 1636), (138, 1669), (139, 1672), (175, 1801), (177, 1813), (189, 1864), (211, 1936), (222, 1999), (227, 2026), (233, 2059), (234, 2074), (254, 2125), (263, 2176), (281, 2224), (295, 2257), (301, 2275), (306, 2296), (325, 2374), (327, 2389), (334, 2410), (337, 2428), (342, 2449), (361, 2515), (379, 2614), (383, 2623),

Gene: Phingu_8 Start: 1530, Stop: 2858, Start Num: 50
Candidate Starts for Phingu_8:
(Start: 40 @1521 has 12 MA's), (Start: 50 @1530 has 2 MA's), (58, 1551), (74, 1605), (77, 1614), (87, 1656), (98, 1686), (104, 1707), (108, 1725), (125, 1794), (139, 1830), (177, 1971), (189, 2022), (211,

2094), (222, 2157), (227, 2184), (233, 2217), (254, 2283), (263, 2334), (281, 2382), (295, 2415), (301, 2433), (306, 2454), (325, 2532), (327, 2547), (334, 2568), (337, 2586), (342, 2607), (361, 2673), (379, 2772), (383, 2781),

Gene: Phonegingi_6 Start: 1346, Stop: 2689, Start Num: 40
Candidate Starts for Phonegingi_6:
(Start: 40 @1346 has 12 MA's), (Start: 50 @1361 has 2 MA's), (58, 1382), (74, 1436), (77, 1445), (87, 1487), (98, 1517), (104, 1538), (108, 1556), (125, 1625), (138, 1658), (139, 1661), (177, 1802), (189, 1853), (211, 1925), (222, 1988), (227, 2015), (233, 2048), (254, 2114), (263, 2165), (281, 2213), (301, 2264), (305, 2279), (306, 2285), (325, 2363), (327, 2378), (334, 2399), (337, 2417), (342, 2438), (361, 2504), (383, 2612),

Gene: Phroglets_9 Start: 4845, Stop: 6437, Start Num: 20
Candidate Starts for Phroglets_9:
(Start: 20 @4845 has 2 MA's), (39, 4893), (51, 4914), (Start: 56 @4929 has 1 MA's), (59, 4941), (61, 4947), (68, 4974), (87, 5049), (118, 5163), (144, 5247), (157, 5289), (182, 5388), (185, 5394), (190, 5427), (196, 5445), (208, 5505), (218, 5568), (253, 5697), (280, 5826), (306, 5910), (312, 5937), (334, 6024), (337, 6045), (358, 6123), (362, 6132), (377, 6225), (383, 6246), (404, 6300), (409, 6309), (421, 6369), (422, 6414),

Gene: Picard_1 Start: 1, Stop: 1257, Start Num: 47
Candidate Starts for Picard_1:
(Start: 47 @1 has 21 MA's), (63, 43), (76, 76), (91, 130), (113, 208), (121, 235), (129, 262), (143, 307), (168, 397), (171, 409), (179, 439), (207, 532), (224, 631), (251, 718), (257, 733), (284, 853), (357, 1081),

Gene: Piccadilly_2 Start: 538, Stop: 1776, Start Num: 47
Candidate Starts for Piccadilly_2:
(Start: 47 @538 has 21 MA's), (62, 577), (66, 586), (91, 667), (105, 709), (129, 799), (138, 826), (158, 895), (167, 931), (177, 970), (207, 1069), (224, 1168), (233, 1213), (251, 1255), (284, 1390), (302, 1438), (342, 1564), (363, 1630),

Gene: Piccoletto_2 Start: 471, Stop: 1940, Start Num: 30
Candidate Starts for Piccoletto_2:
(1, 132), (Start: 30 @471 has 31 MA's), (85, 621), (96, 648), (134, 792), (162, 888), (164, 900), (184, 969), (202, 1050), (215, 1149), (219, 1167), (229, 1212), (231, 1224), (240, 1257), (285, 1434), (307, 1506), (310, 1521), (314, 1536), (330, 1599), (334, 1614), (379, 1827), (393, 1863),

Gene: Pickles13_5 Start: 1211, Stop: 2560, Start Num: 38
Candidate Starts for Pickles13_5:
(11, 1052), (Start: 18 @1154 has 1 MA's), (21, 1163), (Start: 38 @1211 has 1 MA's), (58, 1253), (74, 1307), (77, 1316), (98, 1388), (108, 1427), (125, 1496), (138, 1529), (139, 1532), (175, 1661), (177, 1673), (189, 1724), (198, 1751), (204, 1766), (211, 1796), (222, 1859), (227, 1886), (233, 1919), (254, 1985), (263, 2036), (281, 2084), (295, 2117), (301, 2135), (306, 2156), (325, 2234), (327, 2249), (334, 2270), (337, 2288), (342, 2309), (361, 2375),

Gene: PigHeaded_12 Start: 5365, Stop: 6909, Start Num: 22
Candidate Starts for PigHeaded_12:
(Start: 22 @5365 has 2 MA's), (39, 5407), (44, 5416), (59, 5455), (86, 5560), (103, 5608), (157, 5794), (161, 5812), (190, 5932), (192, 5941), (196, 5950), (211, 6031), (228, 6127), (230, 6133), (237, 6169), (253, 6208), (274, 6307), (337, 6535), (358, 6616), (379, 6730), (382, 6736), (383, 6739), (403, 6787), (407, 6790),

Gene: Pippa_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for Pippa_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (215, 1143), (219, 1161), (229, 1206), (231, 1218), (307, 1500), (310, 1515), (314, 1530), (346, 1668), (388, 1848), (397, 1866),

Gene: Prairie_2 Start: 428, Stop: 1867, Start Num: 41
Candidate Starts for Prairie_2:
(Start: 41 @428 has 7 MA's), (151, 791), (164, 842), (202, 992), (216, 1097), (237, 1193), (240, 1199), (270, 1322), (307, 1448),

Gene: PrincessTrina_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for PrincessTrina_3:
(17, 1240), (Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: REQ3_35 Start: 16180, Stop: 17478, Start Num: 49
Candidate Starts for REQ3_35:
(49, 16180), (121, 16426), (124, 16438), (158, 16549), (177, 16624), (194, 16690), (209, 16729), (227, 16837), (229, 16846), (240, 16891), (251, 16912), (254, 16921), (272, 17008), (302, 17095), (320, 17134), (336, 17194), (342, 17224), (348, 17251), (365, 17302), (373, 17344), (386, 17404), (411, 17467),

Gene: RainyPolka_3 Start: 1174, Stop: 2544, Start Num: 54
Candidate Starts for RainyPolka_3:
(Start: 54 @1174 has 15 MA's), (64, 1213), (73, 1240), (79, 1270), (83, 1282), (93, 1309), (149, 1498), (157, 1525), (158, 1531), (166, 1564), (168, 1570), (172, 1588), (185, 1630), (186, 1633), (193, 1672), (195, 1678), (231, 1855), (247, 1906), (259, 1936), (269, 1999), (278, 2032), (280, 2038), (291, 2071), (300, 2098), (303, 2110), (334, 2224), (343, 2275), (344, 2278), (365, 2347), (367, 2359), (373, 2395), (376, 2416), (407, 2500), (416, 2533),

Gene: Raleigh_1 Start: 1, Stop: 1251, Start Num: 47
Candidate Starts for Raleigh_1:
(Start: 47 @1 has 21 MA's), (76, 76), (91, 130), (121, 235), (129, 262), (158, 358), (163, 379), (168, 397), (173, 415), (177, 433), (224, 631), (233, 676), (251, 718), (284, 853), (325, 961), (342, 1027), (374, 1153),

Gene: Rasovi_3 Start: 869, Stop: 2281, Start Num: 24
Candidate Starts for Rasovi_3:
(10, 728), (Start: 24 @869 has 22 MA's), (48, 920), (Start: 54 @935 has 15 MA's), (65, 977), (84, 1046), (87, 1055), (105, 1106), (116, 1151), (127, 1193), (139, 1226), (142, 1238), (154, 1277), (170, 1340), (177, 1367), (199, 1451), (214, 1508), (217, 1529), (222, 1559), (256, 1682), (258, 1685), (259, 1691), (274, 1772), (279, 1796), (282, 1808), (289, 1829), (293, 1835), (309, 1889), (315, 1913), (329, 1970), (334, 1976), (350, 2048), (376, 2156), (389, 2207), (396, 2222), (399, 2228),

Gene: Rootkit7_3 Start: 857, Stop: 2269, Start Num: 24
Candidate Starts for Rootkit7_3:
(19, 842), (Start: 24 @857 has 22 MA's), (48, 908), (Start: 54 @923 has 15 MA's), (84, 1034), (87, 1043), (105, 1094), (116, 1139), (127, 1181), (154, 1265), (163, 1301), (170, 1328), (177, 1355), (197,

1427), (199, 1439), (214, 1496), (217, 1517), (232, 1598), (256, 1670), (258, 1673), (259, 1679), (274, 1760), (279, 1784), (289, 1817), (315, 1901), (329, 1958), (334, 1964), (376, 2144), (379, 2165), (396, 2210), (399, 2216),

Gene: RosiePosie_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for RosiePosie_3:
(Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (202, 1882), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: SBlackberry_3 Start: 857, Stop: 2269, Start Num: 24
Candidate Starts for SBlackberry_3:
(19, 842), (Start: 24 @857 has 22 MA's), (48, 908), (Start: 54 @923 has 15 MA's), (65, 965), (84, 1034), (87, 1043), (105, 1094), (116, 1139), (127, 1181), (154, 1265), (163, 1301), (170, 1328), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (217, 1517), (256, 1670), (258, 1673), (259, 1679), (274, 1760), (279, 1784), (289, 1817), (315, 1901), (329, 1958), (334, 1964), (350, 2036), (376, 2144), (396, 2210), (399, 2216),

Gene: SV1_1 Start: 1, Stop: 1263, Start Num: 47
Candidate Starts for SV1_1:
(Start: 47 @1 has 21 MA's), (63, 43), (91, 130), (129, 262), (143, 307), (168, 397), (171, 409), (179, 439), (205, 532), (213, 577), (224, 637), (251, 724), (284, 859), (310, 913), (373, 1153), (374, 1159),

Gene: Salete_3 Start: 1180, Stop: 2550, Start Num: 54
Candidate Starts for Salete_3:
(Start: 54 @1180 has 15 MA's), (64, 1219), (72, 1243), (73, 1246), (79, 1276), (83, 1288), (93, 1315), (116, 1396), (124, 1426), (138, 1468), (149, 1504), (157, 1531), (158, 1537), (166, 1570), (168, 1576), (169, 1585), (185, 1636), (186, 1639), (193, 1678), (195, 1684), (222, 1813), (231, 1861), (259, 1942), (269, 2005), (280, 2044), (291, 2077), (303, 2116), (335, 2236), (343, 2281), (344, 2284), (365, 2353), (373, 2401), (376, 2422), (379, 2443), (413, 2524), (416, 2539),

Gene: Scavito_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for Scavito_3:
(Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (172, 1762), (176, 1774), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (202, 1882), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Schlegelian_2 Start: 538, Stop: 1776, Start Num: 47
Candidate Starts for Schlegelian_2:
(Start: 47 @538 has 21 MA's), (62, 577), (66, 586), (91, 667), (105, 709), (129, 799), (138, 826), (158, 895), (167, 931), (177, 970), (207, 1069), (224, 1168), (233, 1213), (251, 1255), (284, 1390), (302, 1438), (342, 1564), (363, 1630),

Gene: ScoobySnack_5 Start: 1058, Stop: 2557, Start Num: 11
Candidate Starts for ScoobySnack_5:
(11, 1058), (Start: 18 @1160 has 1 MA's), (21, 1169), (Start: 40 @1220 has 12 MA's), (Start: 50 @1229 has 2 MA's), (58, 1250), (74, 1304), (77, 1313), (98, 1385), (104, 1406), (108, 1424), (125, 1493), (139,

1529), (175, 1658), (177, 1670), (189, 1721), (204, 1763), (211, 1793), (222, 1856), (227, 1883), (233, 1916), (254, 1982), (263, 2033), (271, 2057), (281, 2081), (301, 2132), (306, 2153), (325, 2231), (327, 2246), (334, 2267), (337, 2285), (342, 2306), (361, 2372), (383, 2480),

Gene: Shade_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for Shade_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (107, 690), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (219, 1161), (229, 1206), (231, 1218), (271, 1377), (307, 1500), (310, 1515), (314, 1530), (341, 1647), (346, 1668), (367, 1743), (388, 1848), (397, 1866),

Gene: Shocker_17 Start: 6811, Stop: 8391, Start Num: 20
Candidate Starts for Shocker_17:
(Start: 20 @6811 has 2 MA's), (39, 6862), (42, 6868), (75, 6970), (86, 7015), (87, 7018), (108, 7096), (110, 7105), (112, 7111), (117, 7129), (120, 7141), (130, 7177), (159, 7273), (167, 7303), (181, 7357), (182, 7360), (186, 7369), (206, 7474), (220, 7555), (228, 7597), (235, 7633), (259, 7696), (277, 7792), (283, 7819), (292, 7840), (296, 7852), (331, 7975), (332, 7978), (333, 7981), (336, 7996), (347, 8056), (352, 8074), (383, 8215), (415, 8302), (421, 8332), (423, 8386),

Gene: Sicarius2_2 Start: 459, Stop: 1907, Start Num: 30
Candidate Starts for Sicarius2_2:
(Start: 30 @459 has 31 MA's), (85, 591), (96, 618), (107, 666), (131, 753), (162, 858), (164, 870), (168, 882), (184, 939), (193, 981), (219, 1137), (229, 1182), (231, 1194), (270, 1350), (285, 1404), (307, 1476), (310, 1491), (314, 1506), (334, 1584), (346, 1644), (387, 1818), (410, 1869),

Gene: SoJo_1 Start: 1, Stop: 1272, Start Num: 47
Candidate Starts for SoJo_1:
(Start: 47 @1 has 21 MA's), (Start: 57 @19 has 1 MA's), (91, 130), (105, 172), (108, 187), (113, 208), (114, 211), (121, 235), (129, 262), (138, 289), (168, 397), (179, 439), (191, 493), (207, 532), (211, 553), (213, 571), (224, 631), (251, 718), (265, 784), (272, 811), (284, 853), (310, 940), (311, 943), (342, 1060), (348, 1087), (350, 1093), (373, 1180), (378, 1219),

Gene: Sonny_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for Sonny_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (107, 690), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (219, 1161), (229, 1206), (231, 1218), (271, 1377), (307, 1500), (310, 1515), (314, 1530), (341, 1647), (346, 1668), (367, 1743), (388, 1848), (397, 1866),

Gene: Spocter_2 Start: 605, Stop: 1903, Start Num: 43
Candidate Starts for Spocter_2:
(34, 599), (Start: 43 @605 has 6 MA's), (59, 632), (60, 635), (62, 650), (76, 686), (94, 743), (97, 755), (101, 773), (113, 818), (121, 845), (122, 848), (175, 1034), (177, 1046), (185, 1067), (215, 1199), (233, 1289), (238, 1307), (247, 1328), (251, 1331), (252, 1334), (262, 1388), (303, 1523), (310, 1547), (328, 1616), (350, 1697), (379, 1826), (390, 1856), (392, 1859), (403, 1886),

Gene: StevieBAY_2 Start: 467, Stop: 1936, Start Num: 30
Candidate Starts for StevieBAY_2:
(Start: 30 @467 has 31 MA's), (85, 620), (96, 647), (131, 782), (134, 791), (136, 800), (162, 887), (164, 899), (168, 911), (184, 968), (202, 1049), (215, 1148), (219, 1166), (229, 1211), (231, 1223), (262, 1346), (271, 1382), (307, 1505), (310, 1520), (314, 1535), (334, 1613), (367, 1745), (371, 1775), (375, 1799), (379, 1823), (384, 1832), (388, 1850), (397, 1868),

Gene: Sucha_3 Start: 857, Stop: 2254, Start Num: 24
Candidate Starts for Sucha_3:
(19, 842), (Start: 24 @857 has 22 MA's), (87, 1043), (105, 1094), (116, 1139), (142, 1226), (143, 1229), (154, 1265), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (221, 1541), (232, 1598), (240, 1628), (246, 1646), (254, 1664), (256, 1670), (259, 1679), (269, 1742), (271, 1748), (275, 1766), (279, 1784), (282, 1796), (289, 1817), (305, 1862), (309, 1877), (315, 1901), (317, 1907), (334, 1964), (348, 2030), (350, 2036), (370, 2111), (378, 2162), (379, 2165), (413, 2237),

Gene: SunnyJune_2 Start: 511, Stop: 1968, Start Num: 29
Candidate Starts for SunnyJune_2:
(Start: 29 @511 has 3 MA's), (72, 607), (89, 673), (93, 679), (117, 772), (153, 895), (176, 982), (184, 1009), (202, 1090), (237, 1291), (260, 1381), (297, 1507), (307, 1546), (317, 1585), (330, 1633), (334, 1648), (344, 1702), (356, 1735), (361, 1753), (367, 1780), (381, 1861), (388, 1885), (414, 1948), (416, 1957),

Gene: Sweetums_9 Start: 2260, Stop: 3609, Start Num: 54
Candidate Starts for Sweetums_9:
(Start: 54 @2260 has 15 MA's), (105, 2425), (113, 2461), (116, 2470), (140, 2533), (168, 2635), (175, 2659), (193, 2734), (232, 2905), (242, 2953), (243, 2956), (251, 3004), (256, 3019), (299, 3190), (312, 3244), (321, 3277), (325, 3295), (327, 3310), (337, 3352), (338, 3355), (350, 3406), (351, 3409), (359, 3433), (363, 3442), (376, 3517), (380, 3541), (389, 3568), (391, 3571), (396, 3583),

Gene: TP1604_3 Start: 1180, Stop: 2550, Start Num: 54
Candidate Starts for TP1604_3:
(Start: 54 @1180 has 15 MA's), (64, 1219), (72, 1243), (73, 1246), (79, 1276), (83, 1288), (93, 1315), (116, 1396), (124, 1426), (138, 1468), (149, 1504), (157, 1531), (158, 1537), (166, 1570), (168, 1576), (169, 1585), (185, 1636), (186, 1639), (193, 1678), (195, 1684), (222, 1813), (231, 1861), (259, 1942), (269, 2005), (278, 2038), (280, 2044), (291, 2077), (303, 2116), (335, 2236), (343, 2281), (344, 2284), (365, 2353), (373, 2401), (376, 2422), (379, 2443), (413, 2524), (416, 2539),

Gene: TaeYoung_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for TaeYoung_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (107, 690), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (215, 1143), (219, 1161), (229, 1206), (231, 1218), (271, 1377), (307, 1500), (310, 1515), (314, 1530), (346, 1668), (367, 1743), (385, 1833), (388, 1848), (397, 1866),

Gene: Taotie_2 Start: 833, Stop: 2164, Start Num: 29
Candidate Starts for Taotie_2:
(Start: 29 @833 has 3 MA's), (105, 1040), (117, 1088), (127, 1127), (138, 1157), (140, 1163), (158, 1226), (265, 1694), (276, 1733), (372, 2069),

Gene: Teng_8 Start: 2189, Stop: 3538, Start Num: 54
Candidate Starts for Teng_8:
(2, 1832), (3, 1844), (5, 1907), (Start: 54 @2189 has 15 MA's), (105, 2354), (113, 2390), (116, 2399), (140, 2462), (168, 2564), (175, 2588), (193, 2663), (232, 2834), (242, 2882), (243, 2885), (250, 2930), (251, 2933), (256, 2948), (299, 3119), (312, 3173), (321, 3206), (325, 3224), (327, 3239), (337, 3281), (338, 3284), (350, 3335), (351, 3338), (359, 3362), (363, 3371), (376, 3446), (380, 3470), (389, 3497), (391, 3500), (396, 3512),

Gene: Timinator_2 Start: 467, Stop: 1936, Start Num: 30
Candidate Starts for Timinator_2:

(Start: 30 @467 has 31 MA's), (85, 620), (96, 647), (131, 782), (134, 791), (136, 800), (162, 887), (164, 899), (168, 911), (184, 968), (202, 1049), (215, 1148), (219, 1166), (229, 1211), (231, 1223), (262, 1346), (271, 1382), (307, 1505), (310, 1520), (314, 1535), (334, 1613), (367, 1745), (371, 1775), (375, 1799), (379, 1823), (384, 1832), (388, 1850), (397, 1868),

Gene: TinyDot_2 Start: 507, Stop: 1817, Start Num: 57
Candidate Starts for TinyDot_2:
(27, 441), (Start: 57 @507 has 1 MA's), (105, 669), (117, 717), (119, 726), (143, 792), (159, 849), (174, 903), (224, 1197), (233, 1242), (241, 1266), (251, 1284), (263, 1344), (331, 1533), (365, 1653), (379, 1740), (396, 1785), (402, 1797),

Gene: ToastyFinz_1 Start: 1, Stop: 1260, Start Num: 47
Candidate Starts for ToastyFinz_1:
(Start: 47 @1 has 21 MA's), (76, 76), (91, 130), (105, 172), (129, 262), (177, 433), (207, 532), (224, 631), (229, 652), (246, 709), (257, 733), (263, 775), (284, 853), (373, 1147),

Gene: Tophat_3 Start: 1291, Stop: 2769, Start Num: 28
Candidate Starts for Tophat_3:
(17, 1240), (Start: 28 @1291 has 18 MA's), (69, 1387), (81, 1438), (84, 1450), (89, 1465), (93, 1471), (110, 1540), (124, 1591), (131, 1615), (142, 1651), (164, 1732), (168, 1744), (172, 1762), (176, 1774), (178, 1783), (184, 1801), (186, 1804), (193, 1843), (198, 1858), (204, 1891), (230, 2047), (231, 2056), (240, 2089), (247, 2113), (250, 2119), (251, 2122), (258, 2140), (262, 2179), (271, 2215), (285, 2266), (292, 2284), (305, 2326), (307, 2338), (317, 2377), (323, 2401), (330, 2431), (331, 2434), (338, 2470), (366, 2572), (371, 2611), (381, 2662), (398, 2704), (414, 2749),

Gene: Tubberson_1 Start: 1, Stop: 1272, Start Num: 47
Candidate Starts for Tubberson_1:
(Start: 47 @1 has 21 MA's), (Start: 57 @19 has 1 MA's), (91, 130), (105, 172), (113, 208), (114, 211), (121, 235), (129, 262), (138, 289), (168, 397), (179, 439), (191, 493), (207, 532), (211, 553), (213, 571), (224, 631), (251, 718), (265, 784), (272, 811), (284, 853), (310, 940), (311, 943), (342, 1060), (348, 1087), (350, 1093), (373, 1180), (378, 1219),

Gene: TurboVicky_3 Start: 857, Stop: 2269, Start Num: 24
Candidate Starts for TurboVicky_3:
(19, 842), (Start: 24 @857 has 22 MA's), (48, 908), (Start: 54 @923 has 15 MA's), (84, 1034), (87, 1043), (105, 1094), (116, 1139), (127, 1181), (154, 1265), (163, 1301), (170, 1328), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (217, 1517), (232, 1598), (256, 1670), (258, 1673), (259, 1679), (274, 1760), (279, 1784), (289, 1817), (315, 1901), (329, 1958), (334, 1964), (376, 2144), (379, 2165), (396, 2210), (399, 2216),

Gene: Typher_3 Start: 860, Stop: 2272, Start Num: 24
Candidate Starts for Typher_3:
(Start: 24 @860 has 22 MA's), (48, 911), (Start: 54 @926 has 15 MA's), (65, 968), (84, 1037), (87, 1046), (105, 1097), (116, 1142), (127, 1184), (154, 1268), (163, 1304), (170, 1331), (177, 1358), (197, 1430), (199, 1442), (214, 1499), (217, 1520), (256, 1673), (258, 1676), (259, 1682), (274, 1763), (279, 1787), (289, 1820), (315, 1904), (329, 1961), (334, 1967), (350, 2039), (376, 2147), (396, 2213), (399, 2219),

Gene: VanLee_3 Start: 889, Stop: 2223, Start Num: 43
Candidate Starts for VanLee_3:
(Start: 43 @889 has 6 MA's), (60, 928), (78, 994), (94, 1036), (104, 1075), (105, 1078), (117, 1126), (155, 1252), (159, 1270), (177, 1339), (189, 1390), (232, 1588), (241, 1621), (251, 1645), (260, 1696), (269, 1732), (312, 1873), (316, 1888), (324, 1918), (328, 1939), (341, 1984), (342, 1987), (348, 2014),

Gene: Vibaki_2 Start: 498, Stop: 1949, Start Num: 33
Candidate Starts for Vibaki_2:
(Start: 33 @498 has 8 MA's), (164, 921), (184, 990), (193, 1032), (202, 1071), (215, 1170), (230, 1236), (231, 1245), (266, 1383), (297, 1488), (303, 1509), (307, 1527), (361, 1734), (364, 1740), (412, 1917), (416, 1938),

Gene: Violeta_6 Start: 1348, Stop: 2685, Start Num: 40
Candidate Starts for Violeta_6:
(11, 1186), (Start: 18 @1288 has 1 MA's), (21, 1297), (Start: 40 @1348 has 12 MA's), (Start: 50 @1357 has 2 MA's), (58, 1378), (74, 1432), (77, 1441), (87, 1483), (98, 1513), (104, 1534), (108, 1552), (122, 1603), (125, 1621), (138, 1654), (139, 1657), (175, 1786), (177, 1798), (189, 1849), (211, 1921), (222, 1984), (227, 2011), (233, 2044), (254, 2110), (263, 2161), (281, 2209), (295, 2242), (301, 2260), (306, 2281), (325, 2359), (327, 2374), (334, 2395), (337, 2413), (342, 2434), (361, 2500), (379, 2599), (383, 2608),

Gene: Vitus_2 Start: 471, Stop: 1922, Start Num: 33
Candidate Starts for Vitus_2:
(Start: 33 @471 has 8 MA's), (150, 837), (164, 894), (184, 963), (202, 1044), (210, 1098), (212, 1113), (215, 1143), (229, 1206), (230, 1209), (231, 1218), (245, 1266), (266, 1356), (285, 1428), (297, 1461), (303, 1482), (304, 1485), (307, 1500), (310, 1515), (330, 1587), (361, 1707), (412, 1890), (416, 1911),

Gene: Vondra_2 Start: 538, Stop: 1776, Start Num: 47
Candidate Starts for Vondra_2:
(Start: 47 @538 has 21 MA's), (62, 577), (66, 586), (91, 667), (105, 709), (129, 799), (138, 826), (158, 895), (167, 931), (177, 970), (207, 1069), (224, 1168), (233, 1213), (251, 1255), (284, 1390), (295, 1417), (325, 1498), (342, 1564),

Gene: Warren_7 Start: 1536, Stop: 2879, Start Num: 40
Candidate Starts for Warren_7:
(11, 1374), (21, 1485), (Start: 40 @1536 has 12 MA's), (Start: 45 @1542 has 2 MA's), (Start: 50 @1551 has 2 MA's), (58, 1572), (74, 1626), (77, 1635), (98, 1707), (104, 1728), (108, 1746), (125, 1815), (138, 1848), (139, 1851), (175, 1980), (177, 1992), (189, 2043), (211, 2115), (222, 2178), (227, 2205), (233, 2238), (254, 2304), (263, 2355), (271, 2379), (281, 2403), (295, 2436), (301, 2454), (306, 2475), (325, 2553), (327, 2568), (334, 2589), (337, 2607), (342, 2628), (361, 2694), (379, 2793), (383, 2802),

Gene: Winchester007_6 Start: 1357, Stop: 2700, Start Num: 40
Candidate Starts for Winchester007_6:
(11, 1195), (Start: 18 @1297 has 1 MA's), (21, 1306), (Start: 40 @1357 has 12 MA's), (Start: 45 @1363 has 2 MA's), (Start: 50 @1372 has 2 MA's), (58, 1393), (74, 1447), (77, 1456), (98, 1528), (104, 1549), (108, 1567), (125, 1636), (138, 1669), (139, 1672), (175, 1801), (177, 1813), (189, 1864), (211, 1936), (222, 1999), (227, 2026), (233, 2059), (234, 2074), (254, 2125), (263, 2176), (281, 2224), (295, 2257), (301, 2275), (306, 2296), (325, 2374), (327, 2389), (334, 2410), (337, 2428), (342, 2449), (361, 2515), (379, 2614), (383, 2623),

Gene: Wrackline_13 Start: 2934, Stop: 4277, Start Num: 56
Candidate Starts for Wrackline_13:
(Start: 56 @2934 has 1 MA's), (105, 3093), (110, 3117), (113, 3129), (116, 3138), (140, 3201), (143, 3213), (168, 3303), (175, 3327), (177, 3339), (228, 3561), (232, 3579), (236, 3606), (244, 3630), (251, 3663), (254, 3672), (256, 3678), (265, 3732), (267, 3741), (273, 3768), (301, 3864), (313, 3918), (321, 3945), (325, 3963), (327, 3978), (342, 4041), (350, 4074), (351, 4077), (373, 4164), (376, 4185), (380, 4209),

Gene: Wyborn_2 Start: 459, Stop: 1907, Start Num: 30
Candidate Starts for Wyborn_2:
(Start: 30 @459 has 31 MA's), (85, 591), (96, 618), (107, 666), (131, 753), (162, 858), (164, 870), (168, 882), (184, 939), (219, 1137), (229, 1182), (231, 1194), (270, 1350), (285, 1404), (307, 1476), (310, 1491), (314, 1506), (334, 1584), (346, 1644), (387, 1818), (410, 1869),

Gene: Xkcd426_3 Start: 1232, Stop: 2599, Start Num: 54
Candidate Starts for Xkcd426_3:
(Start: 54 @1232 has 15 MA's), (84, 1346), (86, 1352), (93, 1367), (116, 1448), (124, 1478), (147, 1547), (160, 1598), (162, 1604), (201, 1760), (202, 1763), (215, 1838), (240, 1946), (241, 1949), (248, 1967), (269, 2057), (291, 2129), (322, 2228), (327, 2258), (340, 2315), (343, 2330), (371, 2444), (376, 2471),

Gene: YDN12_3 Start: 1178, Stop: 2548, Start Num: 54
Candidate Starts for YDN12_3:
(Start: 54 @1178 has 15 MA's), (64, 1217), (73, 1244), (79, 1274), (83, 1286), (93, 1313), (116, 1394), (138, 1466), (149, 1502), (157, 1529), (158, 1535), (166, 1568), (168, 1574), (172, 1592), (185, 1634), (186, 1637), (187, 1640), (193, 1676), (195, 1682), (222, 1811), (231, 1859), (259, 1940), (269, 2003), (278, 2036), (280, 2042), (291, 2075), (303, 2114), (334, 2228), (335, 2234), (343, 2279), (344, 2282), (365, 2351), (373, 2399), (376, 2420), (379, 2441), (413, 2522), (416, 2537),

Gene: Zanella_3 Start: 857, Stop: 2269, Start Num: 24
Candidate Starts for Zanella_3:
(19, 842), (Start: 24 @857 has 22 MA's), (48, 908), (Start: 54 @923 has 15 MA's), (84, 1034), (87, 1043), (105, 1094), (116, 1139), (127, 1181), (142, 1226), (154, 1265), (163, 1301), (170, 1328), (177, 1355), (197, 1427), (199, 1439), (214, 1496), (217, 1517), (256, 1670), (258, 1673), (259, 1679), (274, 1760), (279, 1784), (289, 1817), (315, 1901), (329, 1958), (334, 1964), (376, 2144), (379, 2165), (396, 2210), (399, 2216),

Gene: Zartrosa_2 Start: 477, Stop: 1934, Start Num: 30
Candidate Starts for Zartrosa_2:
(Start: 30 @477 has 31 MA's), (85, 615), (96, 642), (107, 690), (131, 777), (134, 786), (162, 882), (164, 894), (168, 906), (184, 963), (193, 1005), (202, 1044), (219, 1161), (229, 1206), (231, 1218), (271, 1377), (307, 1500), (310, 1515), (314, 1530), (341, 1647), (346, 1668), (367, 1743), (385, 1833), (388, 1848), (397, 1866),