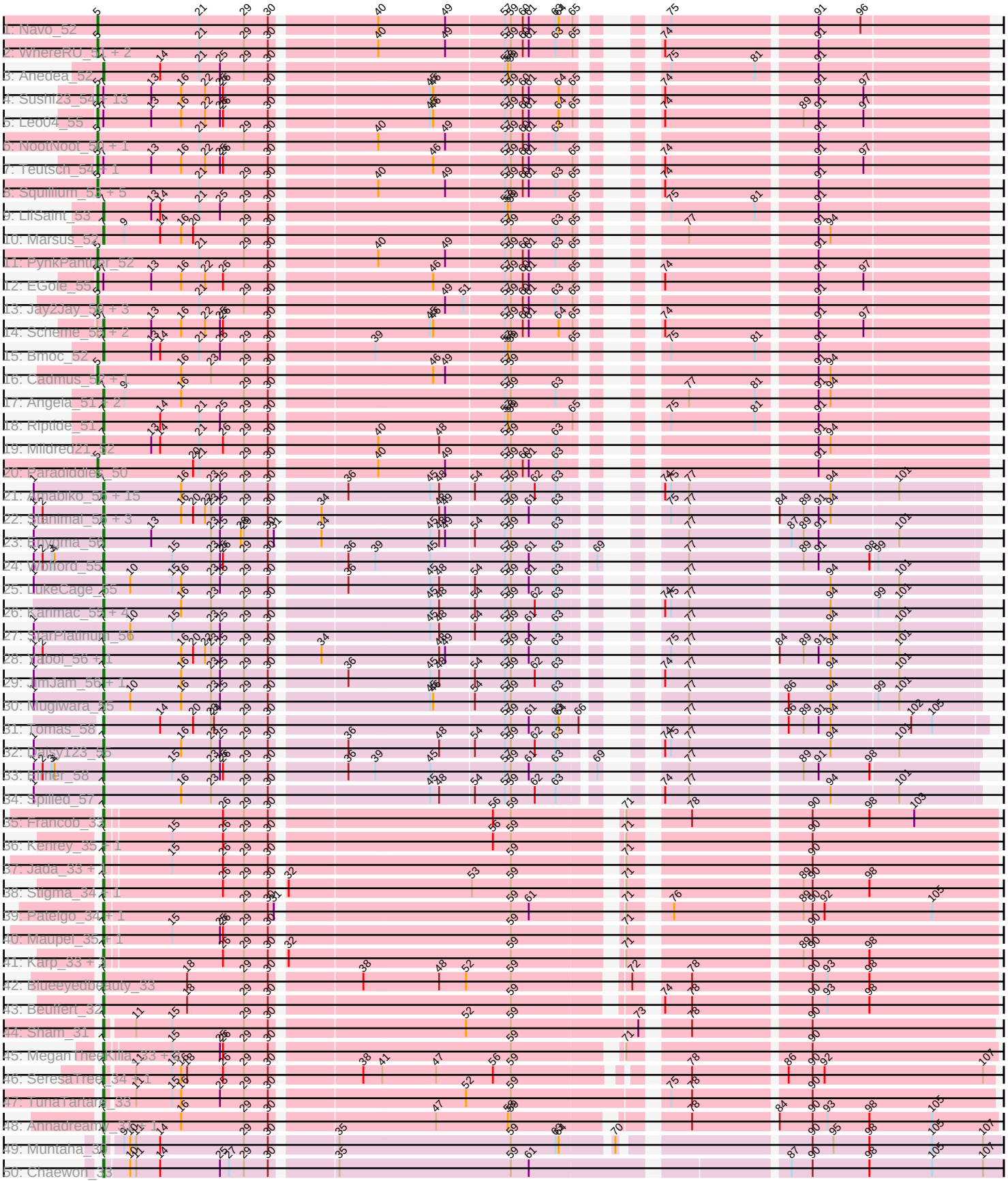
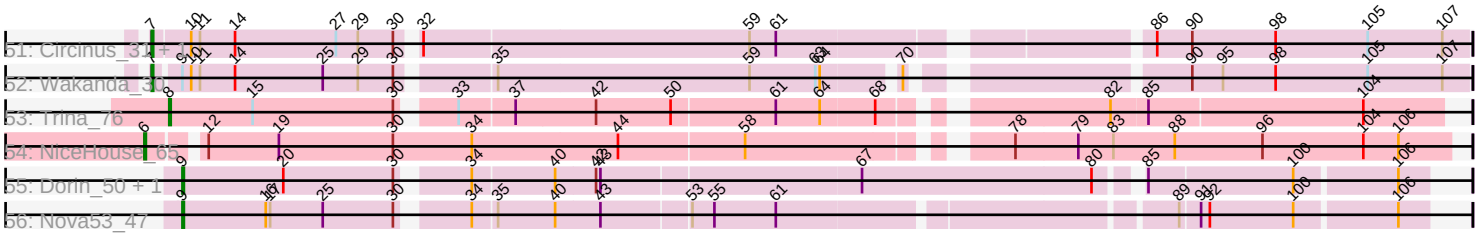
Pham 340922



Pham 340922


51: Circinus_31 + 1
52: Wakanda_30
53: Trina_76
54: NiceHouse_65
55: Donn_50 + 1
56: Nova53_47

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 340922 Report

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

Pham number 340922 has 124 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Navo_52
• Track 2 : WhereRU_51, Persimmon_50, Davielle_51
• Track 3 : Anedea_52
• Track 4 : Sushi23_54, Shuckle_52, Lululemon_53, BlueOtter_54, Cross_54, Cursive_52, Larnav_54, ArianaSWT_54, HangryHippo_54, Coogler_54, PacManQ_53, Peebs_53, Samisti12_54, Pepperwood_54
• Track 5 : Leo04_55
• Track 6 : NootNoot_50, Bartholomune_52
• Track 7 : Teutsch_54, Tribute_52
• Track 8 : Squillium_53, Liandry_53, Eliot67_51, Braelyn_53, FreddyDRoo_52, PinkiePie_52
• Track 9 : LilSaint_53
• Track 10 : Marsus_52
• Track 11 : PynkPanther_52
• Track 12 : EGole_55
• Track 13 : Jay2Jay_59, Warpy_58, Targaryen_55, Evy_55
• Track 14 : Scheme_55, Watermoore_54, WashU_54
• Track 15 : Bmoc_52
• Track 16 : Cadmus_52, Daubenski_55
• Track 17 : Angela_51, MulchMansion_51, LilMartin_51
• Track 18 : Riptide_51
• Track 19 : Mildred21_52
• Track 20 : Paradiddles_50
• Track 21 : Amabiko_56, AcciDwight_60, TomSawyer_54, Gibbi_60, Rikishi_56, Jollison_55, Wipeout_54, Birchlyn_53, Bordeaux_54, Spelly_56, Starbow_54, Battuta_54, PumpkinSpice_55, Tuesday_60, Quaran19_56, SaltySpitoon_56
• Track 22 : Stanimal_56, Sollertia_56, Genie2_56, AngryGiraffe_55
• Track 23 : Enygma_56
• Track 24 : Wofford_55
• Track 25 : LukeCage_55
• Track 26 : Karimac_55, Brizzy_55, KentuckyRacer_56, IchabodCrane_53, CeilingFan_55
• Track 27 : StarPlatinum_56
• Track 28 : Yaboi_56, BoomerJR_56
• Track 29 : JimJam_56, MindFlayer_54
• Track 30 : Mugiwara_55
• Track 31 : Tomas_58

• Track 32 : Daisy123_55
• Track 33 : Elmer_58
• Track 34 : Spilled_57
• Track 35 : Francob_33
• Track 36 : Kenrey_35, Phredrick_33
• Track 37 : Jada_33, Forrest_35
• Track 38 : Stigma_34, SparkleGoddess_34
• Track 39 : Patelgo_34, Moab_34
• Track 40 : Maupel_35, Gilson_35
• Track 41 : Karp_33, Belfort_35, Comrade_34, Westy_34
• Track 42 : Blueeyedbeauty_33
• Track 43 : Beuffert_32
• Track 44 : Sham_31
• Track 45 : MeganTheeKilla_33, DeluluLabubu_33, Emma1919_35
• Track 46 : SeresaTree_34, Faust_34
• Track 47 : TunaTartare_33
• Track 48 : Annadreamy_31, Limpid_31
• Track 49 : Muntaha_30
• Track 50 : Chaewon_33
• Track 51 : Circinus_31, BillNye_29
• Track 52 : Wakanda_30
• Track 53 : Trina_76
• Track 54 : NiceHouse_65
• Track 55 : Dorin_50, Francesca_49
• Track 56 : Nova53_47

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

The start number called the most often in the published annotations is 7, it was called in 76 of the 118 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AcciDwight_60, Amabiko_56, Anedea_52, Angela_51, AngryGiraffe_55, Annadreamy_31, Battuta_54, Belfort_35, Beuffert_32, BillNye_29, Birchlyn_53, Blueeyedbeauty_33, Bmoc_52, BoomerJR_56, Bordeaux_54, Brizzy_55, CeilingFan_55, Chaewon_33, Circinus_31, Comrade_34, Daisy123_55, DeluluLabubu_33, Elmer_58, Emma1919_35, Enygma_56, Faust_34, Forrest_35, Francob_33, Genie2_56, Gibbi_60, Gilson_35, IchabodCrane_53, Jada_33, JimJam_56, Jollison_55, Karimac_55, Karp_33, Kenrey_35, KentuckyRacer_56, LilMartin_51, LilSaint_53, Limpid_31, LukeCage_55, Marsus_52, Maupel_35, MeganTheeKilla_33, Mildred21_52, MindFlayer_54, Moab_34, Mugiwara_55, MulchMansion_51, Muntaha_30, Patelgo_34, Phredrick_33, PumpkinSpice_55, Quaran19_56, Rikishi_56, Riptide_51, SaltySpitoon_56, Scheme_55, SeresaTree_34, Sham_31, Sollertia_56, SparkleGoddess_34, Spelly_56, Spilled_57, Stanimal_56, StarPlatinum_56, Starbow_54, Stigma_34, TomSawyer_54, Tomas_58, Tuesday_60, TunaTartare_33, Wakanda_30, WashU_54, Watermoore_54, Westy_34, Wipeout_54, Wofford_55, Yaboi_56,

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

• ArianaSWT_54, BlueOtter_54, Coogler_54, Cross_54, Cursive_52, EGole_55, HangryHippo_54, Larnav_54, Leo04_55, Lululemon_53, PacManQ_53, Peebs_53, Pepperwood_54, Samisti12_54, Shuckle_52, Sushi23_54, Teutsch_54, Tribute_52,

Genes that do not have the "Most Annotated" start:
• Bartholomune_52, Braelyn_53, Cadmus_52, Daubenski_55, Davielle_51, Dorin_50, Eliot67_51, Evy_55, Francesca_49, FreddyDRoo_52, Jay2Jay_59, Liandry_53, Navo_52, NiceHouse_65, NootNoot_50, Nova53_47, Paradiddles_50, Persimmon_50, PinkiePie_52, PynkPanther_52, Squillium_53, Targaryen_55, Trina_76, Warpy_58, WhereRU_51,

Summary by start number:

Start 5:
• Found in 41 of 124 (33.1%) of genes in pham
• Manual Annotations of this start: 37 of 118
• Called 92.7% of time when present
• Phage (with cluster) where this start called: ArianaSWT_54 (BE1), Bartholomune_52 (BE1), BlueOtter_54 (BE1), Braelyn_53 (BE1), Cadmus_52 (BE1), Coogler_54 (BE1), Cross_54 (BE1), Cursive_52 (BE1), Daubenski_55 (BE1), Davielle_51 (BE1), EGole_55 (BE1), Eliot67_51 (BE1), Evy_55 (BE1), FreddyDRoo_52 (BE1), HangryHippo_54 (BE1), Jay2Jay_59 (BE1), Larnav_54 (BE1), Leo04_55 (BE1), Liandry_53 (BE1), Lululemon_53 (BE1), Navo_52 (BE1), NootNoot_50 (BE1), PacManQ_53 (BE1), Paradiddles_50 (BE1), Peebs_53 (BE1), Pepperwood_54 (BE1), Persimmon_50 (BE1), PinkiePie_52 (BE1), PynkPanther_52 (BE1), Samisti12_54 (BE1), Shuckle_52 (BE1), Squillium_53 (BE1), Sushi23_54 (BE1), Targaryen_55 (BE1), Teutsch_54 (BE1), Tribute_52 (BE1), Warpy_58 (BE1), WhereRU_51 (BE1),

Start 6:
• Found in 1 of 124 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 118
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NiceHouse_65 (CE),

Start 7:
• Found in 99 of 124 (79.8%) of genes in pham
• Manual Annotations of this start: 76 of 118
• Called 81.8% of time when present
• Phage (with cluster) where this start called: AcciDwight_60 (BE2), Amabiko_56 (BE2), Anedea_52 (BE1), Angela_51 (BE1), AngryGiraffe_55 (BE2), Annadreamy_31 (BK1), Battuta_54 (BE2), Belfort_35 (BK1), Beuffert_32 (BK1), BillNye_29 (BK2), Birchlyn_53 (BE2), Blueeyedbeauty_33 (BK1), Bmoc_52 (BE1), BoomerJR_56 (BE2), Bordeaux_54 (BE2), Brizzy_55 (BE2), CeilingFan_55 (BE2), Chaewon_33 (BK2), Circinus_31 (BK2), Comrade_34 (BK1), Daisy123_55 (BE2), DeluluLabubu_33 (BK1), Elmer_58 (BE2), Emma1919_35 (BK1), Enygma_56 (BE2), Faust_34 (BK1), Forrest_35 (BK1), Francob_33 (BK1), Genie2_56 (BE2), Gibbi_60 (BE2), Gilson_35 (BK1), IchabodCrane_53 (BE2), Jada_33 (BK1), JimJam_56 (BE2), Jollison_55 (BE2), Karimac_55 (BE2), Karp_33 (BK1), Kenrey_35 (BK1), KentuckyRacer_56 (BE2), LilMartin_51 (BE1), LilSaint_53 (BE1), Limpid_31 (BK1), LukeCage_55 (BE2), Marsus_52 (BE1), Maupel_35 (BK1), MeganTheeKilla_33 (BK1), Mildred21_52 (BE1), MindFlayer_54 (BE2), Moab_34 (BK1), Mugiwara_55 (BE2), MulchMansion_51 (BE1), Muntaha_30 (BK2), Patelgo_34 (BK1), Phredrick_33 (BK1),

PumpkinSpice_55 (BE2), Quaran19_56 (BE2), Rikishi_56 (BE2), Riptide_51 (BE1), SaltySpitoon_56 (BE2), Scheme_55 (BE1), SeresaTree_34 (BK1), Sham_31 (BK1), Sollertia_56 (BE2), SparkleGoddess_34 (BK1), Spelly_56 (BE2), Spilled_57 (BE2), Stanimal_56 (BE2), StarPlatinum_56 (BE2), Starbow_54 (BE2), Stigma_34 (BK1), TomSawyer_54 (BE2), Tomas_58 (BE2), Tuesday_60 (BE2), TunaTartare_33 (BK1), Wakanda_30 (BK2), WashU_54 (BE1), Watermoore_54 (BE1), Westy_34 (BK1), Wipeout_54 (BE2), Wofford_55 (BE2), Yaboi_56 (BE2),

Start 8:
• Found in 1 of 124 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 118
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Trina_76 (CE),

Start 9:
• Found in 9 of 124 (7.3%) of genes in pham
• Manual Annotations of this start: 3 of 118
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Dorin_50 (CG), Francesca_49 (CG), Nova53_47 (CG),

Summary by clusters:

There are 6 clusters represented in this pham: CG, CE, BK1, BK2, BE2, BE1,

Info for manual annotations of cluster BE1:
•Start number 5 was manually annotated 37 times for cluster BE1.
•Start number 7 was manually annotated 12 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 7 was manually annotated 35 times for cluster BE2.

Info for manual annotations of cluster BK1:
•Start number 7 was manually annotated 24 times for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 7 was manually annotated 5 times for cluster BK2.

Info for manual annotations of cluster CE:
•Start number 6 was manually annotated 1 time for cluster CE.
•Start number 8 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CG:
•Start number 9 was manually annotated 3 times for cluster CG.

Gene Information:

Gene: AcciDwight_60 Start: 30891, Stop: 31679, Start Num: 7
Candidate Starts for AcciDwight_60:
(1, 30831), (Start: 7 @30891 has 76 MA's), (16, 30969), (23, 30999), (25, 31008), (29, 31032), (30, 31056), (36, 31122), (45, 31203), (48, 31212), (54, 31245), (57, 31275), (59, 31281), (62, 31305), (63,

31326), (74, 31377), (75, 31383), (77, 31401), (94, 31533), (101, 31599),

Gene: Amabiko_56 Start: 30936, Stop: 31724, Start Num: 7
Candidate Starts for Amabiko_56:
(1, 30876), (Start: 7 @30936 has 76 MA's), (16, 31014), (23, 31044), (25, 31053), (29, 31077), (30, 31101), (36, 31167), (45, 31248), (48, 31257), (54, 31290), (57, 31320), (59, 31326), (62, 31350), (63, 31371), (74, 31422), (75, 31428), (77, 31446), (94, 31578), (101, 31644),

Gene: Anedea_52 Start: 30469, Stop: 31263, Start Num: 7
Candidate Starts for Anedea_52:
(Start: 7 @30469 has 76 MA's), (14, 30526), (21, 30565), (25, 30586), (29, 30610), (30, 30634), (57, 30853), (58, 30856), (59, 30859), (75, 30958), (81, 31042), (91, 31096),

Gene: Angela_51 Start: 29947, Stop: 30741, Start Num: 7
Candidate Starts for Angela_51:
(Start: 7 @29947 has 76 MA's), (Start: 9 @29968 has 3 MA's), (16, 30025), (29, 30088), (30, 30112), (57, 30331), (59, 30337), (63, 30382), (77, 30454), (81, 30520), (91, 30574), (94, 30586),

Gene: AngryGiraffe_55 Start: 30910, Stop: 31698, Start Num: 7
Candidate Starts for AngryGiraffe_55:
(1, 30850), (2, 30859), (Start: 7 @30910 has 76 MA's), (16, 30988), (20, 31000), (22, 31012), (23, 31018), (25, 31027), (29, 31051), (30, 31075), (34, 31117), (48, 31231), (49, 31237), (57, 31294), (59, 31300), (61, 31318), (63, 31345), (75, 31402), (77, 31420), (84, 31501), (89, 31525), (91, 31540), (94, 31552),

Gene: Annadreamy_31 Start: 19482, Stop: 20312, Start Num: 7
Candidate Starts for Annadreamy_31:
(Start: 7 @19482 has 76 MA's), (16, 19560), (29, 19623), (30, 19647), (47, 19800), (58, 19872), (59, 19875), (78, 20016), (84, 20094), (90, 20127), (93, 20142), (98, 20184), (105, 20247),

Gene: ArianaSWT_54 Start: 31581, Stop: 32381, Start Num: 5
Candidate Starts for ArianaSWT_54:
(Start: 5 @31581 has 37 MA's), (Start: 7 @31587 has 76 MA's), (13, 31635), (16, 31665), (22, 31689), (25, 31704), (26, 31707), (30, 31752), (45, 31899), (46, 31902), (57, 31971), (59, 31977), (60, 31989), (61, 31995), (64, 32025), (65, 32037), (74, 32070), (91, 32214), (97, 32259),

Gene: Bartholomune_52 Start: 30255, Stop: 31055, Start Num: 5
Candidate Starts for Bartholomune_52:
(Start: 5 @30255 has 37 MA's), (21, 30357), (29, 30402), (30, 30426), (40, 30522), (49, 30588), (57, 30645), (59, 30651), (60, 30663), (61, 30669), (63, 30696), (91, 30888),

Gene: Battuta_54 Start: 30910, Stop: 31698, Start Num: 7
Candidate Starts for Battuta_54:
(1, 30850), (Start: 7 @30910 has 76 MA's), (16, 30988), (23, 31018), (25, 31027), (29, 31051), (30, 31075), (36, 31141), (45, 31222), (48, 31231), (54, 31264), (57, 31294), (59, 31300), (62, 31324), (63, 31345), (74, 31396), (75, 31402), (77, 31420), (94, 31552), (101, 31618),

Gene: Belfort_35 Start: 22004, Stop: 22828, Start Num: 7
Candidate Starts for Belfort_35:
(Start: 7 @22004 has 76 MA's), (26, 22118), (29, 22139), (30, 22163), (32, 22172), (59, 22391), (71, 22484), (89, 22634), (90, 22643), (98, 22700),

Gene: Beuffert_32 Start: 20577, Stop: 21407, Start Num: 7

Candidate Starts for Beuffert_32:
(Start: 7 @20577 has 76 MA's), (18, 20661), (29, 20718), (30, 20742), (59, 20970), (74, 21084), (78, 21111), (90, 21222), (93, 21237), (98, 21279),

Gene: BillNye_29 Start: 22882, Stop: 23727, Start Num: 7
Candidate Starts for BillNye_29:
(Start: 7 @22882 has 76 MA's), (10, 22906), (11, 22912), (14, 22936), (27, 23005), (29, 23020), (30, 23044), (32, 23053), (59, 23272), (61, 23290), (86, 23515), (90, 23539), (98, 23596), (105, 23659), (107, 23710),

Gene: Birchlyn_53 Start: 28793, Stop: 29581, Start Num: 7
Candidate Starts for Birchlyn_53:
(1, 28733), (Start: 7 @28793 has 76 MA's), (16, 28871), (23, 28901), (25, 28910), (29, 28934), (30, 28958), (36, 29024), (45, 29105), (48, 29114), (54, 29147), (57, 29177), (59, 29183), (62, 29207), (63, 29228), (74, 29279), (75, 29285), (77, 29303), (94, 29435), (101, 29501),

Gene: BlueOtter_54 Start: 31619, Stop: 32419, Start Num: 5
Candidate Starts for BlueOtter_54:
(Start: 5 @31619 has 37 MA's), (Start: 7 @31625 has 76 MA's), (13, 31673), (16, 31703), (22, 31727), (25, 31742), (26, 31745), (30, 31790), (45, 31937), (46, 31940), (57, 32009), (59, 32015), (60, 32027), (61, 32033), (64, 32063), (65, 32075), (74, 32108), (91, 32252), (97, 32297),

Gene: Blueeyedbeauty_33 Start: 19974, Stop: 20804, Start Num: 7
Candidate Starts for Blueeyedbeauty_33:
(Start: 7 @19974 has 76 MA's), (18, 20058), (29, 20115), (30, 20139), (38, 20220), (48, 20295), (52, 20322), (59, 20367), (72, 20466), (78, 20508), (90, 20619), (93, 20634), (98, 20676),

Gene: Bmoc_52 Start: 30254, Stop: 31048, Start Num: 7
Candidate Starts for Bmoc_52:
(Start: 7 @30254 has 76 MA's), (13, 30302), (14, 30311), (21, 30350), (25, 30371), (29, 30395), (30, 30419), (39, 30512), (57, 30638), (58, 30641), (59, 30644), (65, 30704), (75, 30743), (81, 30827), (91, 30881),

Gene: BoomerJR_56 Start: 30799, Stop: 31587, Start Num: 7
Candidate Starts for BoomerJR_56:
(1, 30739), (2, 30748), (Start: 7 @30799 has 76 MA's), (16, 30877), (20, 30889), (22, 30901), (23, 30907), (25, 30916), (29, 30940), (30, 30964), (34, 31006), (48, 31120), (49, 31126), (57, 31183), (59, 31189), (61, 31207), (63, 31234), (75, 31291), (77, 31309), (84, 31390), (89, 31414), (91, 31429), (94, 31441), (101, 31507),

Gene: Bordeaux_54 Start: 31065, Stop: 31853, Start Num: 7
Candidate Starts for Bordeaux_54:
(1, 31005), (Start: 7 @31065 has 76 MA's), (16, 31143), (23, 31173), (25, 31182), (29, 31206), (30, 31230), (36, 31296), (45, 31377), (48, 31386), (54, 31419), (57, 31449), (59, 31455), (62, 31479), (63, 31500), (74, 31551), (75, 31557), (77, 31575), (94, 31707), (101, 31773),

Gene: Braelyn_53 Start: 31022, Stop: 31822, Start Num: 5
Candidate Starts for Braelyn_53:
(Start: 5 @31022 has 37 MA's), (21, 31124), (29, 31169), (30, 31193), (40, 31289), (49, 31355), (57, 31412), (59, 31418), (60, 31430), (61, 31436), (63, 31463), (65, 31478), (74, 31511), (91, 31655),

Gene: Brizzy_55 Start: 30584, Stop: 31372, Start Num: 7
Candidate Starts for Brizzy_55:

(Start: 7 @30584 has 76 MA's), (16, 30662), (23, 30692), (29, 30725), (30, 30749), (45, 30896), (48, 30905), (54, 30938), (57, 30968), (59, 30974), (62, 30998), (63, 31019), (74, 31070), (75, 31076), (77, 31094), (94, 31226), (99, 31271), (101, 31292),

Gene: Cadmus_52 Start: 30601, Stop: 31401, Start Num: 5
Candidate Starts for Cadmus_52:
(Start: 5 @30601 has 37 MA's), (16, 30685), (23, 30715), (29, 30748), (30, 30772), (46, 30922), (49, 30934), (57, 30991), (59, 30997), (91, 31234), (94, 31246),

Gene: CeilingFan_55 Start: 30825, Stop: 31613, Start Num: 7
Candidate Starts for CeilingFan_55:
(Start: 7 @30825 has 76 MA's), (16, 30903), (23, 30933), (29, 30966), (30, 30990), (45, 31137), (48, 31146), (54, 31179), (57, 31209), (59, 31215), (62, 31239), (63, 31260), (74, 31311), (75, 31317), (77, 31335), (94, 31467), (99, 31512), (101, 31533),

Gene: Chaewon_33 Start: 23004, Stop: 23855, Start Num: 7
Candidate Starts for Chaewon_33:
(Start: 7 @23004 has 76 MA's), (10, 23028), (11, 23034), (14, 23058), (25, 23118), (27, 23127), (29, 23142), (30, 23166), (35, 23223), (59, 23394), (61, 23412), (87, 23643), (90, 23664), (98, 23721), (105, 23784), (107, 23835),

Gene: Circinus_31 Start: 23018, Stop: 23863, Start Num: 7
Candidate Starts for Circinus_31:
(Start: 7 @23018 has 76 MA's), (10, 23042), (11, 23048), (14, 23072), (27, 23141), (29, 23156), (30, 23180), (32, 23189), (59, 23408), (61, 23426), (86, 23651), (90, 23675), (98, 23732), (105, 23795), (107, 23846),

Gene: Comrade_34 Start: 21619, Stop: 22443, Start Num: 7
Candidate Starts for Comrade_34:
(Start: 7 @21619 has 76 MA's), (26, 21733), (29, 21754), (30, 21778), (32, 21787), (59, 22006), (71, 22099), (89, 22249), (90, 22258), (98, 22315),

Gene: Coogler_54 Start: 31645, Stop: 32445, Start Num: 5
Candidate Starts for Coogler_54:
(Start: 5 @31645 has 37 MA's), (Start: 7 @31651 has 76 MA's), (13, 31699), (16, 31729), (22, 31753), (25, 31768), (26, 31771), (30, 31816), (45, 31963), (46, 31966), (57, 32035), (59, 32041), (60, 32053), (61, 32059), (64, 32089), (65, 32101), (74, 32134), (91, 32278), (97, 32323),

Gene: Cross_54 Start: 31620, Stop: 32420, Start Num: 5
Candidate Starts for Cross_54:
(Start: 5 @31620 has 37 MA's), (Start: 7 @31626 has 76 MA's), (13, 31674), (16, 31704), (22, 31728), (25, 31743), (26, 31746), (30, 31791), (45, 31938), (46, 31941), (57, 32010), (59, 32016), (60, 32028), (61, 32034), (64, 32064), (65, 32076), (74, 32109), (91, 32253), (97, 32298),

Gene: Cursive_52 Start: 31145, Stop: 31945, Start Num: 5
Candidate Starts for Cursive_52:
(Start: 5 @31145 has 37 MA's), (Start: 7 @31151 has 76 MA's), (13, 31199), (16, 31229), (22, 31253), (25, 31268), (26, 31271), (30, 31316), (45, 31463), (46, 31466), (57, 31535), (59, 31541), (60, 31553), (61, 31559), (64, 31589), (65, 31601), (74, 31634), (91, 31778), (97, 31823),

Gene: Daisy123_55 Start: 30684, Stop: 31472, Start Num: 7
Candidate Starts for Daisy123_55:

(1, 30624), (Start: 7 @30684 has 76 MA's), (16, 30762), (23, 30792), (25, 30801), (29, 30825), (30, 30849), (36, 30915), (48, 31005), (54, 31038), (57, 31068), (59, 31074), (62, 31098), (63, 31119), (74, 31170), (75, 31176), (77, 31194), (94, 31326), (101, 31392),

Gene: Daubenski_55 Start: 31365, Stop: 32165, Start Num: 5
Candidate Starts for Daubenski_55:
(Start: 5 @31365 has 37 MA's), (16, 31449), (23, 31479), (29, 31512), (30, 31536), (46, 31686), (49, 31698), (57, 31755), (59, 31761), (91, 31998), (94, 32010),

Gene: Davielle_51 Start: 30439, Stop: 31239, Start Num: 5
Candidate Starts for Davielle_51:
(Start: 5 @30439 has 37 MA's), (21, 30541), (29, 30586), (30, 30610), (40, 30706), (49, 30772), (57, 30829), (59, 30835), (60, 30847), (61, 30853), (63, 30880), (65, 30895), (74, 30928), (91, 31072),

Gene: DeluluLabubu_33 Start: 19702, Stop: 20526, Start Num: 7
Candidate Starts for DeluluLabubu_33:
(Start: 7 @19702 has 76 MA's), (15, 19765), (25, 19813), (26, 19816), (29, 19837), (30, 19861), (59, 20089), (71, 20182), (90, 20341),

Gene: Dorin_50 Start: 30618, Stop: 31415, Start Num: 9
Candidate Starts for Dorin_50:
(Start: 9 @30618 has 3 MA's), (20, 30687), (30, 30762), (34, 30801), (40, 30855), (42, 30882), (43, 30885), (67, 31056), (80, 31212), (85, 31233), (100, 31329), (106, 31395),

Gene: EGole_55 Start: 32524, Stop: 33324, Start Num: 5
Candidate Starts for EGole_55:
(Start: 5 @32524 has 37 MA's), (Start: 7 @32530 has 76 MA's), (13, 32578), (16, 32608), (22, 32632), (26, 32650), (30, 32695), (46, 32845), (57, 32914), (59, 32920), (60, 32932), (61, 32938), (65, 32980), (74, 33013), (91, 33157), (97, 33202),

Gene: Eliot67_51 Start: 30252, Stop: 31052, Start Num: 5
Candidate Starts for Eliot67_51:
(Start: 5 @30252 has 37 MA's), (21, 30354), (29, 30399), (30, 30423), (40, 30519), (49, 30585), (57, 30642), (59, 30648), (60, 30660), (61, 30666), (63, 30693), (65, 30708), (74, 30741), (91, 30885),

Gene: Elmer_58 Start: 31975, Stop: 32760, Start Num: 7
Candidate Starts for Elmer_58:
(1, 31915), (2, 31924), (3, 31933), (4, 31936), (Start: 7 @31975 has 76 MA's), (15, 32044), (23, 32083), (25, 32092), (26, 32095), (29, 32116), (30, 32140), (36, 32206), (39, 32233), (45, 32287), (57, 32359), (59, 32365), (61, 32383), (63, 32410), (69, 32440), (77, 32485), (89, 32590), (91, 32605), (98, 32656),

Gene: Emma1919_35 Start: 20397, Stop: 21221, Start Num: 7
Candidate Starts for Emma1919_35:
(Start: 7 @20397 has 76 MA's), (15, 20460), (25, 20508), (26, 20511), (29, 20532), (30, 20556), (59, 20784), (71, 20877), (90, 21036),

Gene: Enygma_56 Start: 32747, Stop: 33535, Start Num: 7
Candidate Starts for Enygma_56:
(1, 32687), (Start: 7 @32747 has 76 MA's), (13, 32795), (23, 32855), (25, 32864), (28, 32885), (29, 32888), (30, 32912), (31, 32918), (34, 32954), (45, 33059), (48, 33068), (49, 33074), (54, 33101), (57, 33131), (59, 33137), (63, 33182), (77, 33257), (87, 33350), (89, 33362), (91, 33377), (101, 33455),

Gene: Evy_55 Start: 31621, Stop: 32421, Start Num: 5

Candidate Starts for Evy_55:
(Start: 5 @31621 has 37 MA's), (21, 31723), (29, 31768), (30, 31792), (49, 31954), (51, 31972), (57, 32011), (59, 32017), (60, 32029), (61, 32035), (63, 32062), (65, 32077), (91, 32254),

Gene: Faust_34 Start: 20990, Stop: 21811, Start Num: 7
Candidate Starts for Faust_34:
(Start: 7 @20990 has 76 MA's), (11, 21017), (15, 21053), (16, 21062), (18, 21068), (26, 21104), (29, 21125), (30, 21149), (38, 21230), (41, 21248), (47, 21302), (56, 21359), (59, 21377), (78, 21518), (86, 21605), (90, 21629), (92, 21641), (107, 21800),

Gene: Forrest_35 Start: 20520, Stop: 21344, Start Num: 7
Candidate Starts for Forrest_35:
(Start: 7 @20520 has 76 MA's), (15, 20583), (26, 20634), (29, 20655), (30, 20679), (59, 20907), (71, 21000), (90, 21159),

Gene: Francesca_49 Start: 30750, Stop: 31547, Start Num: 9
Candidate Starts for Francesca_49:
(Start: 9 @30750 has 3 MA's), (20, 30819), (30, 30894), (34, 30933), (40, 30987), (42, 31014), (43, 31017), (67, 31188), (80, 31344), (85, 31365), (100, 31461), (106, 31527),

Gene: Francob_33 Start: 20528, Stop: 21352, Start Num: 7
Candidate Starts for Francob_33:
(Start: 7 @20528 has 76 MA's), (26, 20642), (29, 20663), (30, 20687), (56, 20897), (59, 20915), (71, 21008), (78, 21056), (90, 21167), (98, 21224), (103, 21269),

Gene: FreddyDRoo_52 Start: 30252, Stop: 31052, Start Num: 5
Candidate Starts for FreddyDRoo_52:
(Start: 5 @30252 has 37 MA's), (21, 30354), (29, 30399), (30, 30423), (40, 30519), (49, 30585), (57, 30642), (59, 30648), (60, 30660), (61, 30666), (63, 30693), (65, 30708), (74, 30741), (91, 30885),

Gene: Genie2_56 Start: 30913, Stop: 31701, Start Num: 7
Candidate Starts for Genie2_56:
(1, 30853), (2, 30862), (Start: 7 @30913 has 76 MA's), (16, 30991), (20, 31003), (22, 31015), (23, 31021), (25, 31030), (29, 31054), (30, 31078), (34, 31120), (48, 31234), (49, 31240), (57, 31297), (59, 31303), (61, 31321), (63, 31348), (75, 31405), (77, 31423), (84, 31504), (89, 31528), (91, 31543), (94, 31555),

Gene: Gibbi_60 Start: 31048, Stop: 31836, Start Num: 7
Candidate Starts for Gibbi_60:
(1, 30988), (Start: 7 @31048 has 76 MA's), (16, 31126), (23, 31156), (25, 31165), (29, 31189), (30, 31213), (36, 31279), (45, 31360), (48, 31369), (54, 31402), (57, 31432), (59, 31438), (62, 31462), (63, 31483), (74, 31534), (75, 31540), (77, 31558), (94, 31690), (101, 31756),

Gene: Gilson_35 Start: 20350, Stop: 21174, Start Num: 7
Candidate Starts for Gilson_35:
(Start: 7 @20350 has 76 MA's), (15, 20413), (25, 20461), (26, 20464), (29, 20485), (30, 20509), (59, 20737), (71, 20830), (90, 20989),

Gene: HangryHippo_54 Start: 31619, Stop: 32419, Start Num: 5
Candidate Starts for HangryHippo_54:
(Start: 5 @31619 has 37 MA's), (Start: 7 @31625 has 76 MA's), (13, 31673), (16, 31703), (22, 31727), (25, 31742), (26, 31745), (30, 31790), (45, 31937), (46, 31940), (57, 32009), (59, 32015), (60, 32027), (61, 32033), (64, 32063), (65, 32075), (74, 32108), (91, 32252), (97, 32297),

Gene: IchabodCrane_53 Start: 30637, Stop: 31425, Start Num: 7
Candidate Starts for IchabodCrane_53:
(Start: 7 @30637 has 76 MA's), (16, 30715), (23, 30745), (29, 30778), (30, 30802), (45, 30949), (48, 30958), (54, 30991), (57, 31021), (59, 31027), (62, 31051), (63, 31072), (74, 31123), (75, 31129), (77, 31147), (94, 31279), (99, 31324), (101, 31345),

Gene: Jada_33 Start: 19702, Stop: 20526, Start Num: 7
Candidate Starts for Jada_33:
(Start: 7 @19702 has 76 MA's), (15, 19765), (26, 19816), (29, 19837), (30, 19861), (59, 20089), (71, 20182), (90, 20341),

Gene: Jay2Jay_59 Start: 32429, Stop: 33229, Start Num: 5
Candidate Starts for Jay2Jay_59:
(Start: 5 @32429 has 37 MA's), (21, 32531), (29, 32576), (30, 32600), (49, 32762), (51, 32780), (57, 32819), (59, 32825), (60, 32837), (61, 32843), (63, 32870), (65, 32885), (91, 33062),

Gene: JimJam_56 Start: 31011, Stop: 31799, Start Num: 7
Candidate Starts for JimJam_56:
(1, 30951), (Start: 7 @31011 has 76 MA's), (16, 31089), (23, 31119), (25, 31128), (29, 31152), (30, 31176), (36, 31242), (45, 31323), (48, 31332), (54, 31365), (57, 31395), (59, 31401), (62, 31425), (63, 31446), (74, 31497), (77, 31521), (94, 31653), (101, 31719),

Gene: Jollison_55 Start: 30893, Stop: 31681, Start Num: 7
Candidate Starts for Jollison_55:
(1, 30833), (Start: 7 @30893 has 76 MA's), (16, 30971), (23, 31001), (25, 31010), (29, 31034), (30, 31058), (36, 31124), (45, 31205), (48, 31214), (54, 31247), (57, 31277), (59, 31283), (62, 31307), (63, 31328), (74, 31379), (75, 31385), (77, 31403), (94, 31535), (101, 31601),

Gene: Karimac_55 Start: 31042, Stop: 31830, Start Num: 7
Candidate Starts for Karimac_55:
(Start: 7 @31042 has 76 MA's), (16, 31120), (23, 31150), (29, 31183), (30, 31207), (45, 31354), (48, 31363), (54, 31396), (57, 31426), (59, 31432), (62, 31456), (63, 31477), (74, 31528), (75, 31534), (77, 31552), (94, 31684), (99, 31729), (101, 31750),

Gene: Karp_33 Start: 21219, Stop: 22043, Start Num: 7
Candidate Starts for Karp_33:
(Start: 7 @21219 has 76 MA's), (26, 21333), (29, 21354), (30, 21378), (32, 21387), (59, 21606), (71, 21699), (89, 21849), (90, 21858), (98, 21915),

Gene: Kenrey_35 Start: 20399, Stop: 21223, Start Num: 7
Candidate Starts for Kenrey_35:
(Start: 7 @20399 has 76 MA's), (15, 20462), (26, 20513), (29, 20534), (30, 20558), (56, 20768), (59, 20786), (71, 20879), (90, 21038),

Gene: KentuckyRacer_56 Start: 30826, Stop: 31614, Start Num: 7
Candidate Starts for KentuckyRacer_56:
(Start: 7 @30826 has 76 MA's), (16, 30904), (23, 30934), (29, 30967), (30, 30991), (45, 31138), (48, 31147), (54, 31180), (57, 31210), (59, 31216), (62, 31240), (63, 31261), (74, 31312), (75, 31318), (77, 31336), (94, 31468), (99, 31513), (101, 31534),

Gene: Larnav_54 Start: 31604, Stop: 32404, Start Num: 5
Candidate Starts for Larnav_54:

(Start: 5 @31604 has 37 MA's), (Start: 7 @31610 has 76 MA's), (13, 31658), (16, 31688), (22, 31712), (25, 31727), (26, 31730), (30, 31775), (45, 31922), (46, 31925), (57, 31994), (59, 32000), (60, 32012), (61, 32018), (64, 32048), (65, 32060), (74, 32093), (91, 32237), (97, 32282),

Gene: Leo04_55 Start: 32119, Stop: 32919, Start Num: 5
Candidate Starts for Leo04_55:
(Start: 5 @32119 has 37 MA's), (Start: 7 @32125 has 76 MA's), (13, 32173), (16, 32203), (22, 32227), (25, 32242), (26, 32245), (30, 32290), (45, 32437), (46, 32440), (57, 32509), (59, 32515), (60, 32527), (61, 32533), (64, 32563), (65, 32575), (74, 32608), (89, 32737), (91, 32752), (97, 32797),

Gene: Liandry_53 Start: 30959, Stop: 31759, Start Num: 5
Candidate Starts for Liandry_53:
(Start: 5 @30959 has 37 MA's), (21, 31061), (29, 31106), (30, 31130), (40, 31226), (49, 31292), (57, 31349), (59, 31355), (60, 31367), (61, 31373), (63, 31400), (65, 31415), (74, 31448), (91, 31592),

Gene: LilMartin_51 Start: 29895, Stop: 30689, Start Num: 7
Candidate Starts for LilMartin_51:
(Start: 7 @29895 has 76 MA's), (Start: 9 @29916 has 3 MA's), (16, 29973), (29, 30036), (30, 30060), (57, 30279), (59, 30285), (63, 30330), (77, 30402), (81, 30468), (91, 30522), (94, 30534),

Gene: LilSaint_53 Start: 30141, Stop: 30935, Start Num: 7
Candidate Starts for LilSaint_53:
(Start: 7 @30141 has 76 MA's), (13, 30189), (14, 30198), (21, 30237), (25, 30258), (29, 30282), (30, 30306), (57, 30525), (58, 30528), (59, 30531), (65, 30591), (75, 30630), (81, 30714), (91, 30768),

Gene: Limpid_31 Start: 19481, Stop: 20311, Start Num: 7
Candidate Starts for Limpid_31:
(Start: 7 @19481 has 76 MA's), (16, 19559), (29, 19622), (30, 19646), (47, 19799), (58, 19871), (59, 19874), (78, 20015), (84, 20093), (90, 20126), (93, 20141), (98, 20183), (105, 20246),

Gene: LukeCage_55 Start: 30793, Stop: 31581, Start Num: 7
Candidate Starts for LukeCage_55:
(1, 30733), (Start: 7 @30793 has 76 MA's), (10, 30820), (15, 30862), (16, 30871), (23, 30901), (25, 30910), (29, 30934), (30, 30958), (36, 31024), (45, 31105), (48, 31114), (54, 31147), (57, 31177), (59, 31183), (61, 31201), (63, 31228), (77, 31303), (94, 31435), (101, 31501),

Gene: Lululemon_53 Start: 31000, Stop: 31800, Start Num: 5
Candidate Starts for Lululemon_53:
(Start: 5 @31000 has 37 MA's), (Start: 7 @31006 has 76 MA's), (13, 31054), (16, 31084), (22, 31108), (25, 31123), (26, 31126), (30, 31171), (45, 31318), (46, 31321), (57, 31390), (59, 31396), (60, 31408), (61, 31414), (64, 31444), (65, 31456), (74, 31489), (91, 31633), (97, 31678),

Gene: Marsus_52 Start: 30167, Stop: 30961, Start Num: 7
Candidate Starts for Marsus_52:
(Start: 7 @30167 has 76 MA's), (Start: 9 @30188 has 3 MA's), (14, 30224), (16, 30245), (20, 30257), (29, 30308), (30, 30332), (57, 30551), (59, 30557), (63, 30602), (65, 30617), (77, 30674), (91, 30794), (94, 30806),

Gene: Maupel_35 Start: 20350, Stop: 21174, Start Num: 7
Candidate Starts for Maupel_35:
(Start: 7 @20350 has 76 MA's), (15, 20413), (25, 20461), (26, 20464), (29, 20485), (30, 20509), (59, 20737), (71, 20830), (90, 20989),

Gene: MeganTheeKilla_33 Start: 19711, Stop: 20535, Start Num: 7
Candidate Starts for MeganTheeKilla_33:
(Start: 7 @19711 has 76 MA's), (15, 19774), (25, 19822), (26, 19825), (29, 19846), (30, 19870), (59, 20098), (71, 20191), (90, 20350),

Gene: Mildred21_52 Start: 30088, Stop: 30882, Start Num: 7
Candidate Starts for Mildred21_52:
(Start: 7 @30088 has 76 MA's), (13, 30136), (14, 30145), (21, 30184), (26, 30208), (29, 30229), (30, 30253), (40, 30349), (48, 30409), (57, 30472), (59, 30478), (63, 30523), (91, 30715), (94, 30727),

Gene: MindFlayer_54 Start: 30544, Stop: 31332, Start Num: 7
Candidate Starts for MindFlayer_54:
(1, 30484), (Start: 7 @30544 has 76 MA's), (16, 30622), (23, 30652), (25, 30661), (29, 30685), (30, 30709), (36, 30775), (45, 30856), (48, 30865), (54, 30898), (57, 30928), (59, 30934), (62, 30958), (63, 30979), (74, 31030), (77, 31054), (94, 31186), (101, 31252),

Gene: Moab_34 Start: 21547, Stop: 22374, Start Num: 7
Candidate Starts for Moab_34:
(Start: 7 @21547 has 76 MA's), (29, 21685), (30, 21709), (31, 21715), (59, 21937), (61, 21955), (71, 22030), (76, 22060), (89, 22180), (90, 22189), (92, 22201), (105, 22309),

Gene: Mugiwara_55 Start: 31292, Stop: 32080, Start Num: 7
Candidate Starts for Mugiwara_55:
(1, 31232), (Start: 7 @31292 has 76 MA's), (10, 31319), (16, 31370), (23, 31400), (25, 31409), (29, 31433), (30, 31457), (45, 31604), (46, 31607), (54, 31646), (57, 31676), (59, 31682), (63, 31727), (77, 31802), (86, 31892), (94, 31934), (99, 31979), (101, 32000),

Gene: MulchMansion_51 Start: 29895, Stop: 30689, Start Num: 7
Candidate Starts for MulchMansion_51:
(Start: 7 @29895 has 76 MA's), (Start: 9 @29916 has 3 MA's), (16, 29973), (29, 30036), (30, 30060), (57, 30279), (59, 30285), (63, 30330), (77, 30402), (81, 30468), (91, 30522), (94, 30534),

Gene: Muntaha_30 Start: 21354, Stop: 22181, Start Num: 7
Candidate Starts for Muntaha_30:
(Start: 7 @21354 has 76 MA's), (Start: 9 @21369 has 3 MA's), (10, 21375), (11, 21381), (14, 21405), (29, 21489), (30, 21513), (35, 21570), (59, 21741), (63, 21786), (64, 21789), (70, 21834), (90, 21993), (95, 22014), (98, 22050), (105, 22113), (107, 22164),

Gene: Navo_52 Start: 30917, Stop: 31717, Start Num: 5
Candidate Starts for Navo_52:
(Start: 5 @30917 has 37 MA's), (21, 31019), (29, 31064), (30, 31088), (40, 31184), (49, 31250), (57, 31307), (59, 31313), (60, 31325), (61, 31331), (63, 31358), (64, 31361), (65, 31373), (75, 31412), (91, 31550), (96, 31592),

Gene: NiceHouse_65 Start: 36974, Stop: 37813, Start Num: 6
Candidate Starts for NiceHouse_65:
(Start: 6 @36974 has 1 MA's), (12, 37004), (19, 37052), (30, 37130), (34, 37184), (44, 37283), (58, 37367), (78, 37517), (79, 37559), (83, 37583), (88, 37625), (96, 37685), (104, 37754), (106, 37778),

Gene: NootNoot_50 Start: 29873, Stop: 30673, Start Num: 5
Candidate Starts for NootNoot_50:
(Start: 5 @29873 has 37 MA's), (21, 29975), (29, 30020), (30, 30044), (40, 30140), (49, 30206), (57, 30263), (59, 30269), (60, 30281), (61, 30287), (63, 30314), (91, 30506),

Gene: Nova53_47 Start: 30754, Stop: 31545, Start Num: 9
Candidate Starts for Nova53_47:
(Start: 9 @30754 has 3 MA's), (16, 30811), (17, 30814), (25, 30850), (30, 30898), (34, 30937), (35, 30952), (40, 30991), (43, 31021), (53, 31078), (55, 31093), (61, 31135), (89, 31384), (91, 31396), (92, 31402), (100, 31459), (106, 31525),

Gene: PacManQ_53 Start: 31000, Stop: 31800, Start Num: 5
Candidate Starts for PacManQ_53:
(Start: 5 @31000 has 37 MA's), (Start: 7 @31006 has 76 MA's), (13, 31054), (16, 31084), (22, 31108), (25, 31123), (26, 31126), (30, 31171), (45, 31318), (46, 31321), (57, 31390), (59, 31396), (60, 31408), (61, 31414), (64, 31444), (65, 31456), (74, 31489), (91, 31633), (97, 31678),

Gene: Paradiddles_50 Start: 30134, Stop: 30934, Start Num: 5
Candidate Starts for Paradiddles_50:
(Start: 5 @30134 has 37 MA's), (20, 30230), (21, 30236), (29, 30281), (30, 30305), (40, 30401), (49, 30467), (57, 30524), (59, 30530), (60, 30542), (61, 30548), (63, 30575), (91, 30767),

Gene: Patelgo_34 Start: 21737, Stop: 22564, Start Num: 7
Candidate Starts for Patelgo_34:
(Start: 7 @21737 has 76 MA's), (29, 21875), (30, 21899), (31, 21905), (59, 22127), (61, 22145), (71, 22220), (76, 22250), (89, 22370), (90, 22379), (92, 22391), (105, 22499),

Gene: Peebs_53 Start: 31357, Stop: 32157, Start Num: 5
Candidate Starts for Peebs_53:
(Start: 5 @31357 has 37 MA's), (Start: 7 @31363 has 76 MA's), (13, 31411), (16, 31441), (22, 31465), (25, 31480), (26, 31483), (30, 31528), (45, 31675), (46, 31678), (57, 31747), (59, 31753), (60, 31765), (61, 31771), (64, 31801), (65, 31813), (74, 31846), (91, 31990), (97, 32035),

Gene: Pepperwood_54 Start: 31490, Stop: 32290, Start Num: 5
Candidate Starts for Pepperwood_54:
(Start: 5 @31490 has 37 MA's), (Start: 7 @31496 has 76 MA's), (13, 31544), (16, 31574), (22, 31598), (25, 31613), (26, 31616), (30, 31661), (45, 31808), (46, 31811), (57, 31880), (59, 31886), (60, 31898), (61, 31904), (64, 31934), (65, 31946), (74, 31979), (91, 32123), (97, 32168),

Gene: Persimmon_50 Start: 29848, Stop: 30648, Start Num: 5
Candidate Starts for Persimmon_50:
(Start: 5 @29848 has 37 MA's), (21, 29950), (29, 29995), (30, 30019), (40, 30115), (49, 30181), (57, 30238), (59, 30244), (60, 30256), (61, 30262), (63, 30289), (65, 30304), (74, 30337), (91, 30481),

Gene: Phredrick_33 Start: 19605, Stop: 20429, Start Num: 7
Candidate Starts for Phredrick_33:
(Start: 7 @19605 has 76 MA's), (15, 19668), (26, 19719), (29, 19740), (30, 19764), (56, 19974), (59, 19992), (71, 20085), (90, 20244),

Gene: PinkiePie_52 Start: 30959, Stop: 31759, Start Num: 5
Candidate Starts for PinkiePie_52:
(Start: 5 @30959 has 37 MA's), (21, 31061), (29, 31106), (30, 31130), (40, 31226), (49, 31292), (57, 31349), (59, 31355), (60, 31367), (61, 31373), (63, 31400), (65, 31415), (74, 31448), (91, 31592),

Gene: PumpkinSpice_55 Start: 30936, Stop: 31724, Start Num: 7
Candidate Starts for PumpkinSpice_55:

(1, 30876), (Start: 7 @30936 has 76 MA's), (16, 31014), (23, 31044), (25, 31053), (29, 31077), (30, 31101), (36, 31167), (45, 31248), (48, 31257), (54, 31290), (57, 31320), (59, 31326), (62, 31350), (63, 31371), (74, 31422), (75, 31428), (77, 31446), (94, 31578), (101, 31644),

Gene: PynkPanther_52 Start: 30987, Stop: 31787, Start Num: 5
Candidate Starts for PynkPanther_52:
(Start: 5 @30987 has 37 MA's), (21, 31089), (29, 31134), (30, 31158), (40, 31254), (49, 31320), (57, 31377), (59, 31383), (60, 31395), (61, 31401), (63, 31428), (65, 31443), (91, 31620),

Gene: Quaran19_56 Start: 30927, Stop: 31715, Start Num: 7
Candidate Starts for Quaran19_56:
(1, 30867), (Start: 7 @30927 has 76 MA's), (16, 31005), (23, 31035), (25, 31044), (29, 31068), (30, 31092), (36, 31158), (45, 31239), (48, 31248), (54, 31281), (57, 31311), (59, 31317), (62, 31341), (63, 31362), (74, 31413), (75, 31419), (77, 31437), (94, 31569), (101, 31635),

Gene: Rikishi_56 Start: 30842, Stop: 31630, Start Num: 7
Candidate Starts for Rikishi_56:
(1, 30782), (Start: 7 @30842 has 76 MA's), (16, 30920), (23, 30950), (25, 30959), (29, 30983), (30, 31007), (36, 31073), (45, 31154), (48, 31163), (54, 31196), (57, 31226), (59, 31232), (62, 31256), (63, 31277), (74, 31328), (75, 31334), (77, 31352), (94, 31484), (101, 31550),

Gene: Riptide_51 Start: 29690, Stop: 30484, Start Num: 7
Candidate Starts for Riptide_51:
(Start: 7 @29690 has 76 MA's), (14, 29747), (21, 29786), (25, 29807), (29, 29831), (30, 29855), (57, 30074), (58, 30077), (59, 30080), (65, 30140), (75, 30179), (81, 30263), (91, 30317),

Gene: SaltySpitoon_56 Start: 30936, Stop: 31724, Start Num: 7
Candidate Starts for SaltySpitoon_56:
(1, 30876), (Start: 7 @30936 has 76 MA's), (16, 31014), (23, 31044), (25, 31053), (29, 31077), (30, 31101), (36, 31167), (45, 31248), (48, 31257), (54, 31290), (57, 31320), (59, 31326), (62, 31350), (63, 31371), (74, 31422), (75, 31428), (77, 31446), (94, 31578), (101, 31644),

Gene: Samisti12_54 Start: 32793, Stop: 33593, Start Num: 5
Candidate Starts for Samisti12_54:
(Start: 5 @32793 has 37 MA's), (Start: 7 @32799 has 76 MA's), (13, 32847), (16, 32877), (22, 32901), (25, 32916), (26, 32919), (30, 32964), (45, 33111), (46, 33114), (57, 33183), (59, 33189), (60, 33201), (61, 33207), (64, 33237), (65, 33249), (74, 33282), (91, 33426), (97, 33471),

Gene: Scheme_55 Start: 32210, Stop: 33004, Start Num: 7
Candidate Starts for Scheme_55:
(Start: 5 @32204 has 37 MA's), (Start: 7 @32210 has 76 MA's), (13, 32258), (16, 32288), (22, 32312), (25, 32327), (26, 32330), (30, 32375), (45, 32522), (46, 32525), (57, 32594), (59, 32600), (60, 32612), (61, 32618), (64, 32648), (65, 32660), (74, 32693), (91, 32837), (97, 32882),

Gene: SeresaTree_34 Start: 20380, Stop: 21201, Start Num: 7
Candidate Starts for SeresaTree_34:
(Start: 7 @20380 has 76 MA's), (11, 20407), (15, 20443), (16, 20452), (18, 20458), (26, 20494), (29, 20515), (30, 20539), (38, 20620), (41, 20638), (47, 20692), (56, 20749), (59, 20767), (78, 20908), (86, 20995), (90, 21019), (92, 21031), (107, 21190),

Gene: Sham_31 Start: 21459, Stop: 22298, Start Num: 7
Candidate Starts for Sham_31:

(Start: 7 @21459 has 76 MA's), (11, 21486), (15, 21522), (29, 21594), (30, 21618), (52, 21801), (59, 21846), (73, 21969), (78, 22005), (90, 22116),

Gene: Shuckle_52 Start: 31810, Stop: 32610, Start Num: 5
Candidate Starts for Shuckle_52:
(Start: 5 @31810 has 37 MA's), (Start: 7 @31816 has 76 MA's), (13, 31864), (16, 31894), (22, 31918), (25, 31933), (26, 31936), (30, 31981), (45, 32128), (46, 32131), (57, 32200), (59, 32206), (60, 32218), (61, 32224), (64, 32254), (65, 32266), (74, 32299), (91, 32443), (97, 32488),

Gene: Sollertia_56 Start: 30913, Stop: 31701, Start Num: 7
Candidate Starts for Sollertia_56:
(1, 30853), (2, 30862), (Start: 7 @30913 has 76 MA's), (16, 30991), (20, 31003), (22, 31015), (23, 31021), (25, 31030), (29, 31054), (30, 31078), (34, 31120), (48, 31234), (49, 31240), (57, 31297), (59, 31303), (61, 31321), (63, 31348), (75, 31405), (77, 31423), (84, 31504), (89, 31528), (91, 31543), (94, 31555),

Gene: SparkleGoddess_34 Start: 21621, Stop: 22445, Start Num: 7
Candidate Starts for SparkleGoddess_34:
(Start: 7 @21621 has 76 MA's), (26, 21735), (29, 21756), (30, 21780), (32, 21789), (53, 21969), (59, 22008), (71, 22101), (89, 22251), (90, 22260), (98, 22317),

Gene: Spelly_56 Start: 30891, Stop: 31679, Start Num: 7
Candidate Starts for Spelly_56:
(1, 30831), (Start: 7 @30891 has 76 MA's), (16, 30969), (23, 30999), (25, 31008), (29, 31032), (30, 31056), (36, 31122), (45, 31203), (48, 31212), (54, 31245), (57, 31275), (59, 31281), (62, 31305), (63, 31326), (74, 31377), (75, 31383), (77, 31401), (94, 31533), (101, 31599),

Gene: Spilled_57 Start: 31008, Stop: 31796, Start Num: 7
Candidate Starts for Spilled_57:
(1, 30948), (Start: 7 @31008 has 76 MA's), (16, 31086), (23, 31116), (29, 31149), (30, 31173), (45, 31320), (48, 31329), (54, 31362), (57, 31392), (59, 31398), (62, 31422), (63, 31443), (74, 31494), (77, 31518), (94, 31650), (101, 31716),

Gene: Squillium_53 Start: 30960, Stop: 31760, Start Num: 5
Candidate Starts for Squillium_53:
(Start: 5 @30960 has 37 MA's), (21, 31062), (29, 31107), (30, 31131), (40, 31227), (49, 31293), (57, 31350), (59, 31356), (60, 31368), (61, 31374), (63, 31401), (65, 31416), (74, 31449), (91, 31593),

Gene: Stanimal_56 Start: 30802, Stop: 31590, Start Num: 7
Candidate Starts for Stanimal_56:
(1, 30742), (2, 30751), (Start: 7 @30802 has 76 MA's), (16, 30880), (20, 30892), (22, 30904), (23, 30910), (25, 30919), (29, 30943), (30, 30967), (34, 31009), (48, 31123), (49, 31129), (57, 31186), (59, 31192), (61, 31210), (63, 31237), (75, 31294), (77, 31312), (84, 31393), (89, 31417), (91, 31432), (94, 31444),

Gene: StarPlatinum_56 Start: 31436, Stop: 32224, Start Num: 7
Candidate Starts for StarPlatinum_56:
(1, 31376), (Start: 7 @31436 has 76 MA's), (10, 31463), (15, 31505), (23, 31544), (25, 31553), (29, 31577), (30, 31601), (45, 31748), (48, 31757), (54, 31790), (57, 31820), (59, 31826), (61, 31844), (63, 31871), (77, 31946), (94, 32078), (101, 32144),

Gene: Starbow_54 Start: 30912, Stop: 31700, Start Num: 7
Candidate Starts for Starbow_54:

(1, 30852), (Start: 7 @30912 has 76 MA's), (16, 30990), (23, 31020), (25, 31029), (29, 31053), (30, 31077), (36, 31143), (45, 31224), (48, 31233), (54, 31266), (57, 31296), (59, 31302), (62, 31326), (63, 31347), (74, 31398), (75, 31404), (77, 31422), (94, 31554), (101, 31620),

Gene: Stigma_34 Start: 21622, Stop: 22446, Start Num: 7
Candidate Starts for Stigma_34:
(Start: 7 @21622 has 76 MA's), (26, 21736), (29, 21757), (30, 21781), (32, 21790), (53, 21970), (59, 22009), (71, 22102), (89, 22252), (90, 22261), (98, 22318),

Gene: Sushi23_54 Start: 31715, Stop: 32515, Start Num: 5
Candidate Starts for Sushi23_54:
(Start: 5 @31715 has 37 MA's), (Start: 7 @31721 has 76 MA's), (13, 31769), (16, 31799), (22, 31823), (25, 31838), (26, 31841), (30, 31886), (45, 32033), (46, 32036), (57, 32105), (59, 32111), (60, 32123), (61, 32129), (64, 32159), (65, 32171), (74, 32204), (91, 32348), (97, 32393),

Gene: Targaryen_55 Start: 32478, Stop: 33278, Start Num: 5
Candidate Starts for Targaryen_55:
(Start: 5 @32478 has 37 MA's), (21, 32580), (29, 32625), (30, 32649), (49, 32811), (51, 32829), (57, 32868), (59, 32874), (60, 32886), (61, 32892), (63, 32919), (65, 32934), (91, 33111),

Gene: Teutsch_54 Start: 31984, Stop: 32784, Start Num: 5
Candidate Starts for Teutsch_54:
(Start: 5 @31984 has 37 MA's), (Start: 7 @31990 has 76 MA's), (13, 32038), (16, 32068), (22, 32092), (25, 32107), (26, 32110), (30, 32155), (46, 32305), (57, 32374), (59, 32380), (60, 32392), (61, 32398), (65, 32440), (74, 32473), (91, 32617), (97, 32662),

Gene: TomSawyer_54 Start: 30530, Stop: 31318, Start Num: 7
Candidate Starts for TomSawyer_54:
(1, 30470), (Start: 7 @30530 has 76 MA's), (16, 30608), (23, 30638), (25, 30647), (29, 30671), (30, 30695), (36, 30761), (45, 30842), (48, 30851), (54, 30884), (57, 30914), (59, 30920), (62, 30944), (63, 30965), (74, 31016), (75, 31022), (77, 31040), (94, 31172), (101, 31238),

Gene: Tomas_58 Start: 33262, Stop: 34056, Start Num: 7
Candidate Starts for Tomas_58:
(Start: 7 @33262 has 76 MA's), (14, 33319), (20, 33352), (23, 33370), (24, 33373), (29, 33403), (30, 33427), (57, 33646), (59, 33652), (61, 33670), (63, 33697), (64, 33700), (66, 33718), (77, 33772), (86, 33862), (89, 33877), (91, 33892), (94, 33904), (102, 33982), (105, 34003),

Gene: Tribute_52 Start: 31184, Stop: 31984, Start Num: 5
Candidate Starts for Tribute_52:
(Start: 5 @31184 has 37 MA's), (Start: 7 @31190 has 76 MA's), (13, 31238), (16, 31268), (22, 31292), (25, 31307), (26, 31310), (30, 31355), (46, 31505), (57, 31574), (59, 31580), (60, 31592), (61, 31598), (65, 31640), (74, 31673), (91, 31817), (97, 31862),

Gene: Trina_76 Start: 40485, Stop: 41291, Start Num: 8
Candidate Starts for Trina_76:
(Start: 8 @40485 has 1 MA's), (15, 40542), (30, 40638), (33, 40668), (37, 40704), (42, 40758), (50, 40809), (61, 40878), (64, 40908), (68, 40944), (82, 41070), (85, 41094), (104, 41238),

Gene: Tuesday_60 Start: 31074, Stop: 31862, Start Num: 7
Candidate Starts for Tuesday_60:
(1, 31014), (Start: 7 @31074 has 76 MA's), (16, 31152), (23, 31182), (25, 31191), (29, 31215), (30, 31239), (36, 31305), (45, 31386), (48, 31395), (54, 31428), (57, 31458), (59, 31464), (62, 31488), (63,

31509), (74, 31560), (75, 31566), (77, 31584), (94, 31716), (101, 31782),

Gene: TunaTartare_33 Start: 21752, Stop: 22591, Start Num: 7
Candidate Starts for TunaTartare_33:
(Start: 7 @21752 has 76 MA's), (11, 21779), (15, 21815), (16, 21824), (25, 21863), (29, 21887), (30, 21911), (52, 22094), (59, 22139), (75, 22277), (78, 22298), (90, 22409),

Gene: Wakanda_30 Start: 21292, Stop: 22119, Start Num: 7
Candidate Starts for Wakanda_30:
(Start: 7 @21292 has 76 MA's), (Start: 9 @21307 has 3 MA's), (10, 21313), (11, 21319), (14, 21343), (25, 21403), (29, 21427), (30, 21451), (35, 21508), (59, 21679), (63, 21724), (64, 21727), (70, 21772), (90, 21931), (95, 21952), (98, 21988), (105, 22051), (107, 22102),

Gene: Warpy_58 Start: 31942, Stop: 32742, Start Num: 5
Candidate Starts for Warpy_58:
(Start: 5 @31942 has 37 MA's), (21, 32044), (29, 32089), (30, 32113), (49, 32275), (51, 32293), (57, 32332), (59, 32338), (60, 32350), (61, 32356), (63, 32383), (65, 32398), (91, 32575),

Gene: WashU_54 Start: 31499, Stop: 32293, Start Num: 7
Candidate Starts for WashU_54:
(Start: 5 @31493 has 37 MA's), (Start: 7 @31499 has 76 MA's), (13, 31547), (16, 31577), (22, 31601), (25, 31616), (26, 31619), (30, 31664), (45, 31811), (46, 31814), (57, 31883), (59, 31889), (60, 31901), (61, 31907), (64, 31937), (65, 31949), (74, 31982), (91, 32126), (97, 32171),

Gene: Watermoore_54 Start: 32197, Stop: 32991, Start Num: 7
Candidate Starts for Watermoore_54:
(Start: 5 @32191 has 37 MA's), (Start: 7 @32197 has 76 MA's), (13, 32245), (16, 32275), (22, 32299), (25, 32314), (26, 32317), (30, 32362), (45, 32509), (46, 32512), (57, 32581), (59, 32587), (60, 32599), (61, 32605), (64, 32635), (65, 32647), (74, 32680), (91, 32824), (97, 32869),

Gene: Westy_34 Start: 21622, Stop: 22446, Start Num: 7
Candidate Starts for Westy_34:
(Start: 7 @21622 has 76 MA's), (26, 21736), (29, 21757), (30, 21781), (32, 21790), (59, 22009), (71, 22102), (89, 22252), (90, 22261), (98, 22318),

Gene: WhereRU_51 Start: 30439, Stop: 31239, Start Num: 5
Candidate Starts for WhereRU_51:
(Start: 5 @30439 has 37 MA's), (21, 30541), (29, 30586), (30, 30610), (40, 30706), (49, 30772), (57, 30829), (59, 30835), (60, 30847), (61, 30853), (63, 30880), (65, 30895), (74, 30928), (91, 31072),

Gene: Wipeout_54 Start: 31281, Stop: 32069, Start Num: 7
Candidate Starts for Wipeout_54:
(1, 31221), (Start: 7 @31281 has 76 MA's), (16, 31359), (23, 31389), (25, 31398), (29, 31422), (30, 31446), (36, 31512), (45, 31593), (48, 31602), (54, 31635), (57, 31665), (59, 31671), (62, 31695), (63, 31716), (74, 31767), (75, 31773), (77, 31791), (94, 31923), (101, 31989),

Gene: Wofford_55 Start: 31938, Stop: 32723, Start Num: 7
Candidate Starts for Wofford_55:
(1, 31878), (2, 31887), (3, 31896), (4, 31899), (Start: 7 @31938 has 76 MA's), (15, 32007), (23, 32046), (25, 32055), (26, 32058), (29, 32079), (30, 32103), (36, 32169), (39, 32196), (45, 32250), (57, 32322), (59, 32328), (61, 32346), (63, 32373), (69, 32403), (77, 32448), (89, 32553), (91, 32568), (98, 32619), (99, 32625),

Gene: Yaboi_56 Start: 30890, Stop: 31678, Start Num: 7
Candidate Starts for Yaboi_56:
(1, 30830), (2, 30839), (Start: 7 @30890 has 76 MA's), (16, 30968), (20, 30980), (22, 30992), (23, 30998), (25, 31007), (29, 31031), (30, 31055), (34, 31097), (48, 31211), (49, 31217), (57, 31274), (59, 31280), (61, 31298), (63, 31325), (75, 31382), (77, 31400), (84, 31481), (89, 31505), (91, 31520), (94, 31532), (101, 31598),