Pham 290921

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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 290921 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290921 has 146 members, 19 are drafts.

Phages represented in each track:
• Track 1 : BackyardAgain_97, Koguma_97
• Track 2 : Roots515_99, Daffodil_105, Megamind_99, MikeLiesIn_101, Caravan_95, ParkTD_101, FoxtrotP1_100, YemiJoy2021_101, Gizmo_104, Erdmann_101, NedWong_101, Bipolarisk_99, Izajani_100, Jessibeth14_99, MoMoMixon_101, Shrimp_100
• Track 3 : Fixie_97, Belieber_96, Chargie21_97, Kboogie_104, ChickenPhender_96, Basquiat_97
• Track 4 : CharlieB_96, Moby_91, BeanWater_92, Sauce_101, Blackdragon_96, Moiqah_91, Sprinklers_96, Shaqnato_93, Maby2021_100, DirtMonster_94, DeejaClivia_89
• Track 5 : RoMag_95, Domi_94
• Track 6 : Alice_93, ET08_89
• Track 7 : Sebata_102, LinStu_100
• Track 8 : BobaPhatt_96, Primadonna_94
• Track 9 : Phox_97, Cali_96, Nidhogg_101, LRRHood_95, Ablatia_99, Darko_100, Wally_99, JayJay_106, HyRo_92, Mangeria_100, Janiyra_102, Quasimodo_101, Bezza_89, McGee_102, YoungMoneyMata_101, Fludd_101
• Track 10 : Loanshark_100, Khaleesi_99, Asterius_103, McWolfish_98, SVoro_98, PurduePete_100
• Track 11 : I3_106
• Track 12 : IkeLoa_94, Kamryn_100, LookingGlass_101, StephanieG_99
• Track 13 : Lethe_99, Trinitium_97, Iota_95
• Track 14 : Naval22_105
• Track 15 : ChaylaJr_95, Catera_97, Littleton_100, Turret_95
• Track 16 : Babyland_101, Ewok_101, Napoleon13_96, Melpomini_94, JulietS_94, EmmaElysia_100, Dietrick_92, Stubby_93, Ava3_101, Bread_100, Burrough_100
• Track 17 : Blubba_89
• Track 18 : Morizzled23_100
• Track 19 : DTDevon_101
• Track 20 : Grasshills_107, EggyFarm_108, BigCity_108
• Track 21 : StubbySaigey_103
• Track 22 : TinyTim_100
• Track 23 : Zalkecks_101
• Track 24 : Bigswole_105, Mikro_98
• Track 25 : Yassified_97
• Track 26 : EmToTheThree_103
• Track 27 : Nappy_103

- Track 28 : Pleione_103
- Track 29 : Ronan_94
- Track 30 : Bonray_100
- Track 31 : Blackbrain_95, Cactojaque_95
- Track 32 : Delylah_103
- Track 33 : JustHall_97
- Track 34 : Willis_101
- Track 35 : Pier_104
- Track 36 : DrPhinkDaddy_99
- Track 37 : Rocha_99
- Track 38 : Shelob_102
- Track 39 : Pio_104, Zeenon_102, Bxz1_98
- Track 40 : Delilah_100, Capablanca_102
- Track 41 : Grungle_88, Maturis_98
- Track 42 : Cane17_89
- Track 43 : Lukilu_91
- Track 44 : Spud_100
- Track 45 : Norm_101, ZygoTaiga_99
- Track 46 : Shifa_89
- Track 47 : QBert_94
- Track 48 : EasyJones_103
- Track 49 : Salacia_104
- Track 50 : BananaFence_99
- Track 51 : SrishMeg2525_99
- Track 52 : Issimir_99
- Track 53 : Jezreel_100
- Track 54 : NuevoMundo_106, Lee7_98
- Track 55 : Colt_90
- Track 56 : Dandelion_107
- Track 57 : Duckfeet_93
- Track 58 : ErnieJ_96
- Track 59 : Yucca_100
- Track 60 : FudgeTart_100
- Track 61 : Pinkcreek_91
- Track 62 : ScoobyDoobyDoo_93
- Track 63 : RedWattleHog_16

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

The start number called the most often in the published annotations is 8, it was called in 46 of the 127 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Ablatia_99, Basquiat_97, Belieber_96, Bezza_89, Bipolarisk_99, Blackbrain_95, Cactojaque_95, Cali_96, Caravan_95, Chargie21_97, ChickenPhender_96, DTDevon_101, Daffodil_105, Darko_100, DrPhinkDaddy_99, Erdmann_101, ErnieJ_96, Fixie_97, Fludd_101, FoxtrotP1_100, Gizmo_104, HyRo_92, Izajani_100, Janiyra_102, JayJay_106, Jessibeth14_99, JustHall_97, Kboogie_104, LRRHood_95, Mangeria_100, McGee_102, Megamind_99, MikeLiesIn_101, MoMoMixon_101, Nappy_103, NedWong_101, Nidhogg_101, ParkTD_101, Phox_97, Quasimodo_101,

Roots515_99, Shifa_89, Shrimp_100, SrishMeg2525_99, StubbySaigey_103, Wally_99, Willis_101, YemiJoy2021_101, YoungMoneyMata_101,

Genes that have the "Most Annotated" start but do not call it:
• BobaPhatt_96, Dandelion_107, IkeLoa_94, Kamryn_100, LinStu_100, LookingGlass_101, Morizzled23_100, Primadonna_94, Rocha_99, Sebata_102, StephanieG_99, Zalkecks_101,

Genes that do not have the "Most Annotated" start:
• Alice_93, Asterius_103, Ava3_101, Babyland_101, BackyardAgain_97, BananaFence_99, BeanWater_92, BigCity_108, Bigswole_105, Blackdragon_96, Blubba_89, Bonray_100, Bread_100, Burrough_100, Bxz1_98, Cane17_89, Capablanca_102, Catera_97, CharlieB_96, ChaylaJr_95, Colt_90, DeejaClivia_89, Delilah_100, Delylah_103, Dietrick_92, DirtMonster_94, Domi_94, Duckfeet_93, ET08_89, EasyJones_103, EggyFarm_108, EmToTheThree_103, EmmaElysia_100, Ewok_101, FudgeTart_100, Grasshills_107, Grungle_88, I3_106, Iota_95, Issimir_99, Jezreel_100, JulietS_94, Khaleesi_99, Koguma_97, Lee7_98, Lethe_99, Littleton_100, Loanshark_100, Lukilu_91, Maby2021_100, Maturis_98, McWolfish_98, Melpomini_94, Mikro_98, Moby_91, Moiqah_91, Napoleon13_96, Naval22_105, Norm_101, NuevoMundo_106, Pier_104, Pinkcreek_91, Pio_104, Pleione_103, PurduePete_100, QBert_94, RedWattleHog_16, RoMag_95, Ronan_94, SVoro_98, Salacia_104, Sauce_101, ScoobyDoobyDoo_93, Shaqnato_93, Shelob_102, Sprinklers_96, Spud_100, Stubby_93, TinyTim_100, Trinitium_97, Turret_95, Yassified_97, Yucca_100, Zeenon_102, ZygoTaiga_99,

Summary by start number:

Start 3:
• Found in 40 of 146 (27.4%) of genes in pham
• Manual Annotations of this start: 5 of 127
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Alice_93 (C1), Colt_90 (C1), Delylah_103 (C1), ET08_89 (C1), Pleione_103 (C1),

Start 4:
• Found in 40 of 146 (27.4%) of genes in pham
• Manual Annotations of this start: 28 of 127
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Asterius_103 (C1), BananaFence_99 (C1), BeanWater_92 (C1), Blackdragon_96 (C1), Blubba_89 (C1), Bxz1_98 (C1), Cane17_89 (C1), Capablanca_102 (C1), CharlieB_96 (C1), DeejaClivia_89 (C1), Delilah_100 (C1), DirtMonster_94 (C1), Duckfeet_93 (C1), Khaleesi_99 (C1), Lee7_98 (C1), Loanshark_100 (C1), Maby2021_100 (C1), McWolfish_98 (C1), Moby_91 (C1), Moiqah_91 (C1), Naval22_105 (C1), Norm_101 (C1), NuevoMundo_106 (C1), Pinkcreek_91 (C1), Pio_104 (C1), PurduePete_100 (C1), Ronan_94 (C1), SVoro_98 (C1), Sauce_101 (C1), Shaqnato_93 (C1), Sprinklers_96 (C1), Spud_100 (C1), Yassified_97 (C1), Zeenon_102 (C1), ZygoTaiga_99 (C1),

Start 5:
• Found in 8 of 146 (5.5%) of genes in pham
• Manual Annotations of this start: 6 of 127
• Called 87.5% of time when present

• Phage (with cluster) where this start called: Dandelion_107 (C1), IkeLoa_94 (C1), Kamryn_100 (C1), LinStu_100 (C1), LookingGlass_101 (C1), Sebata_102 (C1), StephanieG_99 (C1),

Start 6:
• Found in 7 of 146 (4.8%) of genes in pham
• Manual Annotations of this start: 4 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BigCity_108 (C1), EggyFarm_108 (C1), FudgeTart_100 (C1), Grasshills_107 (C1), Lukilu_91 (C1), Pier_104 (C1), ScoobyDoobyDoo_93 (C2),

Start 7:
• Found in 9 of 146 (6.2%) of genes in pham
• Manual Annotations of this start: 9 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Catera_97 (C1), ChaylaJr_95 (C1), Iota_95 (C1), Issimir_99 (C1), Jezreel_100 (C1), Lethe_99 (C1), Littleton_100 (C1), Trinitium_97 (C1), Turret_95 (C1),

Start 8:
• Found in 61 of 146 (41.8%) of genes in pham
• Manual Annotations of this start: 46 of 127
• Called 80.3% of time when present
• Phage (with cluster) where this start called: Ablatia_99 (C1), Basquiat_97 (C1), Belieber_96 (C1), Bezza_89 (C1), Bipolarisk_99 (C1), Blackbrain_95 (C1), Cactojaque_95 (C1), Cali_96 (C1), Caravan_95 (C1), Chargie21_97 (C1), ChickenPhender_96 (C1), DTDevon_101 (C1), Daffodil_105 (C1), Darko_100 (C1), DrPhinkDaddy_99 (C1), Erdmann_101 (C1), ErnieJ_96 (C1), Fixie_97 (C1), Fludd_101 (C1), FoxtrotP1_100 (C1), Gizmo_104 (C1), HyRo_92 (C1), Izajani_100 (C1), Janiyra_102 (C1), JayJay_106 (C1), Jessibeth14_99 (C1), JustHall_97 (C1), Kboogie_104 (C1), LRRHood_95 (C1), Mangeria_100 (C1), McGee_102 (C1), Megamind_99 (C1), MikeLiesIn_101 (C1), MoMoMixon_101 (C1), Nappy_103 (C1), NedWong_101 (C1), Nidhogg_101 (C1), ParkTD_101 (C1), Phox_97 (C1), Quasimodo_101 (C1), Roots515_99 (C1), Shifa_89 (C1), Shrimp_100 (C1), SrishMeg2525_99 (C1), StubbySaigey_103 (C1), Wally_99 (C1), Willis_101 (C1), YemiJoy2021_101 (C1), YoungMoneyMata_101 (C1),

Start 9:
• Found in 6 of 146 (4.1%) of genes in pham
• Manual Annotations of this start: 5 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bigswole_105 (C1), Domi_94 (C1), I3_106 (C1), Mikro_98 (C1), RoMag_95 (C1), Salacia_104 (C1),

Start 10:
• Found in 52 of 146 (35.6%) of genes in pham
• Manual Annotations of this start: 2 of 127
• Called 7.7% of time when present
• Phage (with cluster) where this start called: BobaPhatt_96 (C1), Morizzled23_100 (C1), Primadonna_94 (C1), Zalkecks_101 (C1),

Start 22:

• Found in 3 of 146 (2.1%) of genes in pham
• Manual Annotations of this start: 3 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EasyJones_103 (C1), QBert_94 (C1), Shelob_102 (C1),

Start 24:
• Found in 19 of 146 (13.0%) of genes in pham
• Manual Annotations of this start: 17 of 127
• Called 89.5% of time when present
• Phage (with cluster) where this start called: Ava3_101 (C1), Babyland_101 (C1), BackyardAgain_97 (C1), Bonray_100 (C1), Bread_100 (C1), Burrough_100 (C1), Dietrick_92 (C1), EmToTheThree_103 (C1), EmmaElysia_100 (C1), Ewok_101 (C1), JulietS_94 (C1), Koguma_97 (C1), Melpomini_94 (C1), Napoleon13_96 (C1), Stubby_93 (C1), TinyTim_100 (C1), Yucca_100 (C1),

Start 27:
• Found in 1 of 146 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RedWattleHog_16 (DX),

Start 28:
• Found in 36 of 146 (24.7%) of genes in pham
• Manual Annotations of this start: 1 of 127
• Called 5.6% of time when present
• Phage (with cluster) where this start called: Grungle_88 (C1), Maturis_98 (C1),

Start 35:
• Found in 27 of 146 (18.5%) of genes in pham
• No Manual Annotations of this start.
• Called 3.7% of time when present
• Phage (with cluster) where this start called: Rocha_99 (C1),

Summary by clusters:

There are 3 clusters represented in this pham: C2, C1, DX,

Info for manual annotations of cluster C1:
•Start number 3 was manually annotated 5 times for cluster C1.
•Start number 4 was manually annotated 28 times for cluster C1.
•Start number 5 was manually annotated 6 times for cluster C1.
•Start number 6 was manually annotated 3 times for cluster C1.
•Start number 7 was manually annotated 9 times for cluster C1.
•Start number 8 was manually annotated 46 times for cluster C1.
•Start number 9 was manually annotated 5 times for cluster C1.
•Start number 10 was manually annotated 2 times for cluster C1.
•Start number 22 was manually annotated 3 times for cluster C1.
•Start number 24 was manually annotated 17 times for cluster C1.
•Start number 28 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster C2:
•Start number 6 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster DX:
•Start number 27 was manually annotated 1 time for cluster DX.

Gene Information:

Gene: Ablatia_99 Start: 49731, Stop: 50648, Start Num: 8
Candidate Starts for Ablatia_99:
(Start: 8 @49731 has 46 MA's), (Start: 10 @49746 has 2 MA's), (19, 49926), (36, 50076), (42, 50172), (45, 50253), (57, 50346), (61, 50472), (64, 50532), (65, 50541), (71, 50601), (74, 50619),

Gene: Alice_93 Start: 48979, Stop: 49953, Start Num: 3
Candidate Starts for Alice_93:
(Start: 3 @48979 has 5 MA's), (Start: 4 @49012 has 28 MA's), (20, 49225), (21, 49228), (32, 49360), (44, 49543), (46, 49579), (61, 49777), (64, 49837), (65, 49846), (71, 49906), (74, 49924),

Gene: Asterius_103 Start: 50347, Stop: 51285, Start Num: 4
Candidate Starts for Asterius_103:
(Start: 3 @50314 has 5 MA's), (Start: 4 @50347 has 28 MA's), (20, 50560), (21, 50563), (32, 50695), (44, 50878), (46, 50914), (56, 50977), (57, 50986), (61, 51112), (65, 51181), (69, 51223), (70, 51238), (71, 51241), (74, 51259), (75, 51277),

Gene: Ava3_101 Start: 50524, Stop: 51213, Start Num: 24
Candidate Starts for Ava3_101:
(Start: 24 @50524 has 17 MA's), (Start: 28 @50560 has 1 MA's), (35, 50638), (42, 50737), (44, 50803), (46, 50839), (61, 51037), (64, 51097), (65, 51106), (71, 51166), (74, 51184),

Gene: Babyland_101 Start: 49697, Stop: 50386, Start Num: 24
Candidate Starts for Babyland_101:
(Start: 24 @49697 has 17 MA's), (Start: 28 @49733 has 1 MA's), (35, 49811), (42, 49910), (44, 49976), (46, 50012), (61, 50210), (64, 50270), (65, 50279), (71, 50339), (74, 50357),

Gene: BackyardAgain_97 Start: 49527, Stop: 50216, Start Num: 24
Candidate Starts for BackyardAgain_97:
(Start: 24 @49527 has 17 MA's), (Start: 28 @49563 has 1 MA's), (35, 49641), (42, 49740), (44, 49806), (46, 49842), (57, 49914), (61, 50040), (64, 50100), (65, 50109), (71, 50169), (74, 50187),

Gene: BananaFence_99 Start: 50531, Stop: 51472, Start Num: 4
Candidate Starts for BananaFence_99:
(Start: 3 @50498 has 5 MA's), (Start: 4 @50531 has 28 MA's), (20, 50744), (21, 50747), (32, 50879), (44, 51062), (46, 51098), (56, 51161), (57, 51170), (61, 51296), (64, 51356), (65, 51365), (71, 51425), (74, 51443),

Gene: Basquiat_97 Start: 49270, Stop: 50184, Start Num: 8
Candidate Starts for Basquiat_97:
(Start: 8 @49270 has 46 MA's), (Start: 10 @49285 has 2 MA's), (19, 49465), (36, 49615), (42, 49711), (45, 49792), (57, 49885), (61, 50011), (64, 50071), (65, 50080), (69, 50122), (71, 50140), (74, 50158),

Gene: BeanWater_92 Start: 50127, Stop: 51068, Start Num: 4
Candidate Starts for BeanWater_92:

(Start: 3 @50094 has 5 MA's), (Start: 4 @50127 has 28 MA's), (20, 50340), (21, 50343), (32, 50475), (44, 50658), (46, 50694), (61, 50892), (64, 50952), (65, 50961), (71, 51021), (74, 51039),

Gene: Belieber_96 Start: 49617, Stop: 50531, Start Num: 8
Candidate Starts for Belieber_96:
(Start: 8 @49617 has 46 MA's), (Start: 10 @49632 has 2 MA's), (19, 49812), (36, 49962), (42, 50058), (45, 50139), (57, 50232), (61, 50358), (64, 50418), (65, 50427), (69, 50469), (71, 50487), (74, 50505),

Gene: Bezza_89 Start: 49574, Stop: 50491, Start Num: 8
Candidate Starts for Bezza_89:
(Start: 8 @49574 has 46 MA's), (Start: 10 @49589 has 2 MA's), (19, 49769), (36, 49919), (42, 50015), (45, 50096), (57, 50189), (61, 50315), (64, 50375), (65, 50384), (71, 50444), (74, 50462),

Gene: BigCity_108 Start: 52801, Stop: 53727, Start Num: 6
Candidate Starts for BigCity_108:
(Start: 6 @52801 has 4 MA's), (15, 52930), (16, 52933), (20, 53011), (37, 53173), (44, 53320), (56, 53419), (57, 53428), (61, 53554), (64, 53614), (65, 53623), (69, 53665), (70, 53680), (71, 53683), (74, 53701), (75, 53719),

Gene: Bigswole_105 Start: 53326, Stop: 54252, Start Num: 9
Candidate Starts for Bigswole_105:
(Start: 9 @53326 has 5 MA's), (12, 53416), (15, 53449), (23, 53545), (26, 53563), (29, 53599), (31, 53641), (38, 53707), (43, 53785), (48, 53890), (54, 53929), (61, 54079), (65, 54148), (69, 54190), (70, 54205), (71, 54208), (74, 54226), (75, 54244),

Gene: Bipolarisk_99 Start: 50549, Stop: 51463, Start Num: 8
Candidate Starts for Bipolarisk_99:
(Start: 8 @50549 has 46 MA's), (Start: 10 @50564 has 2 MA's), (11, 50639), (19, 50744), (34, 50885), (36, 50894), (40, 50960), (42, 50990), (47, 51098), (51, 51119), (57, 51164), (61, 51290), (65, 51359), (69, 51401), (70, 51416), (71, 51419), (74, 51437), (75, 51455),

Gene: Blackbrain_95 Start: 48848, Stop: 49765, Start Num: 8
Candidate Starts for Blackbrain_95:
(Start: 8 @48848 has 46 MA's), (Start: 10 @48863 has 2 MA's), (19, 49043), (36, 49193), (42, 49289), (45, 49370), (61, 49589), (64, 49649), (65, 49658), (71, 49718), (74, 49736),

Gene: Blackdragon_96 Start: 49954, Stop: 50895, Start Num: 4
Candidate Starts for Blackdragon_96:
(Start: 3 @49921 has 5 MA's), (Start: 4 @49954 has 28 MA's), (20, 50167), (21, 50170), (32, 50302), (44, 50485), (46, 50521), (61, 50719), (64, 50779), (65, 50788), (71, 50848), (74, 50866),

Gene: Blubba_89 Start: 48921, Stop: 49859, Start Num: 4
Candidate Starts for Blubba_89:
(Start: 3 @48888 has 5 MA's), (Start: 4 @48921 has 28 MA's), (20, 49134), (21, 49137), (32, 49269), (44, 49452), (46, 49488), (61, 49686), (64, 49746), (65, 49755), (69, 49797), (70, 49812), (71, 49815), (74, 49833),

Gene: BobaPhatt_96 Start: 48910, Stop: 49812, Start Num: 10
Candidate Starts for BobaPhatt_96:
(Start: 8 @48895 has 46 MA's), (Start: 10 @48910 has 2 MA's), (19, 49090), (36, 49240), (42, 49336), (45, 49417), (57, 49510), (61, 49636), (64, 49696), (65, 49705), (71, 49765), (74, 49783),

Gene: Bonray_100 Start: 50950, Stop: 51636, Start Num: 24

Candidate Starts for Bonray_100:
(Start: 24 @50950 has 17 MA's), (Start: 28 @50986 has 1 MA's), (35, 51064), (42, 51163), (44, 51229),
(46, 51265), (61, 51463), (65, 51532), (69, 51574), (70, 51589), (71, 51592), (74, 51610), (75, 51628),

Gene: Bread_100 Start: 50610, Stop: 51299, Start Num: 24
Candidate Starts for Bread_100:
(Start: 24 @50610 has 17 MA's), (Start: 28 @50646 has 1 MA's), (35, 50724), (42, 50823), (44, 50889),
(46, 50925), (61, 51123), (64, 51183), (65, 51192), (71, 51252), (74, 51270),

Gene: Burrough_100 Start: 51109, Stop: 51798, Start Num: 24
Candidate Starts for Burrough_100:
(Start: 24 @51109 has 17 MA's), (Start: 28 @51145 has 1 MA's), (35, 51223), (42, 51322), (44, 51388),
(46, 51424), (61, 51622), (64, 51682), (65, 51691), (71, 51751), (74, 51769),

Gene: Bxz1_98 Start: 52296, Stop: 53234, Start Num: 4
Candidate Starts for Bxz1_98:
(Start: 3 @52263 has 5 MA's), (Start: 4 @52296 has 28 MA's), (20, 52509), (21, 52512), (32, 52644),
(44, 52827), (46, 52863), (61, 53061), (65, 53130), (69, 53172), (71, 53190), (74, 53208), (75, 53226),

Gene: Cactojaque_95 Start: 48955, Stop: 49872, Start Num: 8
Candidate Starts for Cactojaque_95:
(Start: 8 @48955 has 46 MA's), (Start: 10 @48970 has 2 MA's), (19, 49150), (36, 49300), (42, 49396),
(45, 49477), (61, 49696), (64, 49756), (65, 49765), (71, 49825), (74, 49843),

Gene: Cali_96 Start: 50881, Stop: 51798, Start Num: 8
Candidate Starts for Cali_96:
(Start: 8 @50881 has 46 MA's), (Start: 10 @50896 has 2 MA's), (19, 51076), (36, 51226), (42, 51322),
(45, 51403), (57, 51496), (61, 51622), (64, 51682), (65, 51691), (71, 51751), (74, 51769),

Gene: Cane17_89 Start: 48994, Stop: 49932, Start Num: 4
Candidate Starts for Cane17_89:
(Start: 3 @48961 has 5 MA's), (Start: 4 @48994 has 28 MA's), (20, 49207), (21, 49210), (32, 49342),
(44, 49525), (46, 49561), (56, 49624), (57, 49633), (61, 49759), (64, 49819), (65, 49828), (69, 49870),
(71, 49888), (74, 49906),

Gene: Capablanca_102 Start: 51109, Stop: 52047, Start Num: 4
Candidate Starts for Capablanca_102:
(Start: 3 @51076 has 5 MA's), (Start: 4 @51109 has 28 MA's), (20, 51322), (21, 51325), (32, 51457),
(44, 51640), (46, 51676), (61, 51874), (64, 51934), (65, 51943), (69, 51985), (70, 52000), (71, 52003),
(74, 52021), (75, 52039),

Gene: Caravan_95 Start: 50235, Stop: 51149, Start Num: 8
Candidate Starts for Caravan_95:
(Start: 8 @50235 has 46 MA's), (Start: 10 @50250 has 2 MA's), (11, 50325), (19, 50430), (34, 50571),
(36, 50580), (40, 50646), (42, 50676), (47, 50784), (51, 50805), (57, 50850), (61, 50976), (65, 51045),
(69, 51087), (70, 51102), (71, 51105), (74, 51123), (75, 51141),

Gene: Catera_97 Start: 49133, Stop: 50065, Start Num: 7
Candidate Starts for Catera_97:
(Start: 7 @49133 has 9 MA's), (13, 49247), (Start: 28 @49412 has 1 MA's), (30, 49454), (43, 49598),
(44, 49658), (53, 49727), (54, 49742), (55, 49745), (61, 49892), (64, 49952), (65, 49961), (69, 50003),
(70, 50018), (71, 50021), (74, 50039), (75, 50057),

Gene: Chargie21_97 Start: 49270, Stop: 50184, Start Num: 8
Candidate Starts for Chargie21_97:
(Start: 8 @49270 has 46 MA's), (Start: 10 @49285 has 2 MA's), (19, 49465), (36, 49615), (42, 49711),
(45, 49792), (57, 49885), (61, 50011), (64, 50071), (65, 50080), (69, 50122), (71, 50140), (74, 50158),

Gene: CharlieB_96 Start: 49261, Stop: 50202, Start Num: 4
Candidate Starts for CharlieB_96:
(Start: 3 @49228 has 5 MA's), (Start: 4 @49261 has 28 MA's), (20, 49474), (21, 49477), (32, 49609),
(44, 49792), (46, 49828), (61, 50026), (64, 50086), (65, 50095), (71, 50155), (74, 50173),

Gene: ChaylaJr_95 Start: 48759, Stop: 49691, Start Num: 7
Candidate Starts for ChaylaJr_95:
(Start: 7 @48759 has 9 MA's), (13, 48873), (Start: 28 @49038 has 1 MA's), (30, 49080), (43, 49224),
(44, 49284), (53, 49353), (54, 49368), (55, 49371), (61, 49518), (64, 49578), (65, 49587), (69, 49629),
(70, 49644), (71, 49647), (74, 49665), (75, 49683),

Gene: ChickenPhender_96 Start: 49079, Stop: 49993, Start Num: 8
Candidate Starts for ChickenPhender_96:
(Start: 8 @49079 has 46 MA's), (Start: 10 @49094 has 2 MA's), (19, 49274), (36, 49424), (42, 49520),
(45, 49601), (57, 49694), (61, 49820), (64, 49880), (65, 49889), (69, 49931), (71, 49949), (74, 49967),

Gene: Colt_90 Start: 49557, Stop: 50528, Start Num: 3
Candidate Starts for Colt_90:
(Start: 3 @49557 has 5 MA's), (Start: 4 @49590 has 28 MA's), (20, 49803), (21, 49806), (32, 49938),
(44, 50121), (46, 50157), (61, 50355), (64, 50415), (65, 50424), (69, 50466), (70, 50481), (71, 50484),
(74, 50502),

Gene: DTDevon_101 Start: 51152, Stop: 52066, Start Num: 8
Candidate Starts for DTDevon_101:
(Start: 8 @51152 has 46 MA's), (11, 51242), (19, 51347), (36, 51497), (39, 51560), (40, 51563), (42,
51593), (47, 51701), (49, 51713), (52, 51725), (57, 51767), (61, 51893), (65, 51962), (69, 52004), (70,
52019), (71, 52022), (74, 52040), (75, 52058),

Gene: Daffodil_105 Start: 50849, Stop: 51763, Start Num: 8
Candidate Starts for Daffodil_105:
(Start: 8 @50849 has 46 MA's), (Start: 10 @50864 has 2 MA's), (11, 50939), (19, 51044), (34, 51185),
(36, 51194), (40, 51260), (42, 51290), (47, 51398), (51, 51419), (57, 51464), (61, 51590), (65, 51659),
(69, 51701), (70, 51716), (71, 51719), (74, 51737), (75, 51755),

Gene: Dandelion_107 Start: 53271, Stop: 54200, Start Num: 5
Candidate Starts for Dandelion_107:
(Start: 5 @53271 has 6 MA's), (Start: 8 @53277 has 46 MA's), (11, 53367), (25, 53514), (Start: 28
@53553 has 1 MA's), (35, 53628), (41, 53721), (42, 53727), (54, 53877), (56, 53892), (57, 53901), (61,
54027), (65, 54096), (69, 54138), (70, 54153), (71, 54156), (74, 54174), (75, 54192),

Gene: Darko_100 Start: 50790, Stop: 51707, Start Num: 8
Candidate Starts for Darko_100:
(Start: 8 @50790 has 46 MA's), (Start: 10 @50805 has 2 MA's), (19, 50985), (36, 51135), (42, 51231),
(45, 51312), (57, 51405), (61, 51531), (64, 51591), (65, 51600), (71, 51660), (74, 51678),

Gene: DeejaClivia_89 Start: 47443, Stop: 48384, Start Num: 4
Candidate Starts for DeejaClivia_89:

(Start: 3 @47410 has 5 MA's), (Start: 4 @47443 has 28 MA's), (20, 47656), (21, 47659), (32, 47791), (44, 47974), (46, 48010), (61, 48208), (64, 48268), (65, 48277), (71, 48337), (74, 48355),

Gene: Delilah_100 Start: 50979, Stop: 51917, Start Num: 4
Candidate Starts for Delilah_100:
(Start: 3 @50946 has 5 MA's), (Start: 4 @50979 has 28 MA's), (20, 51192), (21, 51195), (32, 51327), (44, 51510), (46, 51546), (61, 51744), (64, 51804), (65, 51813), (69, 51855), (70, 51870), (71, 51873), (74, 51891), (75, 51909),

Gene: Delylah_103 Start: 50490, Stop: 51461, Start Num: 3
Candidate Starts for Delylah_103:
(Start: 3 @50490 has 5 MA's), (Start: 4 @50523 has 28 MA's), (20, 50736), (21, 50739), (32, 50871), (44, 51054), (46, 51090), (56, 51153), (57, 51162), (61, 51288), (65, 51357), (69, 51399), (70, 51414), (71, 51417), (74, 51435), (75, 51453),

Gene: Dietrick_92 Start: 48775, Stop: 49464, Start Num: 24
Candidate Starts for Dietrick_92:
(Start: 24 @48775 has 17 MA's), (Start: 28 @48811 has 1 MA's), (35, 48889), (42, 48988), (44, 49054), (46, 49090), (61, 49288), (64, 49348), (65, 49357), (71, 49417), (74, 49435),

Gene: DirtMonster_94 Start: 50017, Stop: 50958, Start Num: 4
Candidate Starts for DirtMonster_94:
(Start: 3 @49984 has 5 MA's), (Start: 4 @50017 has 28 MA's), (20, 50230), (21, 50233), (32, 50365), (44, 50548), (46, 50584), (61, 50782), (64, 50842), (65, 50851), (71, 50911), (74, 50929),

Gene: Domi_94 Start: 49887, Stop: 50813, Start Num: 9
Candidate Starts for Domi_94:
(Start: 9 @49887 has 5 MA's), (12, 49977), (15, 50010), (23, 50106), (26, 50124), (29, 50160), (31, 50202), (38, 50268), (43, 50346), (48, 50451), (54, 50490), (59, 50589), (61, 50640), (64, 50700), (65, 50709), (69, 50751), (70, 50766), (71, 50769), (74, 50787), (75, 50805),

Gene: DrPhinkDaddy_99 Start: 51069, Stop: 51986, Start Num: 8
Candidate Starts for DrPhinkDaddy_99:
(Start: 8 @51069 has 46 MA's), (Start: 10 @51084 has 2 MA's), (11, 51159), (19, 51264), (34, 51405), (36, 51414), (40, 51480), (42, 51510), (47, 51618), (51, 51639), (57, 51684), (61, 51810), (64, 51870), (65, 51879), (69, 51921), (71, 51939), (74, 51957),

Gene: Duckfeet_93 Start: 48975, Stop: 49916, Start Num: 4
Candidate Starts for Duckfeet_93:
(Start: 3 @48942 has 5 MA's), (Start: 4 @48975 has 28 MA's), (20, 49188), (21, 49191), (32, 49323), (44, 49506), (46, 49542), (59, 49689), (61, 49740), (64, 49800), (65, 49809), (71, 49869), (74, 49887),

Gene: ET08_89 Start: 49483, Stop: 50457, Start Num: 3
Candidate Starts for ET08_89:
(Start: 3 @49483 has 5 MA's), (Start: 4 @49516 has 28 MA's), (20, 49729), (21, 49732), (32, 49864), (44, 50047), (46, 50083), (61, 50281), (64, 50341), (65, 50350), (71, 50410), (74, 50428),

Gene: EasyJones_103 Start: 50149, Stop: 50850, Start Num: 22
Candidate Starts for EasyJones_103:
(Start: 22 @50149 has 3 MA's), (42, 50374), (54, 50524), (56, 50539), (57, 50548), (61, 50674), (65, 50743), (71, 50803), (74, 50821),

Gene: EggyFarm_108 Start: 52801, Stop: 53727, Start Num: 6

Candidate Starts for EggyFarm_108:
(Start: 6 @52801 has 4 MA's), (15, 52930), (16, 52933), (20, 53011), (37, 53173), (44, 53320), (56, 53419), (57, 53428), (61, 53554), (64, 53614), (65, 53623), (69, 53665), (70, 53680), (71, 53683), (74, 53701), (75, 53719),

Gene: EmToTheThree_103 Start: 52294, Stop: 52980, Start Num: 24
Candidate Starts for EmToTheThree_103:
(Start: 24 @52294 has 17 MA's), (Start: 28 @52330 has 1 MA's), (35, 52408), (42, 52507), (44, 52573), (46, 52609), (61, 52807), (64, 52867), (65, 52876), (69, 52918), (70, 52933), (71, 52936), (74, 52954), (75, 52972),

Gene: EmmaElysia_100 Start: 49825, Stop: 50514, Start Num: 24
Candidate Starts for EmmaElysia_100:
(Start: 24 @49825 has 17 MA's), (Start: 28 @49861 has 1 MA's), (35, 49939), (42, 50038), (44, 50104), (46, 50140), (61, 50338), (64, 50398), (65, 50407), (71, 50467), (74, 50485),

Gene: Erdmann_101 Start: 50850, Stop: 51764, Start Num: 8
Candidate Starts for Erdmann_101:
(Start: 8 @50850 has 46 MA's), (Start: 10 @50865 has 2 MA's), (11, 50940), (19, 51045), (34, 51186), (36, 51195), (40, 51261), (42, 51291), (47, 51399), (51, 51420), (57, 51465), (61, 51591), (65, 51660), (69, 51702), (70, 51717), (71, 51720), (74, 51738), (75, 51756),

Gene: ErnieJ_96 Start: 49060, Stop: 49974, Start Num: 8
Candidate Starts for ErnieJ_96:
(Start: 8 @49060 has 46 MA's), (Start: 10 @49075 has 2 MA's), (19, 49255), (36, 49405), (42, 49501), (45, 49582), (57, 49675), (61, 49801), (64, 49861), (65, 49870), (69, 49912), (70, 49927), (71, 49930), (74, 49948), (75, 49966),

Gene: Ewok_101 Start: 50470, Stop: 51159, Start Num: 24
Candidate Starts for Ewok_101:
(Start: 24 @50470 has 17 MA's), (Start: 28 @50506 has 1 MA's), (35, 50584), (42, 50683), (44, 50749), (46, 50785), (61, 50983), (64, 51043), (65, 51052), (71, 51112), (74, 51130),

Gene: Fixie_97 Start: 49495, Stop: 50409, Start Num: 8
Candidate Starts for Fixie_97:
(Start: 8 @49495 has 46 MA's), (Start: 10 @49510 has 2 MA's), (19, 49690), (36, 49840), (42, 49936), (45, 50017), (57, 50110), (61, 50236), (64, 50296), (65, 50305), (69, 50347), (71, 50365), (74, 50383),

Gene: Fludd_101 Start: 49705, Stop: 50619, Start Num: 8
Candidate Starts for Fludd_101:
(Start: 8 @49705 has 46 MA's), (Start: 10 @49720 has 2 MA's), (19, 49900), (36, 50050), (42, 50146), (45, 50227), (57, 50320), (61, 50446), (64, 50506), (65, 50515), (71, 50575), (74, 50593),

Gene: FoxtrotP1_100 Start: 52020, Stop: 52934, Start Num: 8
Candidate Starts for FoxtrotP1_100:
(Start: 8 @52020 has 46 MA's), (Start: 10 @52035 has 2 MA's), (11, 52110), (19, 52215), (34, 52356), (36, 52365), (40, 52431), (42, 52461), (47, 52569), (51, 52590), (57, 52635), (61, 52761), (65, 52830), (69, 52872), (70, 52887), (71, 52890), (74, 52908), (75, 52926),

Gene: FudgeTart_100 Start: 50127, Stop: 51056, Start Num: 6
Candidate Starts for FudgeTart_100:
(Start: 6 @50127 has 4 MA's), (14, 50253), (15, 50256), (16, 50259), (20, 50337), (37, 50499), (44, 50646), (56, 50745), (57, 50754), (61, 50880), (65, 50949), (69, 50991), (70, 51006), (71, 51009), (74,

51027),

Gene: Gizmo_104 Start: 52000, Stop: 52914, Start Num: 8
Candidate Starts for Gizmo_104:
(Start: 8 @52000 has 46 MA's), (Start: 10 @52015 has 2 MA's), (11, 52090), (19, 52195), (34, 52336), (36, 52345), (40, 52411), (42, 52441), (47, 52549), (51, 52570), (57, 52615), (61, 52741), (65, 52810), (69, 52852), (70, 52867), (71, 52870), (74, 52888), (75, 52906),

Gene: Grasshills_107 Start: 52801, Stop: 53727, Start Num: 6
Candidate Starts for Grasshills_107:
(Start: 6 @52801 has 4 MA's), (15, 52930), (16, 52933), (20, 53011), (37, 53173), (44, 53320), (56, 53419), (57, 53428), (61, 53554), (64, 53614), (65, 53623), (69, 53665), (70, 53680), (71, 53683), (74, 53701), (75, 53719),

Gene: Grungle_88 Start: 47460, Stop: 48113, Start Num: 28
Candidate Starts for Grungle_88:
(Start: 24 @47424 has 17 MA's), (Start: 28 @47460 has 1 MA's), (35, 47538), (42, 47637), (44, 47703), (46, 47739), (57, 47811), (61, 47937), (64, 47997), (65, 48006), (71, 48066), (74, 48084),

Gene: HyRo_92 Start: 49635, Stop: 50552, Start Num: 8
Candidate Starts for HyRo_92:
(Start: 8 @49635 has 46 MA's), (Start: 10 @49650 has 2 MA's), (19, 49830), (36, 49980), (42, 50076), (45, 50157), (57, 50250), (61, 50376), (64, 50436), (65, 50445), (71, 50505), (74, 50523),

Gene: I3_106 Start: 51339, Stop: 52265, Start Num: 9
Candidate Starts for I3_106:
(Start: 9 @51339 has 5 MA's), (12, 51429), (15, 51462), (17, 51483), (23, 51558), (26, 51576), (29, 51612), (31, 51654), (38, 51720), (43, 51798), (48, 51903), (54, 51942), (61, 52092), (64, 52152), (65, 52161), (69, 52203), (70, 52218), (71, 52221), (74, 52239), (75, 52257),

Gene: IkeLoa_94 Start: 49446, Stop: 50375, Start Num: 5
Candidate Starts for IkeLoa_94:
(Start: 5 @49446 has 6 MA's), (Start: 8 @49452 has 46 MA's), (11, 49542), (25, 49689), (Start: 28 @49728 has 1 MA's), (35, 49803), (41, 49896), (42, 49902), (54, 50052), (56, 50067), (57, 50076), (61, 50202), (64, 50262), (65, 50271), (69, 50313), (70, 50328), (71, 50331), (74, 50349), (75, 50367),

Gene: Iota_95 Start: 49803, Stop: 50735, Start Num: 7
Candidate Starts for Iota_95:
(Start: 7 @49803 has 9 MA's), (13, 49917), (Start: 28 @50082 has 1 MA's), (30, 50124), (43, 50268), (44, 50328), (53, 50397), (54, 50412), (55, 50415), (61, 50562), (64, 50622), (65, 50631), (69, 50673), (70, 50688), (71, 50691), (74, 50709),

Gene: Issimir_99 Start: 50806, Stop: 51738, Start Num: 7
Candidate Starts for Issimir_99:
(Start: 7 @50806 has 9 MA's), (13, 50920), (Start: 28 @51085 has 1 MA's), (30, 51127), (43, 51271), (44, 51331), (61, 51565), (65, 51634), (69, 51676), (70, 51691), (71, 51694), (74, 51712), (75, 51730),

Gene: Izajani_100 Start: 51030, Stop: 51944, Start Num: 8
Candidate Starts for Izajani_100:
(Start: 8 @51030 has 46 MA's), (Start: 10 @51045 has 2 MA's), (11, 51120), (19, 51225), (34, 51366), (36, 51375), (40, 51441), (42, 51471), (47, 51579), (51, 51600), (57, 51645), (61, 51771), (65, 51840), (69, 51882), (70, 51897), (71, 51900), (74, 51918), (75, 51936),

Gene: Janiyra_102 Start: 50308, Stop: 51225, Start Num: 8
Candidate Starts for Janiyra_102:
(Start: 8 @50308 has 46 MA's), (Start: 10 @50323 has 2 MA's), (19, 50503), (36, 50653), (42, 50749), (45, 50830), (57, 50923), (61, 51049), (64, 51109), (65, 51118), (71, 51178), (74, 51196),

Gene: JayJay_106 Start: 52075, Stop: 52992, Start Num: 8
Candidate Starts for JayJay_106:
(Start: 8 @52075 has 46 MA's), (Start: 10 @52090 has 2 MA's), (19, 52270), (36, 52420), (42, 52516), (45, 52597), (57, 52690), (61, 52816), (64, 52876), (65, 52885), (71, 52945), (74, 52963),

Gene: Jessibeth14_99 Start: 50635, Stop: 51549, Start Num: 8
Candidate Starts for Jessibeth14_99:
(Start: 8 @50635 has 46 MA's), (Start: 10 @50650 has 2 MA's), (11, 50725), (19, 50830), (34, 50971), (36, 50980), (40, 51046), (42, 51076), (47, 51184), (51, 51205), (57, 51250), (61, 51376), (65, 51445), (69, 51487), (70, 51502), (71, 51505), (74, 51523), (75, 51541),

Gene: Jezreel_100 Start: 50786, Stop: 51718, Start Num: 7
Candidate Starts for Jezreel_100:
(Start: 7 @50786 has 9 MA's), (13, 50900), (Start: 28 @51065 has 1 MA's), (30, 51107), (43, 51251), (44, 51311), (53, 51380), (54, 51395), (55, 51398), (61, 51545), (65, 51614), (69, 51656), (70, 51671), (71, 51674), (74, 51692), (75, 51710),

Gene: JulietS_94 Start: 48305, Stop: 48994, Start Num: 24
Candidate Starts for JulietS_94:
(Start: 24 @48305 has 17 MA's), (Start: 28 @48341 has 1 MA's), (35, 48419), (42, 48518), (44, 48584), (46, 48620), (61, 48818), (64, 48878), (65, 48887), (71, 48947), (74, 48965),

Gene: JustHall_97 Start: 50173, Stop: 51087, Start Num: 8
Candidate Starts for JustHall_97:
(Start: 8 @50173 has 46 MA's), (Start: 10 @50188 has 2 MA's), (11, 50263), (19, 50368), (34, 50509), (36, 50518), (40, 50584), (42, 50614), (47, 50722), (51, 50743), (57, 50788), (61, 50914), (65, 50983), (70, 51040), (71, 51043), (74, 51061), (75, 51079),

Gene: Kamryn_100 Start: 51441, Stop: 52370, Start Num: 5
Candidate Starts for Kamryn_100:
(Start: 5 @51441 has 6 MA's), (Start: 8 @51447 has 46 MA's), (11, 51537), (25, 51684), (Start: 28 @51723 has 1 MA's), (35, 51798), (41, 51891), (42, 51897), (54, 52047), (56, 52062), (57, 52071), (61, 52197), (64, 52257), (65, 52266), (69, 52308), (70, 52323), (71, 52326), (74, 52344), (75, 52362),

Gene: Kboogie_104 Start: 49814, Stop: 50728, Start Num: 8
Candidate Starts for Kboogie_104:
(Start: 8 @49814 has 46 MA's), (Start: 10 @49829 has 2 MA's), (19, 50009), (36, 50159), (42, 50255), (45, 50336), (57, 50429), (61, 50555), (64, 50615), (65, 50624), (69, 50666), (71, 50684), (74, 50702),

Gene: Khaleesi_99 Start: 50726, Stop: 51664, Start Num: 4
Candidate Starts for Khaleesi_99:
(Start: 3 @50693 has 5 MA's), (Start: 4 @50726 has 28 MA's), (20, 50939), (21, 50942), (32, 51074), (44, 51257), (46, 51293), (56, 51356), (57, 51365), (61, 51491), (65, 51560), (69, 51602), (70, 51617), (71, 51620), (74, 51638), (75, 51656),

Gene: Koguma_97 Start: 48525, Stop: 49214, Start Num: 24
Candidate Starts for Koguma_97:

(Start: 24 @48525 has 17 MA's), (Start: 28 @48561 has 1 MA's), (35, 48639), (42, 48738), (44, 48804), (46, 48840), (57, 48912), (61, 49038), (64, 49098), (65, 49107), (71, 49167), (74, 49185),

Gene: LRRHood_95 Start: 50351, Stop: 51268, Start Num: 8
Candidate Starts for LRRHood_95:
(Start: 8 @50351 has 46 MA's), (Start: 10 @50366 has 2 MA's), (19, 50546), (36, 50696), (42, 50792), (45, 50873), (57, 50966), (61, 51092), (64, 51152), (65, 51161), (71, 51221), (74, 51239),

Gene: Lee7_98 Start: 51361, Stop: 52302, Start Num: 4
Candidate Starts for Lee7_98:
(Start: 3 @51328 has 5 MA's), (Start: 4 @51361 has 28 MA's), (20, 51574), (21, 51577), (32, 51709), (44, 51892), (46, 51928), (61, 52126), (65, 52195), (71, 52255), (74, 52273),

Gene: Lethe_99 Start: 50809, Stop: 51741, Start Num: 7
Candidate Starts for Lethe_99:
(Start: 7 @50809 has 9 MA's), (13, 50923), (Start: 28 @51088 has 1 MA's), (30, 51130), (43, 51274), (44, 51334), (53, 51403), (54, 51418), (55, 51421), (61, 51568), (64, 51628), (65, 51637), (69, 51679), (70, 51694), (71, 51697), (74, 51715),

Gene: LinStu_100 Start: 50946, Stop: 51878, Start Num: 5
Candidate Starts for LinStu_100:
(Start: 5 @50946 has 6 MA's), (Start: 8 @50952 has 46 MA's), (11, 51042), (25, 51189), (Start: 28 @51228 has 1 MA's), (35, 51303), (41, 51396), (42, 51402), (54, 51552), (56, 51567), (57, 51576), (61, 51702), (64, 51762), (65, 51771), (71, 51831), (74, 51849),

Gene: Littleton_100 Start: 50185, Stop: 51117, Start Num: 7
Candidate Starts for Littleton_100:
(Start: 7 @50185 has 9 MA's), (13, 50299), (Start: 28 @50464 has 1 MA's), (30, 50506), (43, 50650), (44, 50710), (53, 50779), (54, 50794), (55, 50797), (61, 50944), (64, 51004), (65, 51013), (69, 51055), (70, 51070), (71, 51073), (74, 51091), (75, 51109),

Gene: Loanshark_100 Start: 50949, Stop: 51887, Start Num: 4
Candidate Starts for Loanshark_100:
(Start: 3 @50916 has 5 MA's), (Start: 4 @50949 has 28 MA's), (20, 51162), (21, 51165), (32, 51297), (44, 51480), (46, 51516), (56, 51579), (57, 51588), (61, 51714), (65, 51783), (69, 51825), (70, 51840), (71, 51843), (74, 51861), (75, 51879),

Gene: LookingGlass_101 Start: 50881, Stop: 51810, Start Num: 5
Candidate Starts for LookingGlass_101:
(Start: 5 @50881 has 6 MA's), (Start: 8 @50887 has 46 MA's), (11, 50977), (25, 51124), (Start: 28 @51163 has 1 MA's), (35, 51238), (41, 51331), (42, 51337), (54, 51487), (56, 51502), (57, 51511), (61, 51637), (64, 51697), (65, 51706), (69, 51748), (70, 51763), (71, 51766), (74, 51784), (75, 51802),

Gene: Lukilu_91 Start: 50470, Stop: 51399, Start Num: 6
Candidate Starts for Lukilu_91:
(Start: 6 @50470 has 4 MA's), (14, 50596), (15, 50599), (16, 50602), (20, 50680), (37, 50842), (44, 50989), (56, 51088), (57, 51097), (61, 51223), (65, 51292), (69, 51334), (71, 51352), (74, 51370),

Gene: Maby2021_100 Start: 50824, Stop: 51765, Start Num: 4
Candidate Starts for Maby2021_100:
(Start: 3 @50791 has 5 MA's), (Start: 4 @50824 has 28 MA's), (20, 51037), (21, 51040), (32, 51172), (44, 51355), (46, 51391), (61, 51589), (64, 51649), (65, 51658), (71, 51718), (74, 51736),

Gene: Mangeria_100 Start: 50917, Stop: 51834, Start Num: 8
Candidate Starts for Mangeria_100:
(Start: 8 @50917 has 46 MA's), (Start: 10 @50932 has 2 MA's), (19, 51112), (36, 51262), (42, 51358), (45, 51439), (57, 51532), (61, 51658), (64, 51718), (65, 51727), (71, 51787), (74, 51805),

Gene: Maturis_98 Start: 50754, Stop: 51407, Start Num: 28
Candidate Starts for Maturis_98:
(Start: 24 @50718 has 17 MA's), (Start: 28 @50754 has 1 MA's), (35, 50832), (42, 50931), (44, 50997), (46, 51033), (57, 51105), (61, 51231), (64, 51291), (65, 51300), (71, 51360), (74, 51378),

Gene: McGee_102 Start: 49449, Stop: 50366, Start Num: 8
Candidate Starts for McGee_102:
(Start: 8 @49449 has 46 MA's), (Start: 10 @49464 has 2 MA's), (19, 49644), (36, 49794), (42, 49890), (45, 49971), (57, 50064), (61, 50190), (64, 50250), (65, 50259), (71, 50319), (74, 50337),

Gene: McWolfish_98 Start: 50609, Stop: 51547, Start Num: 4
Candidate Starts for McWolfish_98:
(Start: 3 @50576 has 5 MA's), (Start: 4 @50609 has 28 MA's), (20, 50822), (21, 50825), (32, 50957), (44, 51140), (46, 51176), (56, 51239), (57, 51248), (61, 51374), (65, 51443), (69, 51485), (70, 51500), (71, 51503), (74, 51521), (75, 51539),

Gene: Megamind_99 Start: 50516, Stop: 51430, Start Num: 8
Candidate Starts for Megamind_99:
(Start: 8 @50516 has 46 MA's), (Start: 10 @50531 has 2 MA's), (11, 50606), (19, 50711), (34, 50852), (36, 50861), (40, 50927), (42, 50957), (47, 51065), (51, 51086), (57, 51131), (61, 51257), (65, 51326), (69, 51368), (70, 51383), (71, 51386), (74, 51404), (75, 51422),

Gene: Melpomini_94 Start: 48216, Stop: 48905, Start Num: 24
Candidate Starts for Melpomini_94:
(Start: 24 @48216 has 17 MA's), (Start: 28 @48252 has 1 MA's), (35, 48330), (42, 48429), (44, 48495), (46, 48531), (61, 48729), (64, 48789), (65, 48798), (71, 48858), (74, 48876),

Gene: MikeLiesIn_101 Start: 50863, Stop: 51777, Start Num: 8
Candidate Starts for MikeLiesIn_101:
(Start: 8 @50863 has 46 MA's), (Start: 10 @50878 has 2 MA's), (11, 50953), (19, 51058), (34, 51199), (36, 51208), (40, 51274), (42, 51304), (47, 51412), (51, 51433), (57, 51478), (61, 51604), (65, 51673), (69, 51715), (70, 51730), (71, 51733), (74, 51751), (75, 51769),

Gene: Mikro_98 Start: 52079, Stop: 53005, Start Num: 9
Candidate Starts for Mikro_98:
(Start: 9 @52079 has 5 MA's), (12, 52169), (15, 52202), (23, 52298), (26, 52316), (29, 52352), (31, 52394), (38, 52460), (43, 52538), (48, 52643), (54, 52682), (61, 52832), (65, 52901), (69, 52943), (70, 52958), (71, 52961), (74, 52979), (75, 52997),

Gene: MoMoMixon_101 Start: 50339, Stop: 51253, Start Num: 8
Candidate Starts for MoMoMixon_101:
(Start: 8 @50339 has 46 MA's), (Start: 10 @50354 has 2 MA's), (11, 50429), (19, 50534), (34, 50675), (36, 50684), (40, 50750), (42, 50780), (47, 50888), (51, 50909), (57, 50954), (61, 51080), (65, 51149), (69, 51191), (70, 51206), (71, 51209), (74, 51227), (75, 51245),

Gene: Moby_91 Start: 46853, Stop: 47794, Start Num: 4
Candidate Starts for Moby_91:

(Start: 3 @46820 has 5 MA's), (Start: 4 @46853 has 28 MA's), (20, 47066), (21, 47069), (32, 47201), (44, 47384), (46, 47420), (61, 47618), (64, 47678), (65, 47687), (71, 47747), (74, 47765),

Gene: Moiqah_91 Start: 46853, Stop: 47794, Start Num: 4
Candidate Starts for Moiqah_91:
(Start: 3 @46820 has 5 MA's), (Start: 4 @46853 has 28 MA's), (20, 47066), (21, 47069), (32, 47201), (44, 47384), (46, 47420), (61, 47618), (64, 47678), (65, 47687), (71, 47747), (74, 47765),

Gene: Morizzled23_100 Start: 49758, Stop: 50657, Start Num: 10
Candidate Starts for Morizzled23_100:
(Start: 8 @49743 has 46 MA's), (Start: 10 @49758 has 2 MA's), (11, 49833), (19, 49938), (34, 50079), (36, 50088), (40, 50154), (42, 50184), (47, 50292), (51, 50313), (57, 50358), (61, 50484), (64, 50544), (65, 50553), (69, 50595), (70, 50610), (71, 50613), (74, 50631), (75, 50649),

Gene: Napoleon13_96 Start: 48654, Stop: 49343, Start Num: 24
Candidate Starts for Napoleon13_96:
(Start: 24 @48654 has 17 MA's), (Start: 28 @48690 has 1 MA's), (35, 48768), (42, 48867), (44, 48933), (46, 48969), (61, 49167), (64, 49227), (65, 49236), (71, 49296), (74, 49314),

Gene: Nappy_103 Start: 51778, Stop: 52695, Start Num: 8
Candidate Starts for Nappy_103:
(Start: 8 @51778 has 46 MA's), (Start: 10 @51793 has 2 MA's), (11, 51868), (19, 51973), (34, 52114), (36, 52123), (40, 52189), (42, 52219), (47, 52327), (51, 52348), (57, 52393), (61, 52519), (65, 52588), (69, 52630), (71, 52648), (74, 52666),

Gene: Naval22_105 Start: 52334, Stop: 53275, Start Num: 4
Candidate Starts for Naval22_105:
(Start: 3 @52301 has 5 MA's), (Start: 4 @52334 has 28 MA's), (20, 52547), (21, 52550), (32, 52682), (44, 52865), (46, 52901), (61, 53099), (64, 53159), (65, 53168), (69, 53210), (71, 53228), (74, 53246),

Gene: NedWong_101 Start: 50850, Stop: 51764, Start Num: 8
Candidate Starts for NedWong_101:
(Start: 8 @50850 has 46 MA's), (Start: 10 @50865 has 2 MA's), (11, 50940), (19, 51045), (34, 51186), (36, 51195), (40, 51261), (42, 51291), (47, 51399), (51, 51420), (57, 51465), (61, 51591), (65, 51660), (69, 51702), (70, 51717), (71, 51720), (74, 51738), (75, 51756),

Gene: Nidhogg_101 Start: 50589, Stop: 51506, Start Num: 8
Candidate Starts for Nidhogg_101:
(Start: 8 @50589 has 46 MA's), (Start: 10 @50604 has 2 MA's), (19, 50784), (36, 50934), (42, 51030), (45, 51111), (57, 51204), (61, 51330), (64, 51390), (65, 51399), (71, 51459), (74, 51477),

Gene: Norm_101 Start: 51755, Stop: 52693, Start Num: 4
Candidate Starts for Norm_101:
(Start: 3 @51722 has 5 MA's), (Start: 4 @51755 has 28 MA's), (20, 51968), (21, 51971), (32, 52103), (44, 52286), (46, 52322), (61, 52520), (65, 52589), (69, 52631), (70, 52646), (71, 52649), (74, 52667), (75, 52685),

Gene: NuevoMundo_106 Start: 53108, Stop: 54049, Start Num: 4
Candidate Starts for NuevoMundo_106:
(Start: 3 @53075 has 5 MA's), (Start: 4 @53108 has 28 MA's), (20, 53321), (21, 53324), (32, 53456), (44, 53639), (46, 53675), (61, 53873), (65, 53942), (71, 54002), (74, 54020),

Gene: ParkTD_101 Start: 50846, Stop: 51760, Start Num: 8

Candidate Starts for ParkTD_101:
(Start: 8 @50846 has 46 MA's), (Start: 10 @50861 has 2 MA's), (11, 50936), (19, 51041), (34, 51182), (36, 51191), (40, 51257), (42, 51287), (47, 51395), (51, 51416), (57, 51461), (61, 51587), (65, 51656), (69, 51698), (70, 51713), (71, 51716), (74, 51734), (75, 51752),

Gene: Phox_97 Start: 51129, Stop: 52046, Start Num: 8
Candidate Starts for Phox_97:
(Start: 8 @51129 has 46 MA's), (Start: 10 @51144 has 2 MA's), (19, 51324), (36, 51474), (42, 51570), (45, 51651), (57, 51744), (61, 51870), (64, 51930), (65, 51939), (71, 51999), (74, 52017),

Gene: Pier_104 Start: 51482, Stop: 52408, Start Num: 6
Candidate Starts for Pier_104:
(Start: 6 @51482 has 4 MA's), (14, 51608), (15, 51611), (16, 51614), (20, 51692), (37, 51854), (44, 52001), (56, 52100), (57, 52109), (61, 52235), (64, 52295), (65, 52304), (69, 52346), (70, 52361), (71, 52364), (74, 52382),

Gene: Pinkcreek_91 Start: 47918, Stop: 48859, Start Num: 4
Candidate Starts for Pinkcreek_91:
(Start: 3 @47885 has 5 MA's), (Start: 4 @47918 has 28 MA's), (20, 48131), (21, 48134), (32, 48266), (44, 48449), (46, 48485), (56, 48548), (57, 48557), (61, 48683), (65, 48752), (71, 48812), (74, 48830),

Gene: Pio_104 Start: 52718, Stop: 53656, Start Num: 4
Candidate Starts for Pio_104:
(Start: 3 @52685 has 5 MA's), (Start: 4 @52718 has 28 MA's), (20, 52931), (21, 52934), (32, 53066), (44, 53249), (46, 53285), (61, 53483), (65, 53552), (69, 53594), (71, 53612), (74, 53630), (75, 53648),

Gene: Pleione_103 Start: 50961, Stop: 51932, Start Num: 3
Candidate Starts for Pleione_103:
(Start: 3 @50961 has 5 MA's), (Start: 4 @50994 has 28 MA's), (20, 51207), (21, 51210), (32, 51342), (44, 51525), (46, 51561), (61, 51759), (64, 51819), (65, 51828), (70, 51885), (71, 51888), (74, 51906), (75, 51924),

Gene: Primadonna_94 Start: 49762, Stop: 50664, Start Num: 10
Candidate Starts for Primadonna_94:
(Start: 8 @49747 has 46 MA's), (Start: 10 @49762 has 2 MA's), (19, 49942), (36, 50092), (42, 50188), (45, 50269), (57, 50362), (61, 50488), (64, 50548), (65, 50557), (71, 50617), (74, 50635),

Gene: PurduePete_100 Start: 51247, Stop: 52185, Start Num: 4
Candidate Starts for PurduePete_100:
(Start: 3 @51214 has 5 MA's), (Start: 4 @51247 has 28 MA's), (20, 51460), (21, 51463), (32, 51595), (44, 51778), (46, 51814), (56, 51877), (57, 51886), (61, 52012), (65, 52081), (69, 52123), (70, 52138), (71, 52141), (74, 52159), (75, 52177),

Gene: QBert_94 Start: 50142, Stop: 50843, Start Num: 22
Candidate Starts for QBert_94:
(Start: 22 @50142 has 3 MA's), (42, 50367), (54, 50517), (59, 50616), (61, 50667), (64, 50727), (65, 50736), (70, 50793), (71, 50796), (74, 50814),

Gene: Quasimodo_101 Start: 50807, Stop: 51724, Start Num: 8
Candidate Starts for Quasimodo_101:
(Start: 8 @50807 has 46 MA's), (Start: 10 @50822 has 2 MA's), (19, 51002), (36, 51152), (42, 51248), (45, 51329), (57, 51422), (61, 51548), (64, 51608), (65, 51617), (71, 51677), (74, 51695),

Gene: RedWattleHog_16 Start: 20074, Stop: 20742, Start Num: 27
Candidate Starts for RedWattleHog_16:
(1, 19705), (2, 19726), (25, 20044), (Start: 27 @20074 has 1 MA's), (33, 20170), (42, 20284), (43, 20287), (46, 20386), (54, 20434), (55, 20437), (58, 20473), (60, 20560), (62, 20584), (63, 20596), (66, 20650), (67, 20656), (68, 20677), (72, 20707),

Gene: RoMag_95 Start: 50053, Stop: 50979, Start Num: 9
Candidate Starts for RoMag_95:
(Start: 9 @50053 has 5 MA's), (12, 50143), (15, 50176), (23, 50272), (26, 50290), (29, 50326), (31, 50368), (38, 50434), (43, 50512), (48, 50617), (54, 50656), (59, 50755), (61, 50806), (64, 50866), (65, 50875), (69, 50917), (70, 50932), (71, 50935), (74, 50953), (75, 50971),

Gene: Rocha_99 Start: 50659, Stop: 51234, Start Num: 35
Candidate Starts for Rocha_99:
(Start: 5 @50302 has 6 MA's), (Start: 8 @50308 has 46 MA's), (11, 50398), (25, 50545), (Start: 28 @50584 has 1 MA's), (35, 50659), (41, 50752), (42, 50758), (54, 50908), (56, 50923), (57, 50932), (61, 51058), (64, 51118), (65, 51127), (71, 51187), (74, 51205),

Gene: Ronan_94 Start: 47988, Stop: 48929, Start Num: 4
Candidate Starts for Ronan_94:
(Start: 3 @47955 has 5 MA's), (Start: 4 @47988 has 28 MA's), (20, 48201), (21, 48204), (32, 48336), (44, 48519), (59, 48702), (61, 48753), (64, 48813), (65, 48822), (71, 48882), (74, 48900),

Gene: Roots515_99 Start: 51043, Stop: 51957, Start Num: 8
Candidate Starts for Roots515_99:
(Start: 8 @51043 has 46 MA's), (Start: 10 @51058 has 2 MA's), (11, 51133), (19, 51238), (34, 51379), (36, 51388), (40, 51454), (42, 51484), (47, 51592), (51, 51613), (57, 51658), (61, 51784), (65, 51853), (69, 51895), (70, 51910), (71, 51913), (74, 51931), (75, 51949),

Gene: SVoro_98 Start: 51197, Stop: 52135, Start Num: 4
Candidate Starts for SVoro_98:
(Start: 3 @51164 has 5 MA's), (Start: 4 @51197 has 28 MA's), (20, 51410), (21, 51413), (32, 51545), (44, 51728), (46, 51764), (56, 51827), (57, 51836), (61, 51962), (65, 52031), (69, 52073), (70, 52088), (71, 52091), (74, 52109), (75, 52127),

Gene: Salacia_104 Start: 51177, Stop: 52106, Start Num: 9
Candidate Starts for Salacia_104:
(Start: 9 @51177 has 5 MA's), (12, 51267), (15, 51300), (23, 51396), (26, 51414), (29, 51450), (38, 51558), (44, 51696), (56, 51795), (57, 51804), (61, 51930), (64, 51990), (65, 51999), (71, 52059), (74, 52077),

Gene: Sauce_101 Start: 50027, Stop: 50968, Start Num: 4
Candidate Starts for Sauce_101:
(Start: 3 @49994 has 5 MA's), (Start: 4 @50027 has 28 MA's), (20, 50240), (21, 50243), (32, 50375), (44, 50558), (46, 50594), (61, 50792), (64, 50852), (65, 50861), (71, 50921), (74, 50939),

Gene: ScoobyDoobyDoo_93 Start: 48138, Stop: 49049, Start Num: 6
Candidate Starts for ScoobyDoobyDoo_93:
(Start: 6 @48138 has 4 MA's), (14, 48264), (15, 48267), (16, 48270), (18, 48312), (20, 48348), (37, 48510), (44, 48657), (50, 48717), (54, 48741), (59, 48840), (61, 48891), (64, 48951), (65, 48960), (69, 49002), (70, 49017), (73, 49035),

Gene: Sebata_102 Start: 51505, Stop: 52437, Start Num: 5

Candidate Starts for Sebata_102:
(Start: 5 @51505 has 6 MA's), (Start: 8 @51511 has 46 MA's), (11, 51601), (25, 51748), (Start: 28 @51787 has 1 MA's), (35, 51862), (41, 51955), (42, 51961), (54, 52111), (56, 52126), (57, 52135), (61, 52261), (64, 52321), (65, 52330), (71, 52390), (74, 52408),

Gene: Shaqnato_93 Start: 48902, Stop: 49843, Start Num: 4
Candidate Starts for Shaqnato_93:
(Start: 3 @48869 has 5 MA's), (Start: 4 @48902 has 28 MA's), (20, 49115), (21, 49118), (32, 49250), (44, 49433), (46, 49469), (61, 49667), (64, 49727), (65, 49736), (71, 49796), (74, 49814),

Gene: Shelob_102 Start: 51853, Stop: 52551, Start Num: 22
Candidate Starts for Shelob_102:
(Start: 22 @51853 has 3 MA's), (42, 52078), (54, 52228), (59, 52327), (61, 52378), (64, 52438), (65, 52447), (69, 52489), (70, 52504), (71, 52507), (74, 52525), (75, 52543),

Gene: Shifa_89 Start: 48902, Stop: 49816, Start Num: 8
Candidate Starts for Shifa_89:
(Start: 8 @48902 has 46 MA's), (Start: 10 @48917 has 2 MA's), (11, 48992), (19, 49097), (34, 49238), (36, 49247), (40, 49313), (42, 49343), (47, 49451), (51, 49472), (57, 49517), (61, 49643), (64, 49703), (65, 49712), (69, 49754), (70, 49769), (71, 49772), (74, 49790),

Gene: Shrimp_100 Start: 50854, Stop: 51768, Start Num: 8
Candidate Starts for Shrimp_100:
(Start: 8 @50854 has 46 MA's), (Start: 10 @50869 has 2 MA's), (11, 50944), (19, 51049), (34, 51190), (36, 51199), (40, 51265), (42, 51295), (47, 51403), (51, 51424), (57, 51469), (61, 51595), (65, 51664), (69, 51706), (70, 51721), (71, 51724), (74, 51742), (75, 51760),

Gene: Sprinklers_96 Start: 49399, Stop: 50340, Start Num: 4
Candidate Starts for Sprinklers_96:
(Start: 3 @49366 has 5 MA's), (Start: 4 @49399 has 28 MA's), (20, 49612), (21, 49615), (32, 49747), (44, 49930), (46, 49966), (61, 50164), (64, 50224), (65, 50233), (71, 50293), (74, 50311),

Gene: Spud_100 Start: 50912, Stop: 51853, Start Num: 4
Candidate Starts for Spud_100:
(Start: 3 @50879 has 5 MA's), (Start: 4 @50912 has 28 MA's), (20, 51125), (21, 51128), (32, 51260), (44, 51443), (46, 51479), (56, 51542), (57, 51551), (61, 51677), (64, 51737), (65, 51746), (69, 51788), (70, 51803), (71, 51806), (74, 51824),

Gene: SrishMeg2525_99 Start: 50957, Stop: 51874, Start Num: 8
Candidate Starts for SrishMeg2525_99:
(Start: 8 @50957 has 46 MA's), (Start: 10 @50972 has 2 MA's), (11, 51047), (19, 51152), (34, 51293), (36, 51302), (40, 51368), (42, 51398), (47, 51506), (51, 51527), (57, 51572), (61, 51698), (64, 51758), (65, 51767), (71, 51827), (74, 51845),

Gene: StephanieG_99 Start: 51748, Stop: 52677, Start Num: 5
Candidate Starts for StephanieG_99:
(Start: 5 @51748 has 6 MA's), (Start: 8 @51754 has 46 MA's), (11, 51844), (25, 51991), (Start: 28 @52030 has 1 MA's), (35, 52105), (41, 52198), (42, 52204), (54, 52354), (56, 52369), (57, 52378), (61, 52504), (64, 52564), (65, 52573), (69, 52615), (70, 52630), (71, 52633), (74, 52651), (75, 52669),

Gene: Stubby_93 Start: 49286, Stop: 49975, Start Num: 24
Candidate Starts for Stubby_93:

(Start: 24 @49286 has 17 MA's), (Start: 28 @49322 has 1 MA's), (35, 49400), (42, 49499), (44, 49565), (46, 49601), (61, 49799), (64, 49859), (65, 49868), (71, 49928), (74, 49946),

Gene: StubbySaigey_103 Start: 49553, Stop: 50470, Start Num: 8
Candidate Starts for StubbySaigey_103:
(Start: 8 @49553 has 46 MA's), (Start: 10 @49568 has 2 MA's), (19, 49748), (36, 49898), (40, 49964), (42, 49994), (47, 50102), (51, 50123), (57, 50168), (61, 50294), (64, 50354), (65, 50363), (71, 50423), (74, 50441),

Gene: TinyTim_100 Start: 50843, Stop: 51532, Start Num: 24
Candidate Starts for TinyTim_100:
(Start: 24 @50843 has 17 MA's), (Start: 28 @50879 has 1 MA's), (35, 50957), (42, 51056), (44, 51122), (46, 51158), (61, 51356), (64, 51416), (65, 51425), (69, 51467), (71, 51485), (74, 51503),

Gene: Trinitium_97 Start: 49304, Stop: 50236, Start Num: 7
Candidate Starts for Trinitium_97:
(Start: 7 @49304 has 9 MA's), (13, 49418), (Start: 28 @49583 has 1 MA's), (30, 49625), (43, 49769), (44, 49829), (53, 49898), (54, 49913), (55, 49916), (61, 50063), (64, 50123), (65, 50132), (69, 50174), (70, 50189), (71, 50192), (74, 50210),

Gene: Turret_95 Start: 48743, Stop: 49675, Start Num: 7
Candidate Starts for Turret_95:
(Start: 7 @48743 has 9 MA's), (13, 48857), (Start: 28 @49022 has 1 MA's), (30, 49064), (43, 49208), (44, 49268), (53, 49337), (54, 49352), (55, 49355), (61, 49502), (64, 49562), (65, 49571), (69, 49613), (70, 49628), (71, 49631), (74, 49649), (75, 49667),

Gene: Wally_99 Start: 49393, Stop: 50310, Start Num: 8
Candidate Starts for Wally_99:
(Start: 8 @49393 has 46 MA's), (Start: 10 @49408 has 2 MA's), (19, 49588), (36, 49738), (42, 49834), (45, 49915), (57, 50008), (61, 50134), (64, 50194), (65, 50203), (71, 50263), (74, 50281),

Gene: Willis_101 Start: 50745, Stop: 51659, Start Num: 8
Candidate Starts for Willis_101:
(Start: 8 @50745 has 46 MA's), (Start: 10 @50760 has 2 MA's), (11, 50835), (19, 50940), (34, 51081), (36, 51090), (40, 51156), (42, 51186), (47, 51294), (51, 51315), (57, 51360), (61, 51486), (64, 51546), (65, 51555), (69, 51597), (70, 51612), (71, 51615), (74, 51633), (75, 51651),

Gene: Yassified_97 Start: 49446, Stop: 50387, Start Num: 4
Candidate Starts for Yassified_97:
(Start: 3 @49413 has 5 MA's), (Start: 4 @49446 has 28 MA's), (20, 49659), (21, 49662), (32, 49794), (44, 49977), (46, 50013), (61, 50211), (64, 50271), (65, 50280), (70, 50337), (71, 50340), (74, 50358),

Gene: YemiJoy2021_101 Start: 50847, Stop: 51761, Start Num: 8
Candidate Starts for YemiJoy2021_101:
(Start: 8 @50847 has 46 MA's), (Start: 10 @50862 has 2 MA's), (11, 50937), (19, 51042), (34, 51183), (36, 51192), (40, 51258), (42, 51288), (47, 51396), (51, 51417), (57, 51462), (61, 51588), (65, 51657), (69, 51699), (70, 51714), (71, 51717), (74, 51735), (75, 51753),

Gene: YoungMoneyMata_101 Start: 50016, Stop: 50933, Start Num: 8
Candidate Starts for YoungMoneyMata_101:
(Start: 8 @50016 has 46 MA's), (Start: 10 @50031 has 2 MA's), (19, 50211), (36, 50361), (42, 50457), (45, 50538), (57, 50631), (61, 50757), (64, 50817), (65, 50826), (71, 50886), (74, 50904),

Gene: Yucca_100 Start: 50762, Stop: 51451, Start Num: 24
Candidate Starts for Yucca_100:
(Start: 24 @50762 has 17 MA's), (Start: 28 @50798 has 1 MA's), (35, 50876), (42, 50975), (44, 51041),
(46, 51077), (61, 51275), (65, 51344), (70, 51401), (71, 51404), (74, 51422),

Gene: Zalkecks_101 Start: 50550, Stop: 51452, Start Num: 10
Candidate Starts for Zalkecks_101:
(Start: 8 @50535 has 46 MA's), (Start: 10 @50550 has 2 MA's), (11, 50625), (19, 50730), (34, 50871),
(36, 50880), (40, 50946), (42, 50976), (47, 51084), (51, 51105), (57, 51150), (61, 51276), (64, 51336),
(65, 51345), (71, 51405), (74, 51423),

Gene: Zeenon_102 Start: 50597, Stop: 51535, Start Num: 4
Candidate Starts for Zeenon_102:
(Start: 3 @50564 has 5 MA's), (Start: 4 @50597 has 28 MA's), (20, 50810), (21, 50813), (32, 50945),
(44, 51128), (46, 51164), (61, 51362), (65, 51431), (69, 51473), (71, 51491), (74, 51509), (75, 51527),

Gene: ZygoTaiga_99 Start: 51751, Stop: 52689, Start Num: 4
Candidate Starts for ZygoTaiga_99:
(Start: 3 @51718 has 5 MA's), (Start: 4 @51751 has 28 MA's), (20, 51964), (21, 51967), (32, 52099),
(44, 52282), (46, 52318), (61, 52516), (65, 52585), (69, 52627), (70, 52642), (71, 52645), (74, 52663),
(75, 52681),