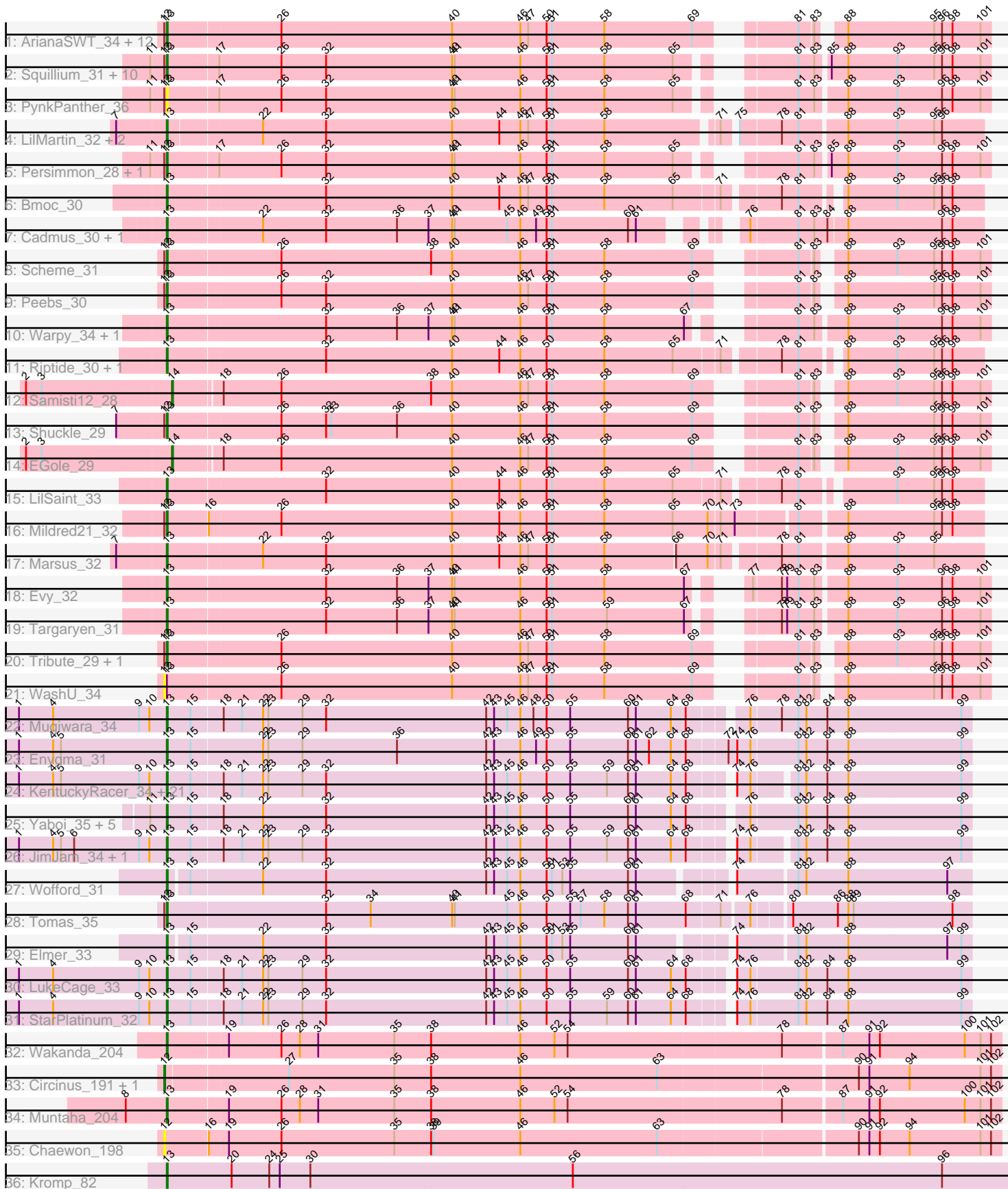


Pham 308408



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 308408 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308408 has 93 members, 9 are drafts.

Phages represented in each track:

- Track 1 : ArianaSWT_34, Lululemon_30, Pepperwood_31, Cross_31, Sushi23_31, Larnav_31, Watermoore_31, Cursive_29, BlueOtter_31, PacManQ_30, HangryHippo_31, Coogler_31, Leo04_31
- Track 2 : Squillium_31, Eliot67_31, NootNoot_28, WhereRU_28, Navo_30, Davielle_28, Liandry_31, Bartholomune_31, Paradiddles_28, PinkiePie_31, FreddyDRoo_31
- Track 3 : PynkPanther_36
- Track 4 : LilMartin_32, Angela_32, MulchMansion_32
- Track 5 : Persimmon_28, Braelyn_31
- Track 6 : Bmoc_30
- Track 7 : Cadmus_30, Daubenski_33
- Track 8 : Scheme_31
- Track 9 : Peebs_30
- Track 10 : Warpy_34, Jay2Jay_34
- Track 11 : Riptide_30, Anedea_30
- Track 12 : Samisti12_28
- Track 13 : Shuckle_29
- Track 14 : EGole_29
- Track 15 : LilSaint_33
- Track 16 : Mildred21_32
- Track 17 : Marsus_32
- Track 18 : Evy_32
- Track 19 : Targaryen_31
- Track 20 : Tribute_29, Teutsch_30
- Track 21 : WashU_34
- Track 22 : Mugiwara_34
- Track 23 : Enygma_31
- Track 24 : KentuckyRacer_34, Brizzy_34, MindFlayer_32, PumpkinSpice_33, AcciDwight_36, Birchlyn_31, Starbow_32, Wipeout_32, Battuta_32, Quaran19_34, CeilingFan_33, Spilled_34, Jollison_33, SaltySpitoon_34, Daisy123_36, Bordeaux_32, IchabodCrane_32, TomSawyer_32, Gibbi_36, Spelly_34, Karimac_33, Amabiko_34
- Track 25 : Yaboi_35, BoomerJR_34, AngryGiraffe_34, Stanimal_34, Sollertia_34, Genie2_34
- Track 26 : JimJam_34, Rikishi_34
- Track 27 : Wofford_31
- Track 28 : Tomas_35

- Track 29 : Elmer_33
- Track 30 : LukeCage_33
- Track 31 : StarPlatinum_32
- Track 32 : Wakanda_204
- Track 33 : Circinus_191, BillNye_190
- Track 34 : Muntaha_204
- Track 35 : Chaewon_198
- Track 36 : Kromp_82

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

The start number called the most often in the published annotations is 13, it was called in 80 of the 84 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AcciDwight_36, Amabiko_34, Anedea_30, Angela_32, AngryGiraffe_34, ArianaSWT_34, Bartholomune_31, Battuta_32, Birchlyn_31, BlueOtter_31, Bmoc_30, BoomerJR_34, Bordeaux_32, Braelyn_31, Brizzy_34, Cadmus_30, CeilingFan_33, Coogler_31, Cross_31, Cursive_29, Daisy123_36, Daubenski_33, Davielle_28, Eliot67_31, Elmer_33, Enygma_31, Evy_32, FreddyDRoo_31, Genie2_34, Gibbi_36, HangryHippo_31, IchabodCrane_32, Jay2Jay_34, JimJam_34, Jollison_33, Karimac_33, KentuckyRacer_34, Kromp_82, Larnav_31, Leo04_31, Liandry_31, LilMartin_32, LilSaint_33, LukeCage_33, Lululemon_30, Marsus_32, Mildred21_32, MindFlayer_32, Mugiwara_34, MulchMansion_32, Muntaha_204, Navo_30, NootNoot_28, PacManQ_30, Paradiddles_28, Peebs_30, Pepperwood_31, Persimmon_28, PinkiePie_31, PumpkinSpice_33, PynkPanther_36, Quarant19_34, Rikishi_34, Riptide_30, SaltySpittoon_34, Scheme_31, Shuckle_29, Sollertia_34, Spelly_34, Spilled_34, Squillium_31, Stanimal_34, StarPlatinum_32, Starbow_32, Sushi23_31, Targaryen_31, Teutsch_30, TomSawyer_32, Tomas_35, Tribute_29, Wakanda_204, Warpy_34, Watermoore_31, WhereRU_28, Wipeout_32, Wofford_31, Yaboi_35,

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

- WashU_34,

Genes that do not have the "Most Annotated" start:

- BillNye_190, Chaewon_198, Circinus_191, EGole_29, Samisti12_28,

Summary by start number:

Start 12:

- Found in 38 of 93 (40.9%) of genes in pham
- Manual Annotations of this start: 2 of 84
- Called 10.5% of time when present
- Phage (with cluster) where this start called: BillNye_190 (BK2), Chaewon_198 (BK2), Circinus_191 (BK2), WashU_34 (BE1),

Start 13:

- Found in 88 of 93 (94.6%) of genes in pham
- Manual Annotations of this start: 80 of 84

- Called 98.9% of time when present
- Phage (with cluster) where this start called: AcciDwight_36 (BE2), Amabiko_34 (BE2), Anedea_30 (BE1), Angela_32 (BE1), AngryGiraffe_34 (BE2), ArianaSWT_34 (BE1), Bartholomune_31 (BE1), Battuta_32 (BE2), Birchlyn_31 (BE2), BlueOtter_31 (BE1), Bmoc_30 (BE1), BoomerJR_34 (BE2), Bordeaux_32 (BE2), Braelyn_31 (BE1), Brizzy_34 (BE2), Cadmus_30 (BE1), CeilingFan_33 (BE2), Coogler_31 (BE1), Cross_31 (BE1), Cursive_29 (BE1), Daisy123_36 (BE2), Daubenski_33 (BE1), Davielle_28 (BE1), Eliot67_31 (BE1), Elmer_33 (BE2), Enygma_31 (BE2), Evy_32 (BE1), FreddyDRoo_31 (BE1), Genie2_34 (BE2), Gibbi_36 (BE2), HangryHippo_31 (BE1), IchabodCrane_32 (BE2), Jay2Jay_34 (BE1), JimJam_34 (BE2), Jollison_33 (BE2), Karimac_33 (BE2), KentuckyRacer_34 (BE2), Kromp_82 (singleton), Larnav_31 (BE1), Leo04_31 (BE1), Liandry_31 (BE1), LilMartin_32 (BE1), LilSaint_33 (BE1), LukeCage_33 (BE2), Lululemon_30 (BE1), Marsus_32 (BE1), Mildred21_32 (BE1), MindFlayer_32 (BE2), Mugiwara_34 (BE2), MulchMansion_32 (BE1), Muntaha_204 (BK2), Navo_30 (BE1), NootNoot_28 (BE1), PacManQ_30 (BE1), Paradiddles_28 (BE1), Peebs_30 (BE1), Pepperwood_31 (BE1), Persimmon_28 (BE1), PinkiePie_31 (BE1), PumpkinSpice_33 (BE2), PynkPanther_36 (BE1), Quarant19_34 (BE2), Rikishi_34 (BE2), Riptide_30 (BE1), SaltySpittoon_34 (BE2), Scheme_31 (BE1), Shuckle_29 (BE1), Sollertia_34 (BE2), Spelly_34 (BE2), Spilled_34 (BE2), Squillium_31 (BE1), Stanimal_34 (BE2), StarPlatinum_32 (BE2), Starbow_32 (BE2), Sushi23_31 (BE1), Targaryen_31 (BE1), Teutsch_30 (BE1), TomSawyer_32 (BE2), Tomas_35 (BE2), Tribute_29 (BE1), Wakanda_204 (BK2), Warpy_34 (BE1), Watermoore_31 (BE1), WhereRU_28 (BE1), Wipeout_32 (BE2), Wofford_31 (BE2), Yaboi_35 (BE2),

Start 14:

- Found in 2 of 93 (2.2%) of genes in pham
- Manual Annotations of this start: 2 of 84
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EGole_29 (BE1), Samisti12_28 (BE1),

Summary by clusters:

There are 4 clusters represented in this pham: BE2, singleton, BE1, BK2,

Info for manual annotations of cluster BE1:

- Start number 13 was manually annotated 43 times for cluster BE1.
- Start number 14 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 13 was manually annotated 34 times for cluster BE2.

Info for manual annotations of cluster BK2:

- Start number 12 was manually annotated 2 times for cluster BK2.
- Start number 13 was manually annotated 2 times for cluster BK2.

Gene Information:

Gene: AcciDwight_36 Start: 15291, Stop: 14416, Start Num: 13

Candidate Starts for AcciDwight_36:

(1, 15456), (4, 15417), (5, 15408), (9, 15321), (10, 15309), (Start: 13 @15291 has 80 MA's), (15, 15264), (18, 15231), (21, 15210), (22, 15186), (23, 15180), (29, 15141), (32, 15114), (42, 14931), (43, 14922), (45, 14907), (46, 14892), (50, 14862), (55, 14835), (59, 14793), (60, 14769), (61, 14760), (64, 14721), (68, 14706), (74, 14667), (76, 14652), (81, 14610), (82, 14601), (84, 14577), (88, 14553), (99, 14427),

Gene: Amabiko_34 Start: 15336, Stop: 14461, Start Num: 13

Candidate Starts for Amabiko_34:

(1, 15501), (4, 15462), (5, 15453), (9, 15366), (10, 15354), (Start: 13 @15336 has 80 MA's), (15, 15309), (18, 15276), (21, 15255), (22, 15231), (23, 15225), (29, 15186), (32, 15159), (42, 14976), (43, 14967), (45, 14952), (46, 14937), (50, 14907), (55, 14880), (59, 14838), (60, 14814), (61, 14805), (64, 14766), (68, 14751), (74, 14712), (76, 14697), (81, 14655), (82, 14646), (84, 14622), (88, 14598), (99, 14472),

Gene: Anedea_30 Start: 14316, Stop: 13435, Start Num: 13

Candidate Starts for Anedea_30:

(Start: 13 @14316 has 80 MA's), (32, 14139), (40, 13995), (44, 13941), (46, 13917), (50, 13887), (58, 13821), (65, 13743), (71, 13695), (78, 13638), (81, 13620), (88, 13584), (93, 13530), (95, 13488), (96, 13479), (98, 13467),

Gene: Angela_32 Start: 14737, Stop: 13856, Start Num: 13

Candidate Starts for Angela_32:

(7, 14791), (Start: 13 @14737 has 80 MA's), (22, 14635), (32, 14563), (40, 14419), (44, 14365), (46, 14341), (47, 14332), (50, 14311), (51, 14305), (58, 14245), (71, 14128), (75, 14116), (78, 14071), (81, 14053), (88, 14005), (93, 13951), (95, 13909), (96, 13900),

Gene: AngryGiraffe_34 Start: 15146, Stop: 14262, Start Num: 13

Candidate Starts for AngryGiraffe_34:

(11, 15164), (Start: 13 @15146 has 80 MA's), (15, 15119), (18, 15086), (22, 15041), (32, 14969), (42, 14786), (43, 14777), (45, 14762), (46, 14747), (50, 14717), (55, 14690), (60, 14624), (61, 14615), (64, 14576), (68, 14561), (76, 14507), (81, 14456), (82, 14447), (84, 14423), (88, 14399), (99, 14273),

Gene: ArianaSWT_34 Start: 14017, Stop: 13148, Start Num: 13

Candidate Starts for ArianaSWT_34:

(Start: 12 @14020 has 2 MA's), (Start: 13 @14017 has 80 MA's), (26, 13891), (40, 13696), (46, 13618), (47, 13609), (50, 13588), (51, 13582), (58, 13522), (69, 13423), (81, 13342), (83, 13327), (88, 13306), (95, 13210), (96, 13201), (98, 13189), (101, 13159),

Gene: Bartholomune_31 Start: 14110, Stop: 13241, Start Num: 13

Candidate Starts for Bartholomune_31:

(11, 14125), (Start: 12 @14113 has 2 MA's), (Start: 13 @14110 has 80 MA's), (17, 14053), (26, 13984), (32, 13933), (40, 13789), (41, 13786), (46, 13711), (50, 13681), (51, 13675), (58, 13615), (65, 13537), (81, 13447), (83, 13429), (85, 13417), (88, 13399), (93, 13345), (95, 13303), (96, 13294), (98, 13282), (101, 13252),

Gene: Battuta_32 Start: 15312, Stop: 14437, Start Num: 13

Candidate Starts for Battuta_32:

(1, 15477), (4, 15438), (5, 15429), (9, 15342), (10, 15330), (Start: 13 @15312 has 80 MA's), (15, 15285), (18, 15252), (21, 15231), (22, 15207), (23, 15201), (29, 15162), (32, 15135), (42, 14952), (43, 14943), (45, 14928), (46, 14913), (50, 14883), (55, 14856), (59, 14814), (60, 14790), (61, 14781), (64, 14742), (68, 14727), (74, 14688), (76, 14673), (81, 14631), (82, 14622), (84, 14598), (88, 14574), (99, 14448),

Gene: BillNye_190 Start: 102381, Stop: 103310, Start Num: 12

Candidate Starts for BillNye_190:

(Start: 12 @102381 has 2 MA's), (27, 102516), (35, 102636), (38, 102678), (46, 102780), (63, 102936), (90, 103152), (91, 103164), (94, 103209), (101, 103287), (102, 103299),

Gene: Birchlyn_31 Start: 13193, Stop: 12318, Start Num: 13

Candidate Starts for Birchlyn_31:

(1, 13358), (4, 13319), (5, 13310), (9, 13223), (10, 13211), (Start: 13 @13193 has 80 MA's), (15, 13166), (18, 13133), (21, 13112), (22, 13088), (23, 13082), (29, 13043), (32, 13016), (42, 12833), (43, 12824), (45, 12809), (46, 12794), (50, 12764), (55, 12737), (59, 12695), (60, 12671), (61, 12662), (64, 12623), (68, 12608), (74, 12569), (76, 12554), (81, 12512), (82, 12503), (84, 12479), (88, 12455), (99, 12329),

Gene: BlueOtter_31 Start: 14059, Stop: 13190, Start Num: 13

Candidate Starts for BlueOtter_31:

(Start: 12 @14062 has 2 MA's), (Start: 13 @14059 has 80 MA's), (26, 13933), (40, 13738), (46, 13660), (47, 13651), (50, 13630), (51, 13624), (58, 13564), (69, 13465), (81, 13384), (83, 13369), (88, 13348), (95, 13252), (96, 13243), (98, 13231), (101, 13201),

Gene: Bmoc_30 Start: 14494, Stop: 13613, Start Num: 13

Candidate Starts for Bmoc_30:

(Start: 13 @14494 has 80 MA's), (32, 14317), (40, 14173), (44, 14119), (46, 14095), (47, 14086), (50, 14065), (51, 14059), (58, 13999), (65, 13921), (71, 13873), (78, 13816), (81, 13798), (88, 13762), (93, 13708), (95, 13666), (96, 13657), (98, 13645),

Gene: BoomerJR_34 Start: 15146, Stop: 14262, Start Num: 13

Candidate Starts for BoomerJR_34:

(11, 15164), (Start: 13 @15146 has 80 MA's), (15, 15119), (18, 15086), (22, 15041), (32, 14969), (42, 14786), (43, 14777), (45, 14762), (46, 14747), (50, 14717), (55, 14690), (60, 14624), (61, 14615), (64, 14576), (68, 14561), (76, 14507), (81, 14456), (82, 14447), (84, 14423), (88, 14399), (99, 14273),

Gene: Bordeaux_32 Start: 15327, Stop: 14452, Start Num: 13

Candidate Starts for Bordeaux_32:

(1, 15492), (4, 15453), (5, 15444), (9, 15357), (10, 15345), (Start: 13 @15327 has 80 MA's), (15, 15300), (18, 15267), (21, 15246), (22, 15222), (23, 15216), (29, 15177), (32, 15150), (42, 14967), (43, 14958), (45, 14943), (46, 14928), (50, 14898), (55, 14871), (59, 14829), (60, 14805), (61, 14796), (64, 14757), (68, 14742), (74, 14703), (76, 14688), (81, 14646), (82, 14637), (84, 14613), (88, 14589), (99, 14463),

Gene: Braelyn_31 Start: 14505, Stop: 13636, Start Num: 13

Candidate Starts for Braelyn_31:

(11, 14520), (Start: 12 @14508 has 2 MA's), (Start: 13 @14505 has 80 MA's), (17, 14448), (26, 14379), (32, 14328), (40, 14184), (41, 14181), (46, 14106), (50, 14076), (51, 14070), (58, 14010), (65, 13932), (81, 13842), (83, 13824), (85, 13812), (88, 13794), (93, 13740), (96, 13689), (98, 13677), (101, 13647),

Gene: Brizzy_34 Start: 14986, Stop: 14102, Start Num: 13

Candidate Starts for Brizzy_34:

(1, 15151), (4, 15112), (5, 15103), (9, 15016), (10, 15004), (Start: 13 @14986 has 80 MA's), (15, 14959), (18, 14926), (21, 14905), (22, 14881), (23, 14875), (29, 14836), (32, 14809), (42, 14626), (43, 14617), (45, 14602), (46, 14587), (50, 14557), (55, 14530), (59, 14488), (60, 14464), (61, 14455), (64, 14416), (68, 14401), (74, 14362), (76, 14347), (81, 14296), (82, 14287), (84, 14263), (88, 14239), (99, 14113),

Gene: Cadmus_30 Start: 13703, Stop: 12846, Start Num: 13

Candidate Starts for Cadmus_30:

(Start: 13 @13703 has 80 MA's), (22, 13598), (32, 13526), (36, 13445), (37, 13409), (40, 13382), (41, 13379), (45, 13319), (46, 13304), (49, 13286), (50, 13274), (51, 13268), (60, 13181), (61, 13172), (76, 13100), (81, 13049), (83, 13031), (84, 13016), (88, 12995), (96, 12890), (98, 12878),

Gene: CeilingFan_33 Start: 15087, Stop: 14212, Start Num: 13

Candidate Starts for CeilingFan_33:

(1, 15252), (4, 15213), (5, 15204), (9, 15117), (10, 15105), (Start: 13 @15087 has 80 MA's), (15, 15060), (18, 15027), (21, 15006), (22, 14982), (23, 14976), (29, 14937), (32, 14910), (42, 14727), (43, 14718), (45, 14703), (46, 14688), (50, 14658), (55, 14631), (59, 14589), (60, 14565), (61, 14556), (64, 14517), (68, 14502), (74, 14463), (76, 14448), (81, 14406), (82, 14397), (84, 14373), (88, 14349), (99, 14223),

Gene: Chaewon_198 Start: 104120, Stop: 105052, Start Num: 12

Candidate Starts for Chaewon_198:

(Start: 12 @104120 has 2 MA's), (16, 104168), (19, 104189), (26, 104249), (35, 104378), (38, 104420), (39, 104423), (46, 104522), (63, 104678), (90, 104894), (91, 104906), (92, 104918), (94, 104951), (101, 105029), (102, 105041),

Gene: Circinus_191 Start: 102188, Stop: 103117, Start Num: 12

Candidate Starts for Circinus_191:

(Start: 12 @102188 has 2 MA's), (27, 102323), (35, 102443), (38, 102485), (46, 102587), (63, 102743), (90, 102959), (91, 102971), (94, 103016), (101, 103094), (102, 103106),

Gene: Coogler_31 Start: 14048, Stop: 13179, Start Num: 13

Candidate Starts for Coogler_31:

(Start: 12 @14051 has 2 MA's), (Start: 13 @14048 has 80 MA's), (26, 13922), (40, 13727), (46, 13649), (47, 13640), (50, 13619), (51, 13613), (58, 13553), (69, 13454), (81, 13373), (83, 13358), (88, 13337), (95, 13241), (96, 13232), (98, 13220), (101, 13190),

Gene: Cross_31 Start: 14060, Stop: 13191, Start Num: 13

Candidate Starts for Cross_31:

(Start: 12 @14063 has 2 MA's), (Start: 13 @14060 has 80 MA's), (26, 13934), (40, 13739), (46, 13661), (47, 13652), (50, 13631), (51, 13625), (58, 13565), (69, 13466), (81, 13385), (83, 13370), (88, 13349), (95, 13253), (96, 13244), (98, 13232), (101, 13202),

Gene: Cursive_29 Start: 12877, Stop: 12008, Start Num: 13

Candidate Starts for Cursive_29:

(Start: 12 @12880 has 2 MA's), (Start: 13 @12877 has 80 MA's), (26, 12751), (40, 12556), (46, 12478), (47, 12469), (50, 12448), (51, 12442), (58, 12382), (69, 12283), (81, 12202), (83, 12187), (88, 12166), (95, 12070), (96, 12061), (98, 12049), (101, 12019),

Gene: Daisy123_36 Start: 14946, Stop: 14071, Start Num: 13

Candidate Starts for Daisy123_36:

(1, 15111), (4, 15072), (5, 15063), (9, 14976), (10, 14964), (Start: 13 @14946 has 80 MA's), (15, 14919), (18, 14886), (21, 14865), (22, 14841), (23, 14835), (29, 14796), (32, 14769), (42, 14586), (43, 14577), (45, 14562), (46, 14547), (50, 14517), (55, 14490), (59, 14448), (60, 14424), (61, 14415), (64, 14376), (68, 14361), (74, 14322), (76, 14307), (81, 14265), (82, 14256), (84, 14232), (88, 14208), (99, 14082),

Gene: Daubenski_33 Start: 14467, Stop: 13610, Start Num: 13

Candidate Starts for Daubenski_33:

(Start: 13 @14467 has 80 MA's), (22, 14362), (32, 14290), (36, 14209), (37, 14173), (40, 14146), (41, 14143), (45, 14083), (46, 14068), (49, 14050), (50, 14038), (51, 14032), (60, 13945), (61, 13936), (76, 13864), (81, 13813), (83, 13795), (84, 13780), (88, 13759), (96, 13654), (98, 13642),

Gene: Davielle_28 Start: 13339, Stop: 12470, Start Num: 13

Candidate Starts for Davielle_28:

(11, 13354), (Start: 12 @13342 has 2 MA's), (Start: 13 @13339 has 80 MA's), (17, 13282), (26, 13213), (32, 13162), (40, 13018), (41, 13015), (46, 12940), (50, 12910), (51, 12904), (58, 12844), (65, 12766), (81, 12676), (83, 12658), (85, 12646), (88, 12628), (93, 12574), (95, 12532), (96, 12523), (98, 12511), (101, 12481),

Gene: EGole_29 Start: 14057, Stop: 13200, Start Num: 14

Candidate Starts for EGole_29:

(2, 14219), (3, 14201), (Start: 14 @14057 has 2 MA's), (18, 14009), (26, 13943), (40, 13748), (46, 13670), (47, 13661), (50, 13640), (51, 13634), (58, 13574), (69, 13475), (81, 13394), (83, 13379), (88, 13358), (93, 13304), (95, 13262), (96, 13253), (98, 13241), (101, 13211),

Gene: Eliot67_31 Start: 14110, Stop: 13241, Start Num: 13

Candidate Starts for Eliot67_31:

(11, 14125), (Start: 12 @14113 has 2 MA's), (Start: 13 @14110 has 80 MA's), (17, 14053), (26, 13984), (32, 13933), (40, 13789), (41, 13786), (46, 13711), (50, 13681), (51, 13675), (58, 13615), (65, 13537), (81, 13447), (83, 13429), (85, 13417), (88, 13399), (93, 13345), (95, 13303), (96, 13294), (98, 13282), (101, 13252),

Gene: Elmer_33 Start: 14617, Stop: 13748, Start Num: 13

Candidate Starts for Elmer_33:

(Start: 13 @14617 has 80 MA's), (15, 14596), (22, 14518), (32, 14446), (42, 14263), (43, 14254), (45, 14239), (46, 14224), (50, 14194), (51, 14188), (53, 14176), (55, 14167), (60, 14101), (61, 14092), (74, 14005), (81, 13942), (82, 13933), (88, 13885), (97, 13774), (99, 13759),

Gene: Enygma_31 Start: 14458, Stop: 13562, Start Num: 13

Candidate Starts for Enygma_31:

(1, 14623), (4, 14584), (5, 14575), (Start: 13 @14458 has 80 MA's), (15, 14431), (22, 14353), (23, 14347), (29, 14308), (36, 14200), (42, 14098), (43, 14089), (46, 14059), (49, 14041), (50, 14029), (55, 14002), (60, 13936), (61, 13927), (62, 13912), (64, 13888), (68, 13873), (72, 13831), (74, 13822), (76, 13807), (81, 13756), (82, 13747), (84, 13723), (88, 13699), (99, 13573),

Gene: Evy_32 Start: 14087, Stop: 13218, Start Num: 13

Candidate Starts for Evy_32:

(Start: 13 @14087 has 80 MA's), (32, 13910), (36, 13829), (37, 13793), (40, 13766), (41, 13763), (46, 13688), (50, 13658), (51, 13652), (58, 13592), (67, 13502), (77, 13472), (78, 13442), (79, 13436), (81, 13424), (83, 13406), (88, 13376), (93, 13322), (96, 13271), (98, 13259), (101, 13229),

Gene: FreddyDRoo_31 Start: 14110, Stop: 13241, Start Num: 13

Candidate Starts for FreddyDRoo_31:

(11, 14125), (Start: 12 @14113 has 2 MA's), (Start: 13 @14110 has 80 MA's), (17, 14053), (26, 13984), (32, 13933), (40, 13789), (41, 13786), (46, 13711), (50, 13681), (51, 13675), (58, 13615), (65, 13537), (81, 13447), (83, 13429), (85, 13417), (88, 13399), (93, 13345), (95, 13303), (96, 13294), (98, 13282), (101, 13252),

Gene: Genie2_34 Start: 15149, Stop: 14265, Start Num: 13

Candidate Starts for Genie2_34:

(11, 15167), (Start: 13 @15149 has 80 MA's), (15, 15122), (18, 15089), (22, 15044), (32, 14972), (42, 14789), (43, 14780), (45, 14765), (46, 14750), (50, 14720), (55, 14693), (60, 14627), (61, 14618), (64, 14579), (68, 14564), (76, 14510), (81, 14459), (82, 14450), (84, 14426), (88, 14402), (99, 14276),

Gene: Gibbi_36 Start: 14947, Stop: 14072, Start Num: 13

Candidate Starts for Gibbi_36:

(1, 15112), (4, 15073), (5, 15064), (9, 14977), (10, 14965), (Start: 13 @14947 has 80 MA's), (15, 14920), (18, 14887), (21, 14866), (22, 14842), (23, 14836), (29, 14797), (32, 14770), (42, 14587), (43, 14578), (45, 14563), (46, 14548), (50, 14518), (55, 14491), (59, 14449), (60, 14425), (61, 14416), (64, 14377), (68, 14362), (74, 14323), (76, 14308), (81, 14266), (82, 14257), (84, 14233), (88, 14209), (99, 14083),

Gene: HangryHippo_31 Start: 14059, Stop: 13190, Start Num: 13

Candidate Starts for HangryHippo_31:

(Start: 12 @14062 has 2 MA's), (Start: 13 @14059 has 80 MA's), (26, 13933), (40, 13738), (46, 13660), (47, 13651), (50, 13630), (51, 13624), (58, 13564), (69, 13465), (81, 13384), (83, 13369), (88, 13348), (95, 13252), (96, 13243), (98, 13231), (101, 13201),

Gene: IchabodCrane_32 Start: 15039, Stop: 14155, Start Num: 13

Candidate Starts for IchabodCrane_32:

(1, 15204), (4, 15165), (5, 15156), (9, 15069), (10, 15057), (Start: 13 @15039 has 80 MA's), (15, 15012), (18, 14979), (21, 14958), (22, 14934), (23, 14928), (29, 14889), (32, 14862), (42, 14679), (43, 14670), (45, 14655), (46, 14640), (50, 14610), (55, 14583), (59, 14541), (60, 14517), (61, 14508), (64, 14469), (68, 14454), (74, 14415), (76, 14400), (81, 14349), (82, 14340), (84, 14316), (88, 14292), (99, 14166),

Gene: Jay2Jay_34 Start: 14277, Stop: 13408, Start Num: 13

Candidate Starts for Jay2Jay_34:

(Start: 13 @14277 has 80 MA's), (32, 14100), (36, 14019), (37, 13983), (40, 13956), (41, 13953), (46, 13878), (50, 13848), (51, 13842), (58, 13782), (67, 13692), (81, 13614), (83, 13596), (88, 13566), (93, 13512), (96, 13461), (98, 13449), (101, 13419),

Gene: JimJam_34 Start: 15275, Stop: 14400, Start Num: 13

Candidate Starts for JimJam_34:

(1, 15440), (4, 15401), (5, 15392), (6, 15377), (9, 15305), (10, 15293), (Start: 13 @15275 has 80 MA's), (15, 15248), (18, 15215), (21, 15194), (22, 15170), (23, 15164), (29, 15125), (32, 15098), (42, 14915), (43, 14906), (45, 14891), (46, 14876), (50, 14846), (55, 14819), (59, 14777), (60, 14753), (61, 14744), (64, 14705), (68, 14690), (74, 14651), (76, 14636), (81, 14594), (82, 14585), (84, 14561), (88, 14537), (99, 14411),

Gene: Jollison_33 Start: 15293, Stop: 14418, Start Num: 13

Candidate Starts for Jollison_33:

(1, 15458), (4, 15419), (5, 15410), (9, 15323), (10, 15311), (Start: 13 @15293 has 80 MA's), (15, 15266), (18, 15233), (21, 15212), (22, 15188), (23, 15182), (29, 15143), (32, 15116), (42, 14933), (43, 14924), (45, 14909), (46, 14894), (50, 14864), (55, 14837), (59, 14795), (60, 14771), (61, 14762), (64, 14723), (68, 14708), (74, 14669), (76, 14654), (81, 14612), (82, 14603), (84, 14579), (88, 14555), (99, 14429),

Gene: Karimac_33 Start: 15442, Stop: 14558, Start Num: 13

Candidate Starts for Karimac_33:

(1, 15607), (4, 15568), (5, 15559), (9, 15472), (10, 15460), (Start: 13 @15442 has 80 MA's), (15, 15415), (18, 15382), (21, 15361), (22, 15337), (23, 15331), (29, 15292), (32, 15265), (42, 15082), (43, 15073), (45, 15058), (46, 15043), (50, 15013), (55, 14986), (59, 14944), (60, 14920), (61, 14911), (64,

14872), (68, 14857), (74, 14818), (76, 14803), (81, 14752), (82, 14743), (84, 14719), (88, 14695), (99, 14569),

Gene: KentuckyRacer_34 Start: 15088, Stop: 14213, Start Num: 13

Candidate Starts for KentuckyRacer_34:

(1, 15253), (4, 15214), (5, 15205), (9, 15118), (10, 15106), (Start: 13 @15088 has 80 MA's), (15, 15061), (18, 15028), (21, 15007), (22, 14983), (23, 14977), (29, 14938), (32, 14911), (42, 14728), (43, 14719), (45, 14704), (46, 14689), (50, 14659), (55, 14632), (59, 14590), (60, 14566), (61, 14557), (64, 14518), (68, 14503), (74, 14464), (76, 14449), (81, 14407), (82, 14398), (84, 14374), (88, 14350), (99, 14224),

Gene: Kromp_82 Start: 51341, Stop: 52297, Start Num: 13

Candidate Starts for Kromp_82:

(Start: 13 @51341 has 80 MA's), (20, 51413), (24, 51455), (25, 51467), (30, 51500), (56, 51797), (96, 52217),

Gene: Larnav_31 Start: 14007, Stop: 13138, Start Num: 13

Candidate Starts for Larnav_31:

(Start: 12 @14010 has 2 MA's), (Start: 13 @14007 has 80 MA's), (26, 13881), (40, 13686), (46, 13608), (47, 13599), (50, 13578), (51, 13572), (58, 13512), (69, 13413), (81, 13332), (83, 13317), (88, 13296), (95, 13200), (96, 13191), (98, 13179), (101, 13149),

Gene: Leo04_31 Start: 14058, Stop: 13189, Start Num: 13

Candidate Starts for Leo04_31:

(Start: 12 @14061 has 2 MA's), (Start: 13 @14058 has 80 MA's), (26, 13932), (40, 13737), (46, 13659), (47, 13650), (50, 13629), (51, 13623), (58, 13563), (69, 13464), (81, 13383), (83, 13368), (88, 13347), (95, 13251), (96, 13242), (98, 13230), (101, 13200),

Gene: Liandry_31 Start: 14109, Stop: 13240, Start Num: 13

Candidate Starts for Liandry_31:

(11, 14124), (Start: 12 @14112 has 2 MA's), (Start: 13 @14109 has 80 MA's), (17, 14052), (26, 13983), (32, 13932), (40, 13788), (41, 13785), (46, 13710), (50, 13680), (51, 13674), (58, 13614), (65, 13536), (81, 13446), (83, 13428), (85, 13416), (88, 13398), (93, 13344), (95, 13302), (96, 13293), (98, 13281), (101, 13251),

Gene: LilMartin_32 Start: 14684, Stop: 13803, Start Num: 13

Candidate Starts for LilMartin_32:

(7, 14738), (Start: 13 @14684 has 80 MA's), (22, 14582), (32, 14510), (40, 14366), (44, 14312), (46, 14288), (47, 14279), (50, 14258), (51, 14252), (58, 14192), (71, 14075), (75, 14063), (78, 14018), (81, 14000), (88, 13952), (93, 13898), (95, 13856), (96, 13847),

Gene: LilSaint_33 Start: 14537, Stop: 13656, Start Num: 13

Candidate Starts for LilSaint_33:

(Start: 13 @14537 has 80 MA's), (32, 14360), (40, 14216), (44, 14162), (46, 14138), (50, 14108), (51, 14102), (58, 14042), (65, 13964), (71, 13916), (78, 13859), (81, 13841), (93, 13751), (95, 13709), (96, 13700), (98, 13688),

Gene: LukeCage_33 Start: 15025, Stop: 14141, Start Num: 13

Candidate Starts for LukeCage_33:

(1, 15190), (4, 15151), (9, 15055), (10, 15043), (Start: 13 @15025 has 80 MA's), (15, 14998), (18, 14965), (21, 14944), (22, 14920), (23, 14914), (29, 14875), (32, 14848), (42, 14665), (43, 14656), (45, 14641), (46, 14626), (50, 14596), (55, 14569), (60, 14503), (61, 14494), (64, 14455), (68, 14440), (74, 14401), (76, 14386), (81, 14335), (82, 14326), (84, 14302), (88, 14278), (99, 14152),

Gene: Lululemon_30 Start: 13439, Stop: 12570, Start Num: 13

Candidate Starts for Lululemon_30:

(Start: 12 @13442 has 2 MA's), (Start: 13 @13439 has 80 MA's), (26, 13313), (40, 13118), (46, 13040), (47, 13031), (50, 13010), (51, 13004), (58, 12944), (69, 12845), (81, 12764), (83, 12749), (88, 12728), (95, 12632), (96, 12623), (98, 12611), (101, 12581),

Gene: Marsus_32 Start: 14561, Stop: 13668, Start Num: 13

Candidate Starts for Marsus_32:

(7, 14615), (Start: 13 @14561 has 80 MA's), (22, 14456), (32, 14384), (40, 14240), (44, 14186), (46, 14162), (47, 14153), (50, 14132), (51, 14126), (58, 14066), (66, 13988), (70, 13952), (71, 13940), (78, 13883), (81, 13865), (88, 13817), (93, 13763), (95, 13721),

Gene: Mildred21_32 Start: 14419, Stop: 13520, Start Num: 13

Candidate Starts for Mildred21_32:

(Start: 12 @14422 has 2 MA's), (Start: 13 @14419 has 80 MA's), (16, 14374), (26, 14293), (40, 14098), (44, 14044), (46, 14020), (50, 13990), (51, 13984), (58, 13924), (65, 13846), (70, 13807), (71, 13795), (73, 13780), (81, 13717), (88, 13669), (95, 13573), (96, 13564), (98, 13552),

Gene: MindFlayer_32 Start: 14946, Stop: 14071, Start Num: 13

Candidate Starts for MindFlayer_32:

(1, 15111), (4, 15072), (5, 15063), (9, 14976), (10, 14964), (Start: 13 @14946 has 80 MA's), (15, 14919), (18, 14886), (21, 14865), (22, 14841), (23, 14835), (29, 14796), (32, 14769), (42, 14586), (43, 14577), (45, 14562), (46, 14547), (50, 14517), (55, 14490), (59, 14448), (60, 14424), (61, 14415), (64, 14376), (68, 14361), (74, 14322), (76, 14307), (81, 14265), (82, 14256), (84, 14232), (88, 14208), (99, 14082),

Gene: Mugiwara_34 Start: 14941, Stop: 14057, Start Num: 13

Candidate Starts for Mugiwara_34:

(1, 15106), (4, 15067), (9, 14971), (10, 14959), (Start: 13 @14941 has 80 MA's), (15, 14914), (18, 14881), (21, 14860), (22, 14836), (23, 14830), (29, 14791), (32, 14764), (42, 14581), (43, 14572), (45, 14557), (46, 14542), (48, 14527), (50, 14512), (55, 14485), (60, 14419), (61, 14410), (64, 14371), (68, 14356), (76, 14302), (78, 14269), (81, 14251), (82, 14242), (84, 14218), (88, 14194), (99, 14068),

Gene: MulchMansion_32 Start: 14685, Stop: 13804, Start Num: 13

Candidate Starts for MulchMansion_32:

(7, 14739), (Start: 13 @14685 has 80 MA's), (22, 14583), (32, 14511), (40, 14367), (44, 14313), (46, 14289), (47, 14280), (50, 14259), (51, 14253), (58, 14193), (71, 14076), (75, 14064), (78, 14019), (81, 14001), (88, 13953), (93, 13899), (95, 13857), (96, 13848),

Gene: Muntaha_204 Start: 102082, Stop: 103014, Start Num: 13

Candidate Starts for Muntaha_204:

(8, 102037), (Start: 13 @102082 has 80 MA's), (19, 102148), (26, 102208), (28, 102229), (31, 102250), (35, 102337), (38, 102379), (46, 102481), (52, 102520), (54, 102535), (78, 102775), (87, 102838), (91, 102868), (92, 102880), (100, 102973), (101, 102991), (102, 103003),

Gene: Navo_30 Start: 14268, Stop: 13399, Start Num: 13

Candidate Starts for Navo_30:

(11, 14283), (Start: 12 @14271 has 2 MA's), (Start: 13 @14268 has 80 MA's), (17, 14211), (26, 14142), (32, 14091), (40, 13947), (41, 13944), (46, 13869), (50, 13839), (51, 13833), (58, 13773), (65, 13695), (81, 13605), (83, 13587), (85, 13575), (88, 13557), (93, 13503), (95, 13461), (96, 13452), (98, 13440), (101, 13410),

Gene: NootNoot_28 Start: 13291, Stop: 12422, Start Num: 13

Candidate Starts for NootNoot_28:

(11, 13306), (Start: 12 @13294 has 2 MA's), (Start: 13 @13291 has 80 MA's), (17, 13234), (26, 13165), (32, 13114), (40, 12970), (41, 12967), (46, 12892), (50, 12862), (51, 12856), (58, 12796), (65, 12718), (81, 12628), (83, 12610), (85, 12598), (88, 12580), (93, 12526), (95, 12484), (96, 12475), (98, 12463), (101, 12433),

Gene: PacManQ_30 Start: 13439, Stop: 12570, Start Num: 13

Candidate Starts for PacManQ_30:

(Start: 12 @13442 has 2 MA's), (Start: 13 @13439 has 80 MA's), (26, 13313), (40, 13118), (46, 13040), (47, 13031), (50, 13010), (51, 13004), (58, 12944), (69, 12845), (81, 12764), (83, 12749), (88, 12728), (95, 12632), (96, 12623), (98, 12611), (101, 12581),

Gene: Paradiddles_28 Start: 13282, Stop: 12413, Start Num: 13

Candidate Starts for Paradiddles_28:

(11, 13297), (Start: 12 @13285 has 2 MA's), (Start: 13 @13282 has 80 MA's), (17, 13225), (26, 13156), (32, 13105), (40, 12961), (41, 12958), (46, 12883), (50, 12853), (51, 12847), (58, 12787), (65, 12709), (81, 12619), (83, 12601), (85, 12589), (88, 12571), (93, 12517), (95, 12475), (96, 12466), (98, 12454), (101, 12424),

Gene: Peebs_30 Start: 13758, Stop: 12889, Start Num: 13

Candidate Starts for Peebs_30:

(Start: 12 @13761 has 2 MA's), (Start: 13 @13758 has 80 MA's), (26, 13632), (32, 13581), (40, 13437), (46, 13359), (47, 13350), (50, 13329), (51, 13323), (58, 13263), (69, 13164), (81, 13083), (83, 13068), (88, 13047), (95, 12951), (96, 12942), (98, 12930), (101, 12900),

Gene: Pepperwood_31 Start: 13931, Stop: 13062, Start Num: 13

Candidate Starts for Pepperwood_31:

(Start: 12 @13934 has 2 MA's), (Start: 13 @13931 has 80 MA's), (26, 13805), (40, 13610), (46, 13532), (47, 13523), (50, 13502), (51, 13496), (58, 13436), (69, 13337), (81, 13256), (83, 13241), (88, 13220), (95, 13124), (96, 13115), (98, 13103), (101, 13073),

Gene: Persimmon_28 Start: 13339, Stop: 12470, Start Num: 13

Candidate Starts for Persimmon_28:

(11, 13354), (Start: 12 @13342 has 2 MA's), (Start: 13 @13339 has 80 MA's), (17, 13282), (26, 13213), (32, 13162), (40, 13018), (41, 13015), (46, 12940), (50, 12910), (51, 12904), (58, 12844), (65, 12766), (81, 12676), (83, 12658), (85, 12646), (88, 12628), (93, 12574), (96, 12523), (98, 12511), (101, 12481),

Gene: PinkiePie_31 Start: 14110, Stop: 13241, Start Num: 13

Candidate Starts for PinkiePie_31:

(11, 14125), (Start: 12 @14113 has 2 MA's), (Start: 13 @14110 has 80 MA's), (17, 14053), (26, 13984), (32, 13933), (40, 13789), (41, 13786), (46, 13711), (50, 13681), (51, 13675), (58, 13615), (65, 13537), (81, 13447), (83, 13429), (85, 13417), (88, 13399), (93, 13345), (95, 13303), (96, 13294), (98, 13282), (101, 13252),

Gene: PumpkinSpice_33 Start: 15336, Stop: 14461, Start Num: 13

Candidate Starts for PumpkinSpice_33:

(1, 15501), (4, 15462), (5, 15453), (9, 15366), (10, 15354), (Start: 13 @15336 has 80 MA's), (15, 15309), (18, 15276), (21, 15255), (22, 15231), (23, 15225), (29, 15186), (32, 15159), (42, 14976), (43, 14967), (45, 14952), (46, 14937), (50, 14907), (55, 14880), (59, 14838), (60, 14814), (61, 14805), (64, 14766), (68, 14751), (74, 14712), (76, 14697), (81, 14655), (82, 14646), (84, 14622), (88, 14598), (99, 14472),

Gene: PynkPanther_36 Start: 13866, Stop: 12997, Start Num: 13

Candidate Starts for PynkPanther_36:

(11, 13881), (Start: 12 @13869 has 2 MA's), (Start: 13 @13866 has 80 MA's), (17, 13809), (26, 13740), (32, 13689), (40, 13545), (41, 13542), (46, 13467), (50, 13437), (51, 13431), (58, 13371), (65, 13293), (81, 13203), (83, 13185), (88, 13155), (93, 13101), (96, 13050), (98, 13038), (101, 13008),

Gene: Quaran19_34 Start: 15327, Stop: 14452, Start Num: 13

Candidate Starts for Quaran19_34:

(1, 15492), (4, 15453), (5, 15444), (9, 15357), (10, 15345), (Start: 13 @15327 has 80 MA's), (15, 15300), (18, 15267), (21, 15246), (22, 15222), (23, 15216), (29, 15177), (32, 15150), (42, 14967), (43, 14958), (45, 14943), (46, 14928), (50, 14898), (55, 14871), (59, 14829), (60, 14805), (61, 14796), (64, 14757), (68, 14742), (74, 14703), (76, 14688), (81, 14646), (82, 14637), (84, 14613), (88, 14589), (99, 14463),

Gene: Rikishi_34 Start: 15242, Stop: 14367, Start Num: 13

Candidate Starts for Rikishi_34:

(1, 15407), (4, 15368), (5, 15359), (6, 15344), (9, 15272), (10, 15260), (Start: 13 @15242 has 80 MA's), (15, 15215), (18, 15182), (21, 15161), (22, 15137), (23, 15131), (29, 15092), (32, 15065), (42, 14882), (43, 14873), (45, 14858), (46, 14843), (50, 14813), (55, 14786), (59, 14744), (60, 14720), (61, 14711), (64, 14672), (68, 14657), (74, 14618), (76, 14603), (81, 14561), (82, 14552), (84, 14528), (88, 14504), (99, 14378),

Gene: Riptide_30 Start: 14042, Stop: 13161, Start Num: 13

Candidate Starts for Riptide_30:

(Start: 13 @14042 has 80 MA's), (32, 13865), (40, 13721), (44, 13667), (46, 13643), (50, 13613), (58, 13547), (65, 13469), (71, 13421), (78, 13364), (81, 13346), (88, 13310), (93, 13256), (95, 13214), (96, 13205), (98, 13193),

Gene: SaltySpittoon_34 Start: 15336, Stop: 14461, Start Num: 13

Candidate Starts for SaltySpittoon_34:

(1, 15501), (4, 15462), (5, 15453), (9, 15366), (10, 15354), (Start: 13 @15336 has 80 MA's), (15, 15309), (18, 15276), (21, 15255), (22, 15231), (23, 15225), (29, 15186), (32, 15159), (42, 14976), (43, 14967), (45, 14952), (46, 14937), (50, 14907), (55, 14880), (59, 14838), (60, 14814), (61, 14805), (64, 14766), (68, 14751), (74, 14712), (76, 14697), (81, 14655), (82, 14646), (84, 14622), (88, 14598), (99, 14472),

Gene: Samisti12_28 Start: 13664, Stop: 12807, Start Num: 14

Candidate Starts for Samisti12_28:

(2, 13826), (3, 13808), (Start: 14 @13664 has 2 MA's), (18, 13616), (26, 13550), (38, 13379), (40, 13355), (46, 13277), (47, 13268), (50, 13247), (51, 13241), (58, 13181), (69, 13082), (81, 13001), (83, 12986), (88, 12965), (93, 12911), (95, 12869), (96, 12860), (98, 12848), (101, 12818),

Gene: Scheme_31 Start: 13942, Stop: 13073, Start Num: 13

Candidate Starts for Scheme_31:

(Start: 12 @13945 has 2 MA's), (Start: 13 @13942 has 80 MA's), (26, 13816), (38, 13645), (40, 13621), (46, 13543), (50, 13513), (51, 13507), (58, 13447), (69, 13348), (81, 13267), (83, 13252), (88, 13231), (93, 13177), (95, 13135), (96, 13126), (98, 13114), (101, 13084),

Gene: Shuckle_29 Start: 14212, Stop: 13343, Start Num: 13

Candidate Starts for Shuckle_29:

(7, 14266), (Start: 12 @14215 has 2 MA's), (Start: 13 @14212 has 80 MA's), (26, 14086), (32, 14035), (33, 14029), (36, 13954), (40, 13891), (46, 13813), (50, 13783), (51, 13777), (58, 13717), (69, 13618), (81, 13537), (83, 13522), (88, 13501), (95, 13405), (96, 13396), (98, 13384), (101, 13354),

Gene: Sollertia_34 Start: 15149, Stop: 14265, Start Num: 13

Candidate Starts for Sollertia_34:

(11, 15167), (Start: 13 @15149 has 80 MA's), (15, 15122), (18, 15089), (22, 15044), (32, 14972), (42, 14789), (43, 14780), (45, 14765), (46, 14750), (50, 14720), (55, 14693), (60, 14627), (61, 14618), (64, 14579), (68, 14564), (76, 14510), (81, 14459), (82, 14450), (84, 14426), (88, 14402), (99, 14276),

Gene: Spelly_34 Start: 15291, Stop: 14416, Start Num: 13

Candidate Starts for Spelly_34:

(1, 15456), (4, 15417), (5, 15408), (9, 15321), (10, 15309), (Start: 13 @15291 has 80 MA's), (15, 15264), (18, 15231), (21, 15210), (22, 15186), (23, 15180), (29, 15141), (32, 15114), (42, 14931), (43, 14922), (45, 14907), (46, 14892), (50, 14862), (55, 14835), (59, 14793), (60, 14769), (61, 14760), (64, 14721), (68, 14706), (74, 14667), (76, 14652), (81, 14610), (82, 14601), (84, 14577), (88, 14553), (99, 14427),

Gene: Spilled_34 Start: 15045, Stop: 14161, Start Num: 13

Candidate Starts for Spilled_34:

(1, 15210), (4, 15171), (5, 15162), (9, 15075), (10, 15063), (Start: 13 @15045 has 80 MA's), (15, 15018), (18, 14985), (21, 14964), (22, 14940), (23, 14934), (29, 14895), (32, 14868), (42, 14685), (43, 14676), (45, 14661), (46, 14646), (50, 14616), (55, 14589), (59, 14547), (60, 14523), (61, 14514), (64, 14475), (68, 14460), (74, 14421), (76, 14406), (81, 14355), (82, 14346), (84, 14322), (88, 14298), (99, 14172),

Gene: Squillium_31 Start: 14109, Stop: 13240, Start Num: 13

Candidate Starts for Squillium_31:

(11, 14124), (Start: 12 @14112 has 2 MA's), (Start: 13 @14109 has 80 MA's), (17, 14052), (26, 13983), (32, 13932), (40, 13788), (41, 13785), (46, 13710), (50, 13680), (51, 13674), (58, 13614), (65, 13536), (81, 13446), (83, 13428), (85, 13416), (88, 13398), (93, 13344), (95, 13302), (96, 13293), (98, 13281), (101, 13251),

Gene: Stanimal_34 Start: 15149, Stop: 14265, Start Num: 13

Candidate Starts for Stanimal_34:

(11, 15167), (Start: 13 @15149 has 80 MA's), (15, 15122), (18, 15089), (22, 15044), (32, 14972), (42, 14789), (43, 14780), (45, 14765), (46, 14750), (50, 14720), (55, 14693), (60, 14627), (61, 14618), (64, 14579), (68, 14564), (76, 14510), (81, 14459), (82, 14450), (84, 14426), (88, 14402), (99, 14276),

Gene: StarPlatinum_32 Start: 14945, Stop: 14061, Start Num: 13

Candidate Starts for StarPlatinum_32:

(1, 15110), (4, 15071), (9, 14975), (10, 14963), (Start: 13 @14945 has 80 MA's), (15, 14918), (18, 14885), (21, 14864), (22, 14840), (23, 14834), (29, 14795), (32, 14768), (42, 14585), (43, 14576), (45, 14561), (46, 14546), (50, 14516), (55, 14489), (59, 14447), (60, 14423), (61, 14414), (64, 14375), (68, 14360), (74, 14321), (76, 14306), (81, 14255), (82, 14246), (84, 14222), (88, 14198), (99, 14072),

Gene: Starbow_32 Start: 15312, Stop: 14437, Start Num: 13

Candidate Starts for Starbow_32:

(1, 15477), (4, 15438), (5, 15429), (9, 15342), (10, 15330), (Start: 13 @15312 has 80 MA's), (15, 15285), (18, 15252), (21, 15231), (22, 15207), (23, 15201), (29, 15162), (32, 15135), (42, 14952), (43, 14943), (45, 14928), (46, 14913), (50, 14883), (55, 14856), (59, 14814), (60, 14790), (61, 14781), (64, 14742), (68, 14727), (74, 14688), (76, 14673), (81, 14631), (82, 14622), (84, 14598), (88, 14574), (99, 14448),

Gene: Sushi23_31 Start: 14154, Stop: 13285, Start Num: 13

Candidate Starts for Sushi23_31:

(Start: 12 @14157 has 2 MA's), (Start: 13 @14154 has 80 MA's), (26, 14028), (40, 13833), (46, 13755), (47, 13746), (50, 13725), (51, 13719), (58, 13659), (69, 13560), (81, 13479), (83, 13464), (88, 13443), (95, 13347), (96, 13338), (98, 13326), (101, 13296),

Gene: Targaryen_31 Start: 14834, Stop: 13965, Start Num: 13

Candidate Starts for Targaryen_31:

(Start: 13 @14834 has 80 MA's), (32, 14657), (36, 14576), (37, 14540), (40, 14513), (41, 14510), (46, 14435), (50, 14405), (51, 14399), (59, 14336), (67, 14249), (78, 14189), (79, 14183), (81, 14171), (83, 14153), (88, 14123), (93, 14069), (96, 14018), (98, 14006), (101, 13976),

Gene: Teutsch_30 Start: 13847, Stop: 12978, Start Num: 13

Candidate Starts for Teutsch_30:

(Start: 12 @13850 has 2 MA's), (Start: 13 @13847 has 80 MA's), (26, 13721), (40, 13526), (46, 13448), (47, 13439), (50, 13418), (51, 13412), (58, 13352), (69, 13253), (81, 13172), (83, 13157), (88, 13136), (93, 13082), (95, 13040), (96, 13031), (98, 13019), (101, 12989),

Gene: TomSawyer_32 Start: 14930, Stop: 14055, Start Num: 13

Candidate Starts for TomSawyer_32:

(1, 15095), (4, 15056), (5, 15047), (9, 14960), (10, 14948), (Start: 13 @14930 has 80 MA's), (15, 14903), (18, 14870), (21, 14849), (22, 14825), (23, 14819), (29, 14780), (32, 14753), (42, 14570), (43, 14561), (45, 14546), (46, 14531), (50, 14501), (55, 14474), (59, 14432), (60, 14408), (61, 14399), (64, 14360), (68, 14345), (74, 14306), (76, 14291), (81, 14249), (82, 14240), (84, 14216), (88, 14192), (99, 14066),

Gene: Tomas_35 Start: 15755, Stop: 14871, Start Num: 13

Candidate Starts for Tomas_35:

(Start: 12 @15758 has 2 MA's), (Start: 13 @15755 has 80 MA's), (32, 15578), (34, 15527), (40, 15434), (41, 15431), (45, 15371), (46, 15356), (50, 15326), (55, 15299), (57, 15287), (58, 15260), (60, 15233), (61, 15224), (68, 15167), (71, 15134), (76, 15107), (80, 15071), (86, 15020), (88, 15008), (89, 15002), (98, 14891),

Gene: Tribute_29 Start: 13625, Stop: 12756, Start Num: 13

Candidate Starts for Tribute_29:

(Start: 12 @13628 has 2 MA's), (Start: 13 @13625 has 80 MA's), (26, 13499), (40, 13304), (46, 13226), (47, 13217), (50, 13196), (51, 13190), (58, 13130), (69, 13031), (81, 12950), (83, 12935), (88, 12914), (93, 12860), (95, 12818), (96, 12809), (98, 12797), (101, 12767),

Gene: Wakanda_204 Start: 102317, Stop: 103249, Start Num: 13

Candidate Starts for Wakanda_204:

(Start: 13 @102317 has 80 MA's), (19, 102383), (26, 102443), (28, 102464), (31, 102485), (35, 102572), (38, 102614), (46, 102716), (52, 102755), (54, 102770), (78, 103010), (87, 103073), (91, 103103), (92, 103115), (100, 103208), (101, 103226), (102, 103238),

Gene: Warpy_34 Start: 14297, Stop: 13428, Start Num: 13

Candidate Starts for Warpy_34:

(Start: 13 @14297 has 80 MA's), (32, 14120), (36, 14039), (37, 14003), (40, 13976), (41, 13973), (46, 13898), (50, 13868), (51, 13862), (58, 13802), (67, 13712), (81, 13634), (83, 13616), (88, 13586), (93, 13532), (96, 13481), (98, 13469), (101, 13439),

Gene: WashU_34 Start: 13935, Stop: 13063, Start Num: 12

Candidate Starts for WashU_34:

(Start: 12 @13935 has 2 MA's), (Start: 13 @13932 has 80 MA's), (26, 13806), (40, 13611), (46, 13533), (47, 13524), (50, 13503), (51, 13497), (58, 13437), (69, 13338), (81, 13257), (83, 13242), (88, 13221),

(95, 13125), (96, 13116), (98, 13104), (101, 13074),

Gene: Watermoore_31 Start: 14060, Stop: 13191, Start Num: 13

Candidate Starts for Watermoore_31:

(Start: 12 @14063 has 2 MA's), (Start: 13 @14060 has 80 MA's), (26, 13934), (40, 13739), (46, 13661), (47, 13652), (50, 13631), (51, 13625), (58, 13565), (69, 13466), (81, 13385), (83, 13370), (88, 13349), (95, 13253), (96, 13244), (98, 13232), (101, 13202),

Gene: WhereRU_28 Start: 13339, Stop: 12470, Start Num: 13

Candidate Starts for WhereRU_28:

(11, 13354), (Start: 12 @13342 has 2 MA's), (Start: 13 @13339 has 80 MA's), (17, 13282), (26, 13213), (32, 13162), (40, 13018), (41, 13015), (46, 12940), (50, 12910), (51, 12904), (58, 12844), (65, 12766), (81, 12676), (83, 12658), (85, 12646), (88, 12628), (93, 12574), (95, 12532), (96, 12523), (98, 12511), (101, 12481),

Gene: Wipeout_32 Start: 14952, Stop: 14077, Start Num: 13

Candidate Starts for Wipeout_32:

(1, 15117), (4, 15078), (5, 15069), (9, 14982), (10, 14970), (Start: 13 @14952 has 80 MA's), (15, 14925), (18, 14892), (21, 14871), (22, 14847), (23, 14841), (29, 14802), (32, 14775), (42, 14592), (43, 14583), (45, 14568), (46, 14553), (50, 14523), (55, 14496), (59, 14454), (60, 14430), (61, 14421), (64, 14382), (68, 14367), (74, 14328), (76, 14313), (81, 14271), (82, 14262), (84, 14238), (88, 14214), (99, 14088),

Gene: Wofford_31 Start: 14095, Stop: 13226, Start Num: 13

Candidate Starts for Wofford_31:

(Start: 13 @14095 has 80 MA's), (15, 14074), (22, 13996), (32, 13924), (42, 13741), (43, 13732), (45, 13717), (46, 13702), (50, 13672), (51, 13666), (53, 13654), (55, 13645), (60, 13579), (61, 13570), (74, 13483), (81, 13420), (82, 13411), (88, 13363), (97, 13252),

Gene: Yaboi_35 Start: 15125, Stop: 14241, Start Num: 13

Candidate Starts for Yaboi_35:

(11, 15143), (Start: 13 @15125 has 80 MA's), (15, 15098), (18, 15065), (22, 15020), (32, 14948), (42, 14765), (43, 14756), (45, 14741), (46, 14726), (50, 14696), (55, 14669), (60, 14603), (61, 14594), (64, 14555), (68, 14540), (76, 14486), (81, 14435), (82, 14426), (84, 14402), (88, 14378), (99, 14252),