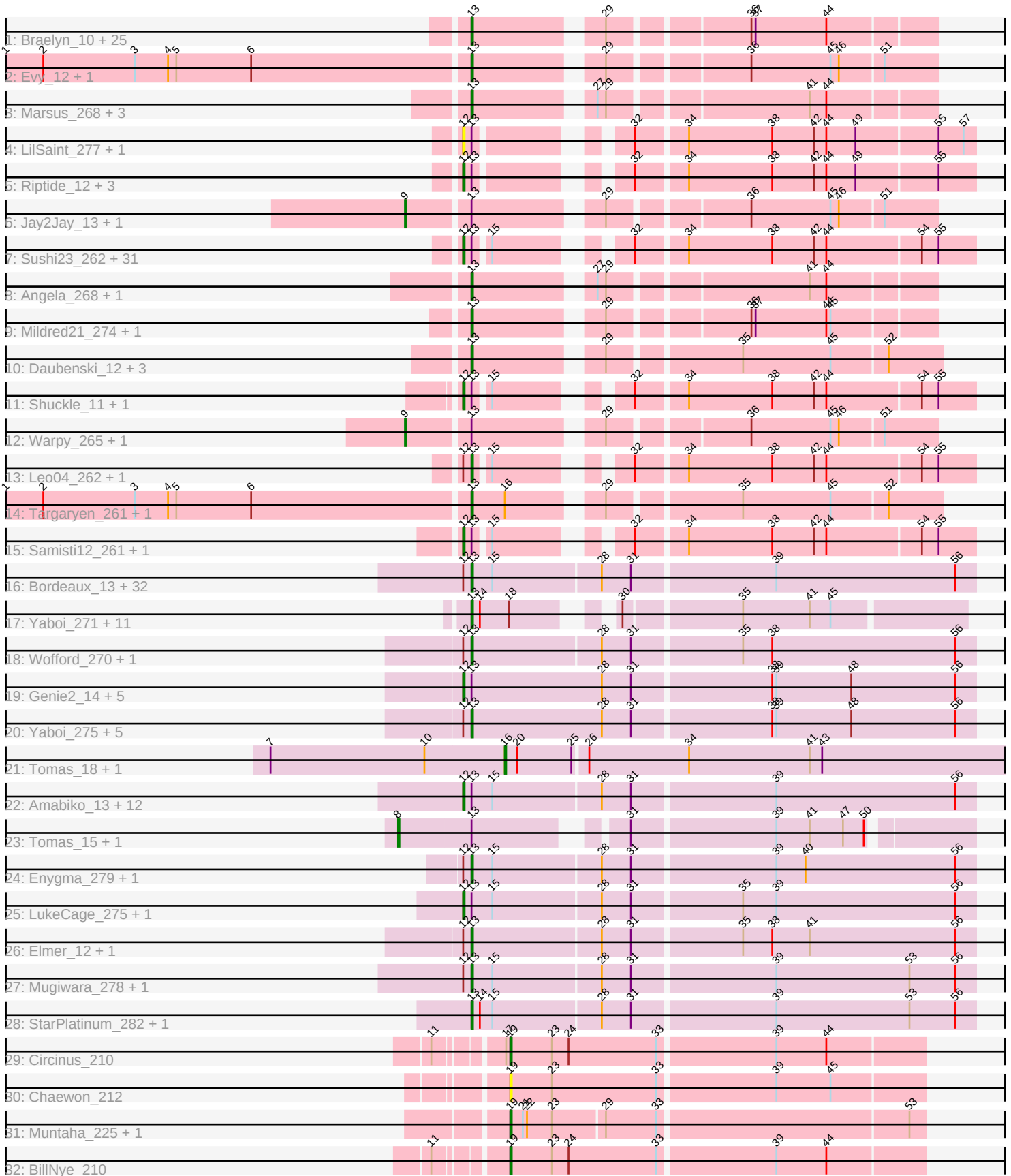


Pham 280127



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 280127 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280127 has 181 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Braelyn_10, LilMartin_263, Navo_251, Bartholomune_10, WhereRU_9, Davielle_258, MulchMansion_11, PinkiePie_10, Persimmon_260, Paradiddles_10, Persimmon_9, LilMartin_11, Davielle_9, Braelyn_255, Bartholomune_260, Liandry_259, MulchMansion_267, Liandry_10, NootNoot_255, Paradiddles_251, NootNoot_10, Squillium_10, WhereRU_258, PinkiePie_260, Navo_9, Squillium_262
- Track 2 : Evy_12, Evy_250
- Track 3 : Marsus_268, Bmoc_266, Marsus_11, Bmoc_10
- Track 4 : LilSaint_277, LilSaint_15
- Track 5 : Riptide_12, Anedea_276, Riptide_267, Anedea_11
- Track 6 : Jay2Jay_13, Jay2Jay_268
- Track 7 : Sushi23_262, Watermoore_258, Larnav_11, HangryHippo_259, Lululemon_257, Scheme_265, Peebs_258, Pepperwood_12, Coogler_11, Tribute_11, Cursive_9, HangryHippo_11, Cross_259, PacManQ_10, Sushi23_12, PacManQ_257, Larnav_261, Scheme_12, Teutsch_11, Pepperwood_261, EGole_265, Cursive_263, Coogler_257, Watermoore_11, BlueOtter_11, Tribute_257, Teutsch_258, EGole_11, BlueOtter_259, Cross_11, Peebs_11, Lululemon_10
- Track 8 : Angela_268, Angela_11
- Track 9 : Mildred21_274, Mildred21_11
- Track 10 : Daubenski_12, Cadmus_259, Daubenski_256, Cadmus_11
- Track 11 : Shuckle_11, Shuckle_259
- Track 12 : Warpy_265, Warpy_13
- Track 13 : Leo04_262, Leo04_11
- Track 14 : Targaryen_261, Targaryen_10
- Track 15 : Samisti12_261, Samisti12_10
- Track 16 : Bordeaux_13, MindFlayer_264, MindFlayer_12, IchabodCrane_12, Spelly_13, PumpkinSpice_277, Jollison_270, Wipeout_265, Battuta_13, Quarant19_13, CeilingFan_12, AcciDwight_283, Quarant19_274, Spelly_279, CeilingFan_278, Karimac_271, SaltySpittoon_13, Wipeout_12, Gibbi_283, Rikishi_12, PumpkinSpice_13, TomSawyer_13, Gibbi_12, Battuta_270, Karimac_13, Jollison_13, AcciDwight_13, Bordeaux_270, Brizzy_12, IchabodCrane_265, TomSawyer_278, Rikishi_274, Birchlyn_10
- Track 17 : Yaboi_271, Sollertia_10, Stanimal_10, Genie2_10, BoomerJR_10, AngryGiraffe_10, Stanimal_265, Yaboi_10, AngryGiraffe_266, BoomerJR_265, Genie2_265, Sollertia_266
- Track 18 : Wofford_270, Wofford_12
- Track 19 : Genie2_14, BoomerJR_14, Stanimal_14, Stanimal_269, Genie2_269, BoomerJR_269

- Track 20 : Yaboi_275, Sollertia_14, AngryGiraffe_14, AngryGiraffe_270, Yaboi_14, Sollertia_270
- Track 21 : Tomas_18, Tomas_274
- Track 22 : Amabiko_13, Brizzy_270, KentuckyRacer_280, JimJam_281, Spilled_12, Spilled_280, Starbow_13, Birchlyn_270, SaltySpittoon_273, Amabiko_277, Starbow_270, KentuckyRacer_12, JimJam_13
- Track 23 : Tomas_15, Tomas_271
- Track 24 : Enygma_279, Enygma_11
- Track 25 : LukeCage_275, LukeCage_12
- Track 26 : Elmer_12, Elmer_279
- Track 27 : Mugiwara_278, Mugiwara_11
- Track 28 : StarPlatinum_282, StarPlatinum_12
- Track 29 : Circinus_210
- Track 30 : Chaewon_212
- Track 31 : Muntaha_225, Wakanda_221
- Track 32 : BillNye_210

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 101 of the 174 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AcciDwight_13, AcciDwight_283, Angela_11, Angela_268, AngryGiraffe_10, AngryGiraffe_14, AngryGiraffe_266, AngryGiraffe_270, Bartholomune_10, Bartholomune_260, Battuta_13, Battuta_270, Birchlyn_10, Bmoc_10, Bmoc_266, BoomerJR_10, BoomerJR_265, Bordeaux_13, Bordeaux_270, Braelyn_10, Braelyn_255, Brizzy_12, Cadmus_11, Cadmus_259, CeilingFan_12, CeilingFan_278, Daubenski_12, Daubenski_256, Davielle_258, Davielle_9, Elmer_12, Elmer_279, Enygma_11, Enygma_279, Evy_12, Evy_250, Genie2_10, Genie2_265, Gibbi_12, Gibbi_283, IchabodCrane_12, IchabodCrane_265, Jollison_13, Jollison_270, Karimac_13, Karimac_271, Leo04_11, Leo04_262, Liandry_10, Liandry_259, LilMartin_11, LilMartin_263, Marsus_11, Marsus_268, Mildred21_11, Mildred21_274, MindFlayer_12, MindFlayer_264, Mugiwara_11, Mugiwara_278, MulchMansion_11, MulchMansion_267, Navo_251, Navo_9, NootNoot_10, NootNoot_255, Paradiddles_10, Paradiddles_251, Persimmon_260, Persimmon_9, PinkiePie_10, PinkiePie_260, PumpkinSpice_13, PumpkinSpice_277, Quarant19_13, Quarant19_274, Rikishi_12, Rikishi_274, SaltySpittoon_13, Sollertia_10, Sollertia_14, Sollertia_266, Sollertia_270, Spelly_13, Spelly_279, Squillium_10, Squillium_262, Stanimal_10, Stanimal_265, StarPlatinum_12, StarPlatinum_282, Targaryen_10, Targaryen_261, TomSawyer_13, TomSawyer_278, WhereRU_258, WhereRU_9, Wipeout_12, Wipeout_265, Wofford_12, Wofford_270, Yaboi_10, Yaboi_14, Yaboi_271, Yaboi_275,

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

• Amabiko_13, Amabiko_277, Anedea_11, Anedea_276, Birchlyn_270, BlueOtter_11, BlueOtter_259, BoomerJR_14, BoomerJR_269, Brizzy_270, Coogler_11, Coogler_257, Cross_11, Cross_259, Cursive_263, Cursive_9, EGole_11, EGole_265, Genie2_14, Genie2_269, HangryHippo_11, HangryHippo_259, Jay2Jay_13, Jay2Jay_268, JimJam_13, JimJam_281, KentuckyRacer_12, KentuckyRacer_280,

Larnav_11, Larnav_261, LilSaint_15, LilSaint_277, LukeCage_12, LukeCage_275, Lululemon_10, Lululemon_257, PacManQ_10, PacManQ_257, Peebs_11, Peebs_258, Pepperwood_12, Pepperwood_261, Riptide_12, Riptide_267, SaltySpittoon_273, Samisti12_10, Samisti12_261, Scheme_12, Scheme_265, Shuckle_11, Shuckle_259, Spilled_12, Spilled_280, Stanimal_14, Stanimal_269, Starbow_13, Starbow_270, Sushi23_12, Sushi23_262, Teutsch_11, Teutsch_258, Tomas_15, Tomas_271, Tribute_11, Tribute_257, Warpy_13, Warpy_265, Watermoore_11, Watermoore_258,

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

- BillNye_210, Chaewon_212, Circinus_210, Muntaha_225, Tomas_18, Tomas_274, Wakanda_221,

Summary by start number:

Start 8:

- Found in 2 of 181 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 174
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tomas_15 (BE2), Tomas_271 (BE2),

Start 9:

- Found in 4 of 181 (2.2%) of genes in pham
- Manual Annotations of this start: 4 of 174
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jay2Jay_13 (BE1), Jay2Jay_268 (BE1), Warpy_13 (BE1), Warpy_265 (BE1),

Start 12:

- Found in 112 of 181 (61.9%) of genes in pham
- Manual Annotations of this start: 61 of 174
- Called 56.2% of time when present
- Phage (with cluster) where this start called: Amabiko_13 (BE2), Amabiko_277 (BE2), Anedea_11 (BE1), Anedea_276 (BE1), Birchlyn_270 (BE2), BlueOtter_11 (BE1), BlueOtter_259 (BE1), BoomerJR_14 (BE2), BoomerJR_269 (BE2), Brizzy_270 (BE2), Coogler_11 (BE1), Coogler_257 (BE1), Cross_11 (BE1), Cross_259 (BE1), Cursive_263 (BE1), Cursive_9 (BE1), EGole_11 (BE1), EGole_265 (BE1), Genie2_14 (BE2), Genie2_269 (BE2), HangryHippo_11 (BE1), HangryHippo_259 (BE1), JimJam_13 (BE2), JimJam_281 (BE2), KentuckyRacer_12 (BE2), KentuckyRacer_280 (BE2), Larnav_11 (BE1), Larnav_261 (BE1), LilSaint_15 (BE1), LilSaint_277 (BE1), LukeCage_12 (BE2), LukeCage_275 (BE2), Lululemon_10 (BE1), Lululemon_257 (BE1), PacManQ_10 (BE1), PacManQ_257 (BE1), Peebs_11 (BE1), Peebs_258 (BE1), Pepperwood_12 (BE1), Pepperwood_261 (BE1), Riptide_12 (BE1), Riptide_267 (BE1), SaltySpittoon_273 (BE2), Samisti12_10 (BE1), Samisti12_261 (BE1), Scheme_12 (BE1), Scheme_265 (BE1), Shuckle_11 (BE1), Shuckle_259 (BE1), Spilled_12 (BE2), Spilled_280 (BE2), Stanimal_14 (BE2), Stanimal_269 (BE2), Starbow_13 (BE2), Starbow_270 (BE2), Sushi23_12 (BE1), Sushi23_262 (BE1), Teutsch_11 (BE1), Teutsch_258 (BE1), Tribute_11 (BE1), Tribute_257 (BE1), Watermoore_11 (BE1), Watermoore_258 (BE1),

Start 13:

- Found in 174 of 181 (96.1%) of genes in pham
- Manual Annotations of this start: 101 of 174

- Called 60.3% of time when present
- Phage (with cluster) where this start called: AcciDwight_13 (BE2), AcciDwight_283 (BE2), Angela_11 (BE1), Angela_268 (BE1), AngryGiraffe_10 (BE2), AngryGiraffe_14 (BE2), AngryGiraffe_266 (BE2), AngryGiraffe_270 (BE2), Bartholomune_10 (BE1), Bartholomune_260 (BE1), Battuta_13 (BE2), Battuta_270 (BE2), Birchlyn_10 (BE2), Bmoc_10 (BE1), Bmoc_266 (BE1), BoomerJR_10 (BE2), BoomerJR_265 (BE2), Bordeaux_13 (BE2), Bordeaux_270 (BE2), Braelyn_10 (BE1), Braelyn_255 (BE1), Brizzy_12 (BE2), Cadmus_11 (BE1), Cadmus_259 (BE1), CeilingFan_12 (BE2), CeilingFan_278 (BE2), Daubenski_12 (BE1), Daubenski_256 (BE1), Davielle_258 (BE1), Davielle_9 (BE1), Elmer_12 (BE2), Elmer_279 (BE2), Enygma_11 (BE2), Enygma_279 (BE2), Evy_12 (BE1), Evy_250 (BE1), Genie2_10 (BE2), Genie2_265 (BE2), Gibbi_12 (BE2), Gibbi_283 (BE2), IchabodCrane_12 (BE2), IchabodCrane_265 (BE2), Jollison_13 (BE2), Jollison_270 (BE2), Karimac_13 (BE2), Karimac_271 (BE2), Leo04_11 (BE1), Leo04_262 (BE1), Liandry_10 (BE1), Liandry_259 (BE1), LilMartin_11 (BE1), LilMartin_263 (BE1), Marsus_11 (BE1), Marsus_268 (BE1), Mildred21_11 (BE1), Mildred21_274 (BE1), MindFlayer_12 (BE2), MindFlayer_264 (BE2), Mugiwara_11 (BE2), Mugiwara_278 (BE2), MulchMansion_11 (BE1), MulchMansion_267 (BE1), Navo_251 (BE1), Navo_9 (BE1), NootNoot_10 (BE1), NootNoot_255 (BE1), Paradiddles_10 (BE1), Paradiddles_251 (BE1), Persimmon_260 (BE1), Persimmon_9 (BE1), PinkiePie_10 (BE1), PinkiePie_260 (BE1), PumpkinSpice_13 (BE2), PumpkinSpice_277 (BE2), Quarant19_13 (BE2), Quarant19_274 (BE2), Rikishi_12 (BE2), Rikishi_274 (BE2), SaltySpitoon_13 (BE2), Sollertia_10 (BE2), Sollertia_14 (BE2), Sollertia_266 (BE2), Sollertia_270 (BE2), Spelly_13 (BE2), Spelly_279 (BE2), Squillium_10 (BE1), Squillium_262 (BE1), Stanimal_10 (BE2), Stanimal_265 (BE2), StarPlatinum_12 (BE2), StarPlatinum_282 (BE2), Targaryen_10 (BE1), Targaryen_261 (BE1), TomSawyer_13 (BE2), TomSawyer_278 (BE2), WhereRU_258 (BE1), WhereRU_9 (BE1), Wipeout_12 (BE2), Wipeout_265 (BE2), Wofford_12 (BE2), Wofford_270 (BE2), Yaboi_10 (BE2), Yaboi_14 (BE2), Yaboi_271 (BE2), Yaboi_275 (BE2),

Start 16:

- Found in 4 of 181 (2.2%) of genes in pham
- Manual Annotations of this start: 2 of 174
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Tomas_18 (BE2), Tomas_274 (BE2),

Start 19:

- Found in 5 of 181 (2.8%) of genes in pham
- Manual Annotations of this start: 4 of 174
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillNye_210 (BK2), Chaewon_212 (BK2), Circinus_210 (BK2), Muntaha_225 (BK2), Wakanda_221 (BK2),

Summary by clusters:

There are 3 clusters represented in this pham: BE2, BE1, BK2,

Info for manual annotations of cluster BE1:

- Start number 9 was manually annotated 4 times for cluster BE1.
- Start number 12 was manually annotated 40 times for cluster BE1.
- Start number 13 was manually annotated 44 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 8 was manually annotated 2 times for cluster BE2.
- Start number 12 was manually annotated 21 times for cluster BE2.
- Start number 13 was manually annotated 57 times for cluster BE2.
- Start number 16 was manually annotated 2 times for cluster BE2.

Info for manual annotations of cluster BK2:

- Start number 19 was manually annotated 4 times for cluster BK2.

Gene Information:

Gene: AcciDwight_283 Start: 127237, Stop: 126884, Start Num: 13

Candidate Starts for AcciDwight_283:

(Start: 12 @127243 has 61 MA's), (Start: 13 @127237 has 101 MA's), (15, 127222), (28, 127147), (31, 127126), (39, 127027), (56, 126898),

Gene: AcciDwight_13 Start: 7141, Stop: 6788, Start Num: 13

Candidate Starts for AcciDwight_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: Amabiko_13 Start: 7147, Stop: 6788, Start Num: 12

Candidate Starts for Amabiko_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: Amabiko_277 Start: 125973, Stop: 125614, Start Num: 12

Candidate Starts for Amabiko_277:

(Start: 12 @125973 has 61 MA's), (Start: 13 @125967 has 101 MA's), (15, 125952), (28, 125877), (31, 125856), (39, 125757), (56, 125628),

Gene: Anedea_276 Start: 129542, Stop: 129219, Start Num: 12

Candidate Starts for Anedea_276:

(Start: 12 @129542 has 61 MA's), (Start: 13 @129536 has 101 MA's), (32, 129455), (34, 129422), (38, 129362), (42, 129332), (44, 129323), (49, 129302), (55, 129245),

Gene: Anedea_11 Start: 6493, Stop: 6170, Start Num: 12

Candidate Starts for Anedea_11:

(Start: 12 @6493 has 61 MA's), (Start: 13 @6487 has 101 MA's), (32, 6406), (34, 6373), (38, 6313), (42, 6283), (44, 6274), (49, 6253), (55, 6196),

Gene: Angela_268 Start: 129119, Stop: 128820, Start Num: 13

Candidate Starts for Angela_268:

(Start: 13 @129119 has 101 MA's), (27, 129044), (29, 129038), (41, 128906), (44, 128894),

Gene: Angela_11 Start: 6716, Stop: 6417, Start Num: 13

Candidate Starts for Angela_11:

(Start: 13 @6716 has 101 MA's), (27, 6641), (29, 6635), (41, 6503), (44, 6491),

Gene: AngryGiraffe_10 Start: 5615, Stop: 5304, Start Num: 13

Candidate Starts for AngryGiraffe_10:

(Start: 13 @5615 has 101 MA's), (14, 5609), (18, 5588), (30, 5537), (35, 5459), (41, 5411), (45, 5396),

Gene: AngryGiraffe_14 Start: 7124, Stop: 6768, Start Num: 13

Candidate Starts for AngryGiraffe_14:

(Start: 12 @7130 has 61 MA's), (Start: 13 @7124 has 101 MA's), (28, 7031), (31, 7010), (38, 6914), (39, 6911), (48, 6857), (56, 6782),

Gene: AngryGiraffe_270 Start: 125467, Stop: 125111, Start Num: 13

Candidate Starts for AngryGiraffe_270:

(Start: 12 @125473 has 61 MA's), (Start: 13 @125467 has 101 MA's), (28, 125374), (31, 125353), (38, 125257), (39, 125254), (48, 125200), (56, 125125),

Gene: AngryGiraffe_266 Start: 123958, Stop: 123647, Start Num: 13

Candidate Starts for AngryGiraffe_266:

(Start: 13 @123958 has 101 MA's), (14, 123952), (18, 123931), (30, 123880), (35, 123802), (41, 123754), (45, 123739),

Gene: Bartholomune_10 Start: 6043, Stop: 5744, Start Num: 13

Candidate Starts for Bartholomune_10:

(Start: 13 @6043 has 101 MA's), (29, 5962), (36, 5872), (37, 5869), (44, 5818),

Gene: Bartholomune_260 Start: 127142, Stop: 126843, Start Num: 13

Candidate Starts for Bartholomune_260:

(Start: 13 @127142 has 101 MA's), (29, 127061), (36, 126971), (37, 126968), (44, 126917),

Gene: Battuta_13 Start: 7141, Stop: 6788, Start Num: 13

Candidate Starts for Battuta_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: Battuta_270 Start: 125296, Stop: 124943, Start Num: 13

Candidate Starts for Battuta_270:

(Start: 12 @125302 has 61 MA's), (Start: 13 @125296 has 101 MA's), (15, 125281), (28, 125206), (31, 125185), (39, 125086), (56, 124957),

Gene: BillNye_210 Start: 109627, Stop: 109917, Start Num: 19

Candidate Starts for BillNye_210:

(11, 109582), (Start: 19 @109627 has 4 MA's), (23, 109657), (24, 109669), (33, 109732), (39, 109813), (44, 109849),

Gene: Birchlyn_270 Start: 121091, Stop: 120732, Start Num: 12

Candidate Starts for Birchlyn_270:

(Start: 12 @121091 has 61 MA's), (Start: 13 @121085 has 101 MA's), (15, 121070), (28, 120995), (31, 120974), (39, 120875), (56, 120746),

Gene: Birchlyn_10 Start: 4994, Stop: 4641, Start Num: 13

Candidate Starts for Birchlyn_10:

(Start: 12 @5000 has 61 MA's), (Start: 13 @4994 has 101 MA's), (15, 4979), (28, 4904), (31, 4883), (39, 4784), (56, 4655),

Gene: BlueOtter_11 Start: 6361, Stop: 6038, Start Num: 12

Candidate Starts for BlueOtter_11:

(Start: 12 @6361 has 61 MA's), (Start: 13 @6355 has 101 MA's), (15, 6346), (32, 6274), (34, 6241), (38, 6181), (42, 6151), (44, 6142), (54, 6076), (55, 6064),

Gene: BlueOtter_259 Start: 127448, Stop: 127125, Start Num: 12

Candidate Starts for BlueOtter_259:

(Start: 12 @127448 has 61 MA's), (Start: 13 @127442 has 101 MA's), (15, 127433), (32, 127361), (34, 127328), (38, 127268), (42, 127238), (44, 127229), (54, 127163), (55, 127151),

Gene: Bmoc_266 Start: 128418, Stop: 128119, Start Num: 13

Candidate Starts for Bmoc_266:

(Start: 13 @128418 has 101 MA's), (27, 128343), (29, 128337), (41, 128205), (44, 128193),

Gene: Bmoc_10 Start: 6596, Stop: 6297, Start Num: 13

Candidate Starts for Bmoc_10:

(Start: 13 @6596 has 101 MA's), (27, 6521), (29, 6515), (41, 6383), (44, 6371),

Gene: BoomerJR_14 Start: 7130, Stop: 6768, Start Num: 12

Candidate Starts for BoomerJR_14:

(Start: 12 @7130 has 61 MA's), (Start: 13 @7124 has 101 MA's), (28, 7031), (31, 7010), (38, 6914), (39, 6911), (48, 6857), (56, 6782),

Gene: BoomerJR_10 Start: 5615, Stop: 5304, Start Num: 13

Candidate Starts for BoomerJR_10:

(Start: 13 @5615 has 101 MA's), (14, 5609), (18, 5588), (30, 5537), (35, 5459), (41, 5411), (45, 5396),

Gene: BoomerJR_269 Start: 125918, Stop: 125556, Start Num: 12

Candidate Starts for BoomerJR_269:

(Start: 12 @125918 has 61 MA's), (Start: 13 @125912 has 101 MA's), (28, 125819), (31, 125798), (38, 125702), (39, 125699), (48, 125645), (56, 125570),

Gene: BoomerJR_265 Start: 124403, Stop: 124092, Start Num: 13

Candidate Starts for BoomerJR_265:

(Start: 13 @124403 has 101 MA's), (14, 124397), (18, 124376), (30, 124325), (35, 124247), (41, 124199), (45, 124184),

Gene: Bordeaux_13 Start: 7141, Stop: 6788, Start Num: 13

Candidate Starts for Bordeaux_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: Bordeaux_270 Start: 125879, Stop: 125526, Start Num: 13

Candidate Starts for Bordeaux_270:

(Start: 12 @125885 has 61 MA's), (Start: 13 @125879 has 101 MA's), (15, 125864), (28, 125789), (31, 125768), (39, 125669), (56, 125540),

Gene: Braelyn_10 Start: 6055, Stop: 5756, Start Num: 13

Candidate Starts for Braelyn_10:

(Start: 13 @6055 has 101 MA's), (29, 5974), (36, 5884), (37, 5881), (44, 5830),

Gene: Braelyn_255 Start: 126465, Stop: 126166, Start Num: 13

Candidate Starts for Braelyn_255:

(Start: 13 @126465 has 101 MA's), (29, 126384), (36, 126294), (37, 126291), (44, 126240),

Gene: Brizzy_270 Start: 126004, Stop: 125645, Start Num: 12

Candidate Starts for Brizzy_270:

(Start: 12 @126004 has 61 MA's), (Start: 13 @125998 has 101 MA's), (15, 125983), (28, 125908), (31, 125887), (39, 125788), (56, 125659),

Gene: Brizzy_12 Start: 6730, Stop: 6377, Start Num: 13

Candidate Starts for Brizzy_12:

(Start: 12 @6736 has 61 MA's), (Start: 13 @6730 has 101 MA's), (15, 6715), (28, 6640), (31, 6619), (39, 6520), (56, 6391),

Gene: Cadmus_259 Start: 129067, Stop: 128759, Start Num: 13

Candidate Starts for Cadmus_259:

(Start: 13 @129067 has 101 MA's), (29, 128986), (35, 128899), (45, 128836), (52, 128797),

Gene: Cadmus_11 Start: 6586, Stop: 6278, Start Num: 13

Candidate Starts for Cadmus_11:

(Start: 13 @6586 has 101 MA's), (29, 6505), (35, 6418), (45, 6355), (52, 6316),

Gene: CeilingFan_12 Start: 6752, Stop: 6399, Start Num: 13

Candidate Starts for CeilingFan_12:

(Start: 12 @6758 has 61 MA's), (Start: 13 @6752 has 101 MA's), (15, 6737), (28, 6662), (31, 6641), (39, 6542), (56, 6413),

Gene: CeilingFan_278 Start: 127359, Stop: 127006, Start Num: 13

Candidate Starts for CeilingFan_278:

(Start: 12 @127365 has 61 MA's), (Start: 13 @127359 has 101 MA's), (15, 127344), (28, 127269), (31, 127248), (39, 127149), (56, 127020),

Gene: Chaewon_212 Start: 109768, Stop: 110058, Start Num: 19

Candidate Starts for Chaewon_212:

(Start: 19 @109768 has 4 MA's), (23, 109798), (33, 109873), (39, 109954), (45, 109993),

Gene: Circinus_210 Start: 109217, Stop: 109507, Start Num: 19

Candidate Starts for Circinus_210:

(11, 109172), (17, 109214), (Start: 19 @109217 has 4 MA's), (23, 109247), (24, 109259), (33, 109322), (39, 109403), (44, 109439),

Gene: Coogler_11 Start: 6361, Stop: 6038, Start Num: 12

Candidate Starts for Coogler_11:

(Start: 12 @6361 has 61 MA's), (Start: 13 @6355 has 101 MA's), (15, 6346), (32, 6274), (34, 6241), (38, 6181), (42, 6151), (44, 6142), (54, 6076), (55, 6064),

Gene: Coogler_257 Start: 127873, Stop: 127550, Start Num: 12

Candidate Starts for Coogler_257:

(Start: 12 @127873 has 61 MA's), (Start: 13 @127867 has 101 MA's), (15, 127858), (32, 127786), (34, 127753), (38, 127693), (42, 127663), (44, 127654), (54, 127588), (55, 127576),

Gene: Cross_259 Start: 128093, Stop: 127770, Start Num: 12

Candidate Starts for Cross_259:

(Start: 12 @128093 has 61 MA's), (Start: 13 @128087 has 101 MA's), (15, 128078), (32, 128006), (34, 127973), (38, 127913), (42, 127883), (44, 127874), (54, 127808), (55, 127796),

Gene: Cross_11 Start: 6361, Stop: 6038, Start Num: 12

Candidate Starts for Cross_11:

(Start: 12 @6361 has 61 MA's), (Start: 13 @6355 has 101 MA's), (15, 6346), (32, 6274), (34, 6241), (38, 6181), (42, 6151), (44, 6142), (54, 6076), (55, 6064),

Gene: Cursive_9 Start: 5179, Stop: 4856, Start Num: 12

Candidate Starts for Cursive_9:

(Start: 12 @5179 has 61 MA's), (Start: 13 @5173 has 101 MA's), (15, 5164), (32, 5092), (34, 5059), (38, 4999), (42, 4969), (44, 4960), (54, 4894), (55, 4882),

Gene: Cursive_263 Start: 127188, Stop: 126865, Start Num: 12

Candidate Starts for Cursive_263:

(Start: 12 @127188 has 61 MA's), (Start: 13 @127182 has 101 MA's), (15, 127173), (32, 127101), (34, 127068), (38, 127008), (42, 126978), (44, 126969), (54, 126903), (55, 126891),

Gene: Daubenski_12 Start: 6584, Stop: 6276, Start Num: 13

Candidate Starts for Daubenski_12:

(Start: 13 @6584 has 101 MA's), (29, 6503), (35, 6416), (45, 6353), (52, 6314),

Gene: Daubenski_256 Start: 128960, Stop: 128652, Start Num: 13

Candidate Starts for Daubenski_256:

(Start: 13 @128960 has 101 MA's), (29, 128879), (35, 128792), (45, 128729), (52, 128690),

Gene: Davielle_258 Start: 127001, Stop: 126702, Start Num: 13

Candidate Starts for Davielle_258:

(Start: 13 @127001 has 101 MA's), (29, 126920), (36, 126830), (37, 126827), (44, 126776),

Gene: Davielle_9 Start: 5841, Stop: 5542, Start Num: 13

Candidate Starts for Davielle_9:

(Start: 13 @5841 has 101 MA's), (29, 5760), (36, 5670), (37, 5667), (44, 5616),

Gene: EGole_265 Start: 131094, Stop: 130771, Start Num: 12

Candidate Starts for EGole_265:

(Start: 12 @131094 has 61 MA's), (Start: 13 @131088 has 101 MA's), (15, 131079), (32, 131007), (34, 130974), (38, 130914), (42, 130884), (44, 130875), (54, 130809), (55, 130797),

Gene: EGole_11 Start: 6782, Stop: 6459, Start Num: 12

Candidate Starts for EGole_11:

(Start: 12 @6782 has 61 MA's), (Start: 13 @6776 has 101 MA's), (15, 6767), (32, 6695), (34, 6662), (38, 6602), (42, 6572), (44, 6563), (54, 6497), (55, 6485),

Gene: Elmer_12 Start: 6271, Stop: 5918, Start Num: 13

Candidate Starts for Elmer_12:

(Start: 12 @6277 has 61 MA's), (Start: 13 @6271 has 101 MA's), (28, 6181), (31, 6160), (35, 6085), (38, 6064), (41, 6037), (56, 5932),

Gene: Elmer_279 Start: 128639, Stop: 128286, Start Num: 13

Candidate Starts for Elmer_279:

(Start: 12 @128645 has 61 MA's), (Start: 13 @128639 has 101 MA's), (28, 128549), (31, 128528), (35, 128453), (38, 128432), (41, 128405), (56, 128300),

Gene: Enygma_279 Start: 128827, Stop: 128474, Start Num: 13

Candidate Starts for Enygma_279:

(Start: 12 @128833 has 61 MA's), (Start: 13 @128827 has 101 MA's), (15, 128812), (28, 128737), (31, 128716), (39, 128617), (40, 128596), (56, 128488),

Gene: Enygma_11 Start: 6403, Stop: 6050, Start Num: 13

Candidate Starts for Enygma_11:

(Start: 12 @6409 has 61 MA's), (Start: 13 @6403 has 101 MA's), (15, 6388), (28, 6313), (31, 6292), (39, 6193), (40, 6172), (56, 6064),

Gene: Evy_12 Start: 6669, Stop: 6367, Start Num: 13

Candidate Starts for Evy_12:

(1, 6999), (2, 6972), (3, 6906), (4, 6882), (5, 6876), (6, 6822), (Start: 13 @6669 has 101 MA's), (29, 6588), (36, 6498), (45, 6441), (46, 6435), (51, 6405),

Gene: Evy_250 Start: 128398, Stop: 128096, Start Num: 13

Candidate Starts for Evy_250:

(1, 128728), (2, 128701), (3, 128635), (4, 128611), (5, 128605), (6, 128551), (Start: 13 @128398 has 101 MA's), (29, 128317), (36, 128227), (45, 128170), (46, 128164), (51, 128134),

Gene: Genie2_14 Start: 7130, Stop: 6768, Start Num: 12

Candidate Starts for Genie2_14:

(Start: 12 @7130 has 61 MA's), (Start: 13 @7124 has 101 MA's), (28, 7031), (31, 7010), (38, 6914), (39, 6911), (48, 6857), (56, 6782),

Gene: Genie2_10 Start: 5615, Stop: 5304, Start Num: 13

Candidate Starts for Genie2_10:

(Start: 13 @5615 has 101 MA's), (14, 5609), (18, 5588), (30, 5537), (35, 5459), (41, 5411), (45, 5396),

Gene: Genie2_269 Start: 126031, Stop: 125669, Start Num: 12

Candidate Starts for Genie2_269:

(Start: 12 @126031 has 61 MA's), (Start: 13 @126025 has 101 MA's), (28, 125932), (31, 125911), (38, 125815), (39, 125812), (48, 125758), (56, 125683),

Gene: Genie2_265 Start: 124516, Stop: 124205, Start Num: 13

Candidate Starts for Genie2_265:

(Start: 13 @124516 has 101 MA's), (14, 124510), (18, 124489), (30, 124438), (35, 124360), (41, 124312), (45, 124297),

Gene: Gibbi_283 Start: 126852, Stop: 126499, Start Num: 13

Candidate Starts for Gibbi_283:

(Start: 12 @126858 has 61 MA's), (Start: 13 @126852 has 101 MA's), (15, 126837), (28, 126762), (31, 126741), (39, 126642), (56, 126513),

Gene: Gibbi_12 Start: 6752, Stop: 6399, Start Num: 13

Candidate Starts for Gibbi_12:

(Start: 12 @6758 has 61 MA's), (Start: 13 @6752 has 101 MA's), (15, 6737), (28, 6662), (31, 6641), (39, 6542), (56, 6413),

Gene: HangryHippo_259 Start: 127448, Stop: 127125, Start Num: 12

Candidate Starts for HangryHippo_259:

(Start: 12 @127448 has 61 MA's), (Start: 13 @127442 has 101 MA's), (15, 127433), (32, 127361), (34, 127328), (38, 127268), (42, 127238), (44, 127229), (54, 127163), (55, 127151),

Gene: HangryHippo_11 Start: 6361, Stop: 6038, Start Num: 12

Candidate Starts for HangryHippo_11:

(Start: 12 @6361 has 61 MA's), (Start: 13 @6355 has 101 MA's), (15, 6346), (32, 6274), (34, 6241), (38, 6181), (42, 6151), (44, 6142), (54, 6076), (55, 6064),

Gene: IchabodCrane_12 Start: 6749, Stop: 6396, Start Num: 13

Candidate Starts for IchabodCrane_12:

(Start: 12 @6755 has 61 MA's), (Start: 13 @6749 has 101 MA's), (15, 6734), (28, 6659), (31, 6638), (39, 6539), (56, 6410),

Gene: IchabodCrane_265 Start: 125292, Stop: 124939, Start Num: 13

Candidate Starts for IchabodCrane_265:

(Start: 12 @125298 has 61 MA's), (Start: 13 @125292 has 101 MA's), (15, 125277), (28, 125202), (31, 125181), (39, 125082), (56, 124953),

Gene: Jay2Jay_13 Start: 6415, Stop: 6071, Start Num: 9

Candidate Starts for Jay2Jay_13:

(Start: 9 @6415 has 4 MA's), (Start: 13 @6373 has 101 MA's), (29, 6292), (36, 6202), (45, 6145), (46, 6139), (51, 6109),

Gene: Jay2Jay_268 Start: 128508, Stop: 128164, Start Num: 9

Candidate Starts for Jay2Jay_268:

(Start: 9 @128508 has 4 MA's), (Start: 13 @128466 has 101 MA's), (29, 128385), (36, 128295), (45, 128238), (46, 128232), (51, 128202),

Gene: JimJam_281 Start: 128682, Stop: 128323, Start Num: 12

Candidate Starts for JimJam_281:

(Start: 12 @128682 has 61 MA's), (Start: 13 @128676 has 101 MA's), (15, 128661), (28, 128586), (31, 128565), (39, 128466), (56, 128337),

Gene: JimJam_13 Start: 7146, Stop: 6787, Start Num: 12

Candidate Starts for JimJam_13:

(Start: 12 @7146 has 61 MA's), (Start: 13 @7140 has 101 MA's), (15, 7125), (28, 7050), (31, 7029), (39, 6930), (56, 6801),

Gene: Jollison_270 Start: 125816, Stop: 125463, Start Num: 13

Candidate Starts for Jollison_270:

(Start: 12 @125822 has 61 MA's), (Start: 13 @125816 has 101 MA's), (15, 125801), (28, 125726), (31, 125705), (39, 125606), (56, 125477),

Gene: Jollison_13 Start: 7141, Stop: 6788, Start Num: 13

Candidate Starts for Jollison_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: Karimac_271 Start: 126462, Stop: 126109, Start Num: 13

Candidate Starts for Karimac_271:

(Start: 12 @126468 has 61 MA's), (Start: 13 @126462 has 101 MA's), (15, 126447), (28, 126372), (31, 126351), (39, 126252), (56, 126123),

Gene: Karimac_13 Start: 7143, Stop: 6790, Start Num: 13

Candidate Starts for Karimac_13:

(Start: 12 @7149 has 61 MA's), (Start: 13 @7143 has 101 MA's), (15, 7128), (28, 7053), (31, 7032), (39, 6933), (56, 6804),

Gene: KentuckyRacer_280 Start: 128210, Stop: 127851, Start Num: 12

Candidate Starts for KentuckyRacer_280:

(Start: 12 @128210 has 61 MA's), (Start: 13 @128204 has 101 MA's), (15, 128189), (28, 128114), (31, 128093), (39, 127994), (56, 127865),

Gene: KentuckyRacer_12 Start: 6759, Stop: 6400, Start Num: 12

Candidate Starts for KentuckyRacer_12:

(Start: 12 @6759 has 61 MA's), (Start: 13 @6753 has 101 MA's), (15, 6738), (28, 6663), (31, 6642), (39, 6543), (56, 6414),

Gene: Larnav_11 Start: 6361, Stop: 6038, Start Num: 12

Candidate Starts for Larnav_11:

(Start: 12 @6361 has 61 MA's), (Start: 13 @6355 has 101 MA's), (15, 6346), (32, 6274), (34, 6241), (38, 6181), (42, 6151), (44, 6142), (54, 6076), (55, 6064),

Gene: Larnav_261 Start: 128366, Stop: 128043, Start Num: 12

Candidate Starts for Larnav_261:

(Start: 12 @128366 has 61 MA's), (Start: 13 @128360 has 101 MA's), (15, 128351), (32, 128279), (34, 128246), (38, 128186), (42, 128156), (44, 128147), (54, 128081), (55, 128069),

Gene: Leo04_262 Start: 128472, Stop: 128155, Start Num: 13

Candidate Starts for Leo04_262:

(Start: 12 @128478 has 61 MA's), (Start: 13 @128472 has 101 MA's), (15, 128463), (32, 128391), (34, 128358), (38, 128298), (42, 128268), (44, 128259), (54, 128193), (55, 128181),

Gene: Leo04_11 Start: 6354, Stop: 6037, Start Num: 13

Candidate Starts for Leo04_11:

(Start: 12 @6360 has 61 MA's), (Start: 13 @6354 has 101 MA's), (15, 6345), (32, 6273), (34, 6240), (38, 6180), (42, 6150), (44, 6141), (54, 6075), (55, 6063),

Gene: Liandry_259 Start: 127564, Stop: 127265, Start Num: 13

Candidate Starts for Liandry_259:

(Start: 13 @127564 has 101 MA's), (29, 127483), (36, 127393), (37, 127390), (44, 127339),

Gene: Liandry_10 Start: 6043, Stop: 5744, Start Num: 13

Candidate Starts for Liandry_10:

(Start: 13 @6043 has 101 MA's), (29, 5962), (36, 5872), (37, 5869), (44, 5818),

Gene: LilMartin_263 Start: 128036, Stop: 127737, Start Num: 13

Candidate Starts for LilMartin_263:

(Start: 13 @128036 has 101 MA's), (29, 127955), (36, 127865), (37, 127862), (44, 127811),

Gene: LilMartin_11 Start: 6692, Stop: 6393, Start Num: 13

Candidate Starts for LilMartin_11:

(Start: 13 @6692 has 101 MA's), (29, 6611), (36, 6521), (37, 6518), (44, 6467),

Gene: LilSaint_277 Start: 128356, Stop: 128033, Start Num: 12

Candidate Starts for LilSaint_277:

(Start: 12 @128356 has 61 MA's), (Start: 13 @128350 has 101 MA's), (32, 128269), (34, 128236), (38, 128176), (42, 128146), (44, 128137), (49, 128116), (55, 128059), (57, 128041),

Gene: LilSaint_15 Start: 6506, Stop: 6183, Start Num: 12

Candidate Starts for LilSaint_15:

(Start: 12 @6506 has 61 MA's), (Start: 13 @6500 has 101 MA's), (32, 6419), (34, 6386), (38, 6326), (42, 6296), (44, 6287), (49, 6266), (55, 6209), (57, 6191),

Gene: LukeCage_275 Start: 127593, Stop: 127234, Start Num: 12

Candidate Starts for LukeCage_275:

(Start: 12 @127593 has 61 MA's), (Start: 13 @127587 has 101 MA's), (15, 127572), (28, 127497), (31, 127476), (35, 127401), (39, 127377), (56, 127248),

Gene: LukeCage_12 Start: 6689, Stop: 6330, Start Num: 12

Candidate Starts for LukeCage_12:

(Start: 12 @6689 has 61 MA's), (Start: 13 @6683 has 101 MA's), (15, 6668), (28, 6593), (31, 6572), (35, 6497), (39, 6473), (56, 6344),

Gene: Lululemon_257 Start: 126633, Stop: 126310, Start Num: 12

Candidate Starts for Lululemon_257:

(Start: 12 @126633 has 61 MA's), (Start: 13 @126627 has 101 MA's), (15, 126618), (32, 126546), (34, 126513), (38, 126453), (42, 126423), (44, 126414), (54, 126348), (55, 126336),

Gene: Lululemon_10 Start: 5741, Stop: 5418, Start Num: 12

Candidate Starts for Lululemon_10:

(Start: 12 @5741 has 61 MA's), (Start: 13 @5735 has 101 MA's), (15, 5726), (32, 5654), (34, 5621), (38, 5561), (42, 5531), (44, 5522), (54, 5456), (55, 5444),

Gene: Marsus_268 Start: 130400, Stop: 130101, Start Num: 13

Candidate Starts for Marsus_268:

(Start: 13 @130400 has 101 MA's), (27, 130325), (29, 130319), (41, 130187), (44, 130175),

Gene: Marsus_11 Start: 6696, Stop: 6397, Start Num: 13

Candidate Starts for Marsus_11:

(Start: 13 @6696 has 101 MA's), (27, 6621), (29, 6615), (41, 6483), (44, 6471),

Gene: Mildred21_274 Start: 127436, Stop: 127137, Start Num: 13

Candidate Starts for Mildred21_274:

(Start: 13 @127436 has 101 MA's), (29, 127355), (36, 127265), (37, 127262), (44, 127211), (45, 127208),

Gene: Mildred21_11 Start: 6278, Stop: 5979, Start Num: 13

Candidate Starts for Mildred21_11:

(Start: 13 @6278 has 101 MA's), (29, 6197), (36, 6107), (37, 6104), (44, 6053), (45, 6050),

Gene: MindFlayer_264 Start: 124811, Stop: 124458, Start Num: 13

Candidate Starts for MindFlayer_264:

(Start: 12 @124817 has 61 MA's), (Start: 13 @124811 has 101 MA's), (15, 124796), (28, 124721), (31, 124700), (39, 124601), (56, 124472),

Gene: MindFlayer_12 Start: 6751, Stop: 6398, Start Num: 13

Candidate Starts for MindFlayer_12:

(Start: 12 @6757 has 61 MA's), (Start: 13 @6751 has 101 MA's), (15, 6736), (28, 6661), (31, 6640), (39, 6541), (56, 6412),

Gene: Mugiwara_278 Start: 127795, Stop: 127442, Start Num: 13

Candidate Starts for Mugiwara_278:

(Start: 12 @127801 has 61 MA's), (Start: 13 @127795 has 101 MA's), (15, 127780), (28, 127705), (31, 127684), (39, 127585), (53, 127489), (56, 127456),

Gene: Mugiwara_11 Start: 6410, Stop: 6057, Start Num: 13

Candidate Starts for Mugiwara_11:

(Start: 12 @6416 has 61 MA's), (Start: 13 @6410 has 101 MA's), (15, 6395), (28, 6320), (31, 6299), (39, 6200), (53, 6104), (56, 6071),

Gene: MulchMansion_11 Start: 6692, Stop: 6393, Start Num: 13

Candidate Starts for MulchMansion_11:

(Start: 13 @6692 has 101 MA's), (29, 6611), (36, 6521), (37, 6518), (44, 6467),

Gene: MulchMansion_267 Start: 129670, Stop: 129371, Start Num: 13

Candidate Starts for MulchMansion_267:

(Start: 13 @129670 has 101 MA's), (29, 129589), (36, 129499), (37, 129496), (44, 129445),

Gene: Muntaha_225 Start: 109742, Stop: 110029, Start Num: 19

Candidate Starts for Muntaha_225:

(Start: 19 @109742 has 4 MA's), (21, 109751), (22, 109754), (23, 109772), (29, 109808), (33, 109844), (53, 110018),

Gene: Navo_251 Start: 125466, Stop: 125167, Start Num: 13

Candidate Starts for Navo_251:

(Start: 13 @125466 has 101 MA's), (29, 125385), (36, 125295), (37, 125292), (44, 125241),

Gene: Navo_9 Start: 5841, Stop: 5542, Start Num: 13

Candidate Starts for Navo_9:

(Start: 13 @5841 has 101 MA's), (29, 5760), (36, 5670), (37, 5667), (44, 5616),

Gene: NootNoot_255 Start: 126352, Stop: 126053, Start Num: 13

Candidate Starts for NootNoot_255:

(Start: 13 @126352 has 101 MA's), (29, 126271), (36, 126181), (37, 126178), (44, 126127),

Gene: NootNoot_10 Start: 6053, Stop: 5754, Start Num: 13

Candidate Starts for NootNoot_10:

(Start: 13 @6053 has 101 MA's), (29, 5972), (36, 5882), (37, 5879), (44, 5828),

Gene: PacManQ_10 Start: 5741, Stop: 5418, Start Num: 12

Candidate Starts for PacManQ_10:

(Start: 12 @5741 has 61 MA's), (Start: 13 @5735 has 101 MA's), (15, 5726), (32, 5654), (34, 5621), (38, 5561), (42, 5531), (44, 5522), (54, 5456), (55, 5444),

Gene: PacManQ_257 Start: 126633, Stop: 126310, Start Num: 12

Candidate Starts for PacManQ_257:

(Start: 12 @126633 has 61 MA's), (Start: 13 @126627 has 101 MA's), (15, 126618), (32, 126546), (34, 126513), (38, 126453), (42, 126423), (44, 126414), (54, 126348), (55, 126336),

Gene: Paradiddles_10 Start: 6043, Stop: 5744, Start Num: 13

Candidate Starts for Paradiddles_10:

(Start: 13 @6043 has 101 MA's), (29, 5962), (36, 5872), (37, 5869), (44, 5818),

Gene: Paradiddles_251 Start: 128751, Stop: 128452, Start Num: 13

Candidate Starts for Paradiddles_251:

(Start: 13 @128751 has 101 MA's), (29, 128670), (36, 128580), (37, 128577), (44, 128526),

Gene: Peebs_258 Start: 128335, Stop: 128012, Start Num: 12

Candidate Starts for Peebs_258:

(Start: 12 @128335 has 61 MA's), (Start: 13 @128329 has 101 MA's), (15, 128320), (32, 128248), (34, 128215), (38, 128155), (42, 128125), (44, 128116), (54, 128050), (55, 128038),

Gene: Peebs_11 Start: 6360, Stop: 6037, Start Num: 12

Candidate Starts for Peebs_11:

(Start: 12 @6360 has 61 MA's), (Start: 13 @6354 has 101 MA's), (15, 6345), (32, 6273), (34, 6240), (38, 6180), (42, 6150), (44, 6141), (54, 6075), (55, 6063),

Gene: Pepperwood_12 Start: 6515, Stop: 6192, Start Num: 12

Candidate Starts for Pepperwood_12:

(Start: 12 @6515 has 61 MA's), (Start: 13 @6509 has 101 MA's), (15, 6500), (32, 6428), (34, 6395), (38, 6335), (42, 6305), (44, 6296), (54, 6230), (55, 6218),

Gene: Pepperwood_261 Start: 128300, Stop: 127977, Start Num: 12

Candidate Starts for Pepperwood_261:

(Start: 12 @128300 has 61 MA's), (Start: 13 @128294 has 101 MA's), (15, 128285), (32, 128213), (34, 128180), (38, 128120), (42, 128090), (44, 128081), (54, 128015), (55, 128003),

Gene: Persimmon_260 Start: 126652, Stop: 126353, Start Num: 13

Candidate Starts for Persimmon_260:

(Start: 13 @126652 has 101 MA's), (29, 126571), (36, 126481), (37, 126478), (44, 126427),

Gene: Persimmon_9 Start: 5841, Stop: 5542, Start Num: 13

Candidate Starts for Persimmon_9:

(Start: 13 @5841 has 101 MA's), (29, 5760), (36, 5670), (37, 5667), (44, 5616),

Gene: PinkiePie_10 Start: 6043, Stop: 5744, Start Num: 13

Candidate Starts for PinkiePie_10:

(Start: 13 @6043 has 101 MA's), (29, 5962), (36, 5872), (37, 5869), (44, 5818),

Gene: PinkiePie_260 Start: 127564, Stop: 127265, Start Num: 13

Candidate Starts for PinkiePie_260:

(Start: 13 @127564 has 101 MA's), (29, 127483), (36, 127393), (37, 127390), (44, 127339),

Gene: PumpkinSpice_277 Start: 127033, Stop: 126680, Start Num: 13

Candidate Starts for PumpkinSpice_277:

(Start: 12 @127039 has 61 MA's), (Start: 13 @127033 has 101 MA's), (15, 127018), (28, 126943), (31, 126922), (39, 126823), (56, 126694),

Gene: PumpkinSpice_13 Start: 7141, Stop: 6788, Start Num: 13

Candidate Starts for PumpkinSpice_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: Quaran19_13 Start: 7141, Stop: 6788, Start Num: 13

Candidate Starts for Quaran19_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: Quaran19_274 Start: 126323, Stop: 125970, Start Num: 13

Candidate Starts for Quaran19_274:

(Start: 12 @126329 has 61 MA's), (Start: 13 @126323 has 101 MA's), (15, 126308), (28, 126233), (31, 126212), (39, 126113), (56, 125984),

Gene: Rikishi_12 Start: 6751, Stop: 6398, Start Num: 13

Candidate Starts for Rikishi_12:

(Start: 12 @6757 has 61 MA's), (Start: 13 @6751 has 101 MA's), (15, 6736), (28, 6661), (31, 6640), (39, 6541), (56, 6412),

Gene: Rikishi_274 Start: 126824, Stop: 126471, Start Num: 13

Candidate Starts for Rikishi_274:

(Start: 12 @126830 has 61 MA's), (Start: 13 @126824 has 101 MA's), (15, 126809), (28, 126734), (31, 126713), (39, 126614), (56, 126485),

Gene: Riptide_12 Start: 6772, Stop: 6449, Start Num: 12

Candidate Starts for Riptide_12:

(Start: 12 @6772 has 61 MA's), (Start: 13 @6766 has 101 MA's), (32, 6685), (34, 6652), (38, 6592), (42, 6562), (44, 6553), (49, 6532), (55, 6475),

Gene: Riptide_267 Start: 128224, Stop: 127901, Start Num: 12

Candidate Starts for Riptide_267:

(Start: 12 @128224 has 61 MA's), (Start: 13 @128218 has 101 MA's), (32, 128137), (34, 128104), (38, 128044), (42, 128014), (44, 128005), (49, 127984), (55, 127927),

Gene: SaltySpittoon_13 Start: 7141, Stop: 6788, Start Num: 13

Candidate Starts for SaltySpittoon_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: SaltySpittoon_273 Start: 125411, Stop: 125052, Start Num: 12

Candidate Starts for SaltySpittoon_273:

(Start: 12 @125411 has 61 MA's), (Start: 13 @125405 has 101 MA's), (15, 125390), (28, 125315), (31, 125294), (39, 125195), (56, 125066),

Gene: Samisti12_261 Start: 129404, Stop: 129081, Start Num: 12

Candidate Starts for Samisti12_261:

(Start: 12 @129404 has 61 MA's), (Start: 13 @129398 has 101 MA's), (15, 129389), (32, 129317), (34, 129284), (38, 129224), (42, 129194), (44, 129185), (54, 129119), (55, 129107),

Gene: Samisti12_10 Start: 6360, Stop: 6037, Start Num: 12

Candidate Starts for Samisti12_10:

(Start: 12 @6360 has 61 MA's), (Start: 13 @6354 has 101 MA's), (15, 6345), (32, 6273), (34, 6240), (38, 6180), (42, 6150), (44, 6141), (54, 6075), (55, 6063),

Gene: Scheme_265 Start: 129710, Stop: 129387, Start Num: 12

Candidate Starts for Scheme_265:

(Start: 12 @129710 has 61 MA's), (Start: 13 @129704 has 101 MA's), (15, 129695), (32, 129623), (34, 129590), (38, 129530), (42, 129500), (44, 129491), (54, 129425), (55, 129413),

Gene: Scheme_12 Start: 6515, Stop: 6192, Start Num: 12

Candidate Starts for Scheme_12:

(Start: 12 @6515 has 61 MA's), (Start: 13 @6509 has 101 MA's), (15, 6500), (32, 6428), (34, 6395), (38, 6335), (42, 6305), (44, 6296), (54, 6230), (55, 6218),

Gene: Shuckle_11 Start: 6805, Stop: 6482, Start Num: 12

Candidate Starts for Shuckle_11:

(Start: 12 @6805 has 61 MA's), (Start: 13 @6799 has 101 MA's), (15, 6790), (32, 6718), (34, 6685), (38, 6625), (42, 6595), (44, 6586), (54, 6520), (55, 6508),

Gene: Shuckle_259 Start: 129438, Stop: 129115, Start Num: 12

Candidate Starts for Shuckle_259:

(Start: 12 @129438 has 61 MA's), (Start: 13 @129432 has 101 MA's), (15, 129423), (32, 129351), (34, 129318), (38, 129258), (42, 129228), (44, 129219), (54, 129153), (55, 129141),

Gene: Sollertia_10 Start: 5615, Stop: 5304, Start Num: 13

Candidate Starts for Sollertia_10:

(Start: 13 @5615 has 101 MA's), (14, 5609), (18, 5588), (30, 5537), (35, 5459), (41, 5411), (45, 5396),

Gene: Sollertia_14 Start: 7124, Stop: 6768, Start Num: 13

Candidate Starts for Sollertia_14:

(Start: 12 @7130 has 61 MA's), (Start: 13 @7124 has 101 MA's), (28, 7031), (31, 7010), (38, 6914), (39, 6911), (48, 6857), (56, 6782),

Gene: Sollertia_266 Start: 124505, Stop: 124194, Start Num: 13

Candidate Starts for Sollertia_266:

(Start: 13 @124505 has 101 MA's), (14, 124499), (18, 124478), (30, 124427), (35, 124349), (41, 124301), (45, 124286),

Gene: Sollertia_270 Start: 126014, Stop: 125658, Start Num: 13

Candidate Starts for Sollertia_270:

(Start: 12 @126020 has 61 MA's), (Start: 13 @126014 has 101 MA's), (28, 125921), (31, 125900), (38, 125804), (39, 125801), (48, 125747), (56, 125672),

Gene: Spelly_13 Start: 7141, Stop: 6788, Start Num: 13

Candidate Starts for Spelly_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: Spelly_279 Start: 125945, Stop: 125592, Start Num: 13

Candidate Starts for Spelly_279:

(Start: 12 @125951 has 61 MA's), (Start: 13 @125945 has 101 MA's), (15, 125930), (28, 125855), (31, 125834), (39, 125735), (56, 125606),

Gene: Spilled_12 Start: 6757, Stop: 6398, Start Num: 12

Candidate Starts for Spilled_12:

(Start: 12 @6757 has 61 MA's), (Start: 13 @6751 has 101 MA's), (15, 6736), (28, 6661), (31, 6640), (39, 6541), (56, 6412),

Gene: Spilled_280 Start: 127226, Stop: 126867, Start Num: 12

Candidate Starts for Spilled_280:

(Start: 12 @127226 has 61 MA's), (Start: 13 @127220 has 101 MA's), (15, 127205), (28, 127130), (31, 127109), (39, 127010), (56, 126881),

Gene: Squillium_10 Start: 6043, Stop: 5744, Start Num: 13

Candidate Starts for Squillium_10:

(Start: 13 @6043 has 101 MA's), (29, 5962), (36, 5872), (37, 5869), (44, 5818),

Gene: Squillium_262 Start: 127567, Stop: 127268, Start Num: 13

Candidate Starts for Squillium_262:

(Start: 13 @127567 has 101 MA's), (29, 127486), (36, 127396), (37, 127393), (44, 127342),

Gene: Stanimal_10 Start: 5615, Stop: 5304, Start Num: 13

Candidate Starts for Stanimal_10:

(Start: 13 @5615 has 101 MA's), (14, 5609), (18, 5588), (30, 5537), (35, 5459), (41, 5411), (45, 5396),

Gene: Stanimal_14 Start: 7130, Stop: 6768, Start Num: 12

Candidate Starts for Stanimal_14:

(Start: 12 @7130 has 61 MA's), (Start: 13 @7124 has 101 MA's), (28, 7031), (31, 7010), (38, 6914), (39, 6911), (48, 6857), (56, 6782),

Gene: Stanimal_269 Start: 126404, Stop: 126042, Start Num: 12

Candidate Starts for Stanimal_269:

(Start: 12 @126404 has 61 MA's), (Start: 13 @126398 has 101 MA's), (28, 126305), (31, 126284), (38, 126188), (39, 126185), (48, 126131), (56, 126056),

Gene: Stanimal_265 Start: 124889, Stop: 124578, Start Num: 13

Candidate Starts for Stanimal_265:

(Start: 13 @124889 has 101 MA's), (14, 124883), (18, 124862), (30, 124811), (35, 124733), (41, 124685), (45, 124670),

Gene: StarPlatinum_282 Start: 128529, Stop: 128176, Start Num: 13

Candidate Starts for StarPlatinum_282:

(Start: 13 @128529 has 101 MA's), (14, 128523), (15, 128514), (28, 128439), (31, 128418), (39, 128319), (53, 128223), (56, 128190),

Gene: StarPlatinum_12 Start: 6842, Stop: 6489, Start Num: 13

Candidate Starts for StarPlatinum_12:

(Start: 13 @6842 has 101 MA's), (14, 6836), (15, 6827), (28, 6752), (31, 6731), (39, 6632), (53, 6536), (56, 6503),

Gene: Starbow_13 Start: 7147, Stop: 6788, Start Num: 12

Candidate Starts for Starbow_13:

(Start: 12 @7147 has 61 MA's), (Start: 13 @7141 has 101 MA's), (15, 7126), (28, 7051), (31, 7030), (39, 6931), (56, 6802),

Gene: Starbow_270 Start: 125995, Stop: 125636, Start Num: 12

Candidate Starts for Starbow_270:

(Start: 12 @125995 has 61 MA's), (Start: 13 @125989 has 101 MA's), (15, 125974), (28, 125899), (31, 125878), (39, 125779), (56, 125650),

Gene: Sushi23_262 Start: 129204, Stop: 128881, Start Num: 12

Candidate Starts for Sushi23_262:

(Start: 12 @129204 has 61 MA's), (Start: 13 @129198 has 101 MA's), (15, 129189), (32, 129117), (34, 129084), (38, 129024), (42, 128994), (44, 128985), (54, 128919), (55, 128907),

Gene: Sushi23_12 Start: 6361, Stop: 6038, Start Num: 12

Candidate Starts for Sushi23_12:

(Start: 12 @6361 has 61 MA's), (Start: 13 @6355 has 101 MA's), (15, 6346), (32, 6274), (34, 6241), (38, 6181), (42, 6151), (44, 6142), (54, 6076), (55, 6064),

Gene: Targaryen_261 Start: 130341, Stop: 130033, Start Num: 13

Candidate Starts for Targaryen_261:

(1, 130671), (2, 130644), (3, 130578), (4, 130554), (5, 130548), (6, 130494), (Start: 13 @130341 has 101 MA's), (Start: 16 @130317 has 2 MA's), (29, 130260), (35, 130173), (45, 130110), (52, 130071),

Gene: Targaryen_10 Start: 6665, Stop: 6357, Start Num: 13

Candidate Starts for Targaryen_10:

(1, 6995), (2, 6968), (3, 6902), (4, 6878), (5, 6872), (6, 6818), (Start: 13 @6665 has 101 MA's), (Start: 16 @6641 has 2 MA's), (29, 6584), (35, 6497), (45, 6434), (52, 6395),

Gene: Deutsch_11 Start: 6362, Stop: 6039, Start Num: 12

Candidate Starts for Deutsch_11:

(Start: 12 @6362 has 61 MA's), (Start: 13 @6356 has 101 MA's), (15, 6347), (32, 6275), (34, 6242), (38, 6182), (42, 6152), (44, 6143), (54, 6077), (55, 6065),

Gene: Deutsch_258 Start: 128571, Stop: 128248, Start Num: 12

Candidate Starts for Deutsch_258:

(Start: 12 @128571 has 61 MA's), (Start: 13 @128565 has 101 MA's), (15, 128556), (32, 128484), (34, 128451), (38, 128391), (42, 128361), (44, 128352), (54, 128286), (55, 128274),

Gene: TomSawyer_13 Start: 6734, Stop: 6381, Start Num: 13

Candidate Starts for TomSawyer_13:

(Start: 12 @6740 has 61 MA's), (Start: 13 @6734 has 101 MA's), (15, 6719), (28, 6644), (31, 6623), (39, 6524), (56, 6395),

Gene: TomSawyer_278 Start: 128513, Stop: 128160, Start Num: 13

Candidate Starts for TomSawyer_278:

(Start: 12 @128519 has 61 MA's), (Start: 13 @128513 has 101 MA's), (15, 128498), (28, 128423), (31, 128402), (39, 128303), (56, 128174),

Gene: Tomas_18 Start: 8698, Stop: 8333, Start Num: 16

Candidate Starts for Tomas_18:

(7, 8866), (10, 8755), (Start: 16 @8698 has 2 MA's), (20, 8689), (25, 8650), (26, 8641), (34, 8569), (41, 8482), (43, 8473),

Gene: Tomas_15 Start: 7771, Stop: 7403, Start Num: 8

Candidate Starts for Tomas_15:

(Start: 8 @7771 has 2 MA's), (Start: 13 @7720 has 101 MA's), (31, 7633), (39, 7534), (41, 7510), (47, 7486), (50, 7471),

Gene: Tomas_274 Start: 130405, Stop: 130040, Start Num: 16

Candidate Starts for Tomas_274:

(7, 130573), (10, 130462), (Start: 16 @130405 has 2 MA's), (20, 130396), (25, 130357), (26, 130348), (34, 130276), (41, 130189), (43, 130180),

Gene: Tomas_271 Start: 129478, Stop: 129110, Start Num: 8

Candidate Starts for Tomas_271:

(Start: 8 @129478 has 2 MA's), (Start: 13 @129427 has 101 MA's), (31, 129340), (39, 129241), (41, 129217), (47, 129193), (50, 129178),

Gene: Tribute_11 Start: 6361, Stop: 6038, Start Num: 12

Candidate Starts for Tribute_11:

(Start: 12 @6361 has 61 MA's), (Start: 13 @6355 has 101 MA's), (15, 6346), (32, 6274), (34, 6241), (38, 6181), (42, 6151), (44, 6142), (54, 6076), (55, 6064),

Gene: Tribute_257 Start: 128905, Stop: 128582, Start Num: 12

Candidate Starts for Tribute_257:

(Start: 12 @128905 has 61 MA's), (Start: 13 @128899 has 101 MA's), (15, 128890), (32, 128818), (34, 128785), (38, 128725), (42, 128695), (44, 128686), (54, 128620), (55, 128608),

Gene: Wakanda_221 Start: 108728, Stop: 109015, Start Num: 19

Candidate Starts for Wakanda_221:

(Start: 19 @108728 has 4 MA's), (21, 108737), (22, 108740), (23, 108758), (29, 108794), (33, 108830), (53, 109004),

Gene: Warpy_265 Start: 127974, Stop: 127630, Start Num: 9

Candidate Starts for Warpy_265:

(Start: 9 @127974 has 4 MA's), (Start: 13 @127932 has 101 MA's), (29, 127851), (36, 127761), (45, 127704), (46, 127698), (51, 127668),

Gene: Warpy_13 Start: 6436, Stop: 6092, Start Num: 9

Candidate Starts for Warpy_13:

(Start: 9 @6436 has 4 MA's), (Start: 13 @6394 has 101 MA's), (29, 6313), (36, 6223), (45, 6166), (46, 6160), (51, 6130),

Gene: Watermoore_258 Start: 128958, Stop: 128635, Start Num: 12

Candidate Starts for Watermoore_258:

(Start: 12 @128958 has 61 MA's), (Start: 13 @128952 has 101 MA's), (15, 128943), (32, 128871), (34, 128838), (38, 128778), (42, 128748), (44, 128739), (54, 128673), (55, 128661),

Gene: Watermoore_11 Start: 6362, Stop: 6039, Start Num: 12

Candidate Starts for Watermoore_11:

(Start: 12 @6362 has 61 MA's), (Start: 13 @6356 has 101 MA's), (15, 6347), (32, 6275), (34, 6242), (38, 6182), (42, 6152), (44, 6143), (54, 6077), (55, 6065),

Gene: WhereRU_9 Start: 5841, Stop: 5542, Start Num: 13

Candidate Starts for WhereRU_9:

(Start: 13 @5841 has 101 MA's), (29, 5760), (36, 5670), (37, 5667), (44, 5616),

Gene: WhereRU_258 Start: 126986, Stop: 126687, Start Num: 13

Candidate Starts for WhereRU_258:

(Start: 13 @126986 has 101 MA's), (29, 126905), (36, 126815), (37, 126812), (44, 126761),

Gene: Wipeout_265 Start: 127487, Stop: 127134, Start Num: 13

Candidate Starts for Wipeout_265:

(Start: 12 @127493 has 61 MA's), (Start: 13 @127487 has 101 MA's), (15, 127472), (28, 127397), (31, 127376), (39, 127277), (56, 127148),

Gene: Wipeout_12 Start: 6756, Stop: 6403, Start Num: 13

Candidate Starts for Wipeout_12:

(Start: 12 @6762 has 61 MA's), (Start: 13 @6756 has 101 MA's), (15, 6741), (28, 6666), (31, 6645), (39, 6546), (56, 6417),

Gene: Wofford_270 Start: 128069, Stop: 127716, Start Num: 13

Candidate Starts for Wofford_270:

(Start: 12 @128075 has 61 MA's), (Start: 13 @128069 has 101 MA's), (28, 127979), (31, 127958), (35, 127883), (38, 127862), (56, 127730),

Gene: Wofford_12 Start: 6276, Stop: 5923, Start Num: 13

Candidate Starts for Wofford_12:

(Start: 12 @6282 has 61 MA's), (Start: 13 @6276 has 101 MA's), (28, 6186), (31, 6165), (35, 6090), (38, 6069), (56, 5937),

Gene: Yaboi_271 Start: 124433, Stop: 124122, Start Num: 13

Candidate Starts for Yaboi_271:

(Start: 13 @124433 has 101 MA's), (14, 124427), (18, 124406), (30, 124355), (35, 124277), (41, 124229), (45, 124214),

Gene: Yaboi_275 Start: 125942, Stop: 125586, Start Num: 13

Candidate Starts for Yaboi_275:

(Start: 12 @125948 has 61 MA's), (Start: 13 @125942 has 101 MA's), (28, 125849), (31, 125828), (38, 125732), (39, 125729), (48, 125675), (56, 125600),

Gene: Yaboi_10 Start: 5615, Stop: 5304, Start Num: 13

Candidate Starts for Yaboi_10:

(Start: 13 @5615 has 101 MA's), (14, 5609), (18, 5588), (30, 5537), (35, 5459), (41, 5411), (45, 5396),

Gene: Yaboi_14 Start: 7124, Stop: 6768, Start Num: 13

Candidate Starts for Yaboi_14:

(Start: 12 @7130 has 61 MA's), (Start: 13 @7124 has 101 MA's), (28, 7031), (31, 7010), (38, 6914), (39, 6911), (48, 6857), (56, 6782),