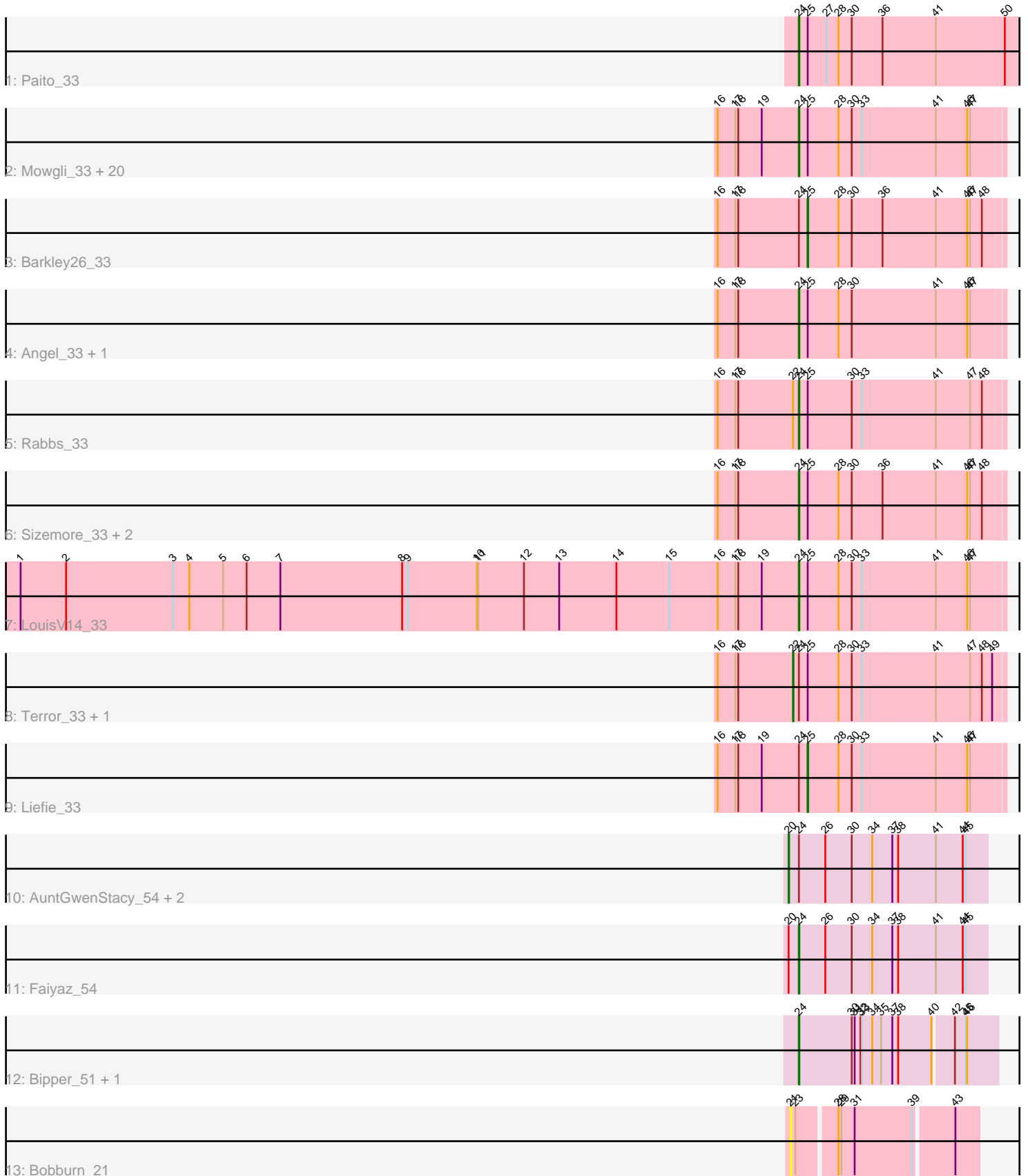


Pham 303502



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 303502 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303502 has 40 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Paito_33
- Track 2 : Mowgli_33, ShaboiShabazz_33, Periodt_33, TomBrady_33, Avrafan_33, BruceB_33, Cherrybomb426_33, Marmie_33, Sweets_33, Hotshotbaby7_33, Olga_33, Aroostook_33, JorRay_33, Halo_33, Chance64_33, Jonghyun_33, Jane_33, Annihilator_33, Phreak_33, BPs_33, Hope_33
- Track 3 : Barkley26_33
- Track 4 : Angel_33, Plagueis_33
- Track 5 : Rabbs_33
- Track 6 : Sizemore_33, Grizzly_33, Kasen3_33
- Track 7 : LouisV14_33
- Track 8 : Terror_33, Taheera_33
- Track 9 : Liefie_33
- Track 10 : AuntGwenStacy_54, Typha_53, Hilltopfarm_53
- Track 11 : Faiyaz_54
- Track 12 : Bipper_51, Cracklewink_51
- Track 13 : Bobburn_21

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

The start number called the most often in the published annotations is 24, it was called in 32 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Angel_33, Annihilator_33, Aroostook_33, Avrafan_33, BPs_33, Bipper_51, BruceB_33, Chance64_33, Cherrybomb426_33, Cracklewink_51, Faiyaz_54, Grizzly_33, Halo_33, Hope_33, Hotshotbaby7_33, Jane_33, Jonghyun_33, JorRay_33, Kasen3_33, LouisV14_33, Marmie_33, Mowgli_33, Olga_33, Paito_33, Periodt_33, Phreak_33, Plagueis_33, Rabbs_33, ShaboiShabazz_33, Sizemore_33, Sweets_33, TomBrady_33,

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

- AuntGwenStacy_54, Barkley26_33, Hilltopfarm_53, Liefie_33, Taheera_33, Terror_33, Typha_53,

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

- Bobburn_21,

Summary by start number:

Start 20:

- Found in 4 of 40 (10.0%) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 75.0% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy_54 (Y), Hilltopfarm_53 (Y), Typha_53 (Y),

Start 21:

- Found in 1 of 40 (2.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bobburn_21 (singleton),

Start 22:

- Found in 3 of 40 (7.5%) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Taheera_33 (G1), Terror_33 (G1),

Start 24:

- Found in 39 of 40 (97.5%) of genes in pham
- Manual Annotations of this start: 32 of 38
- Called 82.1% of time when present
- Phage (with cluster) where this start called: Angel_33 (G1), Annihilator_33 (G1), Aroostook_33 (G1), Avrafan_33 (G1), BPs_33 (G1), Bipper_51 (Y), BruceB_33 (G1), Chance64_33 (G1), Cherrybomb426_33 (G1), Cracklewink_51 (Y), Faiyaz_54 (Y), Grizzly_33 (G1), Halo_33 (G1), Hope_33 (G1), Hotshotbaby7_33 (G1), Jane_33 (G1), Jonghyun_33 (G1), JorRay_33 (G1), Kasen3_33 (G1), LouisV14_33 (G1), Marmie_33 (G1), Mowgli_33 (G1), Olga_33 (G1), Paito_33 (G1), Periodt_33 (G1), Phreak_33 (G1), Plagueis_33 (G1), Rabbs_33 (G1), ShaboiShabazz_33 (G1), Sizemore_33 (G1), Sweets_33 (G1), TomBrady_33 (G1),

Start 25:

- Found in 33 of 40 (82.5%) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 6.1% of time when present
- Phage (with cluster) where this start called: Barkley26_33 (G1), Liefie_33 (G1),

Summary by clusters:

There are 3 clusters represented in this pham: Y, singleton, G1,

Info for manual annotations of cluster G1:

- Start number 22 was manually annotated 2 times for cluster G1.
- Start number 24 was manually annotated 29 times for cluster G1.
- Start number 25 was manually annotated 2 times for cluster G1.

Info for manual annotations of cluster Y:

- Start number 20 was manually annotated 2 times for cluster Y.
- Start number 24 was manually annotated 3 times for cluster Y.

Gene Information:

Gene: Angel_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Angel_33:

(16, 29489), (17, 29453), (18, 29447), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (41, 29048), (46, 28985), (47, 28979),

Gene: Annihilator_33 Start: 29315, Stop: 28905, Start Num: 24

Candidate Starts for Annihilator_33:

(16, 29480), (17, 29444), (18, 29438), (19, 29390), (Start: 24 @29315 has 32 MA's), (Start: 25 @29297 has 2 MA's), (28, 29234), (30, 29207), (33, 29186), (41, 29039), (46, 28976), (47, 28970),

Gene: Aroostook_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Aroostook_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: AuntGwenStacy_54 Start: 41198, Stop: 40797, Start Num: 20

Candidate Starts for AuntGwenStacy_54:

(Start: 20 @41198 has 2 MA's), (Start: 24 @41177 has 32 MA's), (26, 41123), (30, 41069), (34, 41027), (37, 40988), (38, 40976), (41, 40901), (44, 40847), (45, 40841),

Gene: Avrafan_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Avrafan_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: BPs_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for BPs_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Barkley26_33 Start: 29328, Stop: 28936, Start Num: 25

Candidate Starts for Barkley26_33:

(16, 29511), (17, 29475), (18, 29469), (Start: 24 @29346 has 32 MA's), (Start: 25 @29328 has 2 MA's), (28, 29265), (30, 29238), (36, 29175), (41, 29070), (46, 29007), (47, 29001), (48, 28977),

Gene: Bipper_51 Start: 39965, Stop: 39576, Start Num: 24

Candidate Starts for Bipper_51:

(Start: 24 @39965 has 32 MA's), (30, 39857), (31, 39851), (32, 39839), (33, 39836), (34, 39815), (35, 39797), (37, 39776), (38, 39764), (40, 39701), (42, 39662), (45, 39641), (46, 39638),

Gene: Bobburn_21 Start: 15474, Stop: 15130, Start Num: 21

Candidate Starts for Bobburn_21:

(21, 15474), (23, 15468), (28, 15393), (29, 15387), (31, 15360), (39, 15246), (43, 15174),

Gene: BruceB_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for BruceB_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Chance64_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Chance64_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Cherrybomb426_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Cherrybomb426_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Cracklewink_51 Start: 39958, Stop: 39569, Start Num: 24

Candidate Starts for Cracklewink_51:

(Start: 24 @39958 has 32 MA's), (30, 39850), (31, 39844), (32, 39832), (33, 39829), (34, 39808), (35, 39790), (37, 39769), (38, 39757), (40, 39694), (42, 39655), (45, 39634), (46, 39631),

Gene: Faiyaz_54 Start: 41165, Stop: 40785, Start Num: 24

Candidate Starts for Faiyaz_54:

(Start: 20 @41186 has 2 MA's), (Start: 24 @41165 has 32 MA's), (26, 41111), (30, 41057), (34, 41015), (37, 40976), (38, 40964), (41, 40889), (44, 40835), (45, 40829),

Gene: Grizzly_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Grizzly_33:

(16, 29489), (17, 29453), (18, 29447), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (36, 29153), (41, 29048), (46, 28985), (47, 28979), (48, 28955),

Gene: Halo_33 Start: 29319, Stop: 28909, Start Num: 24

Candidate Starts for Halo_33:

(16, 29484), (17, 29448), (18, 29442), (19, 29394), (Start: 24 @29319 has 32 MA's), (Start: 25 @29301 has 2 MA's), (28, 29238), (30, 29211), (33, 29190), (41, 29043), (46, 28980), (47, 28974),

Gene: Hilltopfarm_53 Start: 40885, Stop: 40484, Start Num: 20

Candidate Starts for Hilltopfarm_53:

(Start: 20 @40885 has 2 MA's), (Start: 24 @40864 has 32 MA's), (26, 40810), (30, 40756), (34, 40714), (37, 40675), (38, 40663), (41, 40588), (44, 40534), (45, 40528),

Gene: Hope_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Hope_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Hotshotbaby7_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Hotshotbaby7_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Jane_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Jane_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Jonghyun_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Jonghyun_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: JorRay_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for JorRay_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Kasen3_33 Start: 29325, Stop: 28915, Start Num: 24

Candidate Starts for Kasen3_33:

(16, 29490), (17, 29454), (18, 29448), (Start: 24 @29325 has 32 MA's), (Start: 25 @29307 has 2 MA's), (28, 29244), (30, 29217), (36, 29154), (41, 29049), (46, 28986), (47, 28980), (48, 28956),

Gene: Liefie_33 Start: 29304, Stop: 28912, Start Num: 25

Candidate Starts for Liefie_33:

(16, 29487), (17, 29451), (18, 29445), (19, 29397), (Start: 24 @29322 has 32 MA's), (Start: 25 @29304 has 2 MA's), (28, 29241), (30, 29214), (33, 29193), (41, 29046), (46, 28983), (47, 28977),

Gene: LouisV14_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for LouisV14_33:

(1, 30914), (2, 30821), (3, 30602), (4, 30569), (5, 30500), (6, 30452), (7, 30383), (8, 30134), (9, 30122), (10, 29981), (11, 29978), (12, 29885), (13, 29813), (14, 29696), (15, 29588), (16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Marmie_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Marmie_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Mowgli_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Mowgli_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Olga_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Olga_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Paito_33 Start: 29505, Stop: 29047, Start Num: 24

Candidate Starts for Paito_33:

(Start: 24 @29505 has 32 MA's), (Start: 25 @29487 has 2 MA's), (27, 29448), (28, 29424), (30, 29397), (36, 29334), (41, 29229), (50, 29088),

Gene: Periodt_33 Start: 29315, Stop: 28905, Start Num: 24

Candidate Starts for Periodt_33:

(16, 29480), (17, 29444), (18, 29438), (19, 29390), (Start: 24 @29315 has 32 MA's), (Start: 25 @29297 has 2 MA's), (28, 29234), (30, 29207), (33, 29186), (41, 29039), (46, 28976), (47, 28970),

Gene: Phreak_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for Phreak_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Plagueis_33 Start: 29159, Stop: 28749, Start Num: 24

Candidate Starts for Plagueis_33:

(16, 29324), (17, 29288), (18, 29282), (Start: 24 @29159 has 32 MA's), (Start: 25 @29141 has 2 MA's), (28, 29078), (30, 29051), (41, 28883), (46, 28820), (47, 28814),

Gene: Rabbs_33 Start: 29407, Stop: 28997, Start Num: 24

Candidate Starts for Rabbs_33:

(16, 29572), (17, 29536), (18, 29530), (Start: 22 @29419 has 2 MA's), (Start: 24 @29407 has 32 MA's), (Start: 25 @29389 has 2 MA's), (30, 29299), (33, 29278), (41, 29131), (47, 29062), (48, 29038),

Gene: ShaboiShabazz_33 Start: 29324, Stop: 28914, Start Num: 24

Candidate Starts for ShaboiShabazz_33:

(16, 29489), (17, 29453), (18, 29447), (19, 29399), (Start: 24 @29324 has 32 MA's), (Start: 25 @29306 has 2 MA's), (28, 29243), (30, 29216), (33, 29195), (41, 29048), (46, 28985), (47, 28979),

Gene: Sizemore_33 Start: 29325, Stop: 28915, Start Num: 24

Candidate Starts for Sizemore_33:

(16, 29490), (17, 29454), (18, 29448), (Start: 24 @29325 has 32 MA's), (Start: 25 @29307 has 2 MA's), (28, 29244), (30, 29217), (36, 29154), (41, 29049), (46, 28986), (47, 28980), (48, 28956),

Gene: Sweets_33 Start: 29319, Stop: 28909, Start Num: 24

Candidate Starts for Sweets_33:

(16, 29484), (17, 29448), (18, 29442), (19, 29394), (Start: 24 @29319 has 32 MA's), (Start: 25 @29301 has 2 MA's), (28, 29238), (30, 29211), (33, 29190), (41, 29043), (46, 28980), (47, 28974),

Gene: Taheera_33 Start: 29454, Stop: 29032, Start Num: 22

Candidate Starts for Taheera_33:

(16, 29607), (17, 29571), (18, 29565), (Start: 22 @29454 has 2 MA's), (Start: 24 @29442 has 32 MA's), (Start: 25 @29424 has 2 MA's), (28, 29361), (30, 29334), (33, 29313), (41, 29166), (47, 29097), (48, 29073), (49, 29052),

Gene: Terror_33 Start: 29454, Stop: 29032, Start Num: 22

Candidate Starts for Terror_33:

(16, 29607), (17, 29571), (18, 29565), (Start: 22 @29454 has 2 MA's), (Start: 24 @29442 has 32 MA's), (Start: 25 @29424 has 2 MA's), (28, 29361), (30, 29334), (33, 29313), (41, 29166), (47, 29097), (48, 29073), (49, 29052),

Gene: TomBrady_33 Start: 29325, Stop: 28915, Start Num: 24

Candidate Starts for TomBrady_33:

(16, 29490), (17, 29454), (18, 29448), (19, 29400), (Start: 24 @29325 has 32 MA's), (Start: 25 @29307 has 2 MA's), (28, 29244), (30, 29217), (33, 29196), (41, 29049), (46, 28986), (47, 28980),

Gene: Typha_53 Start: 41198, Stop: 40797, Start Num: 20

Candidate Starts for Typha_53:

(Start: 20 @41198 has 2 MA's), (Start: 24 @41177 has 32 MA's), (26, 41123), (30, 41069), (34, 41027), (37, 40988), (38, 40976), (41, 40901), (44, 40847), (45, 40841),