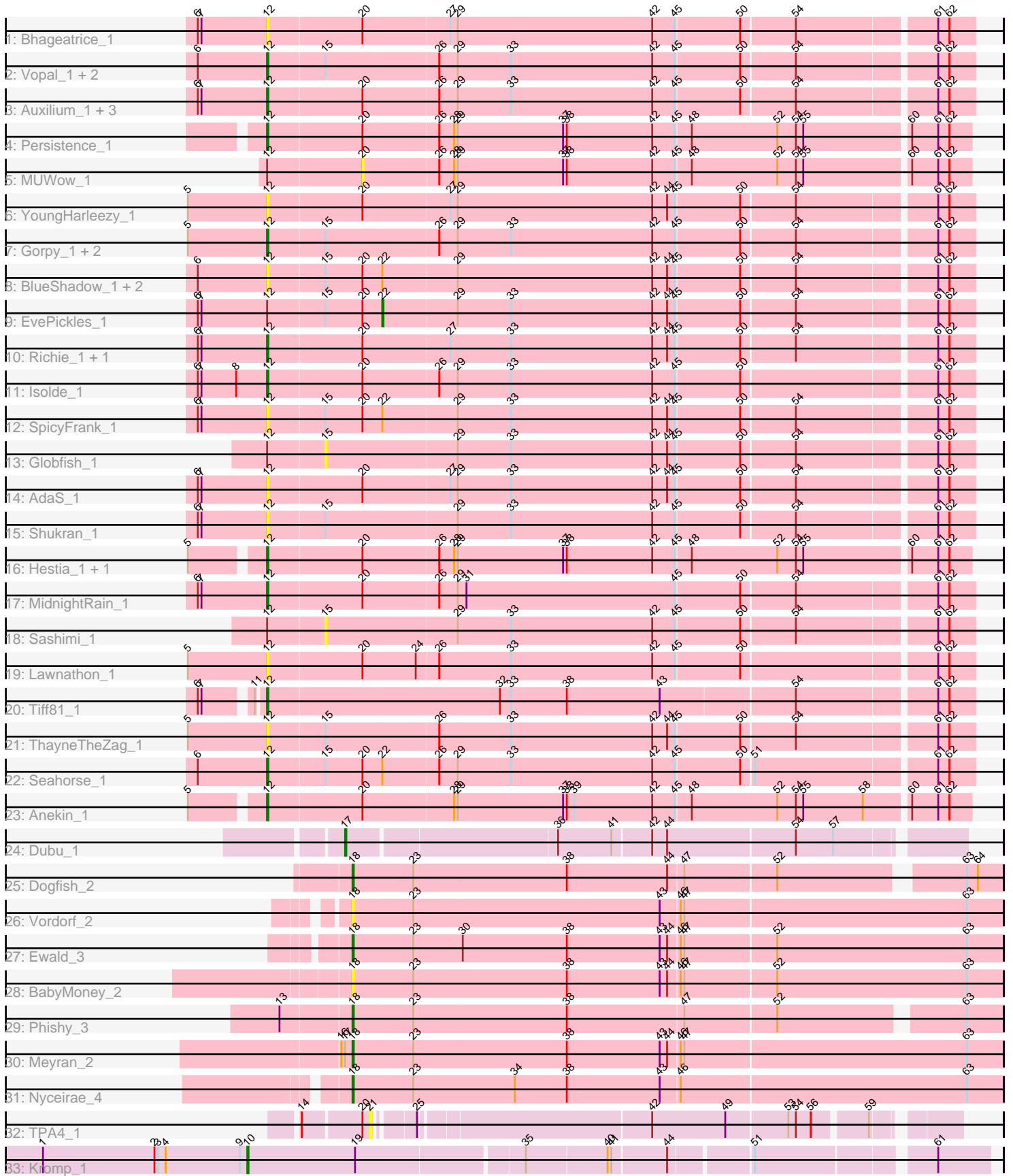


Pham 211198



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 211198 Report

This analysis was run 02/22/25 on database version 588.

Pham number 211198 has 44 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Bhageatrice_1
- Track 2 : Vopal_1, RadFad_1, Hillester_1
- Track 3 : Auxilium_1, BenchScraper_1, Raphaella_1, CookieBear_1
- Track 4 : Persistence_1
- Track 5 : MUWow_1
- Track 6 : YoungHarleezy_1
- Track 7 : Gorpy_1, BillyTP_1, Sakai_1
- Track 8 : BlueShadow_1, Aikyam_1, MaterMagnus_1
- Track 9 : EvePickles_1
- Track 10 : Richie_1, Faja_1
- Track 11 : Isolde_1
- Track 12 : SpicyFrank_1
- Track 13 : Globfish_1
- Track 14 : AdaS_1
- Track 15 : Shukran_1
- Track 16 : Hestia_1, Phrank15_1
- Track 17 : MidnightRain_1
- Track 18 : Sashimi_1
- Track 19 : Lawnathon_1
- Track 20 : Tiff81_1
- Track 21 : ThayneTheZag_1
- Track 22 : Seahorse_1
- Track 23 : Anekin_1
- Track 24 : Dubu_1
- Track 25 : Dogfish_2
- Track 26 : Vordorf_2
- Track 27 : Ewald_3
- Track 28 : BabyMoney_2
- Track 29 : Phishy_3
- Track 30 : Meyran_2
- Track 31 : Nyceirae_4
- Track 32 : TPA4_1
- Track 33 : Kromp_1

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

The start number called the most often in the published annotations is 12, it was called in 17 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS_1, Aikyam_1, Anekin_1, Auxilium_1, BenchScraper_1, Bhageatrice_1, BillyTP_1, BlueShadow_1, CookieBear_1, Faja_1, Gorpy_1, Hestia_1, Hillester_1, Isolde_1, Lawnathon_1, MaterMagnus_1, MidnightRain_1, Persistence_1, Phrank15_1, RadFad_1, Raphaella_1, Richie_1, Sakai_1, Seahorse_1, Shukran_1, SpicyFrank_1, ThayneTheZag_1, Tiff81_1, Vopal_1, YoungHarleezy_1,

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

- EvePickles_1, Globfish_1, MUWow_1, Sashimi_1,

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

- BabyMoney_2, Dogfish_2, Dubu_1, Ewald_3, Kromp_1, Meyran_2, Nyceirae_4, Phishy_3, TPA4_1, Vordorf_2,

Summary by start number:

Start 10:

- Found in 1 of 44 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kromp_1 (singleton),

Start 12:

- Found in 34 of 44 (77.3%) of genes in pham
- Manual Annotations of this start: 17 of 25
- Called 88.2% of time when present
- Phage (with cluster) where this start called: AdaS_1 (AY), Aikyam_1 (AY), Anekin_1 (AY), Auxilium_1 (AY), BenchScraper_1 (AY), Bhageatrice_1 (AY), BillyTP_1 (AY), BlueShadow_1 (AY), CookieBear_1 (AY), Faja_1 (AY), Gorpy_1 (AY), Hestia_1 (AY), Hillester_1 (AY), Isolde_1 (AY), Lawnathon_1 (AY), MaterMagnus_1 (AY), MidnightRain_1 (AY), Persistence_1 (AY), Phrank15_1 (AY), RadFad_1 (AY), Raphaella_1 (AY), Richie_1 (AY), Sakai_1 (AY), Seahorse_1 (AY), Shukran_1 (AY), SpicyFrank_1 (AY), ThayneTheZag_1 (AY), Tiff81_1 (AY), Vopal_1 (AY), YoungHarleezy_1 (AY),

Start 15:

- Found in 16 of 44 (36.4%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Globfish_1 (AY), Sashimi_1 (AY),

Start 17:

- Found in 2 of 44 (4.5%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Dubu_1 (BJ),

Start 18:

- Found in 7 of 44 (15.9%) of genes in pham

- Manual Annotations of this start: 5 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyMoney_2 (DT), Dogfish_2 (DT), Ewald_3 (DT), Meyran_2 (DT), Nyceirae_4 (DT), Phishy_3 (DT), Vordorf_2 (DT),

Start 20:

- Found in 24 of 44 (54.5%) of genes in pham
- No Manual Annotations of this start.
- Called 4.2% of time when present
- Phage (with cluster) where this start called: MUWow_1 (AY),

Start 21:

- Found in 1 of 44 (2.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA4_1 (singleton),

Start 22:

- Found in 6 of 44 (13.6%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 16.7% of time when present
- Phage (with cluster) where this start called: EvePickles_1 (AY),

Summary by clusters:

There are 4 clusters represented in this pham: AY, singleton, DT, BJ,

Info for manual annotations of cluster AY:

- Start number 12 was manually annotated 17 times for cluster AY.
- Start number 22 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster BJ:

- Start number 17 was manually annotated 1 time for cluster BJ.

Info for manual annotations of cluster DT:

- Start number 18 was manually annotated 5 times for cluster DT.

Gene Information:

Gene: AdaS_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for AdaS_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (20, 139), (27, 205), (29, 211), (33, 253), (42, 367), (44, 379), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Aikyam_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Aikyam_1:

(6, 10), (Start: 12 @64 has 17 MA's), (15, 109), (20, 139), (Start: 22 @154 has 1 MA's), (29, 211), (42, 367), (44, 379), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Anekin_1 Start: 56, Stop: 607, Start Num: 12

Candidate Starts for Anekin_1:

(5, 2), (Start: 12 @56 has 17 MA's), (20, 131), (28, 200), (29, 203), (37, 287), (38, 290), (39, 296), (42, 359), (45, 377), (48, 389), (52, 458), (54, 473), (55, 479), (58, 527), (60, 560), (61, 581), (62, 590),

Gene: Auxilium_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Auxilium_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (20, 139), (26, 196), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: BabyMoney_2 Start: 312, Stop: 830, Start Num: 18

Candidate Starts for BabyMoney_2:

(Start: 18 @312 has 5 MA's), (23, 360), (38, 483), (43, 558), (44, 564), (46, 573), (47, 576), (52, 648), (63, 801),

Gene: BenchScraper_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for BenchScraper_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (20, 139), (26, 196), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Bhageatrice_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Bhageatrice_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (20, 139), (27, 205), (29, 211), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: BillyTP_1 Start: 65, Stop: 613, Start Num: 12

Candidate Starts for BillyTP_1:

(5, 2), (Start: 12 @65 has 17 MA's), (15, 110), (26, 197), (29, 212), (33, 254), (42, 368), (45, 386), (50, 437), (54, 479), (61, 584), (62, 593),

Gene: BlueShadow_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for BlueShadow_1:

(6, 10), (Start: 12 @64 has 17 MA's), (15, 109), (20, 139), (Start: 22 @154 has 1 MA's), (29, 211), (42, 367), (44, 379), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: CookieBear_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for CookieBear_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (20, 139), (26, 196), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Dogfish_2 Start: 447, Stop: 947, Start Num: 18

Candidate Starts for Dogfish_2:

(Start: 18 @447 has 5 MA's), (23, 495), (38, 618), (44, 699), (47, 711), (52, 783), (63, 918), (64, 927),

Gene: Dubu_1 Start: 90, Stop: 557, Start Num: 17

Candidate Starts for Dubu_1:

(Start: 17 @90 has 1 MA's), (36, 252), (41, 294), (42, 324), (44, 336), (54, 435), (57, 465),

Gene: EvePickles_1 Start: 154, Stop: 612, Start Num: 22

Candidate Starts for EvePickles_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (15, 109), (20, 139), (Start: 22 @154 has 1 MA's), (29, 211), (33, 253), (42, 367), (44, 379), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Ewald_3 Start: 702, Stop: 1220, Start Num: 18

Candidate Starts for Ewald_3:

(Start: 18 @702 has 5 MA's), (23, 750), (30, 789), (38, 873), (43, 948), (44, 954), (46, 963), (47, 966), (52, 1038), (63, 1191),

Gene: Faja_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Faja_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (20, 139), (27, 205), (33, 253), (42, 367), (44, 379), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Globfish_1 Start: 109, Stop: 612, Start Num: 15

Candidate Starts for Globfish_1:

(Start: 12 @64 has 17 MA's), (15, 109), (29, 211), (33, 253), (42, 367), (44, 379), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Gorpy_1 Start: 65, Stop: 613, Start Num: 12

Candidate Starts for Gorpy_1:

(5, 2), (Start: 12 @65 has 17 MA's), (15, 110), (26, 197), (29, 212), (33, 254), (42, 368), (45, 386), (50, 437), (54, 479), (61, 584), (62, 593),

Gene: Hestia_1 Start: 56, Stop: 607, Start Num: 12

Candidate Starts for Hestia_1:

(5, 2), (Start: 12 @56 has 17 MA's), (20, 131), (26, 188), (28, 200), (29, 203), (37, 287), (38, 290), (42, 359), (45, 377), (48, 389), (52, 458), (54, 473), (55, 479), (60, 560), (61, 581), (62, 590),

Gene: Hillester_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Hillester_1:

(6, 10), (Start: 12 @64 has 17 MA's), (15, 109), (26, 196), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Isolde_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Isolde_1:

(6, 10), (7, 13), (8, 40), (Start: 12 @64 has 17 MA's), (20, 139), (26, 196), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (61, 583), (62, 592),

Gene: Kromp_1 Start: 200, Stop: 754, Start Num: 10

Candidate Starts for Kromp_1:

(1, 35), (2, 125), (3, 128), (4, 134), (9, 194), (Start: 10 @200 has 1 MA's), (19, 287), (35, 416), (40, 479), (41, 482), (44, 524), (51, 584), (61, 713),

Gene: Lawnathon_1 Start: 65, Stop: 613, Start Num: 12

Candidate Starts for Lawnathon_1:

(5, 2), (Start: 12 @65 has 17 MA's), (20, 140), (24, 182), (26, 197), (33, 254), (42, 368), (45, 386), (50, 437), (61, 584), (62, 593),

Gene: MUWow_1 Start: 131, Stop: 607, Start Num: 20

Candidate Starts for MUWow_1:

(Start: 12 @56 has 17 MA's), (20, 131), (26, 188), (28, 200), (29, 203), (37, 287), (38, 290), (42, 359), (45, 377), (48, 389), (52, 458), (54, 473), (55, 479), (60, 560), (61, 581), (62, 590),

Gene: MaterMagnus_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for MaterMagnus_1:

(6, 10), (Start: 12 @64 has 17 MA's), (15, 109), (20, 139), (Start: 22 @154 has 1 MA's), (29, 211), (42, 367), (44, 379), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Meyran_2 Start: 851, Stop: 1369, Start Num: 18

Candidate Starts for Meyran_2:

(16, 842), (Start: 17 @845 has 1 MA's), (Start: 18 @851 has 5 MA's), (23, 899), (38, 1022), (43, 1097), (44, 1103), (46, 1112), (47, 1115), (63, 1340),

Gene: MidnightRain_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for MidnightRain_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (20, 139), (26, 196), (29, 211), (31, 217), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Nyceirae_4 Start: 828, Stop: 1346, Start Num: 18

Candidate Starts for Nyceirae_4:

(Start: 18 @828 has 5 MA's), (23, 876), (34, 957), (38, 999), (43, 1074), (46, 1089), (63, 1317),

Gene: Persistence_1 Start: 55, Stop: 606, Start Num: 12

Candidate Starts for Persistence_1:

(Start: 12 @55 has 17 MA's), (20, 130), (26, 187), (28, 199), (29, 202), (37, 286), (38, 289), (42, 358), (45, 376), (48, 388), (52, 457), (54, 472), (55, 478), (60, 559), (61, 580), (62, 589),

Gene: Phishy_3 Start: 800, Stop: 1303, Start Num: 18

Candidate Starts for Phishy_3:

(13, 746), (Start: 18 @800 has 5 MA's), (23, 848), (38, 971), (47, 1064), (52, 1136), (63, 1274),

Gene: Phrank15_1 Start: 56, Stop: 607, Start Num: 12

Candidate Starts for Phrank15_1:

(5, 2), (Start: 12 @56 has 17 MA's), (20, 131), (26, 188), (28, 200), (29, 203), (37, 287), (38, 290), (42, 359), (45, 377), (48, 389), (52, 458), (54, 473), (55, 479), (60, 560), (61, 581), (62, 590),

Gene: RadFad_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for RadFad_1:

(6, 10), (Start: 12 @64 has 17 MA's), (15, 109), (26, 196), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Raphaella_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Raphaella_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (20, 139), (26, 196), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Richie_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Richie_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (20, 139), (27, 205), (33, 253), (42, 367), (44, 379), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Sakai_1 Start: 65, Stop: 613, Start Num: 12

Candidate Starts for Sakai_1:

(5, 2), (Start: 12 @65 has 17 MA's), (15, 110), (26, 197), (29, 212), (33, 254), (42, 368), (45, 386), (50, 437), (54, 479), (61, 584), (62, 593),

Gene: Sashimi_1 Start: 109, Stop: 612, Start Num: 15

Candidate Starts for Sashimi_1:

(Start: 12 @64 has 17 MA's), (15, 109), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Seahorse_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Seahorse_1:

(6, 10), (Start: 12 @64 has 17 MA's), (15, 109), (20, 139), (Start: 22 @154 has 1 MA's), (26, 196), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (51, 445), (61, 583), (62, 592),

Gene: Shukran_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Shukran_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (15, 109), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: SpicyFrank_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for SpicyFrank_1:

(6, 10), (7, 13), (Start: 12 @64 has 17 MA's), (15, 109), (20, 139), (Start: 22 @154 has 1 MA's), (29, 211), (33, 253), (42, 367), (44, 379), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: TPA4_1 Start: 75, Stop: 497, Start Num: 21

Candidate Starts for TPA4_1:

(14, 24), (20, 69), (21, 75), (25, 102), (42, 279), (49, 336), (53, 384), (54, 390), (56, 402), (59, 441),

Gene: ThayneTheZag_1 Start: 65, Stop: 613, Start Num: 12

Candidate Starts for ThayneTheZag_1:

(5, 2), (Start: 12 @65 has 17 MA's), (15, 110), (26, 197), (33, 254), (42, 368), (44, 380), (45, 386), (50, 437), (54, 479), (61, 584), (62, 593),

Gene: Tiff81_1 Start: 52, Stop: 603, Start Num: 12

Candidate Starts for Tiff81_1:

(6, 10), (7, 13), (11, 46), (Start: 12 @52 has 17 MA's), (32, 235), (33, 244), (38, 289), (43, 364), (54, 469), (61, 574), (62, 583),

Gene: Vopal_1 Start: 64, Stop: 612, Start Num: 12

Candidate Starts for Vopal_1:

(6, 10), (Start: 12 @64 has 17 MA's), (15, 109), (26, 196), (29, 211), (33, 253), (42, 367), (45, 385), (50, 436), (54, 478), (61, 583), (62, 592),

Gene: Vordorf_2 Start: 594, Stop: 1112, Start Num: 18

Candidate Starts for Vordorf_2:

(Start: 18 @594 has 5 MA's), (23, 642), (43, 840), (46, 855), (47, 858), (63, 1083),

Gene: YoungHarleezy_1 Start: 65, Stop: 613, Start Num: 12

Candidate Starts for YoungHarleezy_1:

(5, 2), (Start: 12 @65 has 17 MA's), (20, 140), (27, 206), (29, 212), (42, 368), (44, 380), (45, 386), (50, 437), (54, 479), (61, 584), (62, 593),