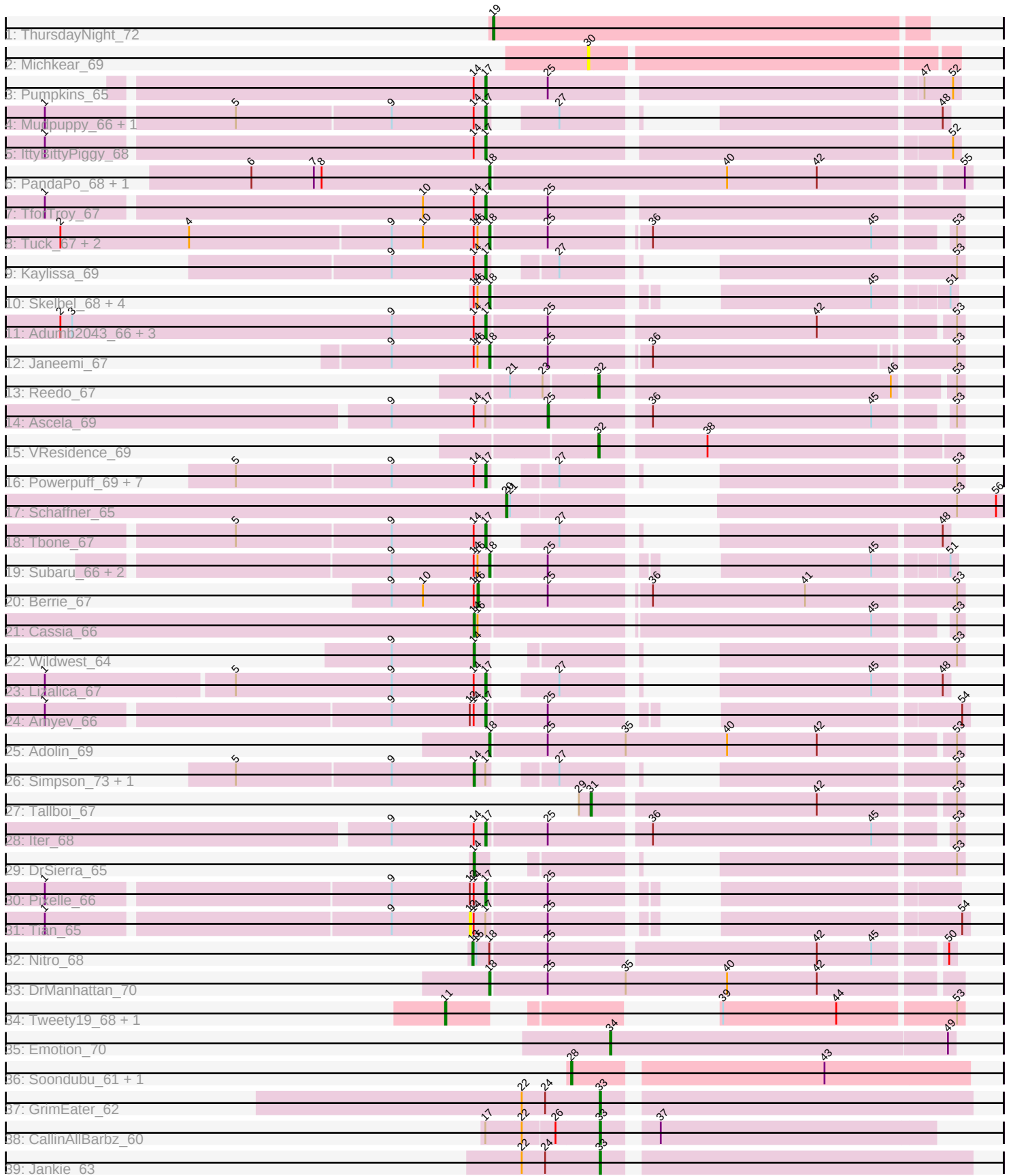


Pham 328883



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 328883 Report

This analysis was run 09/05/26 on database version 662.

Pham number 328883 has 62 members, 11 are drafts.

Phages represented in each track:

- Track 1 : ThursdayNight_72
- Track 2 : Michkear_69
- Track 3 : Pumpkins_65
- Track 4 : Mudpuppy_66, Warda_68
- Track 5 : IttyBittyPiggy_68
- Track 6 : PandaPo_68, MissSwiss_68
- Track 7 : TforTroy_67
- Track 8 : Tuck_67, Phives_68, Community_67
- Track 9 : Kaylissa_69
- Track 10 : Skelbel_68, Asa16_67, Eraser_67, London_67, Niobe_67
- Track 11 : Adumb2043_66, Turab_65, Amploria_68, AEgle_65
- Track 12 : Janeemi_67
- Track 13 : Reedo_67
- Track 14 : Ascela_69
- Track 15 : VResidence_69
- Track 16 : Powerpuff_69, Flutur_67, Joemato_69, YesChef_67, Lego_67, AGrandiflora_69, Cyan_68, Tutumahutu_69
- Track 17 : Schaffner_65
- Track 18 : Tbone_67
- Track 19 : Subaru_66, Jstan_68, Elezi_66
- Track 20 : Berrie_67
- Track 21 : Cassia_66
- Track 22 : Wildwest_64
- Track 23 : Lizalica_67
- Track 24 : Amyev_66
- Track 25 : Adolin_69
- Track 26 : Simpson_73, JohnDoe_68
- Track 27 : Tallboi_67
- Track 28 : Iter_68
- Track 29 : DrSierra_65
- Track 30 : Pixelle_66
- Track 31 : Tian_65
- Track 32 : Nitro_68
- Track 33 : DrManhattan_70
- Track 34 : Tweety19_68, Snek_67
- Track 35 : Emotion_70
- Track 36 : Soondubu_61, Exile_59

- Track 37 : GrimEater_62
- Track 38 : CallinAllBarbz_60
- Track 39 : Jankie_63

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

The start number called the most often in the published annotations is 17, it was called in 20 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AEgle_65, AGrandiflora_69, Adumb2043_66, Amploria_68, Amyev_66, Cyan_68, Flutur_67, Iter_68, IttyBittyPiggy_68, Joemato_69, Kaylissa_69, Lego_67, Lizalica_67, Mudpuppy_66, Pixelle_66, Powerpuff_69, Pumpkins_65, Tbone_67, TforTroy_67, Turab_65, Tutumahutu_69, Warda_68, YesChef_67,

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

- Ascela_69, CallinAllBarbz_60, JohnDoe_68, Simpson_73, Tian_65,

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

- Adolin_69, Asa16_67, Berrie_67, Cassia_66, Community_67, DrManhattan_70, DrSierra_65, Elezi_66, Emotion_70, Eraser_67, Exile_59, GrimEater_62, Janeemi_67, Jankie_63, Jstan_68, London_67, Michkear_69, MissSwiss_68, Niobe_67, Nitro_68, PandaPo_68, Phives_68, Reedo_67, Schaffner_65, Skelbel_68, Snek_67, Soondubu_61, Subaru_66, Tallboi_67, ThursdayNight_72, Tuck_67, Tweety19_68, VResidence_69, Wildwest_64,

Summary by start number:

Start 11:

- Found in 2 of 62 (3.2%) of genes in pham
- Manual Annotations of this start: 2 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Snek_67 (AZ3), Tweety19_68 (AZ3),

Start 12:

- Found in 3 of 62 (4.8%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Tian_65 (AZ1),

Start 13:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nitro_68 (AZ1),

Start 14:

- Found in 43 of 62 (69.4%) of genes in pham
- Manual Annotations of this start: 4 of 51
- Called 11.6% of time when present

- Phage (with cluster) where this start called: Cassia_66 (AZ1), DrSierra_65 (AZ1), JohnDoe_68 (AZ1), Simpson_73 (AZ1), Wildwest_64 (AZ1),

Start 16:

- Found in 14 of 62 (22.6%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Berrie_67 (AZ1),

Start 17:

- Found in 28 of 62 (45.2%) of genes in pham
- Manual Annotations of this start: 20 of 51
- Called 82.1% of time when present
- Phage (with cluster) where this start called: AEgle_65 (AZ1), AGrandiflora_69 (AZ1), Adumb2043_66 (AZ1), Amploria_68 (AZ1), Amyev_66 (AZ1), Cyan_68 (AZ1), Flutur_67 (AZ1), Iter_68 (AZ1), IttyBittyPiggy_68 (AZ1), Joemato_69 (AZ1), Kaylissa_69 (AZ1), Lego_67 (AZ1), Lizalica_67 (AZ1), Mudpuppy_66 (AZ1), Pixelle_66 (AZ1), Powerpuff_69 (AZ1), Pumpkins_65 (AZ1), Tbone_67 (AZ1), TforTroy_67 (AZ1), Turab_65 (AZ1), Tutumahutu_69 (AZ1), Warda_68 (AZ1), YesChef_67 (AZ1),

Start 18:

- Found in 17 of 62 (27.4%) of genes in pham
- Manual Annotations of this start: 12 of 51
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Adolin_69 (AZ1), Asa16_67 (AZ1), Community_67 (AZ1), DrManhattan_70 (AZ1), Elezi_66 (AZ1), Eraser_67 (AZ1), Janeemi_67 (AZ1), Jstan_68 (AZ1), London_67 (AZ1), MissSwiss_68 (AZ1), Niobe_67 (AZ1), PandaPo_68 (AZ1), Phives_68 (AZ1), Skelbel_68 (AZ1), Subaru_66 (AZ1), Tuck_67 (AZ1),

Start 19:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ThursdayNight_72 (AZ),

Start 20:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Schaffner_65 (AZ1),

Start 25:

- Found in 22 of 62 (35.5%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 4.5% of time when present
- Phage (with cluster) where this start called: Ascela_69 (AZ1),

Start 28:

- Found in 2 of 62 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Exile_59 (AZ6), Soondubu_61 (AZ6),

Start 30:

- Found in 1 of 62 (1.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Michkear_69 (AZ),

Start 31:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tallboi_67 (AZ1),

Start 32:

- Found in 2 of 62 (3.2%) of genes in pham
- Manual Annotations of this start: 2 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Reedo_67 (AZ1), VResidence_69 (AZ1),

Start 33:

- Found in 3 of 62 (4.8%) of genes in pham
- Manual Annotations of this start: 3 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CallinAllBarbz_60 (FP), GrimEater_62 (FP), Jankie_63 (FP),

Start 34:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emotion_70 (AZ4),

Summary by clusters:

There are 6 clusters represented in this pham: FP, AZ, AZ1, AZ3, AZ4, AZ6,

Info for manual annotations of cluster AZ:

- Start number 19 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:

- Start number 13 was manually annotated 1 time for cluster AZ1.
- Start number 14 was manually annotated 4 times for cluster AZ1.
- Start number 16 was manually annotated 1 time for cluster AZ1.
- Start number 17 was manually annotated 20 times for cluster AZ1.
- Start number 18 was manually annotated 12 times for cluster AZ1.
- Start number 20 was manually annotated 1 time for cluster AZ1.
- Start number 25 was manually annotated 1 time for cluster AZ1.
- Start number 31 was manually annotated 1 time for cluster AZ1.
- Start number 32 was manually annotated 2 times for cluster AZ1.

Info for manual annotations of cluster AZ3:

- Start number 11 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 34 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster AZ6:

- Start number 28 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster FP:

- Start number 33 was manually annotated 3 times for cluster FP.

Gene Information:

Gene: AEgle_65 Start: 41928, Stop: 42272, Start Num: 17

Candidate Starts for AEgle_65:

(2, 41601), (3, 41610), (9, 41856), (Start: 14 @41919 has 4 MA's), (Start: 17 @41928 has 20 MA's), (Start: 25 @41973 has 1 MA's), (42, 42171), (53, 42267),

Gene: AGrandiflora_69 Start: 42827, Stop: 43090, Start Num: 17

Candidate Starts for AGrandiflora_69:

(5, 42638), (9, 42755), (Start: 14 @42818 has 4 MA's), (Start: 17 @42827 has 20 MA's), (27, 42857), (53, 43085),

Gene: Adolin_69 Start: 41878, Stop: 42228, Start Num: 18

Candidate Starts for Adolin_69:

(Start: 18 @41878 has 12 MA's), (Start: 25 @41920 has 1 MA's), (35, 41980), (40, 42058), (42, 42127), (53, 42223),

Gene: Adumb2043_66 Start: 41952, Stop: 42296, Start Num: 17

Candidate Starts for Adumb2043_66:

(2, 41625), (3, 41634), (9, 41880), (Start: 14 @41943 has 4 MA's), (Start: 17 @41952 has 20 MA's), (Start: 25 @41997 has 1 MA's), (42, 42195), (53, 42291),

Gene: Amploria_68 Start: 42132, Stop: 42476, Start Num: 17

Candidate Starts for Amploria_68:

(2, 41805), (3, 41814), (9, 42060), (Start: 14 @42123 has 4 MA's), (Start: 17 @42132 has 20 MA's), (Start: 25 @42177 has 1 MA's), (42, 42375), (53, 42471),

Gene: Amyev_66 Start: 43156, Stop: 43452, Start Num: 17

Candidate Starts for Amyev_66:

(1, 42829), (9, 43084), (12, 43144), (Start: 14 @43147 has 4 MA's), (Start: 17 @43156 has 20 MA's), (Start: 25 @43201 has 1 MA's), (54, 43447),

Gene: Asa16_67 Start: 42516, Stop: 42797, Start Num: 18

Candidate Starts for Asa16_67:

(Start: 14 @42504 has 4 MA's), (Start: 16 @42507 has 1 MA's), (Start: 18 @42516 has 12 MA's), (45, 42744), (51, 42792),

Gene: Ascela_69 Start: 43040, Stop: 43333, Start Num: 25

Candidate Starts for Ascela_69:

(9, 42923), (Start: 14 @42986 has 4 MA's), (Start: 17 @42995 has 20 MA's), (Start: 25 @43040 has 1 MA's), (36, 43112), (45, 43280), (53, 43328),

Gene: Berrie_67 Start: 42601, Stop: 42954, Start Num: 16

Candidate Starts for Berrie_67:

(9, 42535), (10, 42559), (Start: 14 @42598 has 4 MA's), (Start: 16 @42601 has 1 MA's), (Start: 25 @42652 has 1 MA's), (36, 42721), (41, 42838), (53, 42949),

Gene: CallinAllBarbz_60 Start: 39859, Stop: 40101, Start Num: 33

Candidate Starts for CallinAllBarbz_60:

(Start: 17 @39775 has 20 MA's), (22, 39802), (26, 39826), (Start: 33 @39859 has 3 MA's), (37, 39892),

Gene: Cassia_66 Start: 42270, Stop: 42614, Start Num: 14

Candidate Starts for Cassia_66:

(Start: 14 @42270 has 4 MA's), (Start: 16 @42273 has 1 MA's), (45, 42561), (53, 42609),

Gene: Community_67 Start: 42884, Stop: 43216, Start Num: 18

Candidate Starts for Community_67:

(2, 42557), (4, 42656), (9, 42809), (10, 42833), (Start: 14 @42872 has 4 MA's), (Start: 16 @42875 has 1 MA's), (Start: 18 @42884 has 12 MA's), (Start: 25 @42926 has 1 MA's), (36, 42995), (45, 43163), (53, 43211),

Gene: Cyan_68 Start: 42571, Stop: 42834, Start Num: 17

Candidate Starts for Cyan_68:

(5, 42382), (9, 42499), (Start: 14 @42562 has 4 MA's), (Start: 17 @42571 has 20 MA's), (27, 42601), (53, 42829),

Gene: DrManhattan_70 Start: 41432, Stop: 41782, Start Num: 18

Candidate Starts for DrManhattan_70:

(Start: 18 @41432 has 12 MA's), (Start: 25 @41474 has 1 MA's), (35, 41534), (40, 41612), (42, 41681),

Gene: DrSierra_65 Start: 41681, Stop: 41947, Start Num: 14

Candidate Starts for DrSierra_65:

(Start: 14 @41681 has 4 MA's), (53, 41942),

Gene: Elezi_66 Start: 42273, Stop: 42554, Start Num: 18

Candidate Starts for Elezi_66:

(9, 42198), (Start: 14 @42261 has 4 MA's), (Start: 16 @42264 has 1 MA's), (Start: 18 @42273 has 12 MA's), (Start: 25 @42315 has 1 MA's), (45, 42501), (51, 42549),

Gene: Emotion_70 Start: 43720, Stop: 43983, Start Num: 34

Candidate Starts for Emotion_70:

(Start: 34 @43720 has 1 MA's), (49, 43978),

Gene: Eraser_67 Start: 42523, Stop: 42804, Start Num: 18

Candidate Starts for Eraser_67:

(Start: 14 @42511 has 4 MA's), (Start: 16 @42514 has 1 MA's), (Start: 18 @42523 has 12 MA's), (45, 42751), (51, 42799),

Gene: Exile_59 Start: 43115, Stop: 43405, Start Num: 28

Candidate Starts for Exile_59:

(Start: 28 @43115 has 1 MA's), (43, 43295),

Gene: Flutur_67 Start: 42852, Stop: 43115, Start Num: 17

Candidate Starts for Flutur_67:

(5, 42663), (9, 42780), (Start: 14 @42843 has 4 MA's), (Start: 17 @42852 has 20 MA's), (27, 42882), (53, 43110),

Gene: GrimEater_62 Start: 40339, Stop: 40611, Start Num: 33

Candidate Starts for GrimEater_62:

(22, 40279), (24, 40297), (Start: 33 @40339 has 3 MA's),

Gene: Iter_68 Start: 42766, Stop: 43104, Start Num: 17

Candidate Starts for Iter_68:

(9, 42694), (Start: 14 @42757 has 4 MA's), (Start: 17 @42766 has 20 MA's), (Start: 25 @42811 has 1 MA's), (36, 42883), (45, 43051), (53, 43099),

Gene: IttyBittyPiggy_68 Start: 41000, Stop: 41344, Start Num: 17

Candidate Starts for IttyBittyPiggy_68:

(1, 40670), (Start: 14 @40991 has 4 MA's), (Start: 17 @41000 has 20 MA's), (52, 41339),

Gene: Janeemi_67 Start: 42677, Stop: 43015, Start Num: 18

Candidate Starts for Janeemi_67:

(9, 42602), (Start: 14 @42665 has 4 MA's), (Start: 16 @42668 has 1 MA's), (Start: 18 @42677 has 12 MA's), (Start: 25 @42719 has 1 MA's), (36, 42788), (53, 43010),

Gene: Jankie_63 Start: 40521, Stop: 40793, Start Num: 33

Candidate Starts for Jankie_63:

(22, 40461), (24, 40479), (Start: 33 @40521 has 3 MA's),

Gene: Joemato_69 Start: 42748, Stop: 43011, Start Num: 17

Candidate Starts for Joemato_69:

(5, 42559), (9, 42676), (Start: 14 @42739 has 4 MA's), (Start: 17 @42748 has 20 MA's), (27, 42778), (53, 43006),

Gene: JohnDoe_68 Start: 42656, Stop: 42928, Start Num: 14

Candidate Starts for JohnDoe_68:

(5, 42476), (9, 42593), (Start: 14 @42656 has 4 MA's), (Start: 17 @42665 has 20 MA's), (27, 42695), (53, 42923),

Gene: Jstan_68 Start: 42277, Stop: 42558, Start Num: 18

Candidate Starts for Jstan_68:

(9, 42202), (Start: 14 @42265 has 4 MA's), (Start: 16 @42268 has 1 MA's), (Start: 18 @42277 has 12 MA's), (Start: 25 @42319 has 1 MA's), (45, 42505), (51, 42553),

Gene: Kaylissa_69 Start: 43024, Stop: 43287, Start Num: 17

Candidate Starts for Kaylissa_69:

(9, 42952), (Start: 14 @43015 has 4 MA's), (Start: 17 @43024 has 20 MA's), (27, 43054), (53, 43282),

Gene: Lego_67 Start: 42346, Stop: 42609, Start Num: 17

Candidate Starts for Lego_67:

(5, 42157), (9, 42274), (Start: 14 @42337 has 4 MA's), (Start: 17 @42346 has 20 MA's), (27, 42376), (53, 42604),

Gene: Lizalica_67 Start: 41945, Stop: 42199, Start Num: 17

Candidate Starts for Lizalica_67:

(1, 41612), (5, 41753), (9, 41873), (Start: 14 @41936 has 4 MA's), (Start: 17 @41945 has 20 MA's), (27, 41978), (45, 42146), (48, 42194),

Gene: London_67 Start: 42514, Stop: 42795, Start Num: 18

Candidate Starts for London_67:

(Start: 14 @42502 has 4 MA's), (Start: 16 @42505 has 1 MA's), (Start: 18 @42514 has 12 MA's), (45, 42742), (51, 42790),

Gene: Michkear_69 Start: 45045, Stop: 45314, Start Num: 30

Candidate Starts for Michkear_69:

(30, 45045),

Gene: MissSwiss_68 Start: 41433, Stop: 41789, Start Num: 18

Candidate Starts for MissSwiss_68:

(6, 41250), (7, 41298), (8, 41304), (Start: 18 @41433 has 12 MA's), (40, 41613), (42, 41682), (55, 41784),

Gene: Mudpuppy_66 Start: 42711, Stop: 42965, Start Num: 17

Candidate Starts for Mudpuppy_66:

(1, 42384), (5, 42522), (9, 42639), (Start: 14 @42702 has 4 MA's), (Start: 17 @42711 has 20 MA's), (27, 42744), (48, 42960),

Gene: Niobe_67 Start: 42517, Stop: 42798, Start Num: 18

Candidate Starts for Niobe_67:

(Start: 14 @42505 has 4 MA's), (Start: 16 @42508 has 1 MA's), (Start: 18 @42517 has 12 MA's), (45, 42745), (51, 42793),

Gene: Nitro_68 Start: 43178, Stop: 43525, Start Num: 13

Candidate Starts for Nitro_68:

(Start: 13 @43178 has 1 MA's), (15, 43181), (Start: 18 @43190 has 12 MA's), (Start: 25 @43232 has 1 MA's), (42, 43430), (45, 43472), (50, 43520),

Gene: PandaPo_68 Start: 41440, Stop: 41796, Start Num: 18

Candidate Starts for PandaPo_68:

(6, 41257), (7, 41305), (8, 41311), (Start: 18 @41440 has 12 MA's), (40, 41620), (42, 41689), (55, 41791),

Gene: Phives_68 Start: 42999, Stop: 43331, Start Num: 18

Candidate Starts for Phives_68:

(2, 42672), (4, 42771), (9, 42924), (10, 42948), (Start: 14 @42987 has 4 MA's), (Start: 16 @42990 has 1 MA's), (Start: 18 @42999 has 12 MA's), (Start: 25 @43041 has 1 MA's), (36, 43110), (45, 43278), (53, 43326),

Gene: Pixelle_66 Start: 43257, Stop: 43547, Start Num: 17

Candidate Starts for Pixelle_66:

(1, 42930), (9, 43185), (12, 43245), (Start: 14 @43248 has 4 MA's), (Start: 17 @43257 has 20 MA's), (Start: 25 @43302 has 1 MA's),

Gene: Powerpuff_69 Start: 43550, Stop: 43813, Start Num: 17

Candidate Starts for Powerpuff_69:

(5, 43361), (9, 43478), (Start: 14 @43541 has 4 MA's), (Start: 17 @43550 has 20 MA's), (27, 43580), (53, 43808),

Gene: Pumpkins_65 Start: 42797, Stop: 43141, Start Num: 17

Candidate Starts for Pumpkins_65:

(Start: 14 @42788 has 4 MA's), (Start: 17 @42797 has 20 MA's), (Start: 25 @42845 has 1 MA's), (47, 43115), (52, 43136),

Gene: Reedo_67 Start: 40786, Stop: 41046, Start Num: 32

Candidate Starts for Reedo_67:

(21, 40723), (23, 40747), (Start: 32 @40786 has 2 MA's), (46, 41002), (53, 41041),

Gene: Schaffner_65 Start: 42471, Stop: 42779, Start Num: 20

Candidate Starts for Schaffner_65:

(Start: 20 @42471 has 1 MA's), (21, 42474), (53, 42744), (56, 42774),

Gene: Simpson_73 Start: 42743, Stop: 43015, Start Num: 14

Candidate Starts for Simpson_73:

(5, 42563), (9, 42680), (Start: 14 @42743 has 4 MA's), (Start: 17 @42752 has 20 MA's), (27, 42782), (53, 43010),

Gene: Skelbel_68 Start: 42517, Stop: 42798, Start Num: 18

Candidate Starts for Skelbel_68:

(Start: 14 @42505 has 4 MA's), (Start: 16 @42508 has 1 MA's), (Start: 18 @42517 has 12 MA's), (45, 42745), (51, 42793),

Gene: Snek_67 Start: 39932, Stop: 40216, Start Num: 11

Candidate Starts for Snek_67:

(Start: 11 @39932 has 2 MA's), (39, 40037), (44, 40124), (53, 40211),

Gene: Soondubu_61 Start: 44124, Stop: 44414, Start Num: 28

Candidate Starts for Soondubu_61:

(Start: 28 @44124 has 1 MA's), (43, 44304),

Gene: Subaru_66 Start: 42273, Stop: 42554, Start Num: 18

Candidate Starts for Subaru_66:

(9, 42198), (Start: 14 @42261 has 4 MA's), (Start: 16 @42264 has 1 MA's), (Start: 18 @42273 has 12 MA's), (Start: 25 @42315 has 1 MA's), (45, 42501), (51, 42549),

Gene: Tallboi_67 Start: 42522, Stop: 42788, Start Num: 31

Candidate Starts for Tallboi_67:

(29, 42513), (Start: 31 @42522 has 1 MA's), (42, 42687), (53, 42783),

Gene: Tbone_67 Start: 42998, Stop: 43252, Start Num: 17

Candidate Starts for Tbone_67:

(5, 42809), (9, 42926), (Start: 14 @42989 has 4 MA's), (Start: 17 @42998 has 20 MA's), (27, 43031), (48, 43247),

Gene: TforTroy_67 Start: 42451, Stop: 42801, Start Num: 17

Candidate Starts for TforTroy_67:

(1, 42121), (10, 42403), (Start: 14 @42442 has 4 MA's), (Start: 17 @42451 has 20 MA's), (Start: 25 @42499 has 1 MA's),

Gene: ThursdayNight_72 Start: 44398, Stop: 44727, Start Num: 19

Candidate Starts for ThursdayNight_72:

(Start: 19 @44398 has 1 MA's),

Gene: Tian_65 Start: 43143, Stop: 43451, Start Num: 12

Candidate Starts for Tian_65:

(1, 42828), (9, 43083), (12, 43143), (Start: 14 @43146 has 4 MA's), (Start: 17 @43155 has 20 MA's), (Start: 25 @43200 has 1 MA's), (54, 43446),

Gene: Tuck_67 Start: 42787, Stop: 43119, Start Num: 18

Candidate Starts for Tuck_67:

(2, 42460), (4, 42559), (9, 42712), (10, 42736), (Start: 14 @42775 has 4 MA's), (Start: 16 @42778 has 1 MA's), (Start: 18 @42787 has 12 MA's), (Start: 25 @42829 has 1 MA's), (36, 42898), (45, 43066), (53, 43114),

Gene: Turab_65 Start: 41972, Stop: 42316, Start Num: 17

Candidate Starts for Turab_65:

(2, 41645), (3, 41654), (9, 41900), (Start: 14 @41963 has 4 MA's), (Start: 17 @41972 has 20 MA's), (Start: 25 @42017 has 1 MA's), (42, 42215), (53, 42311),

Gene: Tutumahutu_69 Start: 42593, Stop: 42856, Start Num: 17

Candidate Starts for Tutumahutu_69:

(5, 42404), (9, 42521), (Start: 14 @42584 has 4 MA's), (Start: 17 @42593 has 20 MA's), (27, 42623), (53, 42851),

Gene: Tweety19_68 Start: 39933, Stop: 40217, Start Num: 11

Candidate Starts for Tweety19_68:

(Start: 11 @39933 has 2 MA's), (39, 40038), (44, 40125), (53, 40212),

Gene: VResidence_69 Start: 40961, Stop: 41224, Start Num: 32

Candidate Starts for VResidence_69:

(Start: 32 @40961 has 2 MA's), (38, 41036),

Gene: Warda_68 Start: 42724, Stop: 42978, Start Num: 17

Candidate Starts for Warda_68:

(1, 42397), (5, 42535), (9, 42652), (Start: 14 @42715 has 4 MA's), (Start: 17 @42724 has 20 MA's), (27, 42757), (48, 42973),

Gene: Wildwest_64 Start: 42676, Stop: 42942, Start Num: 14

Candidate Starts for Wildwest_64:

(9, 42613), (Start: 14 @42676 has 4 MA's), (53, 42937),

Gene: YesChef_67 Start: 42409, Stop: 42672, Start Num: 17

Candidate Starts for YesChef_67:

(5, 42220), (9, 42337), (Start: 14 @42400 has 4 MA's), (Start: 17 @42409 has 20 MA's), (27, 42439), (53, 42667),