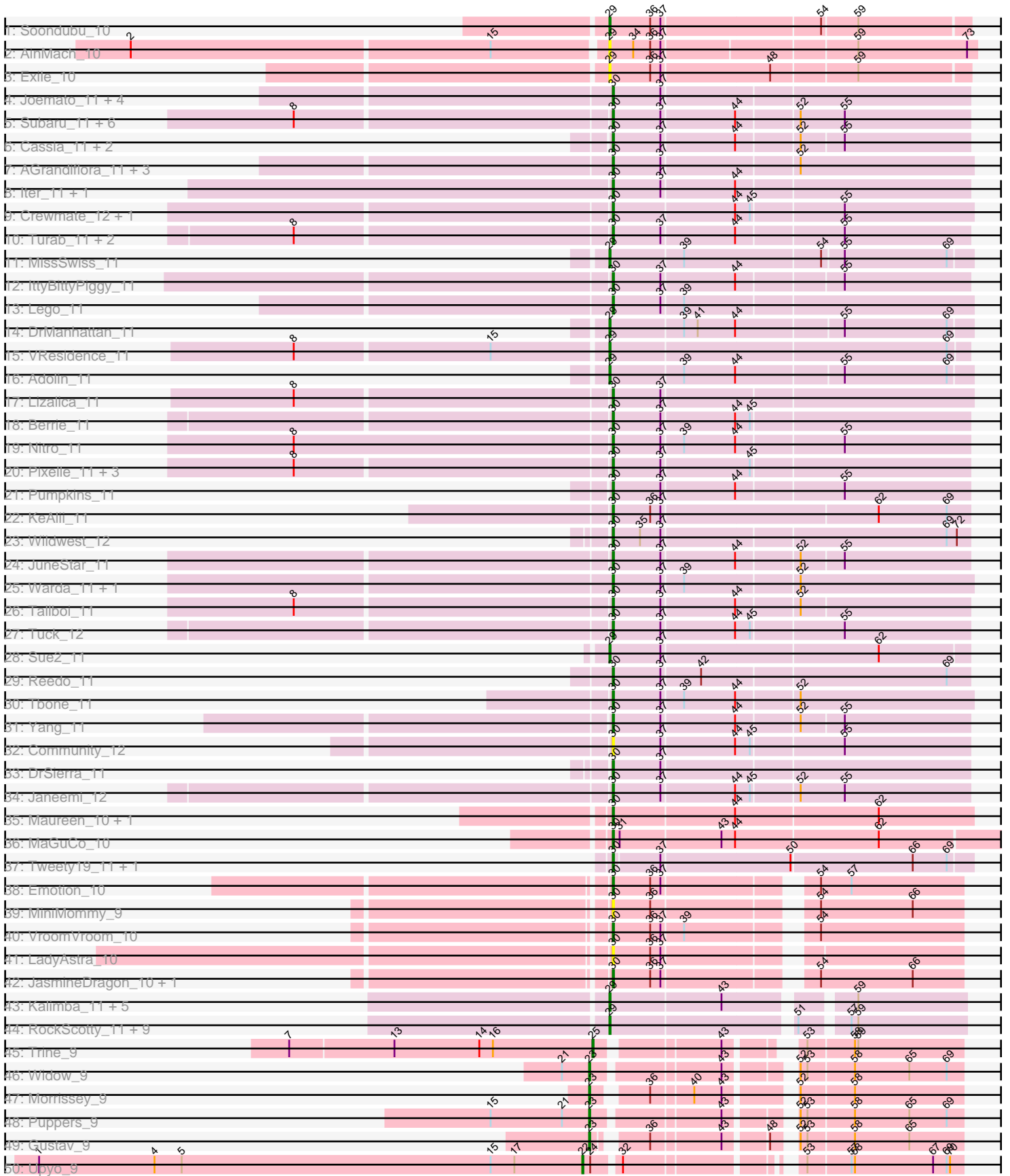
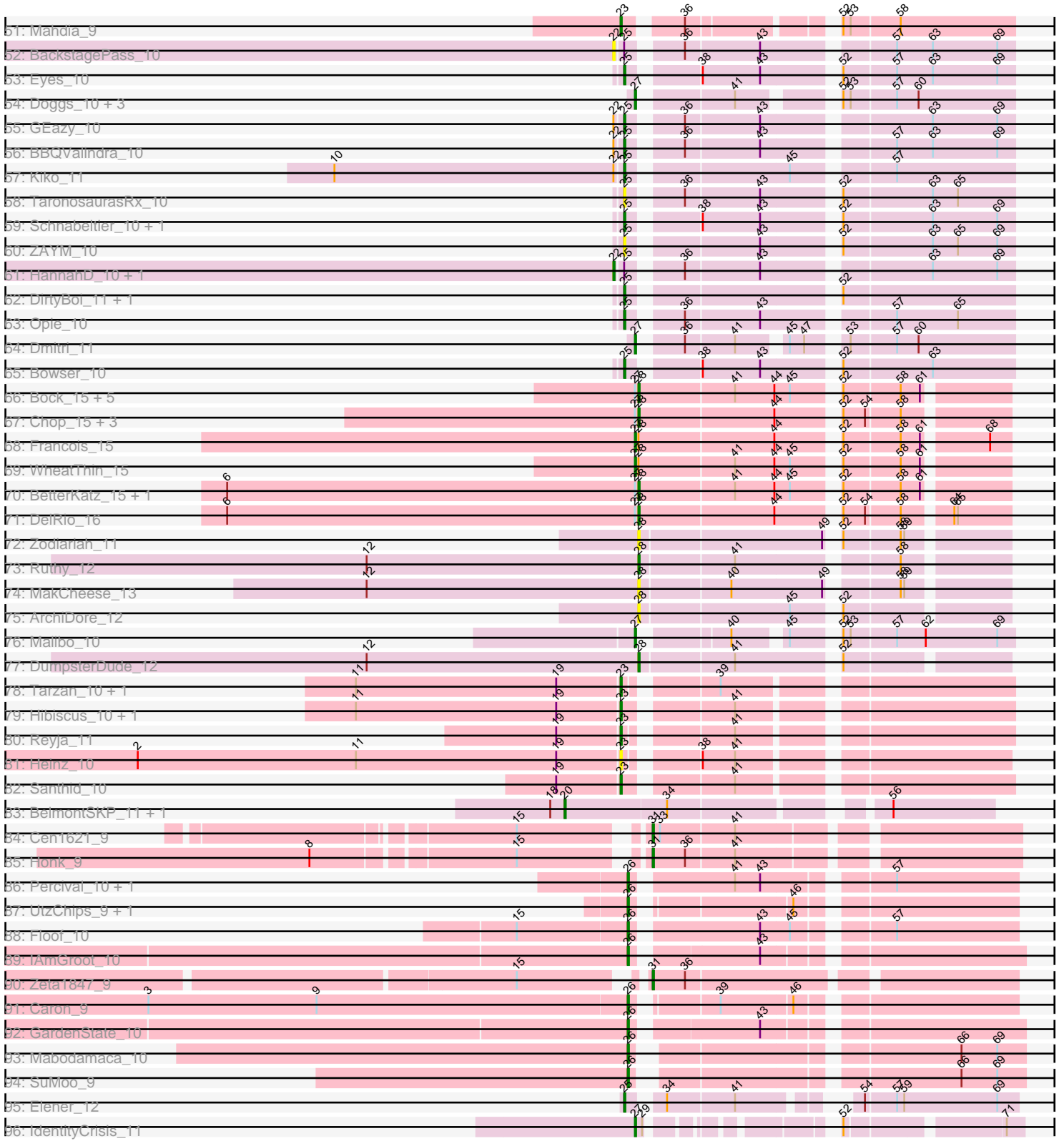


Pham 222946



Pham 222946



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 222946 Report

This analysis was run 03/28/25 on database version 593.

Pham number 222946 has 156 members, 30 are drafts.

Phages represented in each track:

- Track 1 : Soondubu_10
- Track 2 : AinMach_10
- Track 3 : Exile_10
- Track 4 : Joemato_11, JohnDoe_11, Cyan_11, Simpson_12, Kaylissa_11
- Track 5 : Subaru_11, Elezi_11, Jstan_11, Eraser_11, London_11, Niobe_11, Asa16_11
- Track 6 : Cassia_11, TforTroy_11, Shaffner_12
- Track 7 : AGrandiflora_11, YesChef_11, Tutumahutu_11, Powerpuff_11
- Track 8 : lter_11, Ascela_11
- Track 9 : Crewmate_12, ObiToo_11
- Track 10 : Turab_11, Adumb2043_11, AEgle_11
- Track 11 : MissSwiss_11
- Track 12 : IttyBittyPiggy_11
- Track 13 : Lego_11
- Track 14 : DrManhattan_11
- Track 15 : VResidence_11
- Track 16 : Adolin_11
- Track 17 : Lizalica_11
- Track 18 : Berrie_11
- Track 19 : Nitro_11
- Track 20 : Pixelle_11, Tian_11, Amyev_11, Phives_12
- Track 21 : Pumpkins_11
- Track 22 : KeAlii_11
- Track 23 : Wildwest_12
- Track 24 : JuneStar_11
- Track 25 : Warda_11, Mudpuppy_11
- Track 26 : Tallboi_11
- Track 27 : Tuck_12
- Track 28 : Sue2_11
- Track 29 : Reedo_11
- Track 30 : Tbone_11
- Track 31 : Yang_11
- Track 32 : Community_12
- Track 33 : DrSierra_11
- Track 34 : Janeemi_12
- Track 35 : Maureen_10, Liebe_10
- Track 36 : MaGuCo_10

- Track 37 : Tweety19_11, Snek_11
- Track 38 : Emotion_10
- Track 39 : MiniMommy_9
- Track 40 : VroomVroom_10
- Track 41 : LadyAstra_10
- Track 42 : JasmineDragon_10, ShakeltOph_10
- Track 43 : Kalimba_11, Cappuccino_11, Donkey_11, Sabourin_11, Gambol_11, Sooty_11
- Track 44 : RockScotty_11, Mysterium_11, SpecialK_11, Halsey_11, Ashes_11, Beaupre_11, Stuu_11, Gumpizza_11, Giorgio_11, Moss_11
- Track 45 : Trine_9
- Track 46 : Widow_9
- Track 47 : Morrissey_9
- Track 48 : Puppies_9
- Track 49 : Gustav_9
- Track 50 : Upyo_9
- Track 51 : Mahdia_9
- Track 52 : BackstagePass_10
- Track 53 : Eyes_10
- Track 54 : Doggs_10, RayTheFireFly_11, Coriander_11, Moonflower_11
- Track 55 : GEazy_10
- Track 56 : BBQValindra_10
- Track 57 : Kiko_11
- Track 58 : TaronosaurusRx_10
- Track 59 : Schnabeltier_10, MagicMan_10
- Track 60 : ZAYM_10
- Track 61 : HannahD_10, Bunker_10
- Track 62 : DirtyBoi_11, Hedwig_11
- Track 63 : Opie_10
- Track 64 : Dmitri_11
- Track 65 : Bowser_10
- Track 66 : Bock_15, Mulch_15, Nadeem_15, Brylie_15, Parada_15, NancyRae_15
- Track 67 : Chop_15, Ayotoya_15, GrandSlam_15, Hamood_15
- Track 68 : Francois_15
- Track 69 : WheatThin_15
- Track 70 : BetterKatz_15, Pimento_16
- Track 71 : DelRio_16
- Track 72 : Zodiariah_11
- Track 73 : Ruthy_12
- Track 74 : MakCheese_13
- Track 75 : ArchiDore_12
- Track 76 : Malibo_10
- Track 77 : DumpsterDude_12
- Track 78 : Tarzan_10, DonkeyMan_10
- Track 79 : Hibiscus_10, Jojo24_10
- Track 80 : Reyja_11
- Track 81 : Heinz_10
- Track 82 : Santhid_10
- Track 83 : BelmontSKP_11, AnnaLie_11
- Track 84 : Cen1621_9
- Track 85 : Honk_9
- Track 86 : Percival_10, Gretchen_10
- Track 87 : UtzChips_9, Barnstormer_9

- Track 88 : Floof_10
- Track 89 : IAmGroot_10
- Track 90 : Zeta1847_9
- Track 91 : Caron_9
- Track 92 : GardenState_10
- Track 93 : Mabodamaca_10
- Track 94 : SuMoo_9
- Track 95 : Elener_12
- Track 96 : IdentityCrisis_11

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

The start number called the most often in the published annotations is 30, it was called in 48 of the 126 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AEgle_11, AGrandiflora_11, Adumb2043_11, Amyev_11, Asa16_11, Ascela_11, Berrie_11, Cassia_11, Community_12, Crewmate_12, Cyan_11, DrSierra_11, Elezi_11, Emotion_10, Eraser_11, Iter_11, IttyBittyPiggy_11, Janeemi_12, JasmineDragon_10, Joemato_11, JohnDoe_11, Jstan_11, JuneStar_11, Kaylissa_11, KeAlii_11, LadyAstra_10, Lego_11, Liebe_10, Lizalica_11, London_11, MaGuCo_10, Maureen_10, MiniMommy_9, Mudpuppy_11, Niobe_11, Nitro_11, ObiToo_11, Phives_12, Pixelle_11, Powerpuff_11, Pumpkins_11, Reedo_11, Shaffner_12, ShakeltOph_10, Simpson_12, Snek_11, Subaru_11, Tallboi_11, Tbone_11, TforTroy_11, Tian_11, Tuck_12, Turab_11, Tutumahutu_11, Tweety19_11, VroomVroom_10, Warda_11, Wildwest_12, Yang_11, YesChef_11,

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

-

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

- Adolin_11, AinMach_10, AnnaLie_11, ArchiDore_12, Ashes_11, Ayotoya_15, BBQValindra_10, BackstagePass_10, Barnstormer_9, Beaupre_11, BelmontSKP_11, BetterKatz_15, Bock_15, Bowser_10, Brylie_15, Bunker_10, Cappuccino_11, Caron_9, Cen1621_9, Chop_15, Coriander_11, DelRio_16, DirtyBoi_11, Dmitri_11, Doggs_10, DonkeyMan_10, Donkey_11, DrManhattan_11, DumpsterDude_12, Elener_12, Exile_10, Eyes_10, Floof_10, Francois_15, GEazy_10, Gambol_11, GardenState_10, Giorgio_11, GrandSlam_15, Gretchen_10, Gumpizza_11, Gustav_9, Halsey_11, Hamood_15, HannahD_10, Hedwig_11, Heinz_10, Hibiscus_10, Honk_9, IAmGroot_10, IdentityCrisis_11, Jojo24_10, Kalimba_11, Kiko_11, Mabodamaca_10, MagicMan_10, Mahdia_9, MakCheese_13, Malibo_10, MissSwiss_11, Moonflower_11, Morrissey_9, Moss_11, Mulch_15, Mysterium_11, Nadeem_15, NancyRae_15, Opie_10, Parada_15, Percival_10, Pimento_16, Puppies_9, RayTheFireFly_11, Reyja_11, RockScotty_11, Ruthy_12, Sabourin_11, Santhid_10, Schnabeltier_10, Soondubu_10, Sooty_11, SpecialK_11, Stuu_11, SuMoo_9, Sue2_11, TaronosaurusRx_10, Tarzan_10, Trine_9, Upyo_9, UtzChips_9, VResidence_11, WheatThin_15, Widow_9, ZAYM_10, Zeta1847_9, Zodiariah_11,

Summary by start number:

Start 20:

- Found in 2 of 156 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnnaLie_11 (EB), BelmontSKP_11 (EB),

Start 22:

- Found in 7 of 156 (4.5%) of genes in pham
- Manual Annotations of this start: 3 of 126
- Called 57.1% of time when present
- Phage (with cluster) where this start called: BackstagePass_10 (DB), Bunker_10 (DB), HannahD_10 (DB), Upyo_9 (CD),

Start 23:

- Found in 12 of 156 (7.7%) of genes in pham
- Manual Annotations of this start: 10 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DonkeyMan_10 (DY), Gustav_9 (CD), Heinz_10 (DY), Hibiscus_10 (DY), Jojo24_10 (DY), Mahdia_9 (CD), Morrissey_9 (CD), Puppies_9 (CD), Reyja_11 (DY), Santhid_10 (DY), Tarzan_10 (DY), Widow_9 (CD),

Start 25:

- Found in 17 of 156 (10.9%) of genes in pham
- Manual Annotations of this start: 12 of 126
- Called 82.4% of time when present
- Phage (with cluster) where this start called: BBQValindra_10 (DB), Bowser_10 (DB), DirtyBoi_11 (DB), Elener_12 (singleton), Eyes_10 (DB), GEazy_10 (DB), Hedwig_11 (DB), Kiko_11 (DB), MagicMan_10 (DB), Opie_10 (DB), Schnabeltier_10 (DB), TaronosaurusRx_10 (DB), Trine_9 (CD), ZAYM_10 (DB),

Start 26:

- Found in 10 of 156 (6.4%) of genes in pham
- Manual Annotations of this start: 10 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnstormer_9 (EH), Caron_9 (EH), Floof_10 (EH), GardenState_10 (EH), Gretchen_10 (EH), IAmGroot_10 (EH), Mabodamaca_10 (EH), Percival_10 (EH), SuMoo_9 (EH), UtzChips_9 (EH),

Start 27:

- Found in 22 of 156 (14.1%) of genes in pham
- Manual Annotations of this start: 7 of 126
- Called 40.9% of time when present
- Phage (with cluster) where this start called: Coriander_11 (DB), Dmitri_11 (DB), Doggs_10 (DB), Francois_15 (DI), IdentityCrisis_11 (singleton), Malibo_10 (DW), Moonflower_11 (DB), RayTheFireFly_11 (DB), WheatThin_15 (DI),

Start 28:

- Found in 20 of 156 (12.8%) of genes in pham
- Manual Annotations of this start: 15 of 126
- Called 90.0% of time when present
- Phage (with cluster) where this start called: ArchiDore_12 (DW), Ayotoya_15 (DI), BetterKatz_15 (DI), Bock_15 (DI), Brylie_15 (DI), Chop_15 (DI), DelRio_16 (DI),

DumpsterDude_12 (DW), GrandSlam_15 (DI), Hamood_15 (DI), MakCheese_13 (DW), Mulch_15 (DI), Nadeem_15 (DI), NancyRae_15 (DI), Parada_15 (DI), Pimento_16 (DI), Ruthy_12 (DW), Zodiariah_11 (DW),

Start 29:

- Found in 25 of 156 (16.0%) of genes in pham
- Manual Annotations of this start: 16 of 126
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Adolin_11 (AZ1), AinMach_10 (AZ), Ashes_11 (AZ5), Beaupre_11 (AZ5), Cappuccino_11 (AZ5), Donkey_11 (AZ5), DrManhattan_11 (AZ1), Exile_10 (AZ), Gambol_11 (AZ5), Giorgio_11 (AZ5), Gumpizza_11 (AZ5), Halsey_11 (AZ5), Kalimba_11 (AZ5), MissSwiss_11 (AZ1), Moss_11 (AZ5), Mysterium_11 (AZ5), RockScotty_11 (AZ5), Sabourin_11 (AZ5), Soondubu_10 (AZ), Sooty_11 (AZ5), SpecialK_11 (AZ5), Stuu_11 (AZ5), Sue2_11 (AZ1), VResidence_11 (AZ1),

Start 30:

- Found in 60 of 156 (38.5%) of genes in pham
- Manual Annotations of this start: 48 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle_11 (AZ1), AGrandiflora_11 (AZ1), Adumb2043_11 (AZ1), Amyev_11 (AZ1), Asa16_11 (AZ1), Ascela_11 (AZ1), Berrie_11 (AZ1), Cassia_11 (AZ1), Community_12 (AZ1), Crewmate_12 (AZ1), Cyan_11 (AZ1), DrSierra_11 (AZ1), Elezi_11 (AZ1), Emotion_10 (AZ4), Eraser_11 (AZ1), Iter_11 (AZ1), IttyBittyPiggy_11 (AZ1), Janeemi_12 (AZ1), JasmineDragon_10 (AZ4), Joemato_11 (AZ1), JohnDoe_11 (AZ1), Jstan_11 (AZ1), JuneStar_11 (AZ1), Kaylissa_11 (AZ1), KeAlii_11 (AZ1), LadyAstra_10 (AZ4), Lego_11 (AZ1), Liebe_10 (AZ2), Lizalica_11 (AZ1), London_11 (AZ1), MaGuCo_10 (AZ2), Maureen_10 (AZ2), MiniMommy_9 (AZ4), Mudpuppy_11 (AZ1), Niobe_11 (AZ1), Nitro_11 (AZ1), ObiToo_11 (AZ1), Phives_12 (AZ1), Pixelle_11 (AZ1), Powerpuff_11 (AZ1), Pumpkins_11 (AZ1), Reedo_11 (AZ1), Shaffner_12 (AZ1), ShakeltOph_10 (AZ4), Simpson_12 (AZ1), Snek_11 (AZ3), Subaru_11 (AZ1), Tallboi_11 (AZ1), Tbone_11 (AZ1), TforTroy_11 (AZ1), Tian_11 (AZ1), Tuck_12 (AZ1), Turab_11 (AZ1), Tutumahutu_11 (AZ1), Tweety19_11 (AZ3), VroomVroom_10 (AZ4), Warda_11 (AZ1), Wildwest_12 (AZ1), Yang_11 (AZ1), YesChef_11 (AZ1),

Start 31:

- Found in 4 of 156 (2.6%) of genes in pham
- Manual Annotations of this start: 3 of 126
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Cen1621_9 (EH), Honk_9 (EH), Zeta1847_9 (EH),

Summary by clusters:

There are 14 clusters represented in this pham: singleton, AZ, EH, DI, DB, CD, DW, DY, AZ1, AZ2, AZ3, AZ4, AZ5, EB,

Info for manual annotations of cluster AZ:

- Start number 29 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:

- Start number 29 was manually annotated 5 times for cluster AZ1.

- Start number 30 was manually annotated 40 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 30 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 30 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 30 was manually annotated 3 times for cluster AZ4.

Info for manual annotations of cluster AZ5:

- Start number 29 was manually annotated 10 times for cluster AZ5.

Info for manual annotations of cluster CD:

- Start number 22 was manually annotated 1 time for cluster CD.
- Start number 23 was manually annotated 5 times for cluster CD.
- Start number 25 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster DB:

- Start number 22 was manually annotated 2 times for cluster DB.
- Start number 25 was manually annotated 10 times for cluster DB.
- Start number 27 was manually annotated 3 times for cluster DB.

Info for manual annotations of cluster DI:

- Start number 27 was manually annotated 2 times for cluster DI.
- Start number 28 was manually annotated 13 times for cluster DI.

Info for manual annotations of cluster DW:

- Start number 27 was manually annotated 1 time for cluster DW.
- Start number 28 was manually annotated 2 times for cluster DW.

Info for manual annotations of cluster DY:

- Start number 23 was manually annotated 5 times for cluster DY.

Info for manual annotations of cluster EB:

- Start number 20 was manually annotated 2 times for cluster EB.

Info for manual annotations of cluster EH:

- Start number 26 was manually annotated 10 times for cluster EH.
- Start number 31 was manually annotated 3 times for cluster EH.

Gene Information:

Gene: AEgle_11 Start: 8744, Stop: 9049, Start Num: 30

Candidate Starts for AEgle_11:

(8, 8474), (Start: 30 @8744 has 48 MA's), (37, 8786), (44, 8849), (55, 8939),

Gene: AGrandiflora_11 Start: 8731, Stop: 9039, Start Num: 30

Candidate Starts for AGrandiflora_11:

(Start: 30 @8731 has 48 MA's), (37, 8773), (52, 8887),

Gene: Adolin_11 Start: 8716, Stop: 9024, Start Num: 29
Candidate Starts for Adolin_11:
(Start: 29 @8716 has 16 MA's), (39, 8779), (44, 8824), (55, 8914), (69, 9004),

Gene: Adumb2043_11 Start: 8743, Stop: 9048, Start Num: 30
Candidate Starts for Adumb2043_11:
(8, 8473), (Start: 30 @8743 has 48 MA's), (37, 8785), (44, 8848), (55, 8938),

Gene: AinMach_10 Start: 7842, Stop: 8153, Start Num: 29
Candidate Starts for AinMach_10:
(2, 7434), (15, 7746), (Start: 29 @7842 has 16 MA's), (34, 7863), (36, 7878), (37, 7887), (59, 8049),
(73, 8145),

Gene: Amyev_11 Start: 8759, Stop: 9064, Start Num: 30
Candidate Starts for Amyev_11:
(8, 8489), (Start: 30 @8759 has 48 MA's), (37, 8801), (45, 8876),

Gene: AnnaLie_11 Start: 8000, Stop: 8320, Start Num: 20
Candidate Starts for AnnaLie_11:
(18, 7988), (Start: 20 @8000 has 2 MA's), (34, 8084), (56, 8237),

Gene: ArchiDore_12 Start: 8060, Stop: 8335, Start Num: 28
Candidate Starts for ArchiDore_12:
(Start: 28 @8060 has 15 MA's), (45, 8180), (52, 8210),

Gene: Asa16_11 Start: 8713, Stop: 9018, Start Num: 30
Candidate Starts for Asa16_11:
(8, 8443), (Start: 30 @8713 has 48 MA's), (37, 8755), (44, 8818), (52, 8869), (55, 8908),

Gene: Ascela_11 Start: 8748, Stop: 9053, Start Num: 30
Candidate Starts for Ascela_11:
(Start: 30 @8748 has 48 MA's), (37, 8790), (44, 8853),

Gene: Ashes_11 Start: 8267, Stop: 8554, Start Num: 29
Candidate Starts for Ashes_11:
(Start: 29 @8267 has 16 MA's), (51, 8417), (57, 8453), (59, 8459),

Gene: Ayotoya_15 Start: 9620, Stop: 9898, Start Num: 28
Candidate Starts for Ayotoya_15:
(Start: 27 @9617 has 7 MA's), (Start: 28 @9620 has 15 MA's), (44, 9731), (52, 9773), (54, 9791), (58,
9818),

Gene: BBQValindra_10 Start: 7210, Stop: 7500, Start Num: 25
Candidate Starts for BBQValindra_10:
(Start: 22 @7204 has 3 MA's), (Start: 25 @7210 has 12 MA's), (36, 7246), (43, 7306), (57, 7402), (63,
7432), (69, 7486),

Gene: BackstagePass_10 Start: 7181, Stop: 7477, Start Num: 22
Candidate Starts for BackstagePass_10:
(Start: 22 @7181 has 3 MA's), (Start: 25 @7187 has 12 MA's), (36, 7223), (43, 7283), (57, 7379), (63,
7409), (69, 7463),

Gene: Barnstormer_9 Start: 7938, Stop: 8219, Start Num: 26

Candidate Starts for Barnstormer_9:

(Start: 26 @7938 has 10 MA's), (46, 8052),

Gene: Beaupre_11 Start: 8268, Stop: 8555, Start Num: 29

Candidate Starts for Beaupre_11:

(Start: 29 @8268 has 16 MA's), (51, 8418), (57, 8454), (59, 8460),

Gene: BelmontSKP_11 Start: 8000, Stop: 8320, Start Num: 20

Candidate Starts for BelmontSKP_11:

(18, 7988), (Start: 20 @8000 has 2 MA's), (34, 8084), (56, 8237),

Gene: Berrie_11 Start: 8715, Stop: 9020, Start Num: 30

Candidate Starts for Berrie_11:

(Start: 30 @8715 has 48 MA's), (37, 8757), (44, 8820), (45, 8832),

Gene: BetterKatz_15 Start: 9588, Stop: 9866, Start Num: 28

Candidate Starts for BetterKatz_15:

(6, 9243), (Start: 27 @9585 has 7 MA's), (Start: 28 @9588 has 15 MA's), (41, 9666), (44, 9699), (45, 9711), (52, 9741), (58, 9786), (61, 9801),

Gene: Bock_15 Start: 9338, Stop: 9616, Start Num: 28

Candidate Starts for Bock_15:

(Start: 27 @9335 has 7 MA's), (Start: 28 @9338 has 15 MA's), (41, 9416), (44, 9449), (45, 9461), (52, 9491), (58, 9536), (61, 9551),

Gene: Bowser_10 Start: 7208, Stop: 7498, Start Num: 25

Candidate Starts for Bowser_10:

(Start: 25 @7208 has 12 MA's), (38, 7256), (43, 7304), (52, 7358), (63, 7430),

Gene: Brylie_15 Start: 9335, Stop: 9613, Start Num: 28

Candidate Starts for Brylie_15:

(Start: 27 @9332 has 7 MA's), (Start: 28 @9335 has 15 MA's), (41, 9413), (44, 9446), (45, 9458), (52, 9488), (58, 9533), (61, 9548),

Gene: Bunker_10 Start: 7204, Stop: 7500, Start Num: 22

Candidate Starts for Bunker_10:

(Start: 22 @7204 has 3 MA's), (Start: 25 @7210 has 12 MA's), (36, 7246), (43, 7306), (63, 7432), (69, 7486),

Gene: Cappuccino_11 Start: 8176, Stop: 8463, Start Num: 29

Candidate Starts for Cappuccino_11:

(Start: 29 @8176 has 16 MA's), (43, 8272), (59, 8368),

Gene: Caron_9 Start: 7966, Stop: 8247, Start Num: 26

Candidate Starts for Caron_9:

(3, 7567), (9, 7708), (Start: 26 @7966 has 10 MA's), (39, 8023), (46, 8080),

Gene: Cassia_11 Start: 8837, Stop: 9139, Start Num: 30

Candidate Starts for Cassia_11:

(Start: 30 @8837 has 48 MA's), (37, 8879), (44, 8942), (52, 8993), (55, 9029),

Gene: Cen1621_9 Start: 7077, Stop: 7358, Start Num: 31

Candidate Starts for Cen1621_9:

(15, 6987), (Start: 31 @7077 has 3 MA's), (33, 7083), (41, 7143),

Gene: Chop_15 Start: 9368, Stop: 9646, Start Num: 28

Candidate Starts for Chop_15:

(Start: 27 @9365 has 7 MA's), (Start: 28 @9368 has 15 MA's), (44, 9479), (52, 9521), (54, 9539), (58, 9566),

Gene: Community_12 Start: 9794, Stop: 10099, Start Num: 30

Candidate Starts for Community_12:

(Start: 30 @9794 has 48 MA's), (37, 9836), (44, 9899), (45, 9911), (55, 9989),

Gene: Coriander_11 Start: 7607, Stop: 7876, Start Num: 27

Candidate Starts for Coriander_11:

(Start: 27 @7607 has 7 MA's), (41, 7673), (52, 7736), (53, 7742), (57, 7778), (60, 7796),

Gene: Crewmate_12 Start: 9180, Stop: 9488, Start Num: 30

Candidate Starts for Crewmate_12:

(Start: 30 @9180 has 48 MA's), (44, 9285), (45, 9297), (55, 9375),

Gene: Cyan_11 Start: 8735, Stop: 9040, Start Num: 30

Candidate Starts for Cyan_11:

(Start: 30 @8735 has 48 MA's), (37, 8777),

Gene: DelRio_16 Start: 9845, Stop: 10123, Start Num: 28

Candidate Starts for DelRio_16:

(6, 9500), (Start: 27 @9842 has 7 MA's), (Start: 28 @9845 has 15 MA's), (44, 9956), (52, 9998), (54, 10016), (58, 10043), (64, 10076), (65, 10079),

Gene: DirtyBoi_11 Start: 7580, Stop: 7870, Start Num: 25

Candidate Starts for DirtyBoi_11:

(Start: 25 @7580 has 12 MA's), (52, 7730),

Gene: Dmitri_11 Start: 7589, Stop: 7858, Start Num: 27

Candidate Starts for Dmitri_11:

(Start: 27 @7589 has 7 MA's), (36, 7616), (41, 7655), (45, 7688), (47, 7700), (53, 7724), (57, 7760), (60, 7778),

Gene: Doggs_10 Start: 7304, Stop: 7573, Start Num: 27

Candidate Starts for Doggs_10:

(Start: 27 @7304 has 7 MA's), (41, 7370), (52, 7433), (53, 7439), (57, 7475), (60, 7493),

Gene: Donkey_11 Start: 8176, Stop: 8463, Start Num: 29

Candidate Starts for Donkey_11:

(Start: 29 @8176 has 16 MA's), (43, 8272), (59, 8368),

Gene: DonkeyMan_10 Start: 7146, Stop: 7430, Start Num: 23

Candidate Starts for DonkeyMan_10:

(11, 6927), (19, 7095), (Start: 23 @7146 has 10 MA's), (39, 7209),

Gene: DrManhattan_11 Start: 8706, Stop: 9014, Start Num: 29

Candidate Starts for DrManhattan_11:

(Start: 29 @8706 has 16 MA's), (39, 8769), (41, 8781), (44, 8814), (55, 8904), (69, 8994),

Gene: DrSierra_11 Start: 8737, Stop: 9042, Start Num: 30
Candidate Starts for DrSierra_11:
(Start: 30 @8737 has 48 MA's), (37, 8779),

Gene: DumpsterDude_12 Start: 8073, Stop: 8348, Start Num: 28
Candidate Starts for DumpsterDude_12:
(12, 7845), (Start: 28 @8073 has 15 MA's), (41, 8148), (52, 8223),

Gene: Elener_12 Start: 9320, Stop: 9589, Start Num: 25
Candidate Starts for Elener_12:
(Start: 25 @9320 has 12 MA's), (34, 9341), (41, 9395), (54, 9464), (57, 9488), (59, 9494), (69, 9572),

Gene: Elezi_11 Start: 8714, Stop: 9019, Start Num: 30
Candidate Starts for Elezi_11:
(8, 8444), (Start: 30 @8714 has 48 MA's), (37, 8756), (44, 8819), (52, 8870), (55, 8909),

Gene: Emotion_10 Start: 7073, Stop: 7354, Start Num: 30
Candidate Starts for Emotion_10:
(Start: 30 @7073 has 48 MA's), (36, 7106), (37, 7115), (54, 7229), (57, 7256),

Gene: Eraser_11 Start: 8714, Stop: 9019, Start Num: 30
Candidate Starts for Eraser_11:
(8, 8444), (Start: 30 @8714 has 48 MA's), (37, 8756), (44, 8819), (52, 8870), (55, 8909),

Gene: Exile_10 Start: 8625, Stop: 8930, Start Num: 29
Candidate Starts for Exile_10:
(Start: 29 @8625 has 16 MA's), (36, 8661), (37, 8670), (48, 8763), (59, 8835),

Gene: Eyes_10 Start: 7217, Stop: 7507, Start Num: 25
Candidate Starts for Eyes_10:
(Start: 25 @7217 has 12 MA's), (38, 7265), (43, 7313), (52, 7367), (57, 7409), (63, 7439), (69, 7493),

Gene: Floof_10 Start: 7504, Stop: 7794, Start Num: 26
Candidate Starts for Floof_10:
(15, 7414), (Start: 26 @7504 has 10 MA's), (43, 7600), (45, 7624), (57, 7693),

Gene: Francois_15 Start: 9346, Stop: 9627, Start Num: 27
Candidate Starts for Francois_15:
(Start: 27 @9346 has 7 MA's), (Start: 28 @9349 has 15 MA's), (44, 9460), (52, 9502), (58, 9547), (61, 9562), (68, 9610),

Gene: GEazy_10 Start: 7219, Stop: 7509, Start Num: 25
Candidate Starts for GEazy_10:
(Start: 22 @7213 has 3 MA's), (Start: 25 @7219 has 12 MA's), (36, 7255), (43, 7315), (63, 7441), (69, 7495),

Gene: Gambol_11 Start: 8176, Stop: 8463, Start Num: 29
Candidate Starts for Gambol_11:
(Start: 29 @8176 has 16 MA's), (43, 8272), (59, 8368),

Gene: GardenState_10 Start: 8171, Stop: 8461, Start Num: 26
Candidate Starts for GardenState_10:

(Start: 26 @8171 has 10 MA's), (43, 8264),

Gene: Giorgio_11 Start: 8269, Stop: 8556, Start Num: 29

Candidate Starts for Giorgio_11:

(Start: 29 @8269 has 16 MA's), (51, 8419), (57, 8455), (59, 8461),

Gene: GrandSlam_15 Start: 9368, Stop: 9646, Start Num: 28

Candidate Starts for GrandSlam_15:

(Start: 27 @9365 has 7 MA's), (Start: 28 @9368 has 15 MA's), (44, 9479), (52, 9521), (54, 9539), (58, 9566),

Gene: Gretchen_10 Start: 9050, Stop: 9340, Start Num: 26

Candidate Starts for Gretchen_10:

(Start: 26 @9050 has 10 MA's), (41, 9125), (43, 9146), (57, 9239),

Gene: Gumpizza_11 Start: 8268, Stop: 8555, Start Num: 29

Candidate Starts for Gumpizza_11:

(Start: 29 @8268 has 16 MA's), (51, 8418), (57, 8454), (59, 8460),

Gene: Gustav_9 Start: 6894, Stop: 7172, Start Num: 23

Candidate Starts for Gustav_9:

(Start: 23 @6894 has 10 MA's), (36, 6930), (43, 6987), (48, 7020), (52, 7032), (53, 7038), (58, 7077), (65, 7125),

Gene: Halsey_11 Start: 8267, Stop: 8554, Start Num: 29

Candidate Starts for Halsey_11:

(Start: 29 @8267 has 16 MA's), (51, 8417), (57, 8453), (59, 8459),

Gene: Hamood_15 Start: 9368, Stop: 9646, Start Num: 28

Candidate Starts for Hamood_15:

(Start: 27 @9365 has 7 MA's), (Start: 28 @9368 has 15 MA's), (44, 9479), (52, 9521), (54, 9539), (58, 9566),

Gene: HannahD_10 Start: 7213, Stop: 7509, Start Num: 22

Candidate Starts for HannahD_10:

(Start: 22 @7213 has 3 MA's), (Start: 25 @7219 has 12 MA's), (36, 7255), (43, 7315), (63, 7441), (69, 7495),

Gene: Hedwig_11 Start: 7580, Stop: 7870, Start Num: 25

Candidate Starts for Hedwig_11:

(Start: 25 @7580 has 12 MA's), (52, 7730),

Gene: Heinz_10 Start: 7185, Stop: 7466, Start Num: 23

Candidate Starts for Heinz_10:

(2, 6783), (11, 6966), (19, 7134), (Start: 23 @7185 has 10 MA's), (38, 7233), (41, 7260),

Gene: Hibiscus_10 Start: 7156, Stop: 7443, Start Num: 23

Candidate Starts for Hibiscus_10:

(11, 6937), (19, 7105), (Start: 23 @7156 has 10 MA's), (41, 7234),

Gene: Honk_9 Start: 7045, Stop: 7326, Start Num: 31

Candidate Starts for Honk_9:

(8, 6799), (15, 6955), (Start: 31 @7045 has 3 MA's), (36, 7072), (41, 7111),

Gene: IAmGroot_10 Start: 8815, Stop: 9105, Start Num: 26

Candidate Starts for IAmGroot_10:

(Start: 26 @8815 has 10 MA's), (43, 8908),

Gene: IdentityCrisis_11 Start: 8164, Stop: 8412, Start Num: 27

Candidate Starts for IdentityCrisis_11:

(Start: 27 @8164 has 7 MA's), (Start: 29 @8170 has 16 MA's), (52, 8281), (71, 8398),

Gene: Iter_11 Start: 8748, Stop: 9053, Start Num: 30

Candidate Starts for Iter_11:

(Start: 30 @8748 has 48 MA's), (37, 8790), (44, 8853),

Gene: IttyBittyPiggy_11 Start: 8739, Stop: 9041, Start Num: 30

Candidate Starts for IttyBittyPiggy_11:

(Start: 30 @8739 has 48 MA's), (37, 8781), (44, 8844), (55, 8931),

Gene: Janeemi_12 Start: 9825, Stop: 10130, Start Num: 30

Candidate Starts for Janeemi_12:

(Start: 30 @9825 has 48 MA's), (37, 9867), (44, 9930), (45, 9942), (52, 9981), (55, 10020),

Gene: JasmineDragon_10 Start: 7008, Stop: 7289, Start Num: 30

Candidate Starts for JasmineDragon_10:

(Start: 30 @7008 has 48 MA's), (36, 7041), (37, 7050), (54, 7164), (66, 7245),

Gene: Joemato_11 Start: 8735, Stop: 9040, Start Num: 30

Candidate Starts for Joemato_11:

(Start: 30 @8735 has 48 MA's), (37, 8777),

Gene: JohnDoe_11 Start: 8733, Stop: 9038, Start Num: 30

Candidate Starts for JohnDoe_11:

(Start: 30 @8733 has 48 MA's), (37, 8775),

Gene: Jojo24_10 Start: 7151, Stop: 7438, Start Num: 23

Candidate Starts for Jojo24_10:

(11, 6932), (19, 7100), (Start: 23 @7151 has 10 MA's), (41, 7229),

Gene: Jstan_11 Start: 8714, Stop: 9019, Start Num: 30

Candidate Starts for Jstan_11:

(8, 8444), (Start: 30 @8714 has 48 MA's), (37, 8756), (44, 8819), (52, 8870), (55, 8909),

Gene: JuneStar_11 Start: 8833, Stop: 9135, Start Num: 30

Candidate Starts for JuneStar_11:

(Start: 30 @8833 has 48 MA's), (37, 8875), (44, 8938), (52, 8989), (55, 9025),

Gene: Kalimba_11 Start: 8176, Stop: 8463, Start Num: 29

Candidate Starts for Kalimba_11:

(Start: 29 @8176 has 16 MA's), (43, 8272), (59, 8368),

Gene: Kaylissa_11 Start: 8736, Stop: 9041, Start Num: 30

Candidate Starts for Kaylissa_11:

(Start: 30 @8736 has 48 MA's), (37, 8778),

Gene: KeAlii_11 Start: 8765, Stop: 9073, Start Num: 30
Candidate Starts for KeAlii_11:
(Start: 30 @8765 has 48 MA's), (36, 8798), (37, 8807), (62, 8993), (69, 9053),

Gene: Kiko_11 Start: 7416, Stop: 7706, Start Num: 25
Candidate Starts for Kiko_11:
(10, 7176), (Start: 22 @7410 has 3 MA's), (Start: 25 @7416 has 12 MA's), (45, 7536), (57, 7608),

Gene: LadyAstra_10 Start: 7008, Stop: 7286, Start Num: 30
Candidate Starts for LadyAstra_10:
(Start: 30 @7008 has 48 MA's), (36, 7041), (37, 7050),

Gene: Lego_11 Start: 8734, Stop: 9042, Start Num: 30
Candidate Starts for Lego_11:
(Start: 30 @8734 has 48 MA's), (37, 8776), (39, 8794),

Gene: Liebe_10 Start: 7184, Stop: 7495, Start Num: 30
Candidate Starts for Liebe_10:
(Start: 30 @7184 has 48 MA's), (44, 7289), (62, 7412),

Gene: Lizalica_11 Start: 8720, Stop: 9028, Start Num: 30
Candidate Starts for Lizalica_11:
(8, 8450), (Start: 30 @8720 has 48 MA's), (37, 8762),

Gene: London_11 Start: 8714, Stop: 9019, Start Num: 30
Candidate Starts for London_11:
(8, 8444), (Start: 30 @8714 has 48 MA's), (37, 8756), (44, 8819), (52, 8870), (55, 8909),

Gene: MaGuCo_10 Start: 7043, Stop: 7435, Start Num: 30
Candidate Starts for MaGuCo_10:
(Start: 30 @7043 has 48 MA's), (Start: 31 @7049 has 3 MA's), (43, 7136), (44, 7148), (62, 7271),

Gene: Mabodamaca_10 Start: 8271, Stop: 8558, Start Num: 26
Candidate Starts for Mabodamaca_10:
(Start: 26 @8271 has 10 MA's), (66, 8505), (69, 8535),

Gene: MagicMan_10 Start: 7547, Stop: 7837, Start Num: 25
Candidate Starts for MagicMan_10:
(Start: 25 @7547 has 12 MA's), (38, 7595), (43, 7643), (52, 7697), (63, 7769), (69, 7823),

Gene: Mahdia_9 Start: 6893, Stop: 7174, Start Num: 23
Candidate Starts for Mahdia_9:
(Start: 23 @6893 has 10 MA's), (36, 6932), (52, 7034), (53, 7040), (58, 7079),

Gene: MakCheese_13 Start: 7880, Stop: 8155, Start Num: 28
Candidate Starts for MakCheese_13:
(12, 7652), (Start: 28 @7880 has 15 MA's), (40, 7952), (49, 8027), (58, 8075), (59, 8078),

Gene: Malibo_10 Start: 7477, Stop: 7743, Start Num: 27
Candidate Starts for Malibo_10:
(Start: 27 @7477 has 7 MA's), (40, 7537), (45, 7573), (52, 7603), (53, 7609), (57, 7645), (62, 7669),
(69, 7729),

Gene: Maureen_10 Start: 7184, Stop: 7495, Start Num: 30

Candidate Starts for Maureen_10:

(Start: 30 @7184 has 48 MA's), (44, 7289), (62, 7412),

Gene: MiniMommy_9 Start: 7008, Stop: 7289, Start Num: 30

Candidate Starts for MiniMommy_9:

(Start: 30 @7008 has 48 MA's), (36, 7041), (54, 7164), (66, 7245),

Gene: MissSwiss_11 Start: 8710, Stop: 9018, Start Num: 29

Candidate Starts for MissSwiss_11:

(Start: 29 @8710 has 16 MA's), (39, 8773), (54, 8890), (55, 8908), (69, 8998),

Gene: Moonflower_11 Start: 7612, Stop: 7881, Start Num: 27

Candidate Starts for Moonflower_11:

(Start: 27 @7612 has 7 MA's), (41, 7678), (52, 7741), (53, 7747), (57, 7783), (60, 7801),

Gene: Morrissey_9 Start: 6870, Stop: 7154, Start Num: 23

Candidate Starts for Morrissey_9:

(Start: 23 @6870 has 10 MA's), (36, 6909), (40, 6942), (43, 6966), (52, 7014), (58, 7059),

Gene: Moss_11 Start: 8267, Stop: 8554, Start Num: 29

Candidate Starts for Moss_11:

(Start: 29 @8267 has 16 MA's), (51, 8417), (57, 8453), (59, 8459),

Gene: Mudpuppy_11 Start: 8734, Stop: 9042, Start Num: 30

Candidate Starts for Mudpuppy_11:

(Start: 30 @8734 has 48 MA's), (37, 8776), (39, 8794), (52, 8890),

Gene: Mulch_15 Start: 9335, Stop: 9613, Start Num: 28

Candidate Starts for Mulch_15:

(Start: 27 @9332 has 7 MA's), (Start: 28 @9335 has 15 MA's), (41, 9413), (44, 9446), (45, 9458), (52, 9488), (58, 9533), (61, 9548),

Gene: Mysterium_11 Start: 8268, Stop: 8555, Start Num: 29

Candidate Starts for Mysterium_11:

(Start: 29 @8268 has 16 MA's), (51, 8418), (57, 8454), (59, 8460),

Gene: Nadeem_15 Start: 9335, Stop: 9613, Start Num: 28

Candidate Starts for Nadeem_15:

(Start: 27 @9332 has 7 MA's), (Start: 28 @9335 has 15 MA's), (41, 9413), (44, 9446), (45, 9458), (52, 9488), (58, 9533), (61, 9548),

Gene: NancyRae_15 Start: 9335, Stop: 9613, Start Num: 28

Candidate Starts for NancyRae_15:

(Start: 27 @9332 has 7 MA's), (Start: 28 @9335 has 15 MA's), (41, 9413), (44, 9446), (45, 9458), (52, 9488), (58, 9533), (61, 9548),

Gene: Niobe_11 Start: 8714, Stop: 9019, Start Num: 30

Candidate Starts for Niobe_11:

(8, 8444), (Start: 30 @8714 has 48 MA's), (37, 8756), (44, 8819), (52, 8870), (55, 8909),

Gene: Nitro_11 Start: 8737, Stop: 9042, Start Num: 30

Candidate Starts for Nitro_11:

(8, 8461), (Start: 30 @8737 has 48 MA's), (37, 8779), (39, 8797), (44, 8842), (55, 8932),

Gene: ObiToo_11 Start: 8917, Stop: 9225, Start Num: 30

Candidate Starts for ObiToo_11:

(Start: 30 @8917 has 48 MA's), (44, 9022), (45, 9034), (55, 9112),

Gene: Opie_10 Start: 7562, Stop: 7852, Start Num: 25

Candidate Starts for Opie_10:

(Start: 25 @7562 has 12 MA's), (36, 7598), (43, 7658), (57, 7754), (65, 7805),

Gene: Parada_15 Start: 9335, Stop: 9613, Start Num: 28

Candidate Starts for Parada_15:

(Start: 27 @9332 has 7 MA's), (Start: 28 @9335 has 15 MA's), (41, 9413), (44, 9446), (45, 9458), (52, 9488), (58, 9533), (61, 9548),

Gene: Percival_10 Start: 8884, Stop: 9174, Start Num: 26

Candidate Starts for Percival_10:

(Start: 26 @8884 has 10 MA's), (41, 8959), (43, 8980), (57, 9073),

Gene: Phives_12 Start: 9819, Stop: 10124, Start Num: 30

Candidate Starts for Phives_12:

(8, 9549), (Start: 30 @9819 has 48 MA's), (37, 9861), (45, 9936),

Gene: Pimento_16 Start: 9539, Stop: 9817, Start Num: 28

Candidate Starts for Pimento_16:

(6, 9194), (Start: 27 @9536 has 7 MA's), (Start: 28 @9539 has 15 MA's), (41, 9617), (44, 9650), (45, 9662), (52, 9692), (58, 9737), (61, 9752),

Gene: Pixelle_11 Start: 8762, Stop: 9067, Start Num: 30

Candidate Starts for Pixelle_11:

(8, 8492), (Start: 30 @8762 has 48 MA's), (37, 8804), (45, 8879),

Gene: Powerpuff_11 Start: 8785, Stop: 9093, Start Num: 30

Candidate Starts for Powerpuff_11:

(Start: 30 @8785 has 48 MA's), (37, 8827), (52, 8941),

Gene: Pumpkins_11 Start: 8839, Stop: 9144, Start Num: 30

Candidate Starts for Pumpkins_11:

(Start: 30 @8839 has 48 MA's), (37, 8881), (44, 8944), (55, 9034),

Gene: Puppies_9 Start: 6807, Stop: 7094, Start Num: 23

Candidate Starts for Puppies_9:

(15, 6720), (21, 6783), (Start: 23 @6807 has 10 MA's), (43, 6909), (52, 6954), (53, 6960), (58, 6999), (65, 7047), (69, 7080),

Gene: RayTheFireFly_11 Start: 7613, Stop: 7882, Start Num: 27

Candidate Starts for RayTheFireFly_11:

(Start: 27 @7613 has 7 MA's), (41, 7679), (52, 7742), (53, 7748), (57, 7784), (60, 7802),

Gene: Reedo_11 Start: 8786, Stop: 9091, Start Num: 30

Candidate Starts for Reedo_11:

(Start: 30 @8786 has 48 MA's), (37, 8828), (42, 8861), (69, 9071),

Gene: Reyja_11 Start: 7295, Stop: 7579, Start Num: 23

Candidate Starts for Reyja_11:

(19, 7244), (Start: 23 @7295 has 10 MA's), (41, 7370),

Gene: RockScotty_11 Start: 8267, Stop: 8554, Start Num: 29

Candidate Starts for RockScotty_11:

(Start: 29 @8267 has 16 MA's), (51, 8417), (57, 8453), (59, 8459),

Gene: Ruthy_12 Start: 8144, Stop: 8419, Start Num: 28

Candidate Starts for Ruthy_12:

(12, 7916), (Start: 28 @8144 has 15 MA's), (41, 8219), (58, 8339),

Gene: Sabourin_11 Start: 8176, Stop: 8463, Start Num: 29

Candidate Starts for Sabourin_11:

(Start: 29 @8176 has 16 MA's), (43, 8272), (59, 8368),

Gene: Santhid_10 Start: 7160, Stop: 7447, Start Num: 23

Candidate Starts for Santhid_10:

(19, 7109), (Start: 23 @7160 has 10 MA's), (41, 7238),

Gene: Schnabeltier_10 Start: 7548, Stop: 7838, Start Num: 25

Candidate Starts for Schnabeltier_10:

(Start: 25 @7548 has 12 MA's), (38, 7596), (43, 7644), (52, 7698), (63, 7770), (69, 7824),

Gene: Shaffner_12 Start: 8830, Stop: 9132, Start Num: 30

Candidate Starts for Shaffner_12:

(Start: 30 @8830 has 48 MA's), (37, 8872), (44, 8935), (52, 8986), (55, 9022),

Gene: ShakeltOph_10 Start: 7008, Stop: 7289, Start Num: 30

Candidate Starts for ShakeltOph_10:

(Start: 30 @7008 has 48 MA's), (36, 7041), (37, 7050), (54, 7164), (66, 7245),

Gene: Simpson_12 Start: 8735, Stop: 9040, Start Num: 30

Candidate Starts for Simpson_12:

(Start: 30 @8735 has 48 MA's), (37, 8777),

Gene: Snek_11 Start: 7822, Stop: 8127, Start Num: 30

Candidate Starts for Snek_11:

(Start: 30 @7822 has 48 MA's), (37, 7861), (50, 7972), (66, 8077), (69, 8107),

Gene: Soondubu_10 Start: 8626, Stop: 8931, Start Num: 29

Candidate Starts for Soondubu_10:

(Start: 29 @8626 has 16 MA's), (36, 8662), (37, 8671), (54, 8806), (59, 8836),

Gene: Sooty_11 Start: 8177, Stop: 8464, Start Num: 29

Candidate Starts for Sooty_11:

(Start: 29 @8177 has 16 MA's), (43, 8273), (59, 8369),

Gene: SpecialK_11 Start: 8174, Stop: 8461, Start Num: 29

Candidate Starts for SpecialK_11:

(Start: 29 @8174 has 16 MA's), (51, 8324), (57, 8360), (59, 8366),

Gene: Stuu_11 Start: 8267, Stop: 8554, Start Num: 29

Candidate Starts for Stuu_11:
(Start: 29 @8267 has 16 MA's), (51, 8417), (57, 8453), (59, 8459),

Gene: SuMoo_9 Start: 7231, Stop: 7518, Start Num: 26
Candidate Starts for SuMoo_9:
(Start: 26 @7231 has 10 MA's), (66, 7465), (69, 7495),

Gene: Subaru_11 Start: 8714, Stop: 9019, Start Num: 30
Candidate Starts for Subaru_11:
(8, 8444), (Start: 30 @8714 has 48 MA's), (37, 8756), (44, 8819), (52, 8870), (55, 8909),

Gene: Sue2_11 Start: 8727, Stop: 9035, Start Num: 29
Candidate Starts for Sue2_11:
(Start: 29 @8727 has 16 MA's), (37, 8772), (62, 8958),

Gene: Tallboi_11 Start: 8748, Stop: 9050, Start Num: 30
Candidate Starts for Tallboi_11:
(8, 8478), (Start: 30 @8748 has 48 MA's), (37, 8790), (44, 8853), (52, 8904),

Gene: TaronosaurusRx_10 Start: 7561, Stop: 7851, Start Num: 25
Candidate Starts for TaronosaurusRx_10:
(Start: 25 @7561 has 12 MA's), (36, 7597), (43, 7657), (52, 7711), (63, 7783), (65, 7804),

Gene: Tarzan_10 Start: 7151, Stop: 7435, Start Num: 23
Candidate Starts for Tarzan_10:
(11, 6932), (19, 7100), (Start: 23 @7151 has 10 MA's), (39, 7214),

Gene: Tbone_11 Start: 8728, Stop: 9036, Start Num: 30
Candidate Starts for Tbone_11:
(Start: 30 @8728 has 48 MA's), (37, 8770), (39, 8788), (44, 8833), (52, 8884),

Gene: TforTroy_11 Start: 8862, Stop: 9164, Start Num: 30
Candidate Starts for TforTroy_11:
(Start: 30 @8862 has 48 MA's), (37, 8904), (44, 8967), (52, 9018), (55, 9054),

Gene: Tian_11 Start: 8759, Stop: 9064, Start Num: 30
Candidate Starts for Tian_11:
(8, 8489), (Start: 30 @8759 has 48 MA's), (37, 8801), (45, 8876),

Gene: Trine_9 Start: 6815, Stop: 7090, Start Num: 25
Candidate Starts for Trine_9:
(7, 6551), (13, 6641), (14, 6716), (16, 6728), (Start: 25 @6815 has 12 MA's), (43, 6911), (53, 6956),
(58, 6995), (59, 6998),

Gene: Tuck_12 Start: 9774, Stop: 10079, Start Num: 30
Candidate Starts for Tuck_12:
(Start: 30 @9774 has 48 MA's), (37, 9816), (44, 9879), (45, 9891), (55, 9969),

Gene: Turab_11 Start: 8743, Stop: 9048, Start Num: 30
Candidate Starts for Turab_11:
(8, 8473), (Start: 30 @8743 has 48 MA's), (37, 8785), (44, 8848), (55, 8938),

Gene: Tutumahutu_11 Start: 8785, Stop: 9093, Start Num: 30

Candidate Starts for Tutumahutu_11:
(Start: 30 @8785 has 48 MA's), (37, 8827), (52, 8941),

Gene: Tweety19_11 Start: 7821, Stop: 8126, Start Num: 30
Candidate Starts for Tweety19_11:
(Start: 30 @7821 has 48 MA's), (37, 7860), (50, 7971), (66, 8076), (69, 8106),

Gene: Upyo_9 Start: 6827, Stop: 7114, Start Num: 22
Candidate Starts for Upyo_9:
(1, 6347), (4, 6449), (5, 6473), (15, 6746), (17, 6767), (Start: 22 @6827 has 3 MA's), (24, 6833), (32, 6854), (53, 6980), (57, 7016), (58, 7019), (67, 7088), (69, 7100), (70, 7103),

Gene: UtzChips_9 Start: 7926, Stop: 8207, Start Num: 26
Candidate Starts for UtzChips_9:
(Start: 26 @7926 has 10 MA's), (46, 8040),

Gene: VResidence_11 Start: 8797, Stop: 9105, Start Num: 29
Candidate Starts for VResidence_11:
(8, 8530), (15, 8698), (Start: 29 @8797 has 16 MA's), (69, 9088),

Gene: VroomVroom_10 Start: 7020, Stop: 7301, Start Num: 30
Candidate Starts for VroomVroom_10:
(Start: 30 @7020 has 48 MA's), (36, 7053), (37, 7062), (39, 7080), (54, 7176),

Gene: Warda_11 Start: 8731, Stop: 9039, Start Num: 30
Candidate Starts for Warda_11:
(Start: 30 @8731 has 48 MA's), (37, 8773), (39, 8791), (52, 8887),

Gene: WheatThin_15 Start: 9332, Stop: 9613, Start Num: 27
Candidate Starts for WheatThin_15:
(Start: 27 @9332 has 7 MA's), (Start: 28 @9335 has 15 MA's), (41, 9413), (44, 9446), (45, 9458), (52, 9488), (58, 9533), (61, 9548),

Gene: Widow_9 Start: 6798, Stop: 7085, Start Num: 23
Candidate Starts for Widow_9:
(21, 6774), (Start: 23 @6798 has 10 MA's), (43, 6900), (52, 6945), (53, 6951), (58, 6990), (65, 7038), (69, 7071),

Gene: Wildwest_12 Start: 9644, Stop: 9949, Start Num: 30
Candidate Starts for Wildwest_12:
(Start: 30 @9644 has 48 MA's), (35, 9668), (37, 9686), (69, 9929), (72, 9938),

Gene: Yang_11 Start: 8832, Stop: 9134, Start Num: 30
Candidate Starts for Yang_11:
(Start: 30 @8832 has 48 MA's), (37, 8874), (44, 8937), (52, 8988), (55, 9024),

Gene: YesChef_11 Start: 8785, Stop: 9093, Start Num: 30
Candidate Starts for YesChef_11:
(Start: 30 @8785 has 48 MA's), (37, 8827), (52, 8941),

Gene: ZAYM_10 Start: 7554, Stop: 7844, Start Num: 25
Candidate Starts for ZAYM_10:
(Start: 25 @7554 has 12 MA's), (43, 7650), (52, 7704), (63, 7776), (65, 7797), (69, 7830),

Gene: Zeta1847_9 Start: 7022, Stop: 7303, Start Num: 31

Candidate Starts for Zeta1847_9:

(15, 6935), (Start: 31 @7022 has 3 MA's), (36, 7049),

Gene: Zodiariah_11 Start: 7870, Stop: 8145, Start Num: 28

Candidate Starts for Zodiariah_11:

(Start: 28 @7870 has 15 MA's), (49, 8017), (52, 8020), (58, 8065), (59, 8068),