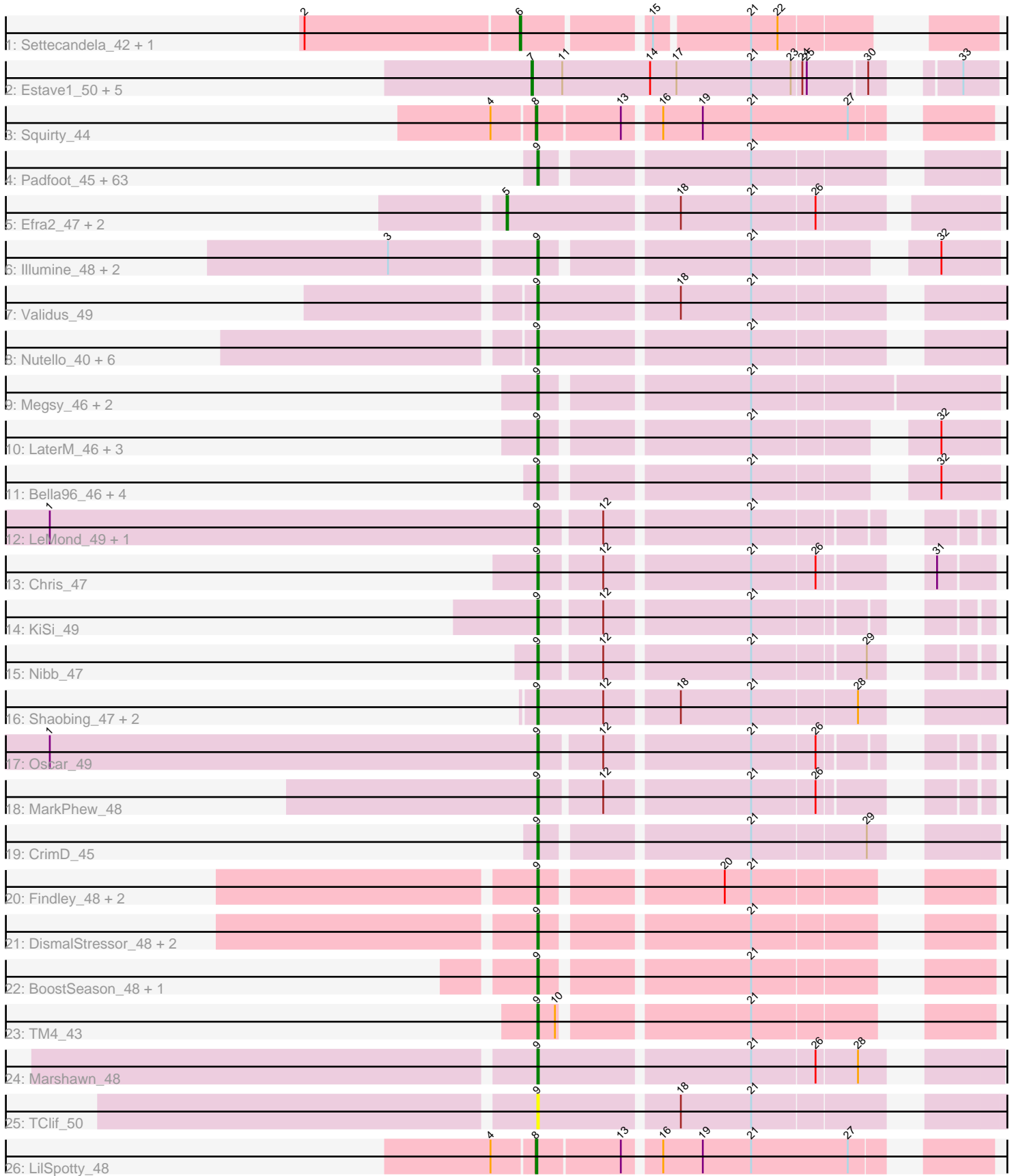


Pham 171302



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 171302 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171302 has 122 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Settecandela_42, Phrappuccino_42
- Track 2 : Estave1_50, DeadP_55, Renaud18_55, Blarby_61, Taj_53, Wee_52
- Track 3 : Squirty_44
- Track 4 : Padfoot_45, ActinUp_45, Llorens_45, Topper_45, BEEST_45, Jayhawk_46, BarrelRoll_45, Ramen_45, Dalmuri_45, CaseJules_46, Hyperbowlee_45, Tiri_46, Jeckyll_45, AlishaPH_45, Rosmarinus_45, Prithvi_46, CREW_45, Geraldini_47, TruffulaTree_45, BaghaKamala_44, Boiiii_45, Joy99_45, Apocalypse_48, Asayake_45, CheetoDust_44, Blizzard_45, Belladonna_45, Zabiza_41, Atiba_45, Adonis_45, Veliki_45, Rapunzel97_45, Beezoo_47, Adephagia_45, Zavala_46, Angelica_45, Mynx_46, Homura_45, Pokerus_44, Inky_45, Padpat_46, JAWS_45, Lunahalos_45, Spock_45, TreyKay_46, Capricorn_45, Anaya_47, HedwigODU_45, MeaningOfLife_46, Ganymede_46, Deby_45, QuincyRose_44, ShiaSurprise_46, Durfee_45, YoureAdopted_44, Piatt_45, Sulley_45, Tachez_45, Jarvi_45, Twitch_45, Peel_45, Slimphazie_45, Emerson_46, BGIlluvia_45
- Track 5 : Efra2_47, Yunkel11_47, Guanica15_47
- Track 6 : Illumine_48, Devera_49, Dole_48
- Track 7 : Validus_49
- Track 8 : Nutello_40, Nikao_43, LilPharaoh_40, Amelie_40, SgtBeansprout_40, Binglebops_40, Mdavu_41
- Track 9 : Megsy_46, ZoeJ_47, TaiwanKao_47
- Track 10 : LaterM_46, Ageofdapage_47, Stinson_46, Murucutumbu_46
- Track 11 : Bella96_46, Urkel_46, SamuelLPlaqson_46, TiniBug_46, DrHayes_46
- Track 12 : LeMond_49, Scarlett_49
- Track 13 : Chris_47
- Track 14 : KiSi_49
- Track 15 : Nibb_47
- Track 16 : Shaobing_47, Niklas_47, Peanam_47
- Track 17 : Oscar_49
- Track 18 : MarkPhew_48
- Track 19 : CrimD_45
- Track 20 : Findley_48, Strobilo_48, Milly_48
- Track 21 : DismalStressor_48, Marcoliusprime_48, DismalFunk_48
- Track 22 : BoostSeason_48, Mufasa_48
- Track 23 : TM4_43
- Track 24 : Marshawn_48
- Track 25 : TClif_50

- Track 26 : LilSpotty_48

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

The start number called the most often in the published annotations is 9, it was called in 104 of the 116 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_45, Adephegia_45, Adonis_45, Ageofdapage_47, AlishaPH_45, Amelie_40, Anaya_47, Angelica_45, Apocalypse_48, Asayake_45, Atiba_45, BEEST_45, BGlluviae_45, BaghaKamala_44, BarrelRoll_45, Beezoo_47, Bella96_46, Belladonna_45, Biglebops_40, Blizzard_45, Boiiii_45, BoostSeason_48, CREW_45, Capricorn_45, CaseJules_46, CheetoDust_44, Chris_47, CrimD_45, Dalmuri_45, Deby_45, Devera_49, DismalFunk_48, DismalStressor_48, Dole_48, DrHayes_46, Durfee_45, Emerson_46, Findley_48, Ganymede_46, Geraldini_47, HedwigODU_45, Homura_45, Hyperbowlee_45, Illumine_48, Inky_45, JAWS_45, Jarvi_45, Jayhawk_46, Jeckyll_45, Joy99_45, KiSi_49, LaterM_46, LeMond_49, LilPharaoh_40, Llorens_45, Lunahalos_45, Marcoliusprime_48, MarkPhew_48, Marshawn_48, Mdavu_41, MeaningOfLife_46, Megsy_46, Milly_48, Mufasa_48, Murucutumbu_46, Mynx_46, Nibb_47, Nikao_43, Niklas_47, Nutello_40, Oscar_49, Padfoot_45, Padpat_46, Peanam_47, Peel_45, Piatt_45, Pokerus_44, Prithvi_46, QuincyRose_44, Ramen_45, Rapunzel97_45, Rosmarinus_45, SamuelLPlaqson_46, Scarlett_49, SgtBeansprout_40, Shaobing_47, ShiaSurprise_46, Slimphazie_45, Spock_45, Stinson_46, Strobilo_48, Sulley_45, TClif_50, TM4_43, Tachez_45, TaiwanKao_47, TiniBug_46, Tiri_46, Topper_45, TreyKay_46, TruffulaTree_45, Twitch_45, Urkel_46, Validus_49, Veliki_45, YoureAdopted_44, Zabiza_41, Zavala_46, ZoeJ_47,

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

-

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

- Blarby_61, DeadP_55, Efra2_47, Estave1_50, Guanica15_47, LilSpotty_48, Phrappuccino_42, Renaud18_55, Settecandela_42, Squirty_44, Taj_53, Wee_52, Yunkel11_47,

Summary by start number:

Start 5:

- Found in 3 of 122 (2.5%) of genes in pham
- Manual Annotations of this start: 3 of 116
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Efra2_47 (K1), Guanica15_47 (K1), Yunkel11_47 (K1),

Start 6:

- Found in 2 of 122 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 116
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Phrappuccino_42 (AA), Settecandela_42 (AA),

Start 7:

- Found in 6 of 122 (4.9%) of genes in pham
- Manual Annotations of this start: 5 of 116
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blarby_61 (F), DeadP_55 (F1), Estave1_50 (F1), Renaud18_55 (F4), Taj_53 (F1), Wee_52 (F1),

Start 8:

- Found in 2 of 122 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 116
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilSpotty_48 (singleton), Squirty_44 (F3),

Start 9:

- Found in 109 of 122 (89.3%) of genes in pham
- Manual Annotations of this start: 104 of 116
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ActinUp_45 (K1), Adephegia_45 (K1), Adonis_45 (K1), Ageofdapage_47 (K1), AlishaPH_45 (K1), Amelie_40 (K1), Anaya_47 (K1), Angelica_45 (K1), Apocalypse_48 (K1), Asayake_45 (K1), Atiba_45 (K1), BEEST_45 (K1), BGlluviae_45 (K1), BaghaKamala_44 (K1), BarrelRoll_45 (K1), Beezoo_47 (K1), Bella96_46 (K1), Belladonna_45 (K1), Binglebops_40 (K1), Blizzard_45 (K1), Boiiii_45 (K1), BoostSeason_48 (K2), CREW_45 (K1), Capricorn_45 (K1), CaseJules_46 (K1), CheetoDust_44 (K1), Chris_47 (K1), CrimD_45 (K1), Dalmuri_45 (K1), Deby_45 (K1), Devera_49 (K1), DismalFunk_48 (K2), DismalStressor_48 (K2), Dole_48 (K1), DrHayes_46 (K1), Durfee_45 (K1), Emerson_46 (K1), Findley_48 (K2), Ganymede_46 (K1), Geraldini_47 (K1), HedwigODU_45 (K1), Homura_45 (K1), Hyperbowlee_45 (K1), Illumine_48 (K1), Inky_45 (K1), JAWS_45 (K1), Jarvi_45 (K1), Jayhawk_46 (K1), Jeckyll_45 (K1), Joy99_45 (K1), KiSi_49 (K1), LaterM_46 (K1), LeMond_49 (K1), LilPharaoh_40 (K1), Llorens_45 (K1), Lunahalos_45 (K1), Marcoliusprime_48 (K2), MarkPhew_48 (K1), Marshawn_48 (K6), Mdavu_41 (K1), MeaningOfLife_46 (K1), Megsy_46 (K1), Milly_48 (K2), Mufasa_48 (K2), Murucutumbu_46 (K1), Mynx_46 (K1), Nibb_47 (K1), Nikao_43 (K1), Niklas_47 (K1), Nutello_40 (K1), Oscar_49 (K1), Padfoot_45 (K1), Padpat_46 (K1), Peanam_47 (K1), Peel_45 (K1), Piatt_45 (K1), Pokerus_44 (K1), Prithvi_46 (K1), QuincyRose_44 (K1), Ramen_45 (K1), Rapunzel97_45 (K1), Rosmarinus_45 (K1), SamuelLPlaqson_46 (K1), Scarlett_49 (K1), SgtBeansprout_40 (K1), Shaobing_47 (K1), ShiaSurprise_46 (K1), Slimphazie_45 (K1), Spock_45 (K1), Stinson_46 (K1), Strobilo_48 (K2), Sulley_45 (K1), TClif_50 (K6), TM4_43 (K2), Tachez_45 (K1), TaiwanKao_47 (K1), TiniBug_46 (K1), Tiri_46 (K1), Topper_45 (K1), TreyKay_46 (K1), TruffulaTree_45 (K1), Twitch_45 (K1), Urkel_46 (K1), Validus_49 (K1), Veliki_45 (K1), YoureAdopted_44 (K1), Zabiza_41 (K1), Zavala_46 (K1), ZoeJ_47 (K2),

Summary by clusters:

There are 9 clusters represented in this pham: AA, F1, singleton, F3, F4, F, K2, K1, K6,

Info for manual annotations of cluster AA:

- Start number 6 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster F1:

- Start number 7 was manually annotated 4 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 8 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 7 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster K1:

- Start number 5 was manually annotated 3 times for cluster K1.
- Start number 9 was manually annotated 93 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 9 was manually annotated 10 times for cluster K2.

Info for manual annotations of cluster K6:

- Start number 9 was manually annotated 1 time for cluster K6.

Gene Information:

Gene: ActinUp_45 Start: 35398, Stop: 35664, Start Num: 9

Candidate Starts for ActinUp_45:

(Start: 9 @35398 has 104 MA's), (21, 35527),

Gene: Adephagia_45 Start: 35395, Stop: 35661, Start Num: 9

Candidate Starts for Adephagia_45:

(Start: 9 @35395 has 104 MA's), (21, 35524),

Gene: Adonis_45 Start: 35693, Stop: 35959, Start Num: 9

Candidate Starts for Adonis_45:

(Start: 9 @35693 has 104 MA's), (21, 35822),

Gene: Ageofdapage_47 Start: 36366, Stop: 36659, Start Num: 9

Candidate Starts for Ageofdapage_47:

(Start: 9 @36366 has 104 MA's), (21, 36495), (32, 36621),

Gene: AlishaPH_45 Start: 35668, Stop: 35934, Start Num: 9

Candidate Starts for AlishaPH_45:

(Start: 9 @35668 has 104 MA's), (21, 35797),

Gene: Amelie_40 Start: 34981, Stop: 35265, Start Num: 9

Candidate Starts for Amelie_40:

(Start: 9 @34981 has 104 MA's), (21, 35119),

Gene: Anaya_47 Start: 36005, Stop: 36271, Start Num: 9

Candidate Starts for Anaya_47:

(Start: 9 @36005 has 104 MA's), (21, 36134),

Gene: Angelica_45 Start: 35625, Stop: 35891, Start Num: 9

Candidate Starts for Angelica_45:

(Start: 9 @35625 has 104 MA's), (21, 35754),

Gene: Apocalypse_48 Start: 36410, Stop: 36676, Start Num: 9

Candidate Starts for Apocalypse_48:

(Start: 9 @36410 has 104 MA's), (21, 36539),

Gene: Asayake_45 Start: 35710, Stop: 35976, Start Num: 9

Candidate Starts for Asayake_45:

(Start: 9 @35710 has 104 MA's), (21, 35839),

Gene: Atiba_45 Start: 35358, Stop: 35624, Start Num: 9

Candidate Starts for Atiba_45:

(Start: 9 @35358 has 104 MA's), (21, 35487),

Gene: BEEST_45 Start: 35710, Stop: 35976, Start Num: 9

Candidate Starts for BEEST_45:

(Start: 9 @35710 has 104 MA's), (21, 35839),

Gene: BGlluviae_45 Start: 35513, Stop: 35779, Start Num: 9

Candidate Starts for BGlluviae_45:

(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: BaghaKamala_44 Start: 34833, Stop: 35099, Start Num: 9

Candidate Starts for BaghaKamala_44:

(Start: 9 @34833 has 104 MA's), (21, 34962),

Gene: BarrelRoll_45 Start: 35381, Stop: 35647, Start Num: 9

Candidate Starts for BarrelRoll_45:

(Start: 9 @35381 has 104 MA's), (21, 35510),

Gene: Beezoo_47 Start: 36356, Stop: 36622, Start Num: 9

Candidate Starts for Beezoo_47:

(Start: 9 @36356 has 104 MA's), (21, 36485),

Gene: Bella96_46 Start: 36247, Stop: 36513, Start Num: 9

Candidate Starts for Bella96_46:

(Start: 9 @36247 has 104 MA's), (21, 36376), (32, 36475),

Gene: Belladonna_45 Start: 35513, Stop: 35779, Start Num: 9

Candidate Starts for Belladonna_45:

(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: Binglebops_40 Start: 34981, Stop: 35265, Start Num: 9

Candidate Starts for Binglebops_40:

(Start: 9 @34981 has 104 MA's), (21, 35119),

Gene: Blarby_61 Start: 37278, Stop: 37565, Start Num: 7

Candidate Starts for Blarby_61:

(Start: 7 @37278 has 5 MA's), (11, 37299), (14, 37359), (17, 37377), (21, 37428), (23, 37455), (24, 37461), (25, 37464), (30, 37506), (33, 37542),

Gene: Blizzard_45 Start: 35710, Stop: 35976, Start Num: 9

Candidate Starts for Blizzard_45:

(Start: 9 @35710 has 104 MA's), (21, 35839),

Gene: Boiiii_45 Start: 35712, Stop: 35978, Start Num: 9

Candidate Starts for Boiiii_45:

(Start: 9 @35712 has 104 MA's), (21, 35841),

Gene: BoostSeason_48 Start: 37105, Stop: 37362, Start Num: 9

Candidate Starts for BoostSeason_48:

(Start: 9 @37105 has 104 MA's), (21, 37234),

Gene: CREW_45 Start: 35513, Stop: 35779, Start Num: 9

Candidate Starts for CREW_45:

(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: Capricorn_45 Start: 35513, Stop: 35779, Start Num: 9

Candidate Starts for Capricorn_45:

(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: CaseJules_46 Start: 35710, Stop: 35976, Start Num: 9

Candidate Starts for CaseJules_46:

(Start: 9 @35710 has 104 MA's), (21, 35839),

Gene: CheetoDust_44 Start: 34882, Stop: 35148, Start Num: 9

Candidate Starts for CheetoDust_44:

(Start: 9 @34882 has 104 MA's), (21, 35011),

Gene: Chris_47 Start: 36192, Stop: 36452, Start Num: 9

Candidate Starts for Chris_47:

(Start: 9 @36192 has 104 MA's), (12, 36231), (21, 36324), (26, 36366), (31, 36417),

Gene: CrimD_45 Start: 35636, Stop: 35902, Start Num: 9

Candidate Starts for CrimD_45:

(Start: 9 @35636 has 104 MA's), (21, 35765), (29, 35840),

Gene: Dalmuri_45 Start: 35513, Stop: 35779, Start Num: 9

Candidate Starts for Dalmuri_45:

(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: DeadP_55 Start: 37934, Stop: 38218, Start Num: 7

Candidate Starts for DeadP_55:

(Start: 7 @37934 has 5 MA's), (11, 37955), (14, 38015), (17, 38033), (21, 38084), (23, 38111), (24, 38117), (25, 38120), (30, 38159), (33, 38195),

Gene: Deby_45 Start: 35641, Stop: 35907, Start Num: 9

Candidate Starts for Deby_45:

(Start: 9 @35641 has 104 MA's), (21, 35770),

Gene: Devera_49 Start: 36174, Stop: 36440, Start Num: 9

Candidate Starts for Devera_49:
(3, 36081), (Start: 9 @36174 has 104 MA's), (21, 36303), (32, 36402),

Gene: DismalFunk_48 Start: 37539, Stop: 37796, Start Num: 9
Candidate Starts for DismalFunk_48:
(Start: 9 @37539 has 104 MA's), (21, 37668),

Gene: DismalStressor_48 Start: 37539, Stop: 37796, Start Num: 9
Candidate Starts for DismalStressor_48:
(Start: 9 @37539 has 104 MA's), (21, 37668),

Gene: Dole_48 Start: 36176, Stop: 36442, Start Num: 9
Candidate Starts for Dole_48:
(3, 36083), (Start: 9 @36176 has 104 MA's), (21, 36305), (32, 36404),

Gene: DrHayes_46 Start: 36292, Stop: 36558, Start Num: 9
Candidate Starts for DrHayes_46:
(Start: 9 @36292 has 104 MA's), (21, 36421), (32, 36520),

Gene: Durfee_45 Start: 35710, Stop: 35976, Start Num: 9
Candidate Starts for Durfee_45:
(Start: 9 @35710 has 104 MA's), (21, 35839),

Gene: Efra2_47 Start: 35223, Stop: 35528, Start Num: 5
Candidate Starts for Efra2_47:
(Start: 5 @35223 has 3 MA's), (18, 35334), (21, 35382), (26, 35424),

Gene: Emerson_46 Start: 35389, Stop: 35655, Start Num: 9
Candidate Starts for Emerson_46:
(Start: 9 @35389 has 104 MA's), (21, 35518),

Gene: Estave1_50 Start: 36122, Stop: 36406, Start Num: 7
Candidate Starts for Estave1_50:
(Start: 7 @36122 has 5 MA's), (11, 36143), (14, 36203), (17, 36221), (21, 36272), (23, 36299), (24, 36305), (25, 36308), (30, 36347), (33, 36383),

Gene: Findley_48 Start: 37532, Stop: 37789, Start Num: 9
Candidate Starts for Findley_48:
(Start: 9 @37532 has 104 MA's), (20, 37643), (21, 37661),

Gene: Ganymede_46 Start: 35828, Stop: 36094, Start Num: 9
Candidate Starts for Ganymede_46:
(Start: 9 @35828 has 104 MA's), (21, 35957),

Gene: Geraldini_47 Start: 36445, Stop: 36711, Start Num: 9
Candidate Starts for Geraldini_47:
(Start: 9 @36445 has 104 MA's), (21, 36574),

Gene: Guanica15_47 Start: 35180, Stop: 35485, Start Num: 5
Candidate Starts for Guanica15_47:
(Start: 5 @35180 has 3 MA's), (18, 35291), (21, 35339), (26, 35381),

Gene: HedwigODU_45 Start: 35398, Stop: 35664, Start Num: 9

Candidate Starts for HedwigODU_45:
(Start: 9 @35398 has 104 MA's), (21, 35527),

Gene: Homura_45 Start: 35513, Stop: 35779, Start Num: 9
Candidate Starts for Homura_45:
(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: Hyperbowlee_45 Start: 35710, Stop: 35976, Start Num: 9
Candidate Starts for Hyperbowlee_45:
(Start: 9 @35710 has 104 MA's), (21, 35839),

Gene: Illumine_48 Start: 36176, Stop: 36442, Start Num: 9
Candidate Starts for Illumine_48:
(3, 36083), (Start: 9 @36176 has 104 MA's), (21, 36305), (32, 36404),

Gene: Inky_45 Start: 35513, Stop: 35779, Start Num: 9
Candidate Starts for Inky_45:
(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: JAWS_45 Start: 35387, Stop: 35653, Start Num: 9
Candidate Starts for JAWS_45:
(Start: 9 @35387 has 104 MA's), (21, 35516),

Gene: Jarvi_45 Start: 35513, Stop: 35779, Start Num: 9
Candidate Starts for Jarvi_45:
(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: Jayhawk_46 Start: 35396, Stop: 35662, Start Num: 9
Candidate Starts for Jayhawk_46:
(Start: 9 @35396 has 104 MA's), (21, 35525),

Gene: Jeckyll_45 Start: 35513, Stop: 35779, Start Num: 9
Candidate Starts for Jeckyll_45:
(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: Joy99_45 Start: 35442, Stop: 35708, Start Num: 9
Candidate Starts for Joy99_45:
(Start: 9 @35442 has 104 MA's), (21, 35571),

Gene: KiSi_49 Start: 36597, Stop: 36851, Start Num: 9
Candidate Starts for KiSi_49:
(Start: 9 @36597 has 104 MA's), (12, 36636), (21, 36729),

Gene: LaterM_46 Start: 36290, Stop: 36556, Start Num: 9
Candidate Starts for LaterM_46:
(Start: 9 @36290 has 104 MA's), (21, 36419), (32, 36518),

Gene: LeMond_49 Start: 36581, Stop: 36835, Start Num: 9
Candidate Starts for LeMond_49:
(1, 36248), (Start: 9 @36581 has 104 MA's), (12, 36620), (21, 36713),

Gene: LilPharaoh_40 Start: 34709, Stop: 34993, Start Num: 9
Candidate Starts for LilPharaoh_40:

(Start: 9 @34709 has 104 MA's), (21, 34847),

Gene: LilSpotty_48 Start: 34139, Stop: 34411, Start Num: 8

Candidate Starts for LilSpotty_48:

(4, 34112), (Start: 8 @34139 has 2 MA's), (13, 34193), (16, 34214), (19, 34241), (21, 34274), (27, 34340),

Gene: Llorens_45 Start: 35513, Stop: 35779, Start Num: 9

Candidate Starts for Llorens_45:

(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: Lunahalos_45 Start: 35513, Stop: 35779, Start Num: 9

Candidate Starts for Lunahalos_45:

(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: Marcoliusprime_48 Start: 37539, Stop: 37796, Start Num: 9

Candidate Starts for Marcoliusprime_48:

(Start: 9 @37539 has 104 MA's), (21, 37668),

Gene: MarkPhew_48 Start: 36023, Stop: 36280, Start Num: 9

Candidate Starts for MarkPhew_48:

(Start: 9 @36023 has 104 MA's), (12, 36062), (21, 36155), (26, 36197),

Gene: Marshawn_48 Start: 36429, Stop: 36707, Start Num: 9

Candidate Starts for Marshawn_48:

(Start: 9 @36429 has 104 MA's), (21, 36567), (26, 36609), (28, 36636),

Gene: Mdavu_41 Start: 34970, Stop: 35254, Start Num: 9

Candidate Starts for Mdavu_41:

(Start: 9 @34970 has 104 MA's), (21, 35108),

Gene: MeaningOfLife_46 Start: 36322, Stop: 36588, Start Num: 9

Candidate Starts for MeaningOfLife_46:

(Start: 9 @36322 has 104 MA's), (21, 36451),

Gene: Megsy_46 Start: 35638, Stop: 35928, Start Num: 9

Candidate Starts for Megsy_46:

(Start: 9 @35638 has 104 MA's), (21, 35767),

Gene: Milly_48 Start: 37512, Stop: 37769, Start Num: 9

Candidate Starts for Milly_48:

(Start: 9 @37512 has 104 MA's), (20, 37623), (21, 37641),

Gene: Mufasa_48 Start: 37096, Stop: 37353, Start Num: 9

Candidate Starts for Mufasa_48:

(Start: 9 @37096 has 104 MA's), (21, 37225),

Gene: Murucutumbu_46 Start: 36383, Stop: 36649, Start Num: 9

Candidate Starts for Murucutumbu_46:

(Start: 9 @36383 has 104 MA's), (21, 36512), (32, 36611),

Gene: Mynx_46 Start: 35714, Stop: 35980, Start Num: 9

Candidate Starts for Mynx_46:

(Start: 9 @35714 has 104 MA's), (21, 35843),

Gene: Nibb_47 Start: 35735, Stop: 35992, Start Num: 9

Candidate Starts for Nibb_47:

(Start: 9 @35735 has 104 MA's), (12, 35774), (21, 35867), (29, 35939),

Gene: Nikao_43 Start: 37594, Stop: 37878, Start Num: 9

Candidate Starts for Nikao_43:

(Start: 9 @37594 has 104 MA's), (21, 37732),

Gene: Niklas_47 Start: 36163, Stop: 36447, Start Num: 9

Candidate Starts for Niklas_47:

(Start: 9 @36163 has 104 MA's), (12, 36208), (18, 36253), (21, 36301), (28, 36370),

Gene: Nutello_40 Start: 34981, Stop: 35265, Start Num: 9

Candidate Starts for Nutello_40:

(Start: 9 @34981 has 104 MA's), (21, 35119),

Gene: Oscar_49 Start: 36483, Stop: 36737, Start Num: 9

Candidate Starts for Oscar_49:

(1, 36150), (Start: 9 @36483 has 104 MA's), (12, 36522), (21, 36615), (26, 36657),

Gene: Padfoot_45 Start: 35710, Stop: 35976, Start Num: 9

Candidate Starts for Padfoot_45:

(Start: 9 @35710 has 104 MA's), (21, 35839),

Gene: Padpat_46 Start: 35389, Stop: 35655, Start Num: 9

Candidate Starts for Padpat_46:

(Start: 9 @35389 has 104 MA's), (21, 35518),

Gene: Peanam_47 Start: 36121, Stop: 36405, Start Num: 9

Candidate Starts for Peanam_47:

(Start: 9 @36121 has 104 MA's), (12, 36166), (18, 36211), (21, 36259), (28, 36328),

Gene: Peel_45 Start: 35515, Stop: 35781, Start Num: 9

Candidate Starts for Peel_45:

(Start: 9 @35515 has 104 MA's), (21, 35644),

Gene: Phrappuccino_42 Start: 23385, Stop: 23648, Start Num: 6

Candidate Starts for Phrappuccino_42:

(2, 23241), (Start: 6 @23385 has 2 MA's), (15, 23463), (21, 23523), (22, 23541),

Gene: Piatt_45 Start: 35710, Stop: 35976, Start Num: 9

Candidate Starts for Piatt_45:

(Start: 9 @35710 has 104 MA's), (21, 35839),

Gene: Pokerus_44 Start: 35436, Stop: 35702, Start Num: 9

Candidate Starts for Pokerus_44:

(Start: 9 @35436 has 104 MA's), (21, 35565),

Gene: Prithvi_46 Start: 35579, Stop: 35869, Start Num: 9

Candidate Starts for Prithvi_46:

(Start: 9 @35579 has 104 MA's), (21, 35708),

Gene: QuincyRose_44 Start: 35828, Stop: 36094, Start Num: 9
Candidate Starts for QuincyRose_44:
(Start: 9 @35828 has 104 MA's), (21, 35957),

Gene: Ramen_45 Start: 35400, Stop: 35666, Start Num: 9
Candidate Starts for Ramen_45:
(Start: 9 @35400 has 104 MA's), (21, 35529),

Gene: Rapunzel97_45 Start: 35396, Stop: 35662, Start Num: 9
Candidate Starts for Rapunzel97_45:
(Start: 9 @35396 has 104 MA's), (21, 35525),

Gene: Renaud18_55 Start: 37223, Stop: 37507, Start Num: 7
Candidate Starts for Renaud18_55:
(Start: 7 @37223 has 5 MA's), (11, 37244), (14, 37304), (17, 37322), (21, 37373), (23, 37400), (24, 37406), (25, 37409), (30, 37448), (33, 37484),

Gene: Rosmarinus_45 Start: 35501, Stop: 35767, Start Num: 9
Candidate Starts for Rosmarinus_45:
(Start: 9 @35501 has 104 MA's), (21, 35630),

Gene: SamuelLPlaqson_46 Start: 36292, Stop: 36558, Start Num: 9
Candidate Starts for SamuelLPlaqson_46:
(Start: 9 @36292 has 104 MA's), (21, 36421), (32, 36520),

Gene: Scarlett_49 Start: 36475, Stop: 36729, Start Num: 9
Candidate Starts for Scarlett_49:
(1, 36142), (Start: 9 @36475 has 104 MA's), (12, 36514), (21, 36607),

Gene: Settecandela_42 Start: 23385, Stop: 23648, Start Num: 6
Candidate Starts for Settecandela_42:
(2, 23241), (Start: 6 @23385 has 2 MA's), (15, 23463), (21, 23523), (22, 23541),

Gene: SgtBeansprout_40 Start: 34981, Stop: 35265, Start Num: 9
Candidate Starts for SgtBeansprout_40:
(Start: 9 @34981 has 104 MA's), (21, 35119),

Gene: Shaobing_47 Start: 36138, Stop: 36422, Start Num: 9
Candidate Starts for Shaobing_47:
(Start: 9 @36138 has 104 MA's), (12, 36183), (18, 36228), (21, 36276), (28, 36345),

Gene: ShiaSurprise_46 Start: 35710, Stop: 35976, Start Num: 9
Candidate Starts for ShiaSurprise_46:
(Start: 9 @35710 has 104 MA's), (21, 35839),

Gene: Slimphazie_45 Start: 35396, Stop: 35662, Start Num: 9
Candidate Starts for Slimphazie_45:
(Start: 9 @35396 has 104 MA's), (21, 35525),

Gene: Spock_45 Start: 35514, Stop: 35780, Start Num: 9
Candidate Starts for Spock_45:
(Start: 9 @35514 has 104 MA's), (21, 35643),

Gene: Squirty_44 Start: 33796, Stop: 34068, Start Num: 8

Candidate Starts for Squirty_44:

(4, 33769), (Start: 8 @33796 has 2 MA's), (13, 33850), (16, 33871), (19, 33898), (21, 33931), (27, 33997),

Gene: Stinson_46 Start: 35903, Stop: 36169, Start Num: 9

Candidate Starts for Stinson_46:

(Start: 9 @35903 has 104 MA's), (21, 36032), (32, 36131),

Gene: Strobilo_48 Start: 37514, Stop: 37771, Start Num: 9

Candidate Starts for Strobilo_48:

(Start: 9 @37514 has 104 MA's), (20, 37625), (21, 37643),

Gene: Sulley_45 Start: 35640, Stop: 35906, Start Num: 9

Candidate Starts for Sulley_45:

(Start: 9 @35640 has 104 MA's), (21, 35769),

Gene: TClif_50 Start: 36567, Stop: 36848, Start Num: 9

Candidate Starts for TClif_50:

(Start: 9 @36567 has 104 MA's), (18, 36657), (21, 36705),

Gene: TM4_43 Start: 31897, Stop: 32154, Start Num: 9

Candidate Starts for TM4_43:

(Start: 9 @31897 has 104 MA's), (10, 31909), (21, 32026),

Gene: Tachez_45 Start: 35358, Stop: 35624, Start Num: 9

Candidate Starts for Tachez_45:

(Start: 9 @35358 has 104 MA's), (21, 35487),

Gene: TaiwanKao_47 Start: 35635, Stop: 35925, Start Num: 9

Candidate Starts for TaiwanKao_47:

(Start: 9 @35635 has 104 MA's), (21, 35764),

Gene: Taj_53 Start: 37144, Stop: 37428, Start Num: 7

Candidate Starts for Taj_53:

(Start: 7 @37144 has 5 MA's), (11, 37165), (14, 37225), (17, 37243), (21, 37294), (23, 37321), (24, 37327), (25, 37330), (30, 37369), (33, 37405),

Gene: TiniBug_46 Start: 36288, Stop: 36554, Start Num: 9

Candidate Starts for TiniBug_46:

(Start: 9 @36288 has 104 MA's), (21, 36417), (32, 36516),

Gene: Tiri_46 Start: 35688, Stop: 35954, Start Num: 9

Candidate Starts for Tiri_46:

(Start: 9 @35688 has 104 MA's), (21, 35817),

Gene: Topper_45 Start: 35513, Stop: 35779, Start Num: 9

Candidate Starts for Topper_45:

(Start: 9 @35513 has 104 MA's), (21, 35642),

Gene: TreyKay_46 Start: 35579, Stop: 35869, Start Num: 9

Candidate Starts for TreyKay_46:

(Start: 9 @35579 has 104 MA's), (21, 35708),

Gene: TruffulaTree_45 Start: 35392, Stop: 35658, Start Num: 9

Candidate Starts for TruffulaTree_45:

(Start: 9 @35392 has 104 MA's), (21, 35521),

Gene: Twitch_45 Start: 35515, Stop: 35781, Start Num: 9

Candidate Starts for Twitch_45:

(Start: 9 @35515 has 104 MA's), (21, 35644),

Gene: Urkel_46 Start: 36292, Stop: 36558, Start Num: 9

Candidate Starts for Urkel_46:

(Start: 9 @36292 has 104 MA's), (21, 36421), (32, 36520),

Gene: Validus_49 Start: 36187, Stop: 36471, Start Num: 9

Candidate Starts for Validus_49:

(Start: 9 @36187 has 104 MA's), (18, 36277), (21, 36325),

Gene: Veliki_45 Start: 35432, Stop: 35698, Start Num: 9

Candidate Starts for Veliki_45:

(Start: 9 @35432 has 104 MA's), (21, 35561),

Gene: Wee_52 Start: 37416, Stop: 37700, Start Num: 7

Candidate Starts for Wee_52:

(Start: 7 @37416 has 5 MA's), (11, 37437), (14, 37497), (17, 37515), (21, 37566), (23, 37593), (24, 37599), (25, 37602), (30, 37641), (33, 37677),

Gene: YoureAdopted_44 Start: 35597, Stop: 35863, Start Num: 9

Candidate Starts for YoureAdopted_44:

(Start: 9 @35597 has 104 MA's), (21, 35726),

Gene: Yunkel11_47 Start: 35179, Stop: 35484, Start Num: 5

Candidate Starts for Yunkel11_47:

(Start: 5 @35179 has 3 MA's), (18, 35290), (21, 35338), (26, 35380),

Gene: Zabiza_41 Start: 31703, Stop: 31969, Start Num: 9

Candidate Starts for Zabiza_41:

(Start: 9 @31703 has 104 MA's), (21, 31832),

Gene: Zavala_46 Start: 35674, Stop: 35940, Start Num: 9

Candidate Starts for Zavala_46:

(Start: 9 @35674 has 104 MA's), (21, 35803),

Gene: ZoeJ_47 Start: 36989, Stop: 37246, Start Num: 9

Candidate Starts for ZoeJ_47:

(Start: 9 @36989 has 104 MA's), (21, 37118),