Pham 347385


1: Padfoot_45 + 68
2: Kheparia_45 + 9
3: Efra2_47 + 2
4: Devera_49 + 2
5: Validus_49
6: Nutello_40 + 7
7: Megsy_46 + 2
8: LaterM_46 + 3
9: LeMond_49 + 1
10: Dartin_47 + 2
11: Chris_47
12: KiSi_49
13: Nibb_47
14: Shaobing_47 + 2
15: Oscar_49
16: MarkPhew_48
17: CrimD_45
18: Chavito_48
19: Findley_48 + 2
20: Doughnut_48 + 2
21: DismalStressor_48 + 2
22: TM4_43
23: Marshawn_48
24: TClif_49

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 347385 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347385 has 128 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Padfoot_45, ActinUp_45, Llorens_45, Topper_45, BEEST_45, Jayhawk_46, BarrelRoll_45, Ramen_45, Dalmuri_45, CaseJules_46, Tiri_46, Jeckyll_45, AlishaPH_45, Rosmarinus_45, Prithvi_46, CREW_45, Geraldini_47, TruffulaTree_45, BaghaKamala_44, Boiiii_45, Angelica_45, BGlluviae_45, Joy99_45, MacKat_40, Apocalypse_48, Asayake_45, CheetoDust_44, Bern_46, Blizzard_45, Atiba_45, Veliki_45, Rapunzel97_45, Beezoo_47, Adephagia_45, Zavala_46, Zabiza_40, Mynx_46, Homura_45, Pokerus_44, Inky_45, Padpat_46, JAWS_45, Lunahalos_45, Spock_45, TreyKay_46, Capricorn_45, Anaya_47, Hyperbowlee_45, HedwigODU_45, MeaningOfLife_46, Ganymede_46, Deby_45, QuincyRose_44, CallaLilly_45, ShiaSurprise_46, Durfee_45, YoureAdopted_44, Piatt_45, Sulley_45, Tachez_45, Clipper_48, Belladonna_45, Jarvi_45, Twitch_45, Adonis_45, Peel_45, Emerson_46, Lokum_46, Slimphazie_45
• Track 2 : Kheparia_45, DartGoblin_47, Pisa4_39, Bella96_46, Anma_46, Urkel_46, Pisa1_45, SamuelLPlaqson_46, TiniBug_46, DrHayes_46
• Track 3 : Efra2_47, Yunkel11_47, Guanica15_47
• Track 4 : Devera_49, Illumine_48, Dole_48
• Track 5 : Validus_49
• Track 6 : Nutello_40, Nikao_43, LilPharaoh_40, Amelie_40, SgtBeansprout_40, Torres_43, Biglebops_40, Mdavu_41
• Track 7 : Megsy_46, ZoeJ_47, TaiwanKao_47
• Track 8 : LaterM_46, Ageofdapage_47, Stinson_46, Murucutumbu_46
• Track 9 : LeMond_49, Scarlett_49
• Track 10 : Dartin_47, McMater_47, Richo_47
• Track 11 : Chris_47
• Track 12 : KiSi_49
• Track 13 : Nibb_47
• Track 14 : Shaobing_47, Niklas_47, Peanam_47
• Track 15 : Oscar_49
• Track 16 : MarkPhew_48
• Track 17 : CrimD_45
• Track 18 : Chavito_48
• Track 19 : Findley_48, Strobilo_48, Milly_48
• Track 20 : Doughnut_48, BoostSeason_48, Mufasa_48
• Track 21 : DismalStressor_48, Marcoliusprime_48, DismalFunk_48
• Track 22 : TM4_43
• Track 23 : Marshawn_48
• Track 24 : TClif_49

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

The start number called the most often in the published annotations is 5, it was called in 102 of the 122 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ActinUp_45, Adephagia_45, Adonis_45, Ageofdapage_47, AlishaPH_45, Anaya_47, Angelica_45, Anma_46, Apocalypse_48, Asayake_45, Atiba_45, BEEST_45, BGlluviae_45, BaghaKamala_44, BarrelRoll_45, Beezoo_47, Bella96_46, Belladonna_45, Bern_46, Blizzard_45, Boiiii_45, BoostSeason_48, CREW_45, CallaLilly_45, Capricorn_45, CaseJules_46, CheetoDust_44, Chris_47, Clipper_48, CrimD_45, Dalmuri_45, DartGoblin_47, Deby_45, Devera_49, DismalFunk_48, DismalStressor_48, Dole_48, Doughnut_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, Kheparia_45, KiSi_49, LaterM_46, LeMond_49, Llorens_45, Lokum_46, Lunahalos_45, MacKat_40, Marcoliusprime_48, MarkPhew_48, MeaningOfLife_46, Megsy_46, Milly_48, Mufasa_48, Murucutumbu_46, Mynx_46, Nibb_47, Oscar_49, Padfoot_45, Padpat_46, Peel_45, Piatt_45, Pisa1_45, Pisa4_39, Pokerus_44, Prithvi_46, QuincyRose_44, Ramen_45, Rapunzel97_45, Rosmarinus_45, SamuelLPlaqson_46, Scarlett_49, ShiaSurprise_46, Slimphazie_45, Spock_45, Stinson_46, Strobilo_48, Sulley_45, TM4_43, Tachez_45, TaiwanKao_47, TiniBug_46, Tiri_46, Topper_45, TreyKay_46, TruffulaTree_45, Twitch_45, Urkel_46, Veliki_45, YoureAdopted_44, Zabiza_40, 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:
• Amelie_40, Biglebops_40, Chavito_48, Dartin_47, Efra2_47, Guanica15_47, LilPharaoh_40, Marshawn_48, McMater_47, Mdavu_41, Nikao_43, Niklas_47, Nutello_40, Peanam_47, Richo_47, SgtBeansprout_40, Shaobing_47, TClif_49, Torres_43, Validus_49, Yunkel11_47,

Summary by start number:

Start 3:
• Found in 3 of 128 (2.3%) of genes in pham
• Manual Annotations of this start: 3 of 122
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Efra2_47 (K1), Guanica15_47 (K1), Yunkel11_47 (K1),

Start 4:
• Found in 18 of 128 (14.1%) of genes in pham
• Manual Annotations of this start: 17 of 122
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amelie_40 (K1), Biglebops_40 (K1), Chavito_48 (K1), Dartin_47 (K1), LilPharaoh_40 (K1), Marshawn_48 (K6),

McMater_47 (K1), Mdavu_41 (K1), Nikao_43 (K1), Niklas_47 (K1), Nutello_40 (K1), Peanam_47 (K1), Richo_47 (K1), SgtBeansprout_40 (K1), Shaobing_47 (K1), TClif_49 (K6), Torres_43 (K1), Validus_49 (K1),

Start 5:
• Found in 107 of 128 (83.6%) of genes in pham
• Manual Annotations of this start: 102 of 122
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ActinUp_45 (K1), Adephagia_45 (K1), Adonis_45 (K1), Ageofdapage_47 (K1), AlishaPH_45 (K1), Anaya_47 (K1), Angelica_45 (K1), Anma_46 (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), Bern_46 (K1), Blizzard_45 (K1), Boiiii_45 (K1), BoostSeason_48 (K2), CREW_45 (K1), CallaLilly_45 (K1), Capricorn_45 (K1), CaseJules_46 (K1), CheetoDust_44 (K1), Chris_47 (K1), Clipper_48 (K1), CrimD_45 (K1), Dalmuri_45 (K1), DartGoblin_47 (K1), Deby_45 (K1), Devera_49 (K1), DismalFunk_48 (K2), DismalStressor_48 (K2), Dole_48 (K1), Doughnut_48 (K2), 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), Kheparia_45 (K1), KiSi_49 (K1), LaterM_46 (K1), LeMond_49 (K1), Llorens_45 (K1), Lokum_46 (K1), Lunahalos_45 (K1), MacKat_40 (K1), Marcoliusprime_48 (K2), MarkPhew_48 (K1), MeaningOfLife_46 (K1), Megsy_46 (K1), Milly_48 (K2), Mufasa_48 (K2), Murucutumbu_46 (K1), Mynx_46 (K1), Nibb_47 (K1), Oscar_49 (K1), Padfoot_45 (K1), Padpat_46 (K1), Peel_45 (K1), Piatt_45 (K1), Pisa1_45 (K1), Pisa4_39 (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), ShiaSurprise_46 (K1), Slimphazie_45 (K1), Spock_45 (K1), Stinson_46 (K1), Strobilo_48 (K2), Sulley_45 (K1), 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), Veliki_45 (K1), YoureAdopted_44 (K1), Zabiza_40 (K1), Zavala_46 (K1), ZoeJ_47 (K2),

Summary by clusters:

There are 3 clusters represented in this pham: K2, K1, K6,

Info for manual annotations of cluster K1:
•Start number 3 was manually annotated 3 times for cluster K1.
•Start number 4 was manually annotated 15 times for cluster K1.
•Start number 5 was manually annotated 91 times for cluster K1.

Info for manual annotations of cluster K2:
•Start number 5 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K6:
•Start number 4 was manually annotated 2 times for cluster K6.

Gene Information:

Gene: ActinUp_45 Start: 35398, Stop: 35664, Start Num: 5
Candidate Starts for ActinUp_45:
(Start: 5 @35398 has 102 MA's), (10, 35527),

Gene: Adephagia_45 Start: 35395, Stop: 35661, Start Num: 5
Candidate Starts for Adephagia_45:
(Start: 5 @35395 has 102 MA's), (10, 35524),

Gene: Adonis_45 Start: 35693, Stop: 35959, Start Num: 5
Candidate Starts for Adonis_45:
(Start: 5 @35693 has 102 MA's), (10, 35822),

Gene: Ageofdapage_47 Start: 36366, Stop: 36659, Start Num: 5
Candidate Starts for Ageofdapage_47:
(Start: 5 @36366 has 102 MA's), (10, 36495), (15, 36621),

Gene: AlishaPH_45 Start: 35668, Stop: 35934, Start Num: 5
Candidate Starts for AlishaPH_45:
(Start: 5 @35668 has 102 MA's), (10, 35797),

Gene: Amelie_40 Start: 34981, Stop: 35265, Start Num: 4
Candidate Starts for Amelie_40:
(Start: 4 @34981 has 17 MA's), (10, 35119),

Gene: Anaya_47 Start: 36005, Stop: 36271, Start Num: 5
Candidate Starts for Anaya_47:
(Start: 5 @36005 has 102 MA's), (10, 36134),

Gene: Angelica_45 Start: 35625, Stop: 35891, Start Num: 5
Candidate Starts for Angelica_45:
(Start: 5 @35625 has 102 MA's), (10, 35754),

Gene: Anma_46 Start: 36292, Stop: 36558, Start Num: 5
Candidate Starts for Anma_46:
(Start: 5 @36292 has 102 MA's), (10, 36421), (15, 36520),

Gene: Apocalypse_48 Start: 36410, Stop: 36676, Start Num: 5
Candidate Starts for Apocalypse_48:
(Start: 5 @36410 has 102 MA's), (10, 36539),

Gene: Asayake_45 Start: 35710, Stop: 35976, Start Num: 5
Candidate Starts for Asayake_45:
(Start: 5 @35710 has 102 MA's), (10, 35839),

Gene: Atiba_45 Start: 35358, Stop: 35624, Start Num: 5
Candidate Starts for Atiba_45:
(Start: 5 @35358 has 102 MA's), (10, 35487),

Gene: BEEST_45 Start: 35710, Stop: 35976, Start Num: 5
Candidate Starts for BEEST_45:
(Start: 5 @35710 has 102 MA's), (10, 35839),

Gene: BGlluviae_45 Start: 35513, Stop: 35779, Start Num: 5

Candidate Starts for BGlluviae_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: BaghaKamala_44 Start: 34833, Stop: 35099, Start Num: 5
Candidate Starts for BaghaKamala_44:
(Start: 5 @34833 has 102 MA's), (10, 34962),

Gene: BarrelRoll_45 Start: 35381, Stop: 35647, Start Num: 5
Candidate Starts for BarrelRoll_45:
(Start: 5 @35381 has 102 MA's), (10, 35510),

Gene: Beezoo_47 Start: 36356, Stop: 36622, Start Num: 5
Candidate Starts for Beezoo_47:
(Start: 5 @36356 has 102 MA's), (10, 36485),

Gene: Bella96_46 Start: 36247, Stop: 36513, Start Num: 5
Candidate Starts for Bella96_46:
(Start: 5 @36247 has 102 MA's), (10, 36376), (15, 36475),

Gene: Belladonna_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Belladonna_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: Bern_46 Start: 34428, Stop: 34694, Start Num: 5
Candidate Starts for Bern_46:
(Start: 5 @34428 has 102 MA's), (10, 34557),

Gene: Biglebops_40 Start: 34981, Stop: 35265, Start Num: 4
Candidate Starts for Biglebops_40:
(Start: 4 @34981 has 17 MA's), (10, 35119),

Gene: Blizzard_45 Start: 35710, Stop: 35976, Start Num: 5
Candidate Starts for Blizzard_45:
(Start: 5 @35710 has 102 MA's), (10, 35839),

Gene: Boiiii_45 Start: 35712, Stop: 35978, Start Num: 5
Candidate Starts for Boiiii_45:
(Start: 5 @35712 has 102 MA's), (10, 35841),

Gene: BoostSeason_48 Start: 37105, Stop: 37362, Start Num: 5
Candidate Starts for BoostSeason_48:
(Start: 5 @37105 has 102 MA's), (10, 37234),

Gene: CREW_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for CREW_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: CallaLilly_45 Start: 35436, Stop: 35702, Start Num: 5
Candidate Starts for CallaLilly_45:
(Start: 5 @35436 has 102 MA's), (10, 35565),

Gene: Capricorn_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Capricorn_45:

(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: CaseJules_46 Start: 35710, Stop: 35976, Start Num: 5
Candidate Starts for CaseJules_46:
(Start: 5 @35710 has 102 MA's), (10, 35839),

Gene: Chavito_48 Start: 36764, Stop: 37048, Start Num: 4
Candidate Starts for Chavito_48:
(Start: 4 @36764 has 17 MA's), (10, 36902),

Gene: CheetoDust_44 Start: 34882, Stop: 35148, Start Num: 5
Candidate Starts for CheetoDust_44:
(Start: 5 @34882 has 102 MA's), (10, 35011),

Gene: Chris_47 Start: 36192, Stop: 36452, Start Num: 5
Candidate Starts for Chris_47:
(Start: 5 @36192 has 102 MA's), (7, 36231), (10, 36324), (11, 36366), (14, 36417),

Gene: Clipper_48 Start: 36029, Stop: 36295, Start Num: 5
Candidate Starts for Clipper_48:
(Start: 5 @36029 has 102 MA's), (10, 36158),

Gene: CrimD_45 Start: 35636, Stop: 35902, Start Num: 5
Candidate Starts for CrimD_45:
(Start: 5 @35636 has 102 MA's), (10, 35765), (13, 35840),

Gene: Dalmuri_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Dalmuri_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: DartGoblin_47 Start: 36240, Stop: 36506, Start Num: 5
Candidate Starts for DartGoblin_47:
(Start: 5 @36240 has 102 MA's), (10, 36369), (15, 36468),

Gene: Dartin_47 Start: 36102, Stop: 36386, Start Num: 4
Candidate Starts for Dartin_47:
(Start: 4 @36102 has 17 MA's), (7, 36147), (8, 36192), (10, 36240), (12, 36309),

Gene: Deby_45 Start: 35641, Stop: 35907, Start Num: 5
Candidate Starts for Deby_45:
(Start: 5 @35641 has 102 MA's), (10, 35770),

Gene: Devera_49 Start: 36174, Stop: 36440, Start Num: 5
Candidate Starts for Devera_49:
(2, 36081), (Start: 5 @36174 has 102 MA's), (10, 36303), (15, 36402),

Gene: DismalFunk_48 Start: 37539, Stop: 37796, Start Num: 5
Candidate Starts for DismalFunk_48:
(Start: 5 @37539 has 102 MA's), (10, 37668),

Gene: DismalStressor_48 Start: 37539, Stop: 37796, Start Num: 5
Candidate Starts for DismalStressor_48:
(Start: 5 @37539 has 102 MA's), (10, 37668),

Gene: Dole_48 Start: 36176, Stop: 36442, Start Num: 5
Candidate Starts for Dole_48:
(2, 36083), (Start: 5 @36176 has 102 MA's), (10, 36305), (15, 36404),

Gene: Doughnut_48 Start: 37152, Stop: 37409, Start Num: 5
Candidate Starts for Doughnut_48:
(Start: 5 @37152 has 102 MA's), (10, 37281),

Gene: DrHayes_46 Start: 36292, Stop: 36558, Start Num: 5
Candidate Starts for DrHayes_46:
(Start: 5 @36292 has 102 MA's), (10, 36421), (15, 36520),

Gene: Durfee_45 Start: 35710, Stop: 35976, Start Num: 5
Candidate Starts for Durfee_45:
(Start: 5 @35710 has 102 MA's), (10, 35839),

Gene: Efra2_47 Start: 35223, Stop: 35528, Start Num: 3
Candidate Starts for Efra2_47:
(Start: 3 @35223 has 3 MA's), (8, 35334), (10, 35382), (11, 35424),

Gene: Emerson_46 Start: 35389, Stop: 35655, Start Num: 5
Candidate Starts for Emerson_46:
(Start: 5 @35389 has 102 MA's), (10, 35518),

Gene: Findley_48 Start: 37532, Stop: 37789, Start Num: 5
Candidate Starts for Findley_48:
(Start: 5 @37532 has 102 MA's), (9, 37643), (10, 37661),

Gene: Ganymede_46 Start: 35828, Stop: 36094, Start Num: 5
Candidate Starts for Ganymede_46:
(Start: 5 @35828 has 102 MA's), (10, 35957),

Gene: Geraldini_47 Start: 36445, Stop: 36711, Start Num: 5
Candidate Starts for Geraldini_47:
(Start: 5 @36445 has 102 MA's), (10, 36574),

Gene: Guanica15_47 Start: 35180, Stop: 35485, Start Num: 3
Candidate Starts for Guanica15_47:
(Start: 3 @35180 has 3 MA's), (8, 35291), (10, 35339), (11, 35381),

Gene: HedwigODU_45 Start: 35398, Stop: 35664, Start Num: 5
Candidate Starts for HedwigODU_45:
(Start: 5 @35398 has 102 MA's), (10, 35527),

Gene: Homura_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Homura_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: Hyperbowlee_45 Start: 35710, Stop: 35976, Start Num: 5
Candidate Starts for Hyperbowlee_45:
(Start: 5 @35710 has 102 MA's), (10, 35839),

Gene: Illumine_48 Start: 36176, Stop: 36442, Start Num: 5
Candidate Starts for Illumine_48:
(2, 36083), (Start: 5 @36176 has 102 MA's), (10, 36305), (15, 36404),

Gene: Inky_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Inky_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: JAWS_45 Start: 35387, Stop: 35653, Start Num: 5
Candidate Starts for JAWS_45:
(Start: 5 @35387 has 102 MA's), (10, 35516),

Gene: Jarvi_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Jarvi_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: Jayhawk_46 Start: 35396, Stop: 35662, Start Num: 5
Candidate Starts for Jayhawk_46:
(Start: 5 @35396 has 102 MA's), (10, 35525),

Gene: Jeckyll_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Jeckyll_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: Joy99_45 Start: 35442, Stop: 35708, Start Num: 5
Candidate Starts for Joy99_45:
(Start: 5 @35442 has 102 MA's), (10, 35571),

Gene: Kheparia_45 Start: 33540, Stop: 33806, Start Num: 5
Candidate Starts for Kheparia_45:
(Start: 5 @33540 has 102 MA's), (10, 33669), (15, 33768),

Gene: KiSi_49 Start: 36597, Stop: 36851, Start Num: 5
Candidate Starts for KiSi_49:
(Start: 5 @36597 has 102 MA's), (7, 36636), (10, 36729),

Gene: LaterM_46 Start: 36290, Stop: 36556, Start Num: 5
Candidate Starts for LaterM_46:
(Start: 5 @36290 has 102 MA's), (10, 36419), (15, 36518),

Gene: LeMond_49 Start: 36581, Stop: 36835, Start Num: 5
Candidate Starts for LeMond_49:
(1, 36248), (Start: 5 @36581 has 102 MA's), (7, 36620), (10, 36713),

Gene: LilPharaoh_40 Start: 34709, Stop: 34993, Start Num: 4
Candidate Starts for LilPharaoh_40:
(Start: 4 @34709 has 17 MA's), (10, 34847),

Gene: Llorens_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Llorens_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: Lokum_46 Start: 35514, Stop: 35780, Start Num: 5

Candidate Starts for Lokum_46:
(Start: 5 @35514 has 102 MA's), (10, 35643),

Gene: Lunahalos_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Lunahalos_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: MacKat_40 Start: 30913, Stop: 31179, Start Num: 5
Candidate Starts for MacKat_40:
(Start: 5 @30913 has 102 MA's), (10, 31042),

Gene: Marcoliusprime_48 Start: 37539, Stop: 37796, Start Num: 5
Candidate Starts for Marcoliusprime_48:
(Start: 5 @37539 has 102 MA's), (10, 37668),

Gene: MarkPhew_48 Start: 36023, Stop: 36280, Start Num: 5
Candidate Starts for MarkPhew_48:
(Start: 5 @36023 has 102 MA's), (7, 36062), (10, 36155), (11, 36197),

Gene: Marshawn_48 Start: 36429, Stop: 36707, Start Num: 4
Candidate Starts for Marshawn_48:
(Start: 4 @36429 has 17 MA's), (10, 36567), (11, 36609), (12, 36636),

Gene: McMater_47 Start: 36102, Stop: 36386, Start Num: 4
Candidate Starts for McMater_47:
(Start: 4 @36102 has 17 MA's), (7, 36147), (8, 36192), (10, 36240), (12, 36309),

Gene: Mdavu_41 Start: 34970, Stop: 35254, Start Num: 4
Candidate Starts for Mdavu_41:
(Start: 4 @34970 has 17 MA's), (10, 35108),

Gene: MeaningOfLife_46 Start: 36322, Stop: 36588, Start Num: 5
Candidate Starts for MeaningOfLife_46:
(Start: 5 @36322 has 102 MA's), (10, 36451),

Gene: Megsy_46 Start: 35638, Stop: 35928, Start Num: 5
Candidate Starts for Megsy_46:
(Start: 5 @35638 has 102 MA's), (10, 35767),

Gene: Milly_48 Start: 37512, Stop: 37769, Start Num: 5
Candidate Starts for Milly_48:
(Start: 5 @37512 has 102 MA's), (9, 37623), (10, 37641),

Gene: Mufasa_48 Start: 37096, Stop: 37353, Start Num: 5
Candidate Starts for Mufasa_48:
(Start: 5 @37096 has 102 MA's), (10, 37225),

Gene: Murucutumbu_46 Start: 36383, Stop: 36649, Start Num: 5
Candidate Starts for Murucutumbu_46:
(Start: 5 @36383 has 102 MA's), (10, 36512), (15, 36611),

Gene: Mynx_46 Start: 35714, Stop: 35980, Start Num: 5
Candidate Starts for Mynx_46:

(Start: 5 @35714 has 102 MA's), (10, 35843),

Gene: Nibb_47 Start: 35735, Stop: 35992, Start Num: 5
Candidate Starts for Nibb_47:
(Start: 5 @35735 has 102 MA's), (7, 35774), (10, 35867), (13, 35939),

Gene: Nikao_43 Start: 37594, Stop: 37878, Start Num: 4
Candidate Starts for Nikao_43:
(Start: 4 @37594 has 17 MA's), (10, 37732),

Gene: Niklas_47 Start: 36163, Stop: 36447, Start Num: 4
Candidate Starts for Niklas_47:
(Start: 4 @36163 has 17 MA's), (7, 36208), (8, 36253), (10, 36301), (12, 36370),

Gene: Nutello_40 Start: 34981, Stop: 35265, Start Num: 4
Candidate Starts for Nutello_40:
(Start: 4 @34981 has 17 MA's), (10, 35119),

Gene: Oscar_49 Start: 36483, Stop: 36737, Start Num: 5
Candidate Starts for Oscar_49:
(1, 36150), (Start: 5 @36483 has 102 MA's), (7, 36522), (10, 36615), (11, 36657),

Gene: Padfoot_45 Start: 35710, Stop: 35976, Start Num: 5
Candidate Starts for Padfoot_45:
(Start: 5 @35710 has 102 MA's), (10, 35839),

Gene: Padpat_46 Start: 35389, Stop: 35655, Start Num: 5
Candidate Starts for Padpat_46:
(Start: 5 @35389 has 102 MA's), (10, 35518),

Gene: Peanam_47 Start: 36121, Stop: 36405, Start Num: 4
Candidate Starts for Peanam_47:
(Start: 4 @36121 has 17 MA's), (7, 36166), (8, 36211), (10, 36259), (12, 36328),

Gene: Peel_45 Start: 35515, Stop: 35781, Start Num: 5
Candidate Starts for Peel_45:
(Start: 5 @35515 has 102 MA's), (10, 35644),

Gene: Piatt_45 Start: 35710, Stop: 35976, Start Num: 5
Candidate Starts for Piatt_45:
(Start: 5 @35710 has 102 MA's), (10, 35839),

Gene: Pisa1_45 Start: 36683, Stop: 36949, Start Num: 5
Candidate Starts for Pisa1_45:
(Start: 5 @36683 has 102 MA's), (10, 36812), (15, 36911),

Gene: Pisa4_39 Start: 32052, Stop: 32318, Start Num: 5
Candidate Starts for Pisa4_39:
(Start: 5 @32052 has 102 MA's), (10, 32181), (15, 32280),

Gene: Pokerus_44 Start: 35436, Stop: 35702, Start Num: 5
Candidate Starts for Pokerus_44:
(Start: 5 @35436 has 102 MA's), (10, 35565),

Gene: Prithvi_46 Start: 35579, Stop: 35869, Start Num: 5
Candidate Starts for Prithvi_46:
(Start: 5 @35579 has 102 MA's), (10, 35708),

Gene: QuincyRose_44 Start: 35828, Stop: 36094, Start Num: 5
Candidate Starts for QuincyRose_44:
(Start: 5 @35828 has 102 MA's), (10, 35957),

Gene: Ramen_45 Start: 35400, Stop: 35666, Start Num: 5
Candidate Starts for Ramen_45:
(Start: 5 @35400 has 102 MA's), (10, 35529),

Gene: Rapunzel97_45 Start: 35396, Stop: 35662, Start Num: 5
Candidate Starts for Rapunzel97_45:
(Start: 5 @35396 has 102 MA's), (10, 35525),

Gene: Richo_47 Start: 36102, Stop: 36386, Start Num: 4
Candidate Starts for Richo_47:
(Start: 4 @36102 has 17 MA's), (7, 36147), (8, 36192), (10, 36240), (12, 36309),

Gene: Rosmarinus_45 Start: 35501, Stop: 35767, Start Num: 5
Candidate Starts for Rosmarinus_45:
(Start: 5 @35501 has 102 MA's), (10, 35630),

Gene: SamuelLPlaqson_46 Start: 36292, Stop: 36558, Start Num: 5
Candidate Starts for SamuelLPlaqson_46:
(Start: 5 @36292 has 102 MA's), (10, 36421), (15, 36520),

Gene: Scarlett_49 Start: 36475, Stop: 36729, Start Num: 5
Candidate Starts for Scarlett_49:
(1, 36142), (Start: 5 @36475 has 102 MA's), (7, 36514), (10, 36607),

Gene: SgtBeansprout_40 Start: 34981, Stop: 35265, Start Num: 4
Candidate Starts for SgtBeansprout_40:
(Start: 4 @34981 has 17 MA's), (10, 35119),

Gene: Shaobing_47 Start: 36138, Stop: 36422, Start Num: 4
Candidate Starts for Shaobing_47:
(Start: 4 @36138 has 17 MA's), (7, 36183), (8, 36228), (10, 36276), (12, 36345),

Gene: ShiaSurprise_46 Start: 35710, Stop: 35976, Start Num: 5
Candidate Starts for ShiaSurprise_46:
(Start: 5 @35710 has 102 MA's), (10, 35839),

Gene: Slimphazie_45 Start: 35396, Stop: 35662, Start Num: 5
Candidate Starts for Slimphazie_45:
(Start: 5 @35396 has 102 MA's), (10, 35525),

Gene: Spock_45 Start: 35514, Stop: 35780, Start Num: 5
Candidate Starts for Spock_45:
(Start: 5 @35514 has 102 MA's), (10, 35643),

Gene: Stinson_46 Start: 35903, Stop: 36169, Start Num: 5
Candidate Starts for Stinson_46:
(Start: 5 @35903 has 102 MA's), (10, 36032), (15, 36131),

Gene: Strobilo_48 Start: 37514, Stop: 37771, Start Num: 5
Candidate Starts for Strobilo_48:
(Start: 5 @37514 has 102 MA's), (9, 37625), (10, 37643),

Gene: Sulley_45 Start: 35640, Stop: 35906, Start Num: 5
Candidate Starts for Sulley_45:
(Start: 5 @35640 has 102 MA's), (10, 35769),

Gene: TClif_49 Start: 36567, Stop: 36848, Start Num: 4
Candidate Starts for TClif_49:
(Start: 4 @36567 has 17 MA's), (8, 36657), (10, 36705),

Gene: TM4_43 Start: 31897, Stop: 32154, Start Num: 5
Candidate Starts for TM4_43:
(Start: 5 @31897 has 102 MA's), (6, 31909), (10, 32026),

Gene: Tachez_45 Start: 35358, Stop: 35624, Start Num: 5
Candidate Starts for Tachez_45:
(Start: 5 @35358 has 102 MA's), (10, 35487),

Gene: TaiwanKao_47 Start: 35635, Stop: 35925, Start Num: 5
Candidate Starts for TaiwanKao_47:
(Start: 5 @35635 has 102 MA's), (10, 35764),

Gene: TiniBug_46 Start: 36288, Stop: 36554, Start Num: 5
Candidate Starts for TiniBug_46:
(Start: 5 @36288 has 102 MA's), (10, 36417), (15, 36516),

Gene: Tiri_46 Start: 35688, Stop: 35954, Start Num: 5
Candidate Starts for Tiri_46:
(Start: 5 @35688 has 102 MA's), (10, 35817),

Gene: Topper_45 Start: 35513, Stop: 35779, Start Num: 5
Candidate Starts for Topper_45:
(Start: 5 @35513 has 102 MA's), (10, 35642),

Gene: Torres_43 Start: 37595, Stop: 37879, Start Num: 4
Candidate Starts for Torres_43:
(Start: 4 @37595 has 17 MA's), (10, 37733),

Gene: TreyKay_46 Start: 35579, Stop: 35869, Start Num: 5
Candidate Starts for TreyKay_46:
(Start: 5 @35579 has 102 MA's), (10, 35708),

Gene: TruffulaTree_45 Start: 35392, Stop: 35658, Start Num: 5
Candidate Starts for TruffulaTree_45:
(Start: 5 @35392 has 102 MA's), (10, 35521),

Gene: Twitch_45 Start: 35515, Stop: 35781, Start Num: 5

Candidate Starts for Twitch_45:
(Start: 5 @35515 has 102 MA's), (10, 35644),

Gene: Urkel_46 Start: 36292, Stop: 36558, Start Num: 5
Candidate Starts for Urkel_46:
(Start: 5 @36292 has 102 MA's), (10, 36421), (15, 36520),

Gene: Validus_49 Start: 36187, Stop: 36471, Start Num: 4
Candidate Starts for Validus_49:
(Start: 4 @36187 has 17 MA's), (8, 36277), (10, 36325),

Gene: Veliki_45 Start: 35432, Stop: 35698, Start Num: 5
Candidate Starts for Veliki_45:
(Start: 5 @35432 has 102 MA's), (10, 35561),

Gene: YoureAdopted_44 Start: 35597, Stop: 35863, Start Num: 5
Candidate Starts for YoureAdopted_44:
(Start: 5 @35597 has 102 MA's), (10, 35726),

Gene: Yunkel11_47 Start: 35179, Stop: 35484, Start Num: 3
Candidate Starts for Yunkel11_47:
(Start: 3 @35179 has 3 MA's), (8, 35290), (10, 35338), (11, 35380),

Gene: Zabiza_40 Start: 31703, Stop: 31969, Start Num: 5
Candidate Starts for Zabiza_40:
(Start: 5 @31703 has 102 MA's), (10, 31832),

Gene: Zavala_46 Start: 35674, Stop: 35940, Start Num: 5
Candidate Starts for Zavala_46:
(Start: 5 @35674 has 102 MA's), (10, 35803),

Gene: ZoeJ_47 Start: 36989, Stop: 37246, Start Num: 5
Candidate Starts for ZoeJ_47:
(Start: 5 @36989 has 102 MA's), (10, 37118),