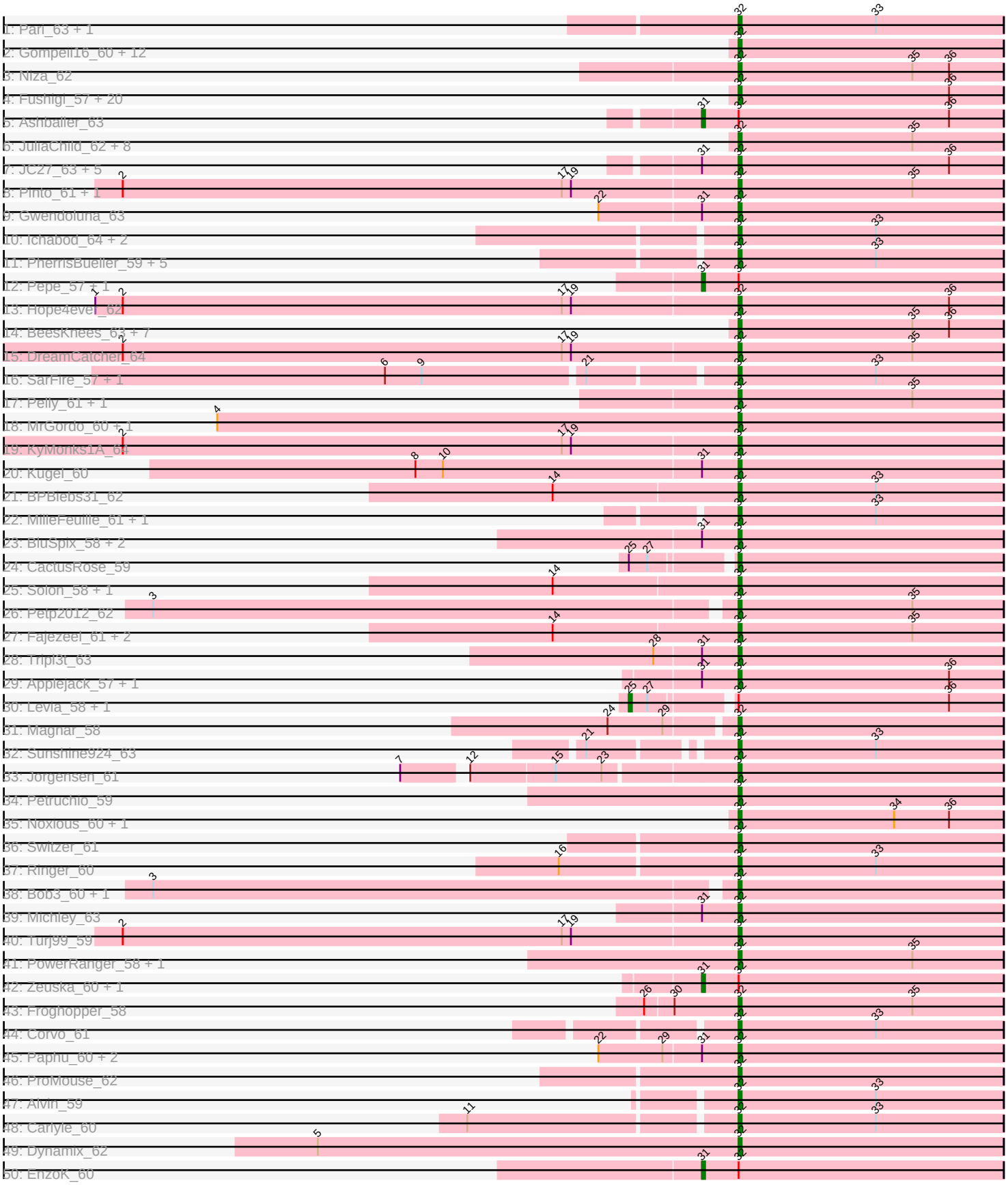
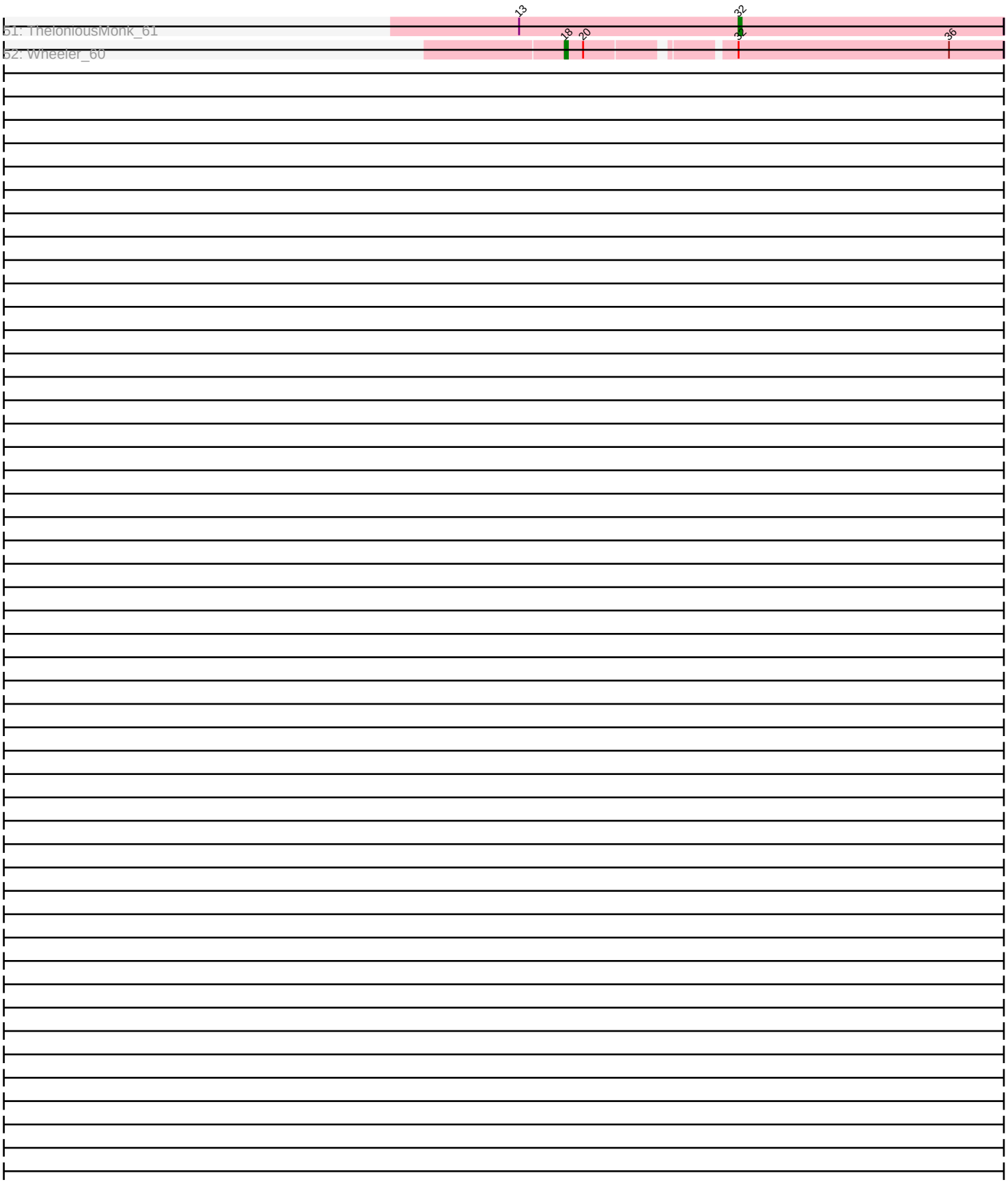
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1: Pari_63 + 1
2: Gompeii16_60 + 12
3: Niza_62
4: Fushigi_57 + 20
5: Ashballer_63
6: JuliaChild_62 + 8
7: JC27_63 + 5
8: Pinto_61 + 1
9: Gwendoluna_63
10: Ichabod_64 + 2
11: PherrisBueller_59 + 5
12: Pepe_57 + 1
13: Hope4ever_62
14: BeesKnees_63 + 7
15: DreamCatcher_64
16: SarFire_57 + 1
17: Pelly_61 + 1
18: MrGordo_60 + 1
19: KyMonks1A_64
20: Kugel_60
21: BPBlebs31_62
22: MilleFeuille_61 + 1
23: BluSpix_58 + 2
24: CactusRose_59
25: Solon_58 + 1
26: Petp2012_62
27: Fajezeel_61 + 2
28: Tripl3t_63
29: Applejack_57 + 1
30: Levia_58 + 1
31: Magnar_58
32: Sunshine924_63
33: Jorgensen_61
34: Petruchio_59
35: Noxious_60 + 1
36: Switzer_61
37: Ringer_60
38: Bob3_60 + 1
39: Michley_63
40: Turj99_59
41: PowerRanger_58 + 1
42: Zeuska_60 + 1
43: Froghopper_58
44: Corvo_61
45: Paphu_60 + 2
46: ProMouse_62
47: Alvin_59
48: Carlyle_60
49: Dynamix_62
50: EnzoK_60

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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 347379 Report

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

Pham number 347379 has 131 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Pari_63, Squee_61
• Track 2 : Gompeii16_60, Bircsak_60, Buttons_58, Nhonho_59, Crispicous1_58, Papez_63, Snazzy_59, Edtherson_60, KSSJEB_61, Ruotula_63, JackSparrow_63, Traft412_63, Mryolo_57
• Track 3 : Niza_62
• Track 4 : Fushigi_57, Licorice_62, Zephyr_62, Abrogate_600, Killigrew_60, Marcell_57, Sibs6_63, Kanely_62, PhrostyMug_61, Trouble_62, PattyP_63, Altman_63, Briton15_65, Pippin_61, Watermelon_61, Marchy_55, Aeneas_64, Ciao_59, Seabiscuit_64, McGuire_62, HanShotFirst_62
• Track 5 : Ashballer_63
• Track 6 : JuliaChild_62, Sagefire_63, Swole_62, GrecoEtereo_60, GMonster_58, QTRlifeCrisis_61, Tote_57, RidgeCB_60, Doom_59
• Track 7 : JC27_63, Forsytheast_59, Moose_59, SwissCheese_61, Bruns_59, Seanderson_60
• Track 8 : Pinto_61, Rufus_62
• Track 9 : Gwendoluna_63
• Track 10 : Ichabod_64, HermioneGrange_62, MPlant7149_60
• Track 11 : PherrisBueller_59, GageAP_61, Dreamboat_61, Graduation_64, Scowl_61, Makemake_62
• Track 12 : Pepe_57, SkiPole_65
• Track 13 : Hope4ever_62
• Track 14 : BeesKnees_63, PacerPaul_60, Zeeculate_58, Marsha_60, Francis47_59, ConceptII_63, Nerujay_63, Gandalf20_63
• Track 15 : DreamCatcher_64
• Track 16 : SarFire_57, Thor_57
• Track 17 : Pelly_61, Dexes_60
• Track 18 : MrGordo_60, Big3_59
• Track 19 : KyMonks1A_64
• Track 20 : Kugel_60
• Track 21 : BPBiebs31_62
• Track 22 : MilleFeuille_61, Paraselene_58
• Track 23 : BluSpix_58, Eyeball_62, IgnatiusPatJac_60
• Track 24 : CactusRose_59
• Track 25 : Solon_58, Lesedi_56
• Track 26 : Petp2012_62
• Track 27 : Fajezeel_61, Acme_62, Greg_61
• Track 28 : Tripl3t_63

• Track 29 : Applejack_57, BarrowTuph_61
• Track 30 : Levia_58, PhineBark_60
• Track 31 : Magnar_58
• Track 32 : Sunshine924_63
• Track 33 : Jorgensen_61
• Track 34 : Petruchio_59
• Track 35 : Noxious_60, KikiBouba_60
• Track 36 : Switzer_61
• Track 37 : Ringer_60
• Track 38 : Bob3_60, Barriga_62
• Track 39 : Michley_63
• Track 40 : Turj99_59
• Track 41 : PowerRanger_58, Euphoria_58
• Track 42 : Zeuska_60, Teodoridan_58
• Track 43 : Froghopper_58
• Track 44 : Corvo_61
• Track 45 : Paphu_60, Tasp14_64, Parliament_62
• Track 46 : ProMouse_62
• Track 47 : Alvin_59
• Track 48 : Carlyle_60
• Track 49 : Dynamix_62
• Track 50 : EnzoK_60
• Track 51 : TheloniousMonk_61
• Track 52 : Wheeler_60

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

The start number called the most often in the published annotations is 32, it was called in 122 of the 130 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abrogate_600, Acme_62, Aeneas_64, Altman_63, Alvin_59, Applejack_57, BPBiebs31_62, Barriga_62, BarrowTuph_61, BeesKnees_63, Big3_59, Bircsak_60, BluSpix_58, Bob3_60, Briton15_65, Bruns_59, Buttons_58, CactusRose_59, Carlyle_60, Ciao_59, ConceptII_63, Corvo_61, Crispicous1_58, Dexes_60, Doom_59, DreamCatcher_64, Dreamboat_61, Dynamix_62, Edtherson_60, Euphoria_58, Eyeball_62, Fajezeel_61, Forsytheast_59, Francis47_59, Froghopper_58, Fushigi_57, GMonster_58, GageAP_61, Gandalf20_63, Gompeii16_60, Graduation_64, GrecoEtereo_60, Greg_61, Gwendoluna_63, HanShotFirst_62, HermioneGrange_62, Hope4ever_62, Ichabod_64, IgnatiusPatJac_60, JC27_63, JackSparrow_63, Jorgensen_61, JuliaChild_62, KSSJEB_61, Kanely_62, KikiBouba_60, Killigrew_60, Kugel_60, KyMonks1A_64, Lesedi_56, Licorice_62, MPlant7149_60, Magnar_58, Makemake_62, Marcell_57, Marchy_55, Marsha_60, McGuire_62, Michley_63, MilleFeuille_61, Moose_59, MrGordo_60, Mryolo_57, Nerujay_63, Nhonho_59, Niza_62, Noxious_60, PacerPaul_60, Papez_63, Paphu_60, Paraselene_58, Pari_63, Parliament_62, PattyP_63, Pelly_61, Petp2012_62, Petruchio_59, PherrisBueller_59, PhrostyMug_61, Pinto_61, Pippin_61, PowerRanger_58, ProMouse_62, QTRlifeCrisis_61, RidgeCB_60, Ringer_60, Rufus_62, Ruotula_63, Sagefire_63, SarFire_57, Scowl_61, Seabiscuit_64, Seanderson_60, Sibs6_63, Snazzy_59,

Solon_58, Squee_61, Sunshine924_63, SwissCheese_61, Switzer_61, Swole_62, Tasp14_64, TheloniousMonk_61, Thor_57, Tote_57, Traft412_63, Tripl3t_63, Trouble_62, Turj99_59, Watermelon_61, Zeeculate_58, Zephyr_62,

Genes that have the "Most Annotated" start but do not call it:
• Ashballer_63, EnzoK_60, Levia_58, Pepe_57, PhineBark_60, SkiPole_65, Teodoridan_58, Wheeler_60, Zeuska_60,

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

Summary by start number:

Start 18:
• Found in 1 of 131 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 130
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Wheeler_60 (A1),

Start 25:
• Found in 3 of 131 (2.3%) of genes in pham
• Manual Annotations of this start: 2 of 130
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Levia_58 (A1), PhineBark_60 (A1),

Start 31:
• Found in 24 of 131 (18.3%) of genes in pham
• Manual Annotations of this start: 5 of 130
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Ashballer_63 (A1), EnzoK_60 (A1), Pepe_57 (A1), SkiPole_65 (A1), Teodoridan_58 (A1), Zeuska_60 (A1),

Start 32:
• Found in 131 of 131 (100.0%) of genes in pham
• Manual Annotations of this start: 122 of 130
• Called 93.1% of time when present
• Phage (with cluster) where this start called: Abrogate_600 (A1), Acme_62 (A1), Aeneas_64 (A1), Altman_63 (A1), Alvin_59 (A1), Applejack_57 (A1), BPBiebs31_62 (A1), Barriga_62 (A1), BarrowTuph_61 (A1), BeesKnees_63 (A1), Big3_59 (A1), Bircsak_60 (A1), BluSpix_58 (A1), Bob3_60 (A1), Briton15_65 (A1), Bruns_59 (A1), Buttons_58 (A1), CactusRose_59 (A1), Carlyle_60 (A1), Ciao_59 (A1), ConceptII_63 (A1), Corvo_61 (A1), Crispicous1_58 (A1), Dexes_60 (A1), Doom_59 (A1), DreamCatcher_64 (A1), Dreamboat_61 (A1), Dynamix_62 (A1), Edtherson_60 (A1), Euphoria_58 (A1), Eyeball_62 (A1), Fajezeel_61 (A1), Forsytheast_59 (A1), Francis47_59 (A1), Froghopper_58 (A1), Fushigi_57 (A1), GMonster_58 (A1), GageAP_61 (A1), Gandalf20_63 (A1), Gompeii16_60 (A1), Graduation_64 (A1), GrecoEtereo_60 (A1), Greg_61 (A1), Gwendoluna_63 (A1), HanShotFirst_62 (A1), HermioneGrange_62 (A1), Hope4ever_62 (A1), Ichabod_64 (A1), IgnatiusPatJac_60 (A1), JC27_63 (A1), JackSparrow_63 (A1), Jorgensen_61 (A1), JuliaChild_62 (A1), KSSJEB_61 (A1), Kanely_62 (A1), KikiBouba_60 (A1), Killigrew_60 (A1), Kugel_60 (A1), KyMonks1A_64 (A1), Lesedi_56 (A1), Licorice_62 (A1), MPlant7149_60 (A1), Magnar_58 (A1), Makemake_62 (A1), Marcell_57 (A1), Marchy_55 (A1), Marsha_60 (A1), McGuire_62 (A1), Michley_63 (A1), MilleFeuille_61 (A1), Moose_59 (A1),

MrGordo_60 (A1), Mryolo_57 (A1), Nerujay_63 (A1), Nhonho_59 (A1), Niza_62 (A1), Noxious_60 (A1), PacerPaul_60 (A1), Papez_63 (A1), Paphu_60 (A1), Paraselene_58 (A1), Pari_63 (A1), Parliament_62 (A1), PattyP_63 (A1), Pelly_61 (A1), Petp2012_62 (A1), Petruchio_59 (A1), PherrisBueller_59 (A1), PhrostyMug_61 (A1), Pinto_61 (A1), Pippin_61 (A1), PowerRanger_58 (A1), ProMouse_62 (A1), QTRlifeCrisis_61 (A1), RidgeCB_60 (A1), Ringer_60 (A1), Rufus_62 (A1), Ruotula_63 (A1), Sagefire_63 (A1), SarFire_57 (A1), Scowl_61 (A1), Seabiscuit_64 (A1), Seanderson_60 (A1), Sibs6_63 (A1), Snazzy_59 (A1), Solon_58 (A1), Squee_61 (A1), Sunshine924_63 (A1), SwissCheese_61 (A1), Switzer_61 (A1), Swole_62 (A1), Tasp14_64 (A1), TheloniousMonk_61 (A1), Thor_57 (A1), Tote_57 (A1), Traft412_63 (A1), Tripl3t_63 (A1), Trouble_62 (A1), Turj99_59 (A1), Watermelon_61 (A1), Zeeculate_58 (A1), Zephyr_62 (A1),

Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:
•Start number 18 was manually annotated 1 time for cluster A1.
•Start number 25 was manually annotated 2 times for cluster A1.
•Start number 31 was manually annotated 5 times for cluster A1.
•Start number 32 was manually annotated 122 times for cluster A1.

Gene Information:

Gene: Abrogate_600 Start: 42412, Stop: 42326, Start Num: 32
Candidate Starts for Abrogate_600:
(Start: 32 @42412 has 122 MA's), (36, 42343),

Gene: Acme_62 Start: 40967, Stop: 40881, Start Num: 32
Candidate Starts for Acme_62:
(14, 41027), (Start: 32 @40967 has 122 MA's), (35, 40910),

Gene: Aeneas_64 Start: 42831, Stop: 42745, Start Num: 32
Candidate Starts for Aeneas_64:
(Start: 32 @42831 has 122 MA's), (36, 42762),

Gene: Altman_63 Start: 41128, Stop: 41042, Start Num: 32
Candidate Starts for Altman_63:
(Start: 32 @41128 has 122 MA's), (36, 41059),

Gene: Alvin_59 Start: 40335, Stop: 40249, Start Num: 32
Candidate Starts for Alvin_59:
(Start: 32 @40335 has 122 MA's), (33, 40290),

Gene: Applejack_57 Start: 38781, Stop: 38695, Start Num: 32
Candidate Starts for Applejack_57:
(Start: 31 @38793 has 5 MA's), (Start: 32 @38781 has 122 MA's), (36, 38712),

Gene: Ashballer_63 Start: 41368, Stop: 41270, Start Num: 31
Candidate Starts for Ashballer_63:

(Start: 31 @41368 has 5 MA's), (Start: 32 @41356 has 122 MA's), (36, 41287),

Gene: BPBiebs31_62 Start: 41315, Stop: 41229, Start Num: 32
Candidate Starts for BPBiebs31_62:
(14, 41375), (Start: 32 @41315 has 122 MA's), (33, 41270),

Gene: Barriga_62 Start: 39540, Stop: 39454, Start Num: 32
Candidate Starts for Barriga_62:
(3, 39726), (Start: 32 @39540 has 122 MA's),

Gene: BarrowTuph_61 Start: 40453, Stop: 40367, Start Num: 32
Candidate Starts for BarrowTuph_61:
(Start: 31 @40465 has 5 MA's), (Start: 32 @40453 has 122 MA's), (36, 40384),

Gene: BeesKnees_63 Start: 40393, Stop: 40307, Start Num: 32
Candidate Starts for BeesKnees_63:
(Start: 32 @40393 has 122 MA's), (35, 40336), (36, 40324),

Gene: Big3_59 Start: 41093, Stop: 41007, Start Num: 32
Candidate Starts for Big3_59:
(4, 41264), (Start: 32 @41093 has 122 MA's),

Gene: Bircsak_60 Start: 42546, Stop: 42460, Start Num: 32
Candidate Starts for Bircsak_60:
(Start: 32 @42546 has 122 MA's),

Gene: BluSpix_58 Start: 36376, Stop: 36290, Start Num: 32
Candidate Starts for BluSpix_58:
(Start: 31 @36388 has 5 MA's), (Start: 32 @36376 has 122 MA's),

Gene: Bob3_60 Start: 40364, Stop: 40278, Start Num: 32
Candidate Starts for Bob3_60:
(3, 40550), (Start: 32 @40364 has 122 MA's),

Gene: Briton15_65 Start: 42585, Stop: 42499, Start Num: 32
Candidate Starts for Briton15_65:
(Start: 32 @42585 has 122 MA's), (36, 42516),

Gene: Bruns_59 Start: 39510, Stop: 39424, Start Num: 32
Candidate Starts for Bruns_59:
(Start: 31 @39522 has 5 MA's), (Start: 32 @39510 has 122 MA's), (36, 39441),

Gene: Buttons_58 Start: 38459, Stop: 38373, Start Num: 32
Candidate Starts for Buttons_58:
(Start: 32 @38459 has 122 MA's),

Gene: CactusRose_59 Start: 40649, Stop: 40563, Start Num: 32
Candidate Starts for CactusRose_59:
(Start: 25 @40679 has 2 MA's), (27, 40673), (Start: 32 @40649 has 122 MA's),

Gene: Carlyle_60 Start: 39245, Stop: 39159, Start Num: 32
Candidate Starts for Carlyle_60:
(11, 39329), (Start: 32 @39245 has 122 MA's), (33, 39200),

Gene: Ciao_59 Start: 39917, Stop: 39831, Start Num: 32
Candidate Starts for Ciao_59:
(Start: 32 @39917 has 122 MA's), (36, 39848),

Gene: ConceptII_63 Start: 41983, Stop: 41897, Start Num: 32
Candidate Starts for ConceptII_63:
(Start: 32 @41983 has 122 MA's), (35, 41926), (36, 41914),

Gene: Corvo_61 Start: 41462, Stop: 41376, Start Num: 32
Candidate Starts for Corvo_61:
(Start: 32 @41462 has 122 MA's), (33, 41417),

Gene: Crispicous1_58 Start: 39702, Stop: 39616, Start Num: 32
Candidate Starts for Crispicous1_58:
(Start: 32 @39702 has 122 MA's),

Gene: Dexes_60 Start: 40821, Stop: 40735, Start Num: 32
Candidate Starts for Dexes_60:
(Start: 32 @40821 has 122 MA's), (35, 40764),

Gene: Doom_59 Start: 41395, Stop: 41309, Start Num: 32
Candidate Starts for Doom_59:
(Start: 32 @41395 has 122 MA's), (35, 41338),

Gene: DreamCatcher_64 Start: 41458, Stop: 41372, Start Num: 32
Candidate Starts for DreamCatcher_64:
(2, 41659), (17, 41515), (19, 41512), (Start: 32 @41458 has 122 MA's), (35, 41401),

Gene: Dreamboat_61 Start: 39688, Stop: 39602, Start Num: 32
Candidate Starts for Dreamboat_61:
(Start: 32 @39688 has 122 MA's), (33, 39643),

Gene: Dynamix_62 Start: 40205, Stop: 40119, Start Num: 32
Candidate Starts for Dynamix_62:
(5, 40343), (Start: 32 @40205 has 122 MA's),

Gene: Edtherson_60 Start: 41389, Stop: 41303, Start Num: 32
Candidate Starts for Edtherson_60:
(Start: 32 @41389 has 122 MA's),

Gene: EnzoK_60 Start: 38092, Stop: 37994, Start Num: 31
Candidate Starts for EnzoK_60:
(Start: 31 @38092 has 5 MA's), (Start: 32 @38080 has 122 MA's),

Gene: Euphoria_58 Start: 40112, Stop: 40026, Start Num: 32
Candidate Starts for Euphoria_58:
(Start: 32 @40112 has 122 MA's), (35, 40055),

Gene: Eyeball_62 Start: 41559, Stop: 41473, Start Num: 32
Candidate Starts for Eyeball_62:
(Start: 31 @41571 has 5 MA's), (Start: 32 @41559 has 122 MA's),

Gene: Fajezeel_61 Start: 40257, Stop: 40171, Start Num: 32
Candidate Starts for Fajezeel_61:
(14, 40317), (Start: 32 @40257 has 122 MA's), (35, 40200),

Gene: Forsytheast_59 Start: 39678, Stop: 39592, Start Num: 32
Candidate Starts for Forsytheast_59:
(Start: 31 @39690 has 5 MA's), (Start: 32 @39678 has 122 MA's), (36, 39609),

Gene: Francis47_59 Start: 41463, Stop: 41377, Start Num: 32
Candidate Starts for Francis47_59:
(Start: 32 @41463 has 122 MA's), (35, 41406), (36, 41394),

Gene: Froghopper_58 Start: 39483, Stop: 39397, Start Num: 32
Candidate Starts for Froghopper_58:
(26, 39513), (30, 39504), (Start: 32 @39483 has 122 MA's), (35, 39426),

Gene: Fushigi_57 Start: 38939, Stop: 38853, Start Num: 32
Candidate Starts for Fushigi_57:
(Start: 32 @38939 has 122 MA's), (36, 38870),

Gene: GMonster_58 Start: 40388, Stop: 40302, Start Num: 32
Candidate Starts for GMonster_58:
(Start: 32 @40388 has 122 MA's), (35, 40331),

Gene: GageAP_61 Start: 41027, Stop: 40941, Start Num: 32
Candidate Starts for GageAP_61:
(Start: 32 @41027 has 122 MA's), (33, 40982),

Gene: Gandalf20_63 Start: 42121, Stop: 42035, Start Num: 32
Candidate Starts for Gandalf20_63:
(Start: 32 @42121 has 122 MA's), (35, 42064), (36, 42052),

Gene: Gompeii16_60 Start: 42547, Stop: 42461, Start Num: 32
Candidate Starts for Gompeii16_60:
(Start: 32 @42547 has 122 MA's),

Gene: Graduation_64 Start: 41860, Stop: 41774, Start Num: 32
Candidate Starts for Graduation_64:
(Start: 32 @41860 has 122 MA's), (33, 41815),

Gene: GrecoEtereo_60 Start: 40025, Stop: 39939, Start Num: 32
Candidate Starts for GrecoEtereo_60:
(Start: 32 @40025 has 122 MA's), (35, 39968),

Gene: Greg_61 Start: 40257, Stop: 40171, Start Num: 32
Candidate Starts for Greg_61:
(14, 40317), (Start: 32 @40257 has 122 MA's), (35, 40200),

Gene: Gwendoluna_63 Start: 42377, Stop: 42291, Start Num: 32
Candidate Starts for Gwendoluna_63:
(22, 42422), (Start: 31 @42389 has 5 MA's), (Start: 32 @42377 has 122 MA's),

Gene: HanShotFirst_62 Start: 42534, Stop: 42448, Start Num: 32

Candidate Starts for HanShotFirst_62:
(Start: 32 @42534 has 122 MA's), (36, 42465),

Gene: HermioneGrange_62 Start: 41601, Stop: 41515, Start Num: 32
Candidate Starts for HermioneGrange_62:
(Start: 32 @41601 has 122 MA's), (33, 41556),

Gene: Hope4ever_62 Start: 41007, Stop: 40921, Start Num: 32
Candidate Starts for Hope4ever_62:
(1, 41217), (2, 41208), (17, 41064), (19, 41061), (Start: 32 @41007 has 122 MA's), (36, 40938),

Gene: Ichabod_64 Start: 41728, Stop: 41642, Start Num: 32
Candidate Starts for Ichabod_64:
(Start: 32 @41728 has 122 MA's), (33, 41683),

Gene: IgnatiusPatJac_60 Start: 40321, Stop: 40235, Start Num: 32
Candidate Starts for IgnatiusPatJac_60:
(Start: 31 @40333 has 5 MA's), (Start: 32 @40321 has 122 MA's),

Gene: JC27_63 Start: 41045, Stop: 40959, Start Num: 32
Candidate Starts for JC27_63:
(Start: 31 @41057 has 5 MA's), (Start: 32 @41045 has 122 MA's), (36, 40976),

Gene: JackSparrow_63 Start: 40917, Stop: 40831, Start Num: 32
Candidate Starts for JackSparrow_63:
(Start: 32 @40917 has 122 MA's),

Gene: Jorgensen_61 Start: 40326, Stop: 40240, Start Num: 32
Candidate Starts for Jorgensen_61:
(7, 40416), (12, 40398), (15, 40371), (23, 40356), (Start: 32 @40326 has 122 MA's),

Gene: JuliaChild_62 Start: 41341, Stop: 41255, Start Num: 32
Candidate Starts for JuliaChild_62:
(Start: 32 @41341 has 122 MA's), (35, 41284),

Gene: KSSJEB_61 Start: 40326, Stop: 40240, Start Num: 32
Candidate Starts for KSSJEB_61:
(Start: 32 @40326 has 122 MA's),

Gene: Kanely_62 Start: 40905, Stop: 40819, Start Num: 32
Candidate Starts for Kanely_62:
(Start: 32 @40905 has 122 MA's), (36, 40836),

Gene: KikiBouba_60 Start: 40507, Stop: 40421, Start Num: 32
Candidate Starts for KikiBouba_60:
(Start: 32 @40507 has 122 MA's), (34, 40456), (36, 40438),

Gene: Killigrew_60 Start: 41100, Stop: 41014, Start Num: 32
Candidate Starts for Killigrew_60:
(Start: 32 @41100 has 122 MA's), (36, 41031),

Gene: Kugel_60 Start: 41153, Stop: 41067, Start Num: 32
Candidate Starts for Kugel_60:

(8, 41258), (10, 41249), (Start: 31 @41165 has 5 MA's), (Start: 32 @41153 has 122 MA's),

Gene: KyMonks1A_64 Start: 40904, Stop: 40818, Start Num: 32
Candidate Starts for KyMonks1A_64:
(2, 41105), (17, 40961), (19, 40958), (Start: 32 @40904 has 122 MA's),

Gene: Lesedi_56 Start: 38890, Stop: 38804, Start Num: 32
Candidate Starts for Lesedi_56:
(14, 38950), (Start: 32 @38890 has 122 MA's),

Gene: Levia_58 Start: 40034, Stop: 39918, Start Num: 25
Candidate Starts for Levia_58:
(Start: 25 @40034 has 2 MA's), (27, 40028), (Start: 32 @40004 has 122 MA's), (36, 39935),

Gene: Licorice_62 Start: 42392, Stop: 42306, Start Num: 32
Candidate Starts for Licorice_62:
(Start: 32 @42392 has 122 MA's), (36, 42323),

Gene: MPlant7149_60 Start: 39489, Stop: 39403, Start Num: 32
Candidate Starts for MPlant7149_60:
(Start: 32 @39489 has 122 MA's), (33, 39444),

Gene: Magnar_58 Start: 40505, Stop: 40419, Start Num: 32
Candidate Starts for Magnar_58:
(24, 40544), (29, 40526), (Start: 32 @40505 has 122 MA's),

Gene: Makemake_62 Start: 41962, Stop: 41876, Start Num: 32
Candidate Starts for Makemake_62:
(Start: 32 @41962 has 122 MA's), (33, 41917),

Gene: Marcell_57 Start: 39512, Stop: 39426, Start Num: 32
Candidate Starts for Marcell_57:
(Start: 32 @39512 has 122 MA's), (36, 39443),

Gene: Marchy_55 Start: 37600, Stop: 37514, Start Num: 32
Candidate Starts for Marchy_55:
(Start: 32 @37600 has 122 MA's), (36, 37531),

Gene: Marsha_60 Start: 41987, Stop: 41901, Start Num: 32
Candidate Starts for Marsha_60:
(Start: 32 @41987 has 122 MA's), (35, 41930), (36, 41918),

Gene: McGuire_62 Start: 40165, Stop: 40079, Start Num: 32
Candidate Starts for McGuire_62:
(Start: 32 @40165 has 122 MA's), (36, 40096),

Gene: Michley_63 Start: 41093, Stop: 41007, Start Num: 32
Candidate Starts for Michley_63:
(Start: 31 @41105 has 5 MA's), (Start: 32 @41093 has 122 MA's),

Gene: MilleFeuille_61 Start: 40336, Stop: 40250, Start Num: 32
Candidate Starts for MilleFeuille_61:
(Start: 32 @40336 has 122 MA's), (33, 40291),

Gene: Moose_59 Start: 39678, Stop: 39592, Start Num: 32
Candidate Starts for Moose_59:
(Start: 31 @39690 has 5 MA's), (Start: 32 @39678 has 122 MA's), (36, 39609),

Gene: MrGordo_60 Start: 40333, Stop: 40247, Start Num: 32
Candidate Starts for MrGordo_60:
(4, 40504), (Start: 32 @40333 has 122 MA's),

Gene: Mryolo_57 Start: 40375, Stop: 40289, Start Num: 32
Candidate Starts for Mryolo_57:
(Start: 32 @40375 has 122 MA's),

Gene: Nerujay_63 Start: 42121, Stop: 42035, Start Num: 32
Candidate Starts for Nerujay_63:
(Start: 32 @42121 has 122 MA's), (35, 42064), (36, 42052),

Gene: Nhonho_59 Start: 41389, Stop: 41303, Start Num: 32
Candidate Starts for Nhonho_59:
(Start: 32 @41389 has 122 MA's),

Gene: Niza_62 Start: 41988, Stop: 41902, Start Num: 32
Candidate Starts for Niza_62:
(Start: 32 @41988 has 122 MA's), (35, 41931), (36, 41919),

Gene: Noxious_60 Start: 40698, Stop: 40612, Start Num: 32
Candidate Starts for Noxious_60:
(Start: 32 @40698 has 122 MA's), (34, 40647), (36, 40629),

Gene: PacerPaul_60 Start: 40830, Stop: 40744, Start Num: 32
Candidate Starts for PacerPaul_60:
(Start: 32 @40830 has 122 MA's), (35, 40773), (36, 40761),

Gene: Papez_63 Start: 42358, Stop: 42272, Start Num: 32
Candidate Starts for Papez_63:
(Start: 32 @42358 has 122 MA's),

Gene: Paphu_60 Start: 41264, Stop: 41178, Start Num: 32
Candidate Starts for Paphu_60:
(22, 41309), (29, 41288), (Start: 31 @41276 has 5 MA's), (Start: 32 @41264 has 122 MA's),

Gene: Paraselene_58 Start: 40895, Stop: 40809, Start Num: 32
Candidate Starts for Paraselene_58:
(Start: 32 @40895 has 122 MA's), (33, 40850),

Gene: Pari_63 Start: 40356, Stop: 40270, Start Num: 32
Candidate Starts for Pari_63:
(Start: 32 @40356 has 122 MA's), (33, 40311),

Gene: Parliament_62 Start: 43056, Stop: 42970, Start Num: 32
Candidate Starts for Parliament_62:
(22, 43101), (29, 43080), (Start: 31 @43068 has 5 MA's), (Start: 32 @43056 has 122 MA's),

Gene: PattyP_63 Start: 42048, Stop: 41962, Start Num: 32
Candidate Starts for PattyP_63:
(Start: 32 @42048 has 122 MA's), (36, 41979),

Gene: Pelly_61 Start: 42060, Stop: 41974, Start Num: 32
Candidate Starts for Pelly_61:
(Start: 32 @42060 has 122 MA's), (35, 42003),

Gene: Pepe_57 Start: 39121, Stop: 39023, Start Num: 31
Candidate Starts for Pepe_57:
(Start: 31 @39121 has 5 MA's), (Start: 32 @39109 has 122 MA's),

Gene: Petp2012_62 Start: 42556, Stop: 42470, Start Num: 32
Candidate Starts for Petp2012_62:
(3, 42742), (Start: 32 @42556 has 122 MA's), (35, 42499),

Gene: Petruchio_59 Start: 39783, Stop: 39697, Start Num: 32
Candidate Starts for Petruchio_59:
(Start: 32 @39783 has 122 MA's),

Gene: PherrisBueller_59 Start: 39225, Stop: 39139, Start Num: 32
Candidate Starts for PherrisBueller_59:
(Start: 32 @39225 has 122 MA's), (33, 39180),

Gene: PhineBark_60 Start: 41052, Stop: 40936, Start Num: 25
Candidate Starts for PhineBark_60:
(Start: 25 @41052 has 2 MA's), (27, 41046), (Start: 32 @41022 has 122 MA's), (36, 40953),

Gene: PhrostyMug_61 Start: 42378, Stop: 42292, Start Num: 32
Candidate Starts for PhrostyMug_61:
(Start: 32 @42378 has 122 MA's), (36, 42309),

Gene: Pinto_61 Start: 40708, Stop: 40622, Start Num: 32
Candidate Starts for Pinto_61:
(2, 40909), (17, 40765), (19, 40762), (Start: 32 @40708 has 122 MA's), (35, 40651),

Gene: Pippin_61 Start: 40310, Stop: 40224, Start Num: 32
Candidate Starts for Pippin_61:
(Start: 32 @40310 has 122 MA's), (36, 40241),

Gene: PowerRanger_58 Start: 41531, Stop: 41445, Start Num: 32
Candidate Starts for PowerRanger_58:
(Start: 32 @41531 has 122 MA's), (35, 41474),

Gene: ProMouse_62 Start: 40658, Stop: 40572, Start Num: 32
Candidate Starts for ProMouse_62:
(Start: 32 @40658 has 122 MA's),

Gene: QTRlifeCrisis_61 Start: 41246, Stop: 41160, Start Num: 32
Candidate Starts for QTRlifeCrisis_61:
(Start: 32 @41246 has 122 MA's), (35, 41189),

Gene: RidgeCB_60 Start: 40684, Stop: 40598, Start Num: 32

Candidate Starts for RidgeCB_60:
(Start: 32 @40684 has 122 MA's), (35, 40627),

Gene: Ringer_60 Start: 41576, Stop: 41490, Start Num: 32
Candidate Starts for Ringer_60:
(16, 41633), (Start: 32 @41576 has 122 MA's), (33, 41531),

Gene: Rufus_62 Start: 41185, Stop: 41099, Start Num: 32
Candidate Starts for Rufus_62:
(2, 41386), (17, 41242), (19, 41239), (Start: 32 @41185 has 122 MA's), (35, 41128),

Gene: Ruotula_63 Start: 42698, Stop: 42612, Start Num: 32
Candidate Starts for Ruotula_63:
(Start: 32 @42698 has 122 MA's),

Gene: Sagefire_63 Start: 42564, Stop: 42478, Start Num: 32
Candidate Starts for Sagefire_63:
(Start: 32 @42564 has 122 MA's), (35, 42507),

Gene: SarFire_57 Start: 39630, Stop: 39544, Start Num: 32
Candidate Starts for SarFire_57:
(6, 39738), (9, 39726), (21, 39675), (Start: 32 @39630 has 122 MA's), (33, 39585),

Gene: Scowl_61 Start: 40456, Stop: 40370, Start Num: 32
Candidate Starts for Scowl_61:
(Start: 32 @40456 has 122 MA's), (33, 40411),

Gene: Seabiscuit_64 Start: 40427, Stop: 40341, Start Num: 32
Candidate Starts for Seabiscuit_64:
(Start: 32 @40427 has 122 MA's), (36, 40358),

Gene: Seanderson_60 Start: 41890, Stop: 41804, Start Num: 32
Candidate Starts for Seanderson_60:
(Start: 31 @41902 has 5 MA's), (Start: 32 @41890 has 122 MA's), (36, 41821),

Gene: Sibs6_63 Start: 39536, Stop: 39450, Start Num: 32
Candidate Starts for Sibs6_63:
(Start: 32 @39536 has 122 MA's), (36, 39467),

Gene: SkiPole_65 Start: 41165, Stop: 41067, Start Num: 31
Candidate Starts for SkiPole_65:
(Start: 31 @41165 has 5 MA's), (Start: 32 @41153 has 122 MA's),

Gene: Snazzy_59 Start: 39990, Stop: 39904, Start Num: 32
Candidate Starts for Snazzy_59:
(Start: 32 @39990 has 122 MA's),

Gene: Solon_58 Start: 39862, Stop: 39776, Start Num: 32
Candidate Starts for Solon_58:
(14, 39922), (Start: 32 @39862 has 122 MA's),

Gene: Squee_61 Start: 40708, Stop: 40622, Start Num: 32
Candidate Starts for Squee_61:

(Start: 32 @40708 has 122 MA's), (33, 40663),

Gene: Sunshine924_63 Start: 40103, Stop: 40017, Start Num: 32
Candidate Starts for Sunshine924_63:
(21, 40145), (Start: 32 @40103 has 122 MA's), (33, 40058),

Gene: SwissCheese_61 Start: 40178, Stop: 40092, Start Num: 32
Candidate Starts for SwissCheese_61:
(Start: 31 @40190 has 5 MA's), (Start: 32 @40178 has 122 MA's), (36, 40109),

Gene: Switzer_61 Start: 42225, Stop: 42139, Start Num: 32
Candidate Starts for Switzer_61:
(Start: 32 @42225 has 122 MA's),

Gene: Swole_62 Start: 40815, Stop: 40729, Start Num: 32
Candidate Starts for Swole_62:
(Start: 32 @40815 has 122 MA's), (35, 40758),

Gene: Tasp14_64 Start: 42545, Stop: 42459, Start Num: 32
Candidate Starts for Tasp14_64:
(22, 42590), (29, 42569), (Start: 31 @42557 has 5 MA's), (Start: 32 @42545 has 122 MA's),

Gene: Teodoridan_58 Start: 39685, Stop: 39587, Start Num: 31
Candidate Starts for Teodoridan_58:
(Start: 31 @39685 has 5 MA's), (Start: 32 @39673 has 122 MA's),

Gene: TheloniousMonk_61 Start: 42308, Stop: 42222, Start Num: 32
Candidate Starts for TheloniousMonk_61:
(13, 42380), (Start: 32 @42308 has 122 MA's),

Gene: Thor_57 Start: 38988, Stop: 38902, Start Num: 32
Candidate Starts for Thor_57:
(6, 39096), (9, 39084), (21, 39033), (Start: 32 @38988 has 122 MA's), (33, 38943),

Gene: Tote_57 Start: 38082, Stop: 37996, Start Num: 32
Candidate Starts for Tote_57:
(Start: 32 @38082 has 122 MA's), (35, 38025),

Gene: Traft412_63 Start: 41489, Stop: 41403, Start Num: 32
Candidate Starts for Traft412_63:
(Start: 32 @41489 has 122 MA's),

Gene: Tripl3t_63 Start: 43200, Stop: 43114, Start Num: 32
Candidate Starts for Tripl3t_63:
(28, 43227), (Start: 31 @43212 has 5 MA's), (Start: 32 @43200 has 122 MA's),

Gene: Trouble_62 Start: 41402, Stop: 41316, Start Num: 32
Candidate Starts for Trouble_62:
(Start: 32 @41402 has 122 MA's), (36, 41333),

Gene: Turj99_59 Start: 41800, Stop: 41714, Start Num: 32
Candidate Starts for Turj99_59:
(2, 42001), (17, 41857), (19, 41854), (Start: 32 @41800 has 122 MA's),

Gene: Watermelon_61 Start: 40365, Stop: 40279, Start Num: 32
Candidate Starts for Watermelon_61:
(Start: 32 @40365 has 122 MA's), (36, 40296),

Gene: Wheeler_60 Start: 40218, Stop: 40084, Start Num: 18
Candidate Starts for Wheeler_60:
(Start: 18 @40218 has 1 MA's), (20, 40212), (Start: 32 @40170 has 122 MA's), (36, 40101),

Gene: Zeeculate_58 Start: 41115, Stop: 41029, Start Num: 32
Candidate Starts for Zeeculate_58:
(Start: 32 @41115 has 122 MA's), (35, 41058), (36, 41046),

Gene: Zephyr_62 Start: 40532, Stop: 40446, Start Num: 32
Candidate Starts for Zephyr_62:
(Start: 32 @40532 has 122 MA's), (36, 40463),

Gene: Zeuska_60 Start: 41858, Stop: 41760, Start Num: 31
Candidate Starts for Zeuska_60:
(Start: 31 @41858 has 5 MA's), (Start: 32 @41846 has 122 MA's),