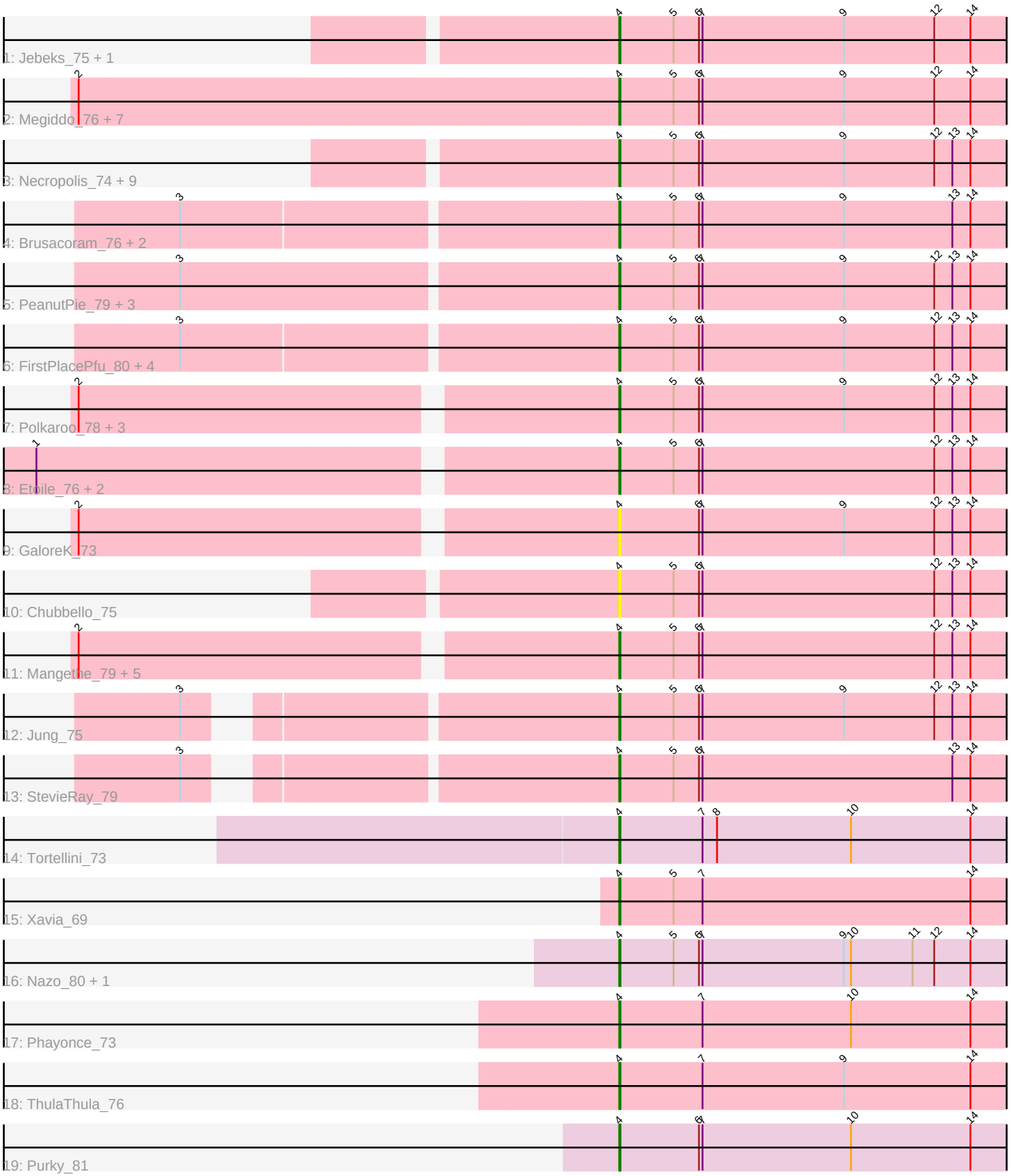
Pham 341028


1: Jebeks_75 + 1
2: Megiddo_76 + 7
3: Necropolis_74 + 9
4: Brusacoram_76 + 2
5: PeanutPie_79 + 3
6: FirstPlacePfu_80 + 4
7: Polkaroo_78 + 3
8: Etoile_76 + 2
9: GaloreK_73
10: Chubbello_75
11: Mangethe_79 + 5
12: Jung_75
13: StevieRay_79
14: Tortellini_73
15: Xavia_69
16: Nazo_80 + 1
17: Phayonce_73
18: ThulaThula_76
19: Purky_81

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 341028 Report

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

Pham number 341028 has 56 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Jebeks_75, Langerak_75
• Track 2 : Megiddo_76, KilKor_77, Phalm_77, Gavriela_75, StressBall_76, CactusJack_77, Willsammy_78, Glaske_76
• Track 3 : Necropolis_74, Fishburne_75, Dynamo_76, Bogie_79, HUHilltop_79, GreaseLightnin_78, Phineas_76, Pygmy_80, Shipwreck_79, Zilizebeth_81
• Track 4 : Brusacoram_76, Thespis_76, Atcoo_76
• Track 5 : PeanutPie_79, Ksquared_78, Bhagsy_80, Bunnies_79
• Track 6 : FirstPlacePfu_80, BronnyJr_71, Camster_78, Malithi_77, Sonah_79
• Track 7 : Polkaroo_78, Bartholomew_75, Donovan_76, Venti_77
• Track 8 : Etoile_76, Kari_78, Vidya_74
• Track 9 : GaloreK_73
• Track 10 : Chubbello_75
• Track 11 : Mangethe_79, Juniormint_72, Techage_77, Phegasus_79, Majeke_79, Arib1_76
• Track 12 : Jung_75
• Track 13 : StevieRay_79
• Track 14 : Tortellini_73
• Track 15 : Xavia_69
• Track 16 : Nazo_80, BigNuz_79
• Track 17 : Phayonce_73
• Track 18 : ThulaThula_76
• Track 19 : Purky_81

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

The start number called the most often in the published annotations is 4, it was called in 51 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arib1_76, Atcoo_76, Bartholomew_75, Bhagsy_80, BigNuz_79, Bogie_79, BronnyJr_71, Brusacoram_76, Bunnies_79, CactusJack_77, Camster_78, Chubbello_75, Donovan_76, Dynamo_76, Etoile_76, FirstPlacePfu_80, Fishburne_75, GaloreK_73, Gavriela_75, Glaske_76, GreaseLightnin_78, HUHilltop_79, Jebeks_75, Jung_75, Juniormint_72, Kari_78, KilKor_77,

Ksquared_78, Langerak_75, Majeke_79, Malithi_77, Mangethe_79, Megiddo_76, Nazo_80, Necropolis_74, PeanutPie_79, Phalm_77, Phayonce_73, Phegasus_79, Phineas_76, Polkaroo_78, Purky_81, Pygmy_80, Shipwreck_79, Sonah_79, StevieRay_79, StressBall_76, Techage_77, Thespis_76, ThulaThula_76, Tortellini_73, Venti_77, Vidya_74, Willsammy_78, Xavia_69, Zilizebeth_81,

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

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

Summary by start number:

Start 4:
• Found in 56 of 56 (100.0%) of genes in pham
• Manual Annotations of this start: 51 of 51
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arib1_76 (P1), Atcoo_76 (P1), Bartholomew_75 (P1), Bhagsy_80 (P1), BigNuz_79 (P4), Bogie_79 (P1), BronnyJr_71 (P1), Brusacoram_76 (P1), Bunnies_79 (P1), CactusJack_77 (P1), Camster_78 (P1), Chubbello_75 (P1), Donovan_76 (P1), Dynamo_76 (P1), Etoile_76 (P1), FirstPlacePfu_80 (P1), Fishburne_75 (P1), GaloreK_73 (P1), Gavriela_75 (P1), Glaske_76 (P1), GreaseLightnin_78 (P1), HUHilltop_79 (P1), Jebeks_75 (P1), Jung_75 (P1), Juniormint_72 (P1), Kari_78 (P1), KilKor_77 (P1), Ksquared_78 (P1), Langerak_75 (P1), Majeke_79 (P1), Malithi_77 (P1), Mangethe_79 (P1), Megiddo_76 (P1), Nazo_80 (P4), Necropolis_74 (P1), PeanutPie_79 (P1), Phalm_77 (P1), Phayonce_73 (P5), Phegasus_79 (P1), Phineas_76 (P1), Polkaroo_78 (P1), Purky_81 (P6), Pygmy_80 (P1), Shipwreck_79 (P1), Sonah_79 (P1), StevieRay_79 (P1), StressBall_76 (P1), Techage_77 (P1), Thespis_76 (P1), ThulaThula_76 (P5), Tortellini_73 (P2), Venti_77 (P1), Vidya_74 (P1), Willsammy_78 (P1), Xavia_69 (P3), Zilizebeth_81 (P1),

Summary by clusters:

There are 6 clusters represented in this pham: P2, P3, P1, P6, P4, P5,

Info for manual annotations of cluster P1:
•Start number 4 was manually annotated 44 times for cluster P1.

Info for manual annotations of cluster P2:
•Start number 4 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:
•Start number 4 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:
•Start number 4 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:
•Start number 4 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:

•Start number 4 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: Arib1_76 Start: 45533, Stop: 45901, Start Num: 4
Candidate Starts for Arib1_76:
(2, 45116), (Start: 4 @45533 has 51 MA's), (5, 45578), (6, 45599), (7, 45602), (12, 45794), (13, 45809), (14, 45824),

Gene: Atcoo_76 Start: 47875, Stop: 48243, Start Num: 4
Candidate Starts for Atcoo_76:
(3, 47527), (Start: 4 @47875 has 51 MA's), (5, 47920), (6, 47941), (7, 47944), (9, 48061), (13, 48151), (14, 48166),

Gene: Bartholomew_75 Start: 45285, Stop: 45653, Start Num: 4
Candidate Starts for Bartholomew_75:
(2, 44868), (Start: 4 @45285 has 51 MA's), (5, 45330), (6, 45351), (7, 45354), (9, 45471), (12, 45546), (13, 45561), (14, 45576),

Gene: Bhagsy_80 Start: 46996, Stop: 47364, Start Num: 4
Candidate Starts for Bhagsy_80:
(3, 46645), (Start: 4 @46996 has 51 MA's), (5, 47041), (6, 47062), (7, 47065), (9, 47182), (12, 47257), (13, 47272), (14, 47287),

Gene: BigNuz_79 Start: 47415, Stop: 47783, Start Num: 4
Candidate Starts for BigNuz_79:
(Start: 4 @47415 has 51 MA's), (5, 47460), (6, 47481), (7, 47484), (9, 47601), (10, 47607), (11, 47658), (12, 47676), (14, 47706),

Gene: Bogie_79 Start: 47440, Stop: 47808, Start Num: 4
Candidate Starts for Bogie_79:
(Start: 4 @47440 has 51 MA's), (5, 47485), (6, 47506), (7, 47509), (9, 47626), (12, 47701), (13, 47716), (14, 47731),

Gene: BronnyJr_71 Start: 45940, Stop: 46308, Start Num: 4
Candidate Starts for BronnyJr_71:
(3, 45592), (Start: 4 @45940 has 51 MA's), (5, 45985), (6, 46006), (7, 46009), (9, 46126), (12, 46201), (13, 46216), (14, 46231),

Gene: Brusacoram_76 Start: 46418, Stop: 46786, Start Num: 4
Candidate Starts for Brusacoram_76:
(3, 46070), (Start: 4 @46418 has 51 MA's), (5, 46463), (6, 46484), (7, 46487), (9, 46604), (13, 46694), (14, 46709),

Gene: Bunnies_79 Start: 47623, Stop: 47991, Start Num: 4
Candidate Starts for Bunnies_79:
(3, 47272), (Start: 4 @47623 has 51 MA's), (5, 47668), (6, 47689), (7, 47692), (9, 47809), (12, 47884), (13, 47899), (14, 47914),

Gene: CactusJack_77 Start: 47022, Stop: 47390, Start Num: 4
Candidate Starts for CactusJack_77:

(2, 46584), (Start: 4 @47022 has 51 MA's), (5, 47067), (6, 47088), (7, 47091), (9, 47208), (12, 47283), (14, 47313),

Gene: Camster_78 Start: 45950, Stop: 46318, Start Num: 4
Candidate Starts for Camster_78:
(3, 45602), (Start: 4 @45950 has 51 MA's), (5, 45995), (6, 46016), (7, 46019), (9, 46136), (12, 46211), (13, 46226), (14, 46241),

Gene: Chubbello_75 Start: 45144, Stop: 45512, Start Num: 4
Candidate Starts for Chubbello_75:
(Start: 4 @45144 has 51 MA's), (5, 45189), (6, 45210), (7, 45213), (12, 45405), (13, 45420), (14, 45435),

Gene: Donovan_76 Start: 45963, Stop: 46331, Start Num: 4
Candidate Starts for Donovan_76:
(2, 45546), (Start: 4 @45963 has 51 MA's), (5, 46008), (6, 46029), (7, 46032), (9, 46149), (12, 46224), (13, 46239), (14, 46254),

Gene: Dynamo_76 Start: 45474, Stop: 45842, Start Num: 4
Candidate Starts for Dynamo_76:
(Start: 4 @45474 has 51 MA's), (5, 45519), (6, 45540), (7, 45543), (9, 45660), (12, 45735), (13, 45750), (14, 45765),

Gene: Etoile_76 Start: 46328, Stop: 46696, Start Num: 4
Candidate Starts for Etoile_76:
(1, 45875), (Start: 4 @46328 has 51 MA's), (5, 46373), (6, 46394), (7, 46397), (12, 46589), (13, 46604), (14, 46619),

Gene: FirstPlacePfu_80 Start: 44481, Stop: 44849, Start Num: 4
Candidate Starts for FirstPlacePfu_80:
(3, 44133), (Start: 4 @44481 has 51 MA's), (5, 44526), (6, 44547), (7, 44550), (9, 44667), (12, 44742), (13, 44757), (14, 44772),

Gene: Fishburne_75 Start: 45910, Stop: 46278, Start Num: 4
Candidate Starts for Fishburne_75:
(Start: 4 @45910 has 51 MA's), (5, 45955), (6, 45976), (7, 45979), (9, 46096), (12, 46171), (13, 46186), (14, 46201),

Gene: GaloreK_73 Start: 45814, Stop: 46182, Start Num: 4
Candidate Starts for GaloreK_73:
(2, 45397), (Start: 4 @45814 has 51 MA's), (6, 45880), (7, 45883), (9, 46000), (12, 46075), (13, 46090), (14, 46105),

Gene: Gavriela_75 Start: 46716, Stop: 47084, Start Num: 4
Candidate Starts for Gavriela_75:
(2, 46278), (Start: 4 @46716 has 51 MA's), (5, 46761), (6, 46782), (7, 46785), (9, 46902), (12, 46977), (14, 47007),

Gene: Glaske_76 Start: 47022, Stop: 47390, Start Num: 4
Candidate Starts for Glaske_76:
(2, 46584), (Start: 4 @47022 has 51 MA's), (5, 47067), (6, 47088), (7, 47091), (9, 47208), (12, 47283), (14, 47313),

Gene: GreaseLightnin_78 Start: 47225, Stop: 47593, Start Num: 4
Candidate Starts for GreaseLightnin_78:
(Start: 4 @47225 has 51 MA's), (5, 47270), (6, 47291), (7, 47294), (9, 47411), (12, 47486), (13, 47501), (14, 47516),

Gene: HUHilltop_79 Start: 45697, Stop: 46065, Start Num: 4
Candidate Starts for HUHilltop_79:
(Start: 4 @45697 has 51 MA's), (5, 45742), (6, 45763), (7, 45766), (9, 45883), (12, 45958), (13, 45973), (14, 45988),

Gene: Jebeks_75 Start: 44381, Stop: 44749, Start Num: 4
Candidate Starts for Jebeks_75:
(Start: 4 @44381 has 51 MA's), (5, 44426), (6, 44447), (7, 44450), (9, 44567), (12, 44642), (14, 44672),

Gene: Jung_75 Start: 45360, Stop: 45728, Start Num: 4
Candidate Starts for Jung_75:
(3, 45048), (Start: 4 @45360 has 51 MA's), (5, 45405), (6, 45426), (7, 45429), (9, 45546), (12, 45621), (13, 45636), (14, 45651),

Gene: Juniormint_72 Start: 44376, Stop: 44744, Start Num: 4
Candidate Starts for Juniormint_72:
(2, 43959), (Start: 4 @44376 has 51 MA's), (5, 44421), (6, 44442), (7, 44445), (12, 44637), (13, 44652), (14, 44667),

Gene: Kari_78 Start: 46324, Stop: 46692, Start Num: 4
Candidate Starts for Kari_78:
(1, 45871), (Start: 4 @46324 has 51 MA's), (5, 46369), (6, 46390), (7, 46393), (12, 46585), (13, 46600), (14, 46615),

Gene: KilKor_77 Start: 47715, Stop: 48083, Start Num: 4
Candidate Starts for KilKor_77:
(2, 47277), (Start: 4 @47715 has 51 MA's), (5, 47760), (6, 47781), (7, 47784), (9, 47901), (12, 47976), (14, 48006),

Gene: Ksquared_78 Start: 47500, Stop: 47868, Start Num: 4
Candidate Starts for Ksquared_78:
(3, 47149), (Start: 4 @47500 has 51 MA's), (5, 47545), (6, 47566), (7, 47569), (9, 47686), (12, 47761), (13, 47776), (14, 47791),

Gene: Langerak_75 Start: 45888, Stop: 46256, Start Num: 4
Candidate Starts for Langerak_75:
(Start: 4 @45888 has 51 MA's), (5, 45933), (6, 45954), (7, 45957), (9, 46074), (12, 46149), (14, 46179),

Gene: Majeke_79 Start: 46412, Stop: 46780, Start Num: 4
Candidate Starts for Majeke_79:
(2, 45995), (Start: 4 @46412 has 51 MA's), (5, 46457), (6, 46478), (7, 46481), (12, 46673), (13, 46688), (14, 46703),

Gene: Malithi_77 Start: 45670, Stop: 46038, Start Num: 4
Candidate Starts for Malithi_77:
(3, 45322), (Start: 4 @45670 has 51 MA's), (5, 45715), (6, 45736), (7, 45739), (9, 45856), (12, 45931), (13, 45946), (14, 45961),

Gene: Mangethe_79 Start: 46412, Stop: 46780, Start Num: 4
Candidate Starts for Mangethe_79:
(2, 45995), (Start: 4 @46412 has 51 MA's), (5, 46457), (6, 46478), (7, 46481), (12, 46673), (13, 46688), (14, 46703),

Gene: Megiddo_76 Start: 47583, Stop: 47951, Start Num: 4
Candidate Starts for Megiddo_76:
(2, 47145), (Start: 4 @47583 has 51 MA's), (5, 47628), (6, 47649), (7, 47652), (9, 47769), (12, 47844), (14, 47874),

Gene: Nazo_80 Start: 47301, Stop: 47669, Start Num: 4
Candidate Starts for Nazo_80:
(Start: 4 @47301 has 51 MA's), (5, 47346), (6, 47367), (7, 47370), (9, 47487), (10, 47493), (11, 47544), (12, 47562), (14, 47592),

Gene: Necropolis_74 Start: 45064, Stop: 45432, Start Num: 4
Candidate Starts for Necropolis_74:
(Start: 4 @45064 has 51 MA's), (5, 45109), (6, 45130), (7, 45133), (9, 45250), (12, 45325), (13, 45340), (14, 45355),

Gene: PeanutPie_79 Start: 47000, Stop: 47368, Start Num: 4
Candidate Starts for PeanutPie_79:
(3, 46649), (Start: 4 @47000 has 51 MA's), (5, 47045), (6, 47066), (7, 47069), (9, 47186), (12, 47261), (13, 47276), (14, 47291),

Gene: Phalm_77 Start: 47013, Stop: 47381, Start Num: 4
Candidate Starts for Phalm_77:
(2, 46575), (Start: 4 @47013 has 51 MA's), (5, 47058), (6, 47079), (7, 47082), (9, 47199), (12, 47274), (14, 47304),

Gene: Phayonce_73 Start: 47394, Stop: 47762, Start Num: 4
Candidate Starts for Phayonce_73:
(Start: 4 @47394 has 51 MA's), (7, 47463), (10, 47586), (14, 47685),

Gene: Phegasus_79 Start: 46379, Stop: 46747, Start Num: 4
Candidate Starts for Phegasus_79:
(2, 45962), (Start: 4 @46379 has 51 MA's), (5, 46424), (6, 46445), (7, 46448), (12, 46640), (13, 46655), (14, 46670),

Gene: Phineas_76 Start: 46031, Stop: 46399, Start Num: 4
Candidate Starts for Phineas_76:
(Start: 4 @46031 has 51 MA's), (5, 46076), (6, 46097), (7, 46100), (9, 46217), (12, 46292), (13, 46307), (14, 46322),

Gene: Polkaroo_78 Start: 47885, Stop: 48253, Start Num: 4
Candidate Starts for Polkaroo_78:
(2, 47468), (Start: 4 @47885 has 51 MA's), (5, 47930), (6, 47951), (7, 47954), (9, 48071), (12, 48146), (13, 48161), (14, 48176),

Gene: Purky_81 Start: 49153, Stop: 49521, Start Num: 4
Candidate Starts for Purky_81:
(Start: 4 @49153 has 51 MA's), (6, 49219), (7, 49222), (10, 49345), (14, 49444),

Gene: Pygmy_80 Start: 47413, Stop: 47781, Start Num: 4
Candidate Starts for Pygmy_80:
(Start: 4 @47413 has 51 MA's), (5, 47458), (6, 47479), (7, 47482), (9, 47599), (12, 47674), (13, 47689), (14, 47704),

Gene: Shipwreck_79 Start: 47471, Stop: 47839, Start Num: 4
Candidate Starts for Shipwreck_79:
(Start: 4 @47471 has 51 MA's), (5, 47516), (6, 47537), (7, 47540), (9, 47657), (12, 47732), (13, 47747), (14, 47762),

Gene: Sonah_79 Start: 45215, Stop: 45583, Start Num: 4
Candidate Starts for Sonah_79:
(3, 44867), (Start: 4 @45215 has 51 MA's), (5, 45260), (6, 45281), (7, 45284), (9, 45401), (12, 45476), (13, 45491), (14, 45506),

Gene: StevieRay_79 Start: 47616, Stop: 47984, Start Num: 4
Candidate Starts for StevieRay_79:
(3, 47304), (Start: 4 @47616 has 51 MA's), (5, 47661), (6, 47682), (7, 47685), (13, 47892), (14, 47907),

Gene: StressBall_76 Start: 46715, Stop: 47083, Start Num: 4
Candidate Starts for StressBall_76:
(2, 46277), (Start: 4 @46715 has 51 MA's), (5, 46760), (6, 46781), (7, 46784), (9, 46901), (12, 46976), (14, 47006),

Gene: Techage_77 Start: 45895, Stop: 46263, Start Num: 4
Candidate Starts for Techage_77:
(2, 45478), (Start: 4 @45895 has 51 MA's), (5, 45940), (6, 45961), (7, 45964), (12, 46156), (13, 46171), (14, 46186),

Gene: Thespis_76 Start: 46418, Stop: 46786, Start Num: 4
Candidate Starts for Thespis_76:
(3, 46070), (Start: 4 @46418 has 51 MA's), (5, 46463), (6, 46484), (7, 46487), (9, 46604), (13, 46694), (14, 46709),

Gene: ThulaThula_76 Start: 48603, Stop: 48971, Start Num: 4
Candidate Starts for ThulaThula_76:
(Start: 4 @48603 has 51 MA's), (7, 48672), (9, 48789), (14, 48894),

Gene: Tortellini_73 Start: 48113, Stop: 48484, Start Num: 4
Candidate Starts for Tortellini_73:
(Start: 4 @48113 has 51 MA's), (7, 48182), (8, 48194), (10, 48305), (14, 48404),

Gene: Venti_77 Start: 45285, Stop: 45653, Start Num: 4
Candidate Starts for Venti_77:
(2, 44868), (Start: 4 @45285 has 51 MA's), (5, 45330), (6, 45351), (7, 45354), (9, 45471), (12, 45546), (13, 45561), (14, 45576),

Gene: Vidya_74 Start: 45303, Stop: 45671, Start Num: 4
Candidate Starts for Vidya_74:
(1, 44850), (Start: 4 @45303 has 51 MA's), (5, 45348), (6, 45369), (7, 45372), (12, 45564), (13, 45579), (14, 45594),

Gene: Willsammy_78 Start: 47199, Stop: 47567, Start Num: 4

Candidate Starts for Willsammy_78:
(2, 46761), (Start: 4 @47199 has 51 MA's), (5, 47244), (6, 47265), (7, 47268), (9, 47385), (12, 47460), (14, 47490),

Gene: Xavia_69 Start: 48623, Stop: 48991, Start Num: 4
Candidate Starts for Xavia_69:
(Start: 4 @48623 has 51 MA's), (5, 48668), (7, 48692), (14, 48914),

Gene: Zilizebeth_81 Start: 46857, Stop: 47225, Start Num: 4
Candidate Starts for Zilizebeth_81:
(Start: 4 @46857 has 51 MA's), (5, 46902), (6, 46923), (7, 46926), (9, 47043), (12, 47118), (13, 47133), (14, 47148),