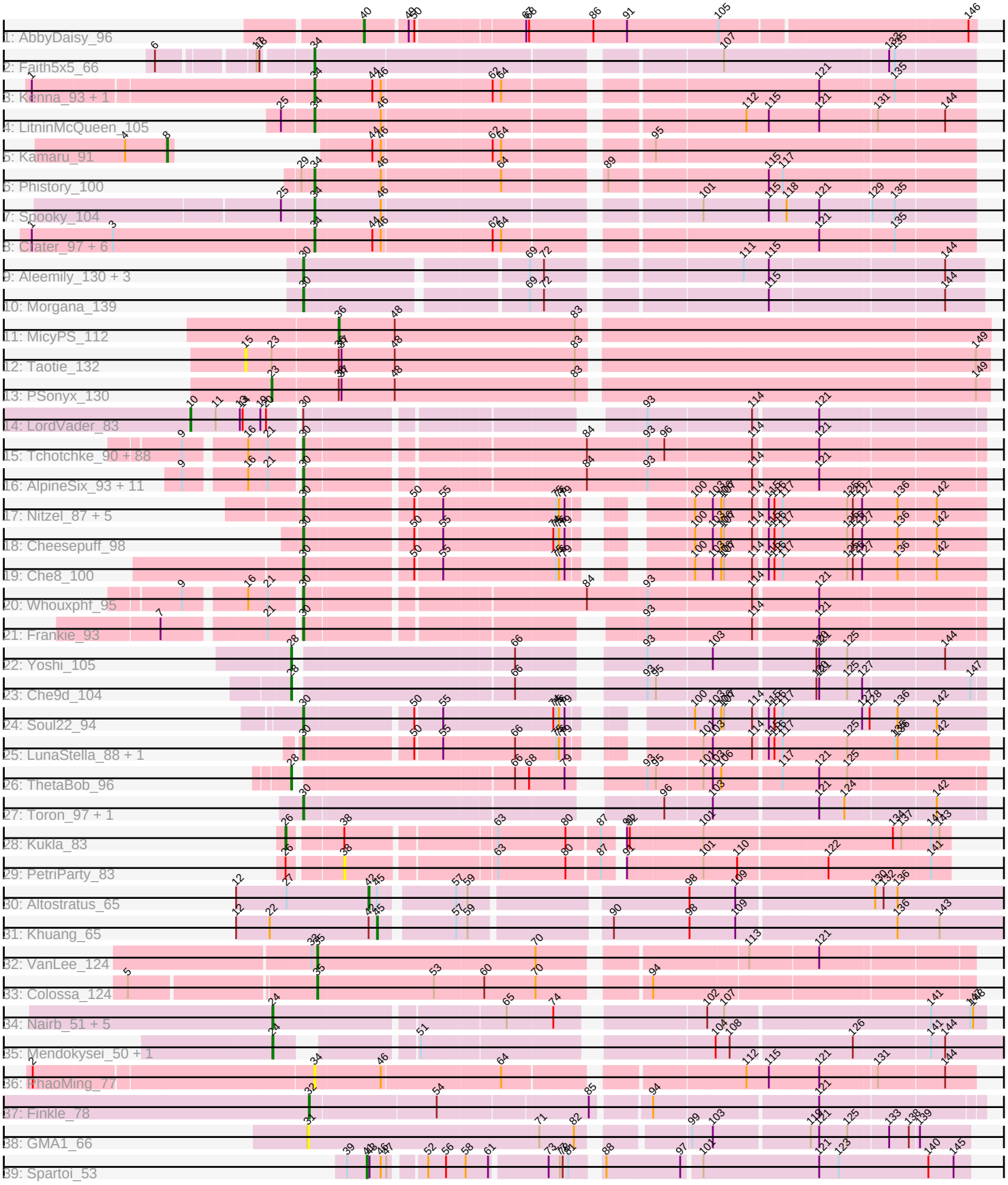
Pham 347332


1: AbbyDaisy_96
2: Faith5x5_66
3: Kenna_93 + 1
4: LitninMcQueen_105
5: Kamaru_91
6: Phistory_100
7: Spooky_104
8: Crater_97 + 6
9: Aleemily_130 + 3
10: Morgana_139
11: MicyPS_112
12: Taotie_132
13: PSonyx_130
14: LordVader_83
15: Tchotchke_90 + 88
16: AlpineSix_93 + 11
17: Nitzel_87 + 5
18: Cheesepuff_98
19: Che8_100
20: Whouxphf_95
21: Frankie_93
22: Yoshi_105
23: Che9d_104
24: Soul22_94
25: LunaStella_88 + 1
26: ThetaBob_96
27: Toron_97 + 1
28: Kukla_83
29: PetriParty_83
30: Altostratus_65
31: Khuang_65
32: VanLee_124
33: Colossa_124
34: Nairb_51 + 5
35: Mendokysei_50 + 1
36: PhaoMing_77
37: Finkle_78
38: GMA1_66
39: Spartoi_53

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 347332 Report

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

Pham number 347332 has 161 members, 11 are drafts.

Phages represented in each track:
• Track 1 : AbbyDaisy_96
• Track 2 : Faith5x5_66
• Track 3 : Kenna_93, Lutum_99
• Track 4 : LitninMcQueen_105
• Track 5 : Kamaru_91
• Track 6 : Phistory_100
• Track 7 : Spooky_104
• Track 8 : Crater_97, Apricot_97, Ecliptus_105, Frickyeah_103, Horus_98, Periwinkle_106, Leroy_98
• Track 9 : Aleemily_130, Cafasso_132, ModicumRichard_132, ObLaDi_131
• Track 10 : Morgana_139
• Track 11 : MicyPS_112
• Track 12 : Taotie_132
• Track 13 : PSonyx_130
• Track 14 : LordVader_83
• Track 15 : Tchotchke_90, Tootsieroll_88, Beanstalk_92, Flathead_97, ShiLan_95, ShowerHandel_92, Veteran_85, Gorge_91, Zizzle_95, Radiance_92, Brocalys_84, James_96, Mandlovu_92, Philus_94, Saal_90, Coco12_93, Guppsters_89, Zerg_93, BlueCrab_95, Mattes_93, Clifton_84, Pacc40_90, MadMen_99, Doug_91, BigPhil_89, Jennelsea_90, Crumble_87, Bubbles123_88, LastJedi_83, Nivrat_92, BobaPhett_94, MilanaBonita_87, EleanorGeorge_99, PatoPoderoso_93, Pippy_90, Corium_91, Cerasum_91, Burwell21_86, Cabrinians_89, Topiatin_95, Jarcob_95, OlympiaSaint_96, Hlubikazi_92, Pollywog_96, SiSi_90, LilMoolah_95, Job42_94, Firehouse51_89, Minnie_86, ByChance_82, Maravista_89, Kingsley_101, Spoonbill_92, DRBy19_95, Sandalphon_92, Strokeseat_92, Lizziana_93, FreddyB_102, DillTech15_100, Yorick_88, Phanphagia_97, TDanisky_103, MulchSalad_92, Melissauren88_83, NormanBulbieJr_90, Whatsapiecost_88, Velveteen_90, Kersh_98, Koella_85, Beakin_85, Chuckly_88, SwagPigglett_94, Sarma624_95, Shauna1_95, Akhila_88, Latretium_95, Martik_90, Demsculpinboyz_107, Sabbb_97, Mozy_99, Mantra_92, Blexus_89, Batiatus_92, KingJulian_100, Sparkdehlily_102, Dante_92, Mutaforma13_95, Brookers_91, Priscilla_93
• Track 16 : AlpineSix_93, Llama_101, Ochi17_100, Seabastian_102, SassyB_85, Nichirin_97, Mwanjiwa_96, OfUltron_102, Modragons_99, PopTart_85, Mova_96, Jinglebell_101
• Track 17 : Nitzel_87, ArcusAngelus_94, Rita_94, MinionDave_92, OwlsT2W_92, Chevrolet_98

• Track 18 : Cheesepuff_98
• Track 19 : Che8_100
• Track 20 : Whouxphf_95
• Track 21 : Frankie_93
• Track 22 : Yoshi_105
• Track 23 : Che9d_104
• Track 24 : Soul22_94
• Track 25 : LunaStella_88, TChen_90
• Track 26 : ThetaBob_96
• Track 27 : Toron_97, MooMoo_87
• Track 28 : Kukla_83
• Track 29 : PetriParty_83
• Track 30 : Altostratus_65
• Track 31 : Khuang_65
• Track 32 : VanLee_124
• Track 33 : Colossa_124
• Track 34 : Nairb_51, Ibrahim_52, Whitty_51, RonRayGun_52, Bernal13_52, ZenTime222_51
• Track 35 : Mendokysei_50, Nette_53
• Track 36 : PhaoMing_77
• Track 37 : Finkle_78
• Track 38 : GMA1_66
• Track 39 : Spartoi_53

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

The start number called the most often in the published annotations is 30, it was called in 116 of the 150 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akhila_88, Aleemily_130, AlpineSix_93, ArcusAngelus_94, Batiatus_92, Beakin_85, Beanstalk_92, BigPhil_89, Blexus_89, BlueCrab_95, BobaPhett_94, Brocalys_84, Brookers_91, Bubbles123_88, Burwell21_86, ByChance_82, Cabrinians_89, Cafasso_132, Cerasum_91, Che8_100, Cheesepuff_98, Chevrolet_98, Chuckly_88, Clifton_84, Coco12_93, Corium_91, Crumble_87, DRBy19_95, Dante_92, Demsculpinboyz_107, DillTech15_100, Doug_91, EleanorGeorge_99, Firehouse51_89, Flathead_97, Frankie_93, FreddyB_102, Gorge_91, Guppsters_89, Hlubikazi_92, James_96, Jarcob_95, Jennelsea_90, Jinglebell_101, Job42_94, Kersh_98, KingJulian_100, Kingsley_101, Koella_85, LastJedi_83, Latretium_95, LilMoolah_95, Lizziana_93, Llama_101, LunaStella_88, MadMen_99, Mandlovu_92, Mantra_92, Maravista_89, Martik_90, Mattes_93, Melissauren88_83, MilanaBonita_87, MinionDave_92, Minnie_86, ModicumRichard_132, Modragons_99, MooMoo_87, Morgana_139, Mova_96, Mozy_99, MulchSalad_92, Mutaforma13_95, Mwanjiwa_96, Nichirin_97, Nitzel_87, Nivrat_92, NormanBulbieJr_90, ObLaDi_131, Ochi17_100, OfUltron_102, OlympiaSaint_96, OwlsT2W_92, Pacc40_90, PatoPoderoso_93, Phanphagia_97, Philus_94, Pippy_90, Pollywog_96, PopTart_85, Priscilla_93, Radiance_92, Rita_94, Saal_90, Sabbb_97, Sandalphon_92, Sarma624_95, SassyB_85, Seabastian_102, Shauna1_95, ShiLan_95, ShowerHandel_92, SiSi_90, Soul22_94, Sparkdehlily_102, Spoonbill_92, Strokeseat_92, SwagPigglett_94, TChen_90, TDanisky_103, Tchotchke_90,

Tootsieroll_88, Topiatin_95, Toron_97, Velveteen_90, Veteran_85, Whatsapiecost_88, Whouxphf_95, Yorick_88, Zerg_93, Zizzle_95,

Genes that have the "Most Annotated" start but do not call it:
• LordVader_83,

Genes that do not have the "Most Annotated" start:
• AbbyDaisy_96, Altostratus_65, Apricot_97, Bernal13_52, Che9d_104, Colossa_124, Crater_97, Ecliptus_105, Faith5x5_66, Finkle_78, Frickyeah_103, GMA1_66, Horus_98, Ibrahim_52, Kamaru_91, Kenna_93, Khuang_65, Kukla_83, Leroy_98, LitninMcQueen_105, Lutum_99, Mendokysei_50, MicyPS_112, Nairb_51, Nette_53, PSonyx_130, Periwinkle_106, PetriParty_83, PhaoMing_77, Phistory_100, RonRayGun_52, Spartoi_53, Spooky_104, Taotie_132, ThetaBob_96, VanLee_124, Whitty_51, Yoshi_105, ZenTime222_51,

Summary by start number:

Start 8:
• Found in 1 of 161 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kamaru_91 (DN1),

Start 10:
• Found in 1 of 161 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LordVader_83 (F),

Start 15:
• Found in 1 of 161 (0.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Taotie_132 (EQ),

Start 23:
• Found in 2 of 161 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 50.0% of time when present
• Phage (with cluster) where this start called: PSonyx_130 (EQ),

Start 24:
• Found in 8 of 161 (5.0%) of genes in pham
• Manual Annotations of this start: 7 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bernal13_52 (T), Ibrahim_52 (T), Mendokysei_50 (T), Nairb_51 (T), Nette_53 (T), RonRayGun_52 (T), Whitty_51 (T), ZenTime222_51 (T),

Start 26:
• Found in 2 of 161 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 50.0% of time when present

• Phage (with cluster) where this start called: Kukla_83 (FJ),

Start 28:
• Found in 3 of 161 (1.9%) of genes in pham
• Manual Annotations of this start: 3 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Che9d_104 (F2), ThetaBob_96 (F4), Yoshi_105 (F2),

Start 30:
• Found in 122 of 161 (75.8%) of genes in pham
• Manual Annotations of this start: 116 of 150
• Called 99.2% of time when present
• Phage (with cluster) where this start called: Akhila_88 (F1), Aleemily_130 (DZ), AlpineSix_93 (F1), ArcusAngelus_94 (F1), Batiatus_92 (F1), Beakin_85 (F1), Beanstalk_92 (F1), BigPhil_89 (F1), Blexus_89 (F1), BlueCrab_95 (F1), BobaPhett_94 (F1), Brocalys_84 (F1), Brookers_91 (F1), Bubbles123_88 (F1), Burwell21_86 (F1), ByChance_82 (F1), Cabrinians_89 (F1), Cafasso_132 (DZ), Cerasum_91 (F1), Che8_100 (F1), Cheesepuff_98 (F1), Chevrolet_98 (F1), Chuckly_88 (F1), Clifton_84 (F1), Coco12_93 (F1), Corium_91 (F1), Crumble_87 (F1), DRBy19_95 (F1), Dante_92 (F1), Demsculpinboyz_107 (F2), DillTech15_100 (F1), Doug_91 (F1), EleanorGeorge_99 (F1), Firehouse51_89 (F1), Flathead_97 (F1), Frankie_93 (F1), FreddyB_102 (F1), Gorge_91 (F1), Guppsters_89 (F1), Hlubikazi_92 (F1), James_96 (F1), Jarcob_95 (F1), Jennelsea_90 (F1), Jinglebell_101 (F1), Job42_94 (F1), Kersh_98 (F1), KingJulian_100 (F1), Kingsley_101 (F1), Koella_85 (F1), LastJedi_83 (F1), Latretium_95 (F1), LilMoolah_95 (F1), Lizziana_93 (F1), Llama_101 (F1), LunaStella_88 (F4), MadMen_99 (F1), Mandlovu_92 (F1), Mantra_92 (F1), Maravista_89 (F1), Martik_90 (F1), Mattes_93 (F1), Melissauren88_83 (F1), MilanaBonita_87 (F1), MinionDave_92 (F1), Minnie_86 (F1), ModicumRichard_132 (DZ), Modragons_99 (F1), MooMoo_87 (singleton), Morgana_139 (DZ), Mova_96 (F1), Mozy_99 (F1), MulchSalad_92 (F7), Mutaforma13_95 (F1), Mwanjiwa_96 (F1), Nichirin_97 (F1), Nitzel_87 (F1), Nivrat_92 (F1), NormanBulbieJr_90 (F1), ObLaDi_131 (DZ), Ochi17_100 (F1), OfUltron_102 (F1), OlympiaSaint_96 (F1), OwlsT2W_92 (F1), Pacc40_90 (F1), PatoPoderoso_93 (F1), Phanphagia_97 (F1), Philus_94 (F1), Pippy_90 (F1), Pollywog_96 (F1), PopTart_85 (F1), Priscilla_93 (F1), Radiance_92 (F1), Rita_94 (F1), Saal_90 (F1), Sabbb_97 (F1), Sandalphon_92 (F1), Sarma624_95 (F1), SassyB_85 (F1), Seabastian_102 (F1), Shauna1_95 (F1), ShiLan_95 (F1), ShowerHandel_92 (F1), SiSi_90 (F1), Soul22_94 (F2), Sparkdehlily_102 (F1), Spoonbill_92 (F1), Strokeseat_92 (F1), SwagPigglett_94 (F1), TChen_90 (F4), TDanisky_103 (F1), Tchotchke_90 (F1), Tootsieroll_88 (F1), Topiatin_95 (F1), Toron_97 (F6), Velveteen_90 (F1), Veteran_85 (F1), Whatsapiecost_88 (F1), Whouxphf_95 (F1), Yorick_88 (F1), Zerg_93 (F1), Zizzle_95 (F1),

Start 31:
• Found in 1 of 161 (0.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA1_66 (singleton),

Start 32:
• Found in 1 of 161 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 150

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Finkle_78 (singleton),

Start 34:
• Found in 14 of 161 (8.7%) of genes in pham
• Manual Annotations of this start: 12 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apricot_97 (DN3), Crater_97 (DN3), Ecliptus_105 (DN), Faith5x5_66 (CZ6), Frickyeah_103 (DN1), Horus_98 (DN1), Kenna_93 (DN1), Leroy_98 (DN1), LitninMcQueen_105 (DN1), Lutum_99 (DN1), Periwinkle_106 (DN1), PhaoMing_77 (UNK), Phistory_100 (DN1), Spooky_104 (DN2),

Start 35:
• Found in 2 of 161 (1.2%) of genes in pham
• Manual Annotations of this start: 2 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Colossa_124 (KA), VanLee_124 (KA),

Start 36:
• Found in 3 of 161 (1.9%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 33.3% of time when present
• Phage (with cluster) where this start called: MicyPS_112 (EQ),

Start 38:
• Found in 2 of 161 (1.2%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: PetriParty_83 (FJ),

Start 40:
• Found in 1 of 161 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AbbyDaisy_96 (AY),

Start 41:
• Found in 1 of 161 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Spartoi_53 (singleton),

Start 42:
• Found in 2 of 161 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Altostratus_65 (FS),

Start 45:
• Found in 2 of 161 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 50.0% of time when present

• Phage (with cluster) where this start called: Khuang_65 (FS),

Summary by clusters:

There are 20 clusters represented in this pham: DN, F1, F2, FS, F4, F6, F, F7, CZ6, singleton, DZ, T, DN3, DN2, AY, DN1, FJ, UNK, EQ, KA,

Info for manual annotations of cluster AY:
•Start number 40 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CZ6:
•Start number 34 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DN:
•Start number 34 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 8 was manually annotated 1 time for cluster DN1.
•Start number 34 was manually annotated 7 times for cluster DN1.

Info for manual annotations of cluster DN2:
•Start number 34 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DN3:
•Start number 34 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DZ:
•Start number 30 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster EQ:
•Start number 23 was manually annotated 1 time for cluster EQ.
•Start number 36 was manually annotated 1 time for cluster EQ.

Info for manual annotations of cluster F:
•Start number 10 was manually annotated 1 time for cluster F.

Info for manual annotations of cluster F1:
•Start number 30 was manually annotated 105 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 28 was manually annotated 2 times for cluster F2.
•Start number 30 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster F4:
•Start number 28 was manually annotated 1 time for cluster F4.
•Start number 30 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster F7:
•Start number 30 was manually annotated 1 time for cluster F7.

Info for manual annotations of cluster FJ:
•Start number 26 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FS:
•Start number 42 was manually annotated 1 time for cluster FS.
•Start number 45 was manually annotated 1 time for cluster FS.

Info for manual annotations of cluster KA:
•Start number 35 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster T:
•Start number 24 was manually annotated 7 times for cluster T.

Gene Information:

Gene: AbbyDaisy_96 Start: 52940, Stop: 53554, Start Num: 40
Candidate Starts for AbbyDaisy_96:
(Start: 40 @52940 has 1 MA's), (49, 52982), (50, 52988), (67, 53096), (68, 53099), (86, 53168), (91, 53204), (105, 53300), (146, 53546),

Gene: Akhila_88 Start: 50832, Stop: 51503, Start Num: 30
Candidate Starts for Akhila_88:
(9, 50727), (16, 50781), (21, 50802), (Start: 30 @50832 has 116 MA's), (84, 51105), (93, 51168), (96, 51186), (114, 51276), (121, 51339),

Gene: Aleemily_130 Start: 69098, Stop: 69757, Start Num: 30
Candidate Starts for Aleemily_130:
(Start: 30 @69098 has 116 MA's), (69, 69317), (72, 69332), (111, 69515), (115, 69542), (144, 69716),

Gene: AlpineSix_93 Start: 51758, Stop: 52429, Start Num: 30
Candidate Starts for AlpineSix_93:
(9, 51653), (16, 51707), (21, 51728), (Start: 30 @51758 has 116 MA's), (84, 52031), (93, 52094), (114, 52202), (121, 52265),

Gene: Altostratus_65 Start: 37257, Stop: 37904, Start Num: 42
Candidate Starts for Altostratus_65:
(12, 37116), (27, 37170), (Start: 42 @37257 has 1 MA's), (Start: 45 @37266 has 1 MA's), (57, 37338), (59, 37350), (98, 37563), (109, 37611), (130, 37752), (132, 37761), (136, 37776),

Gene: Apricot_97 Start: 50346, Stop: 50999, Start Num: 34
Candidate Starts for Apricot_97:
(1, 50049), (3, 50136), (Start: 34 @50346 has 12 MA's), (44, 50406), (46, 50415), (62, 50529), (64, 50538), (121, 50841), (135, 50916),

Gene: ArcusAngelus_94 Start: 52779, Stop: 53411, Start Num: 30
Candidate Starts for ArcusAngelus_94:
(Start: 30 @52779 has 116 MA's), (50, 52884), (55, 52908), (75, 53025), (76, 53028), (79, 53034), (100, 53118), (103, 53136), (106, 53145), (107, 53148), (114, 53178), (115, 53190), (116, 53196), (117, 53205), (125, 53271), (126, 53277), (127, 53286), (136, 53322), (142, 53361),

Gene: Batiatus_92 Start: 52041, Stop: 52712, Start Num: 30
Candidate Starts for Batiatus_92:

(9, 51936), (16, 51990), (21, 52011), (Start: 30 @52041 has 116 MA's), (84, 52314), (93, 52377), (96, 52395), (114, 52485), (121, 52548),

Gene: Beakin_85 Start: 48794, Stop: 49465, Start Num: 30
Candidate Starts for Beakin_85:
(9, 48689), (16, 48743), (21, 48764), (Start: 30 @48794 has 116 MA's), (84, 49067), (93, 49130), (96, 49148), (114, 49238), (121, 49301),

Gene: Beanstalk_92 Start: 51191, Stop: 51862, Start Num: 30
Candidate Starts for Beanstalk_92:
(9, 51086), (16, 51140), (21, 51161), (Start: 30 @51191 has 116 MA's), (84, 51464), (93, 51527), (96, 51545), (114, 51635), (121, 51698),

Gene: Bernal13_52 Start: 37022, Stop: 37711, Start Num: 24
Candidate Starts for Bernal13_52:
(Start: 24 @37022 has 7 MA's), (65, 37247), (74, 37295), (102, 37430), (107, 37448), (141, 37655), (147, 37697), (148, 37700),

Gene: BigPhil_89 Start: 48833, Stop: 49504, Start Num: 30
Candidate Starts for BigPhil_89:
(9, 48728), (16, 48782), (21, 48803), (Start: 30 @48833 has 116 MA's), (84, 49106), (93, 49169), (96, 49187), (114, 49277), (121, 49340),

Gene: Blexus_89 Start: 52169, Stop: 52840, Start Num: 30
Candidate Starts for Blexus_89:
(9, 52064), (16, 52118), (21, 52139), (Start: 30 @52169 has 116 MA's), (84, 52442), (93, 52505), (96, 52523), (114, 52613), (121, 52676),

Gene: BlueCrab_95 Start: 53118, Stop: 53789, Start Num: 30
Candidate Starts for BlueCrab_95:
(9, 53013), (16, 53067), (21, 53088), (Start: 30 @53118 has 116 MA's), (84, 53391), (93, 53454), (96, 53472), (114, 53562), (121, 53625),

Gene: BobaPhett_94 Start: 53851, Stop: 54522, Start Num: 30
Candidate Starts for BobaPhett_94:
(9, 53746), (16, 53800), (21, 53821), (Start: 30 @53851 has 116 MA's), (84, 54124), (93, 54187), (96, 54205), (114, 54295), (121, 54358),

Gene: Brocalys_84 Start: 49330, Stop: 50001, Start Num: 30
Candidate Starts for Brocalys_84:
(9, 49225), (16, 49279), (21, 49300), (Start: 30 @49330 has 116 MA's), (84, 49603), (93, 49666), (96, 49684), (114, 49774), (121, 49837),

Gene: Brookers_91 Start: 51784, Stop: 52455, Start Num: 30
Candidate Starts for Brookers_91:
(9, 51679), (16, 51733), (21, 51754), (Start: 30 @51784 has 116 MA's), (84, 52057), (93, 52120), (96, 52138), (114, 52228), (121, 52291),

Gene: Bubbles123_88 Start: 52051, Stop: 52722, Start Num: 30
Candidate Starts for Bubbles123_88:
(9, 51946), (16, 52000), (21, 52021), (Start: 30 @52051 has 116 MA's), (84, 52324), (93, 52387), (96, 52405), (114, 52495), (121, 52558),

Gene: Burwell21_86 Start: 51616, Stop: 52287, Start Num: 30
Candidate Starts for Burwell21_86:
(9, 51511), (16, 51565), (21, 51586), (Start: 30 @51616 has 116 MA's), (84, 51889), (93, 51952), (96, 51970), (114, 52060), (121, 52123),

Gene: ByChance_82 Start: 47242, Stop: 47913, Start Num: 30
Candidate Starts for ByChance_82:
(9, 47137), (16, 47191), (21, 47212), (Start: 30 @47242 has 116 MA's), (84, 47515), (93, 47578), (96, 47596), (114, 47686), (121, 47749),

Gene: Cabrinians_89 Start: 51250, Stop: 51921, Start Num: 30
Candidate Starts for Cabrinians_89:
(9, 51145), (16, 51199), (21, 51220), (Start: 30 @51250 has 116 MA's), (84, 51523), (93, 51586), (96, 51604), (114, 51694), (121, 51757),

Gene: Cafasso_132 Start: 69705, Stop: 70364, Start Num: 30
Candidate Starts for Cafasso_132:
(Start: 30 @69705 has 116 MA's), (69, 69924), (72, 69939), (111, 70122), (115, 70149), (144, 70323),

Gene: Cerasum_91 Start: 48851, Stop: 49522, Start Num: 30
Candidate Starts for Cerasum_91:
(9, 48746), (16, 48800), (21, 48821), (Start: 30 @48851 has 116 MA's), (84, 49124), (93, 49187), (96, 49205), (114, 49295), (121, 49358),

Gene: Che8_100 Start: 53402, Stop: 54034, Start Num: 30
Candidate Starts for Che8_100:
(Start: 30 @53402 has 116 MA's), (50, 53507), (55, 53531), (75, 53648), (76, 53651), (79, 53657), (100, 53741), (103, 53759), (106, 53768), (107, 53771), (114, 53801), (115, 53813), (116, 53819), (117, 53828), (125, 53894), (126, 53900), (127, 53909), (136, 53945), (142, 53984),

Gene: Che9d_104 Start: 51798, Stop: 52457, Start Num: 28
Candidate Starts for Che9d_104:
(Start: 28 @51798 has 3 MA's), (66, 52014), (93, 52122), (95, 52131), (120, 52290), (121, 52293), (125, 52323), (127, 52338), (147, 52446),

Gene: Cheesepuff_98 Start: 51587, Stop: 52219, Start Num: 30
Candidate Starts for Cheesepuff_98:
(Start: 30 @51587 has 116 MA's), (50, 51692), (55, 51716), (74, 51830), (75, 51833), (76, 51836), (79, 51842), (100, 51926), (103, 51944), (106, 51953), (107, 51956), (114, 51986), (115, 51998), (116, 52004), (117, 52013), (125, 52079), (126, 52085), (127, 52094), (136, 52130), (142, 52169),

Gene: Chevrolet_98 Start: 52780, Stop: 53412, Start Num: 30
Candidate Starts for Chevrolet_98:
(Start: 30 @52780 has 116 MA's), (50, 52885), (55, 52909), (75, 53026), (76, 53029), (79, 53035), (100, 53119), (103, 53137), (106, 53146), (107, 53149), (114, 53179), (115, 53191), (116, 53197), (117, 53206), (125, 53272), (126, 53278), (127, 53287), (136, 53323), (142, 53362),

Gene: Chuckly_88 Start: 48275, Stop: 48946, Start Num: 30
Candidate Starts for Chuckly_88:
(9, 48170), (16, 48224), (21, 48245), (Start: 30 @48275 has 116 MA's), (84, 48548), (93, 48611), (96, 48629), (114, 48719), (121, 48782),

Gene: Clifton_84 Start: 50305, Stop: 50976, Start Num: 30

Candidate Starts for Clifton_84:
(9, 50200), (16, 50254), (21, 50275), (Start: 30 @50305 has 116 MA's), (84, 50578), (93, 50641), (96, 50659), (114, 50749), (121, 50812),

Gene: Coco12_93 Start: 52908, Stop: 53579, Start Num: 30
Candidate Starts for Coco12_93:
(9, 52803), (16, 52857), (21, 52878), (Start: 30 @52908 has 116 MA's), (84, 53181), (93, 53244), (96, 53262), (114, 53352), (121, 53415),

Gene: Colossa_124 Start: 64634, Stop: 65281, Start Num: 35
Candidate Starts for Colossa_124:
(5, 64448), (Start: 35 @64634 has 2 MA's), (53, 64757), (60, 64808), (70, 64862), (94, 64961),

Gene: Corium_91 Start: 53708, Stop: 54379, Start Num: 30
Candidate Starts for Corium_91:
(9, 53603), (16, 53657), (21, 53678), (Start: 30 @53708 has 116 MA's), (84, 53981), (93, 54044), (96, 54062), (114, 54152), (121, 54215),

Gene: Crater_97 Start: 50690, Stop: 51343, Start Num: 34
Candidate Starts for Crater_97:
(1, 50393), (3, 50480), (Start: 34 @50690 has 12 MA's), (44, 50750), (46, 50759), (62, 50873), (64, 50882), (121, 51185), (135, 51260),

Gene: Crumble_87 Start: 47975, Stop: 48646, Start Num: 30
Candidate Starts for Crumble_87:
(9, 47870), (16, 47924), (21, 47945), (Start: 30 @47975 has 116 MA's), (84, 48248), (93, 48311), (96, 48329), (114, 48419), (121, 48482),

Gene: DRBy19_95 Start: 53614, Stop: 54285, Start Num: 30
Candidate Starts for DRBy19_95:
(9, 53509), (16, 53563), (21, 53584), (Start: 30 @53614 has 116 MA's), (84, 53887), (93, 53950), (96, 53968), (114, 54058), (121, 54121),

Gene: Dante_92 Start: 53536, Stop: 54207, Start Num: 30
Candidate Starts for Dante_92:
(9, 53431), (16, 53485), (21, 53506), (Start: 30 @53536 has 116 MA's), (84, 53809), (93, 53872), (96, 53890), (114, 53980), (121, 54043),

Gene: Demsculpinboyz_107 Start: 52197, Stop: 52868, Start Num: 30
Candidate Starts for Demsculpinboyz_107:
(9, 52092), (16, 52146), (21, 52167), (Start: 30 @52197 has 116 MA's), (84, 52470), (93, 52533), (96, 52551), (114, 52641), (121, 52704),

Gene: DillTech15_100 Start: 52362, Stop: 53033, Start Num: 30
Candidate Starts for DillTech15_100:
(9, 52257), (16, 52311), (21, 52332), (Start: 30 @52362 has 116 MA's), (84, 52635), (93, 52698), (96, 52716), (114, 52806), (121, 52869),

Gene: Doug_91 Start: 53450, Stop: 54121, Start Num: 30
Candidate Starts for Doug_91:
(9, 53345), (16, 53399), (21, 53420), (Start: 30 @53450 has 116 MA's), (84, 53723), (93, 53786), (96, 53804), (114, 53894), (121, 53957),

Gene: Ecliptus_105 Start: 53889, Stop: 54542, Start Num: 34
Candidate Starts for Ecliptus_105:
(1, 53592), (3, 53679), (Start: 34 @53889 has 12 MA's), (44, 53949), (46, 53958), (62, 54072), (64, 54081), (121, 54384), (135, 54459),

Gene: EleanorGeorge_99 Start: 54680, Stop: 55351, Start Num: 30
Candidate Starts for EleanorGeorge_99:
(9, 54575), (16, 54629), (21, 54650), (Start: 30 @54680 has 116 MA's), (84, 54953), (93, 55016), (96, 55034), (114, 55124), (121, 55187),

Gene: Faith5x5_66 Start: 39135, Stop: 39788, Start Num: 34
Candidate Starts for Faith5x5_66:
(6, 38994), (17, 39084), (18, 39087), (Start: 34 @39135 has 12 MA's), (107, 39531), (133, 39699), (135, 39705),

Gene: Finkle_78 Start: 45662, Stop: 46321, Start Num: 32
Candidate Starts for Finkle_78:
(Start: 32 @45662 has 1 MA's), (54, 45791), (85, 45941), (94, 45995), (121, 46160),

Gene: Firehouse51_89 Start: 52902, Stop: 53573, Start Num: 30
Candidate Starts for Firehouse51_89:
(9, 52797), (16, 52851), (21, 52872), (Start: 30 @52902 has 116 MA's), (84, 53175), (93, 53238), (96, 53256), (114, 53346), (121, 53409),

Gene: Flathead_97 Start: 52406, Stop: 53077, Start Num: 30
Candidate Starts for Flathead_97:
(9, 52301), (16, 52355), (21, 52376), (Start: 30 @52406 has 116 MA's), (84, 52679), (93, 52742), (96, 52760), (114, 52850), (121, 52913),

Gene: Frankie_93 Start: 51890, Stop: 52528, Start Num: 30
Candidate Starts for Frankie_93:
(7, 51764), (21, 51860), (Start: 30 @51890 has 116 MA's), (93, 52193), (114, 52301), (121, 52364),

Gene: FreddyB_102 Start: 52897, Stop: 53568, Start Num: 30
Candidate Starts for FreddyB_102:
(9, 52792), (16, 52846), (21, 52867), (Start: 30 @52897 has 116 MA's), (84, 53170), (93, 53233), (96, 53251), (114, 53341), (121, 53404),

Gene: Frickyeah_103 Start: 52636, Stop: 53289, Start Num: 34
Candidate Starts for Frickyeah_103:
(1, 52339), (3, 52426), (Start: 34 @52636 has 12 MA's), (44, 52696), (46, 52705), (62, 52819), (64, 52828), (121, 53131), (135, 53206),

Gene: GMA1_66 Start: 39225, Stop: 39875, Start Num: 31
Candidate Starts for GMA1_66:
(31, 39225), (71, 39465), (82, 39501), (99, 39597), (103, 39618), (119, 39714), (121, 39723), (125, 39753), (133, 39792), (138, 39813), (139, 39822),

Gene: Gorge_91 Start: 52524, Stop: 53195, Start Num: 30
Candidate Starts for Gorge_91:
(9, 52419), (16, 52473), (21, 52494), (Start: 30 @52524 has 116 MA's), (84, 52797), (93, 52860), (96, 52878), (114, 52968), (121, 53031),

Gene: Guppsters_89 Start: 49888, Stop: 50559, Start Num: 30
Candidate Starts for Guppsters_89:
(9, 49783), (16, 49837), (21, 49858), (Start: 30 @49888 has 116 MA's), (84, 50161), (93, 50224), (96, 50242), (114, 50332), (121, 50395),

Gene: Hlubikazi_92 Start: 50511, Stop: 51182, Start Num: 30
Candidate Starts for Hlubikazi_92:
(9, 50406), (16, 50460), (21, 50481), (Start: 30 @50511 has 116 MA's), (84, 50784), (93, 50847), (96, 50865), (114, 50955), (121, 51018),

Gene: Horus_98 Start: 52911, Stop: 53564, Start Num: 34
Candidate Starts for Horus_98:
(1, 52614), (3, 52701), (Start: 34 @52911 has 12 MA's), (44, 52971), (46, 52980), (62, 53094), (64, 53103), (121, 53406), (135, 53481),

Gene: Ibrahim_52 Start: 37468, Stop: 38157, Start Num: 24
Candidate Starts for Ibrahim_52:
(Start: 24 @37468 has 7 MA's), (65, 37693), (74, 37741), (102, 37876), (107, 37894), (141, 38101), (147, 38143), (148, 38146),

Gene: James_96 Start: 53906, Stop: 54577, Start Num: 30
Candidate Starts for James_96:
(9, 53801), (16, 53855), (21, 53876), (Start: 30 @53906 has 116 MA's), (84, 54179), (93, 54242), (96, 54260), (114, 54350), (121, 54413),

Gene: Jarcob_95 Start: 53505, Stop: 54176, Start Num: 30
Candidate Starts for Jarcob_95:
(9, 53400), (16, 53454), (21, 53475), (Start: 30 @53505 has 116 MA's), (84, 53778), (93, 53841), (96, 53859), (114, 53949), (121, 54012),

Gene: Jennelsea_90 Start: 50806, Stop: 51477, Start Num: 30
Candidate Starts for Jennelsea_90:
(9, 50701), (16, 50755), (21, 50776), (Start: 30 @50806 has 116 MA's), (84, 51079), (93, 51142), (96, 51160), (114, 51250), (121, 51313),

Gene: Jinglebell_101 Start: 53655, Stop: 54326, Start Num: 30
Candidate Starts for Jinglebell_101:
(9, 53550), (16, 53604), (21, 53625), (Start: 30 @53655 has 116 MA's), (84, 53928), (93, 53991), (114, 54099), (121, 54162),

Gene: Job42_94 Start: 54565, Stop: 55236, Start Num: 30
Candidate Starts for Job42_94:
(9, 54460), (16, 54514), (21, 54535), (Start: 30 @54565 has 116 MA's), (84, 54838), (93, 54901), (96, 54919), (114, 55009), (121, 55072),

Gene: Kamaru_91 Start: 50215, Stop: 50868, Start Num: 8
Candidate Starts for Kamaru_91:
(4, 50170), (Start: 8 @50215 has 1 MA's), (44, 50275), (46, 50284), (62, 50398), (64, 50407), (95, 50542),

Gene: Kenna_93 Start: 50964, Stop: 51617, Start Num: 34
Candidate Starts for Kenna_93:

(1, 50679), (Start: 34 @50964 has 12 MA's), (44, 51024), (46, 51033), (62, 51147), (64, 51156), (121, 51459), (135, 51534),

Gene: Kersh_98 Start: 54938, Stop: 55609, Start Num: 30
Candidate Starts for Kersh_98:
(9, 54833), (16, 54887), (21, 54908), (Start: 30 @54938 has 116 MA's), (84, 55211), (93, 55274), (96, 55292), (114, 55382), (121, 55445),

Gene: Khuang_65 Start: 37494, Stop: 38132, Start Num: 45
Candidate Starts for Khuang_65:
(12, 37344), (22, 37380), (Start: 42 @37485 has 1 MA's), (Start: 45 @37494 has 1 MA's), (57, 37566), (59, 37578), (90, 37710), (98, 37791), (109, 37839), (136, 38004), (143, 38049),

Gene: KingJulian_100 Start: 54572, Stop: 55243, Start Num: 30
Candidate Starts for KingJulian_100:
(9, 54467), (16, 54521), (21, 54542), (Start: 30 @54572 has 116 MA's), (84, 54845), (93, 54908), (96, 54926), (114, 55016), (121, 55079),

Gene: Kingsley_101 Start: 55515, Stop: 56186, Start Num: 30
Candidate Starts for Kingsley_101:
(9, 55410), (16, 55464), (21, 55485), (Start: 30 @55515 has 116 MA's), (84, 55788), (93, 55851), (96, 55869), (114, 55959), (121, 56022),

Gene: Koella_85 Start: 48668, Stop: 49339, Start Num: 30
Candidate Starts for Koella_85:
(9, 48563), (16, 48617), (21, 48638), (Start: 30 @48668 has 116 MA's), (84, 48941), (93, 49004), (96, 49022), (114, 49112), (121, 49175),

Gene: Kukla_83 Start: 45201, Stop: 45845, Start Num: 26
Candidate Starts for Kukla_83:
(Start: 26 @45201 has 1 MA's), (38, 45252), (63, 45399), (80, 45471), (87, 45504), (91, 45519), (92, 45522), (101, 45594), (134, 45786), (137, 45795), (141, 45825), (143, 45834),

Gene: LastJedi_83 Start: 49724, Stop: 50395, Start Num: 30
Candidate Starts for LastJedi_83:
(9, 49619), (16, 49673), (21, 49694), (Start: 30 @49724 has 116 MA's), (84, 49997), (93, 50060), (96, 50078), (114, 50168), (121, 50231),

Gene: Latretium_95 Start: 52771, Stop: 53442, Start Num: 30
Candidate Starts for Latretium_95:
(9, 52666), (16, 52720), (21, 52741), (Start: 30 @52771 has 116 MA's), (84, 53044), (93, 53107), (96, 53125), (114, 53215), (121, 53278),

Gene: Leroy_98 Start: 51106, Stop: 51759, Start Num: 34
Candidate Starts for Leroy_98:
(1, 50809), (3, 50896), (Start: 34 @51106 has 12 MA's), (44, 51166), (46, 51175), (62, 51289), (64, 51298), (121, 51601), (135, 51676),

Gene: LilMoolah_95 Start: 52705, Stop: 53376, Start Num: 30
Candidate Starts for LilMoolah_95:
(9, 52600), (16, 52654), (21, 52675), (Start: 30 @52705 has 116 MA's), (84, 52978), (93, 53041), (96, 53059), (114, 53149), (121, 53212),

Gene: LitninMcQueen_105 Start: 54357, Stop: 55010, Start Num: 34
Candidate Starts for LitninMcQueen_105:
(25, 54324), (Start: 34 @54357 has 12 MA's), (46, 54426), (112, 54777), (115, 54801), (121, 54852), (131, 54909), (144, 54978),

Gene: Lizziana_93 Start: 52973, Stop: 53644, Start Num: 30
Candidate Starts for Lizziana_93:
(9, 52868), (16, 52922), (21, 52943), (Start: 30 @52973 has 116 MA's), (84, 53246), (93, 53309), (96, 53327), (114, 53417), (121, 53480),

Gene: Llama_101 Start: 53511, Stop: 54182, Start Num: 30
Candidate Starts for Llama_101:
(9, 53406), (16, 53460), (21, 53481), (Start: 30 @53511 has 116 MA's), (84, 53784), (93, 53847), (114, 53955), (121, 54018),

Gene: LordVader_83 Start: 48967, Stop: 49716, Start Num: 10
Candidate Starts for LordVader_83:
(Start: 10 @48967 has 1 MA's), (11, 48994), (13, 49018), (14, 49021), (19, 49039), (20, 49045), (Start: 30 @49078 has 116 MA's), (93, 49381), (114, 49489), (121, 49552),

Gene: LunaStella_88 Start: 50144, Stop: 50779, Start Num: 30
Candidate Starts for LunaStella_88:
(Start: 30 @50144 has 116 MA's), (50, 50249), (55, 50273), (66, 50348), (75, 50390), (76, 50393), (79, 50399), (101, 50492), (103, 50501), (114, 50543), (115, 50555), (116, 50561), (117, 50570), (125, 50636), (135, 50684), (136, 50687), (142, 50726),

Gene: Lutum_99 Start: 52283, Stop: 52936, Start Num: 34
Candidate Starts for Lutum_99:
(1, 51998), (Start: 34 @52283 has 12 MA's), (44, 52343), (46, 52352), (62, 52466), (64, 52475), (121, 52778), (135, 52853),

Gene: MadMen_99 Start: 52819, Stop: 53490, Start Num: 30
Candidate Starts for MadMen_99:
(9, 52714), (16, 52768), (21, 52789), (Start: 30 @52819 has 116 MA's), (84, 53092), (93, 53155), (96, 53173), (114, 53263), (121, 53326),

Gene: Mandlovu_92 Start: 50453, Stop: 51124, Start Num: 30
Candidate Starts for Mandlovu_92:
(9, 50348), (16, 50402), (21, 50423), (Start: 30 @50453 has 116 MA's), (84, 50726), (93, 50789), (96, 50807), (114, 50897), (121, 50960),

Gene: Mantra_92 Start: 51884, Stop: 52555, Start Num: 30
Candidate Starts for Mantra_92:
(9, 51779), (16, 51833), (21, 51854), (Start: 30 @51884 has 116 MA's), (84, 52157), (93, 52220), (96, 52238), (114, 52328), (121, 52391),

Gene: Maravista_89 Start: 53633, Stop: 54304, Start Num: 30
Candidate Starts for Maravista_89:
(9, 53528), (16, 53582), (21, 53603), (Start: 30 @53633 has 116 MA's), (84, 53906), (93, 53969), (96, 53987), (114, 54077), (121, 54140),

Gene: Martik_90 Start: 52990, Stop: 53661, Start Num: 30
Candidate Starts for Martik_90:

(9, 52885), (16, 52939), (21, 52960), (Start: 30 @52990 has 116 MA's), (84, 53263), (93, 53326), (96, 53344), (114, 53434), (121, 53497),

Gene: Mattes_93 Start: 52642, Stop: 53313, Start Num: 30
Candidate Starts for Mattes_93:
(9, 52537), (16, 52591), (21, 52612), (Start: 30 @52642 has 116 MA's), (84, 52915), (93, 52978), (96, 52996), (114, 53086), (121, 53149),

Gene: Melissauren88_83 Start: 48486, Stop: 49157, Start Num: 30
Candidate Starts for Melissauren88_83:
(9, 48381), (16, 48435), (21, 48456), (Start: 30 @48486 has 116 MA's), (84, 48759), (93, 48822), (96, 48840), (114, 48930), (121, 48993),

Gene: Mendokysei_50 Start: 36594, Stop: 37283, Start Num: 24
Candidate Starts for Mendokysei_50:
(Start: 24 @36594 has 7 MA's), (51, 36711), (104, 36987), (108, 37002), (126, 37125), (141, 37203), (144, 37218),

Gene: MicyPS_112 Start: 65223, Stop: 65894, Start Num: 36
Candidate Starts for MicyPS_112:
(Start: 36 @65223 has 1 MA's), (48, 65283), (83, 65475),

Gene: MilanaBonita_87 Start: 50832, Stop: 51503, Start Num: 30
Candidate Starts for MilanaBonita_87:
(9, 50727), (16, 50781), (21, 50802), (Start: 30 @50832 has 116 MA's), (84, 51105), (93, 51168), (96, 51186), (114, 51276), (121, 51339),

Gene: MinionDave_92 Start: 52235, Stop: 52867, Start Num: 30
Candidate Starts for MinionDave_92:
(Start: 30 @52235 has 116 MA's), (50, 52340), (55, 52364), (75, 52481), (76, 52484), (79, 52490), (100, 52574), (103, 52592), (106, 52601), (107, 52604), (114, 52634), (115, 52646), (116, 52652), (117, 52661), (125, 52727), (126, 52733), (127, 52742), (136, 52778), (142, 52817),

Gene: Minnie_86 Start: 52608, Stop: 53279, Start Num: 30
Candidate Starts for Minnie_86:
(9, 52503), (16, 52557), (21, 52578), (Start: 30 @52608 has 116 MA's), (84, 52881), (93, 52944), (96, 52962), (114, 53052), (121, 53115),

Gene: ModicumRichard_132 Start: 69993, Stop: 70652, Start Num: 30
Candidate Starts for ModicumRichard_132:
(Start: 30 @69993 has 116 MA's), (69, 70212), (72, 70227), (111, 70410), (115, 70437), (144, 70611),

Gene: Modragons_99 Start: 53499, Stop: 54170, Start Num: 30
Candidate Starts for Modragons_99:
(9, 53394), (16, 53448), (21, 53469), (Start: 30 @53499 has 116 MA's), (84, 53772), (93, 53835), (114, 53943), (121, 54006),

Gene: MooMoo_87 Start: 49816, Stop: 50469, Start Num: 30
Candidate Starts for MooMoo_87:
(Start: 30 @49816 has 116 MA's), (96, 50152), (103, 50200), (121, 50305), (124, 50332), (142, 50422),

Gene: Morgana_139 Start: 72172, Stop: 72831, Start Num: 30
Candidate Starts for Morgana_139:

(Start: 30 @72172 has 116 MA's), (69, 72391), (72, 72406), (115, 72616), (144, 72790),

Gene: Mova_96 Start: 52643, Stop: 53314, Start Num: 30
Candidate Starts for Mova_96:
(9, 52538), (16, 52592), (21, 52613), (Start: 30 @52643 has 116 MA's), (84, 52916), (93, 52979), (114, 53087), (121, 53150),

Gene: Mozy_99 Start: 52410, Stop: 53081, Start Num: 30
Candidate Starts for Mozy_99:
(9, 52305), (16, 52359), (21, 52380), (Start: 30 @52410 has 116 MA's), (84, 52683), (93, 52746), (96, 52764), (114, 52854), (121, 52917),

Gene: MulchSalad_92 Start: 53471, Stop: 54142, Start Num: 30
Candidate Starts for MulchSalad_92:
(9, 53366), (16, 53420), (21, 53441), (Start: 30 @53471 has 116 MA's), (84, 53744), (93, 53807), (96, 53825), (114, 53915), (121, 53978),

Gene: Mutaforma13_95 Start: 51744, Stop: 52415, Start Num: 30
Candidate Starts for Mutaforma13_95:
(9, 51639), (16, 51693), (21, 51714), (Start: 30 @51744 has 116 MA's), (84, 52017), (93, 52080), (96, 52098), (114, 52188), (121, 52251),

Gene: Mwanjiwa_96 Start: 53161, Stop: 53832, Start Num: 30
Candidate Starts for Mwanjiwa_96:
(9, 53056), (16, 53110), (21, 53131), (Start: 30 @53161 has 116 MA's), (84, 53434), (93, 53497), (114, 53605), (121, 53668),

Gene: Nairb_51 Start: 37022, Stop: 37711, Start Num: 24
Candidate Starts for Nairb_51:
(Start: 24 @37022 has 7 MA's), (65, 37247), (74, 37295), (102, 37430), (107, 37448), (141, 37655), (147, 37697), (148, 37700),

Gene: Nette_53 Start: 36603, Stop: 37292, Start Num: 24
Candidate Starts for Nette_53:
(Start: 24 @36603 has 7 MA's), (51, 36720), (104, 36996), (108, 37011), (126, 37134), (141, 37212), (144, 37227),

Gene: Nichirin_97 Start: 53354, Stop: 54025, Start Num: 30
Candidate Starts for Nichirin_97:
(9, 53249), (16, 53303), (21, 53324), (Start: 30 @53354 has 116 MA's), (84, 53627), (93, 53690), (114, 53798), (121, 53861),

Gene: Nitzel_87 Start: 48891, Stop: 49523, Start Num: 30
Candidate Starts for Nitzel_87:
(Start: 30 @48891 has 116 MA's), (50, 48996), (55, 49020), (75, 49137), (76, 49140), (79, 49146), (100, 49230), (103, 49248), (106, 49257), (107, 49260), (114, 49290), (115, 49302), (116, 49308), (117, 49317), (125, 49383), (126, 49389), (127, 49398), (136, 49434), (142, 49473),

Gene: Nivrat_92 Start: 52578, Stop: 53249, Start Num: 30
Candidate Starts for Nivrat_92:
(9, 52473), (16, 52527), (21, 52548), (Start: 30 @52578 has 116 MA's), (84, 52851), (93, 52914), (96, 52932), (114, 53022), (121, 53085),

Gene: NormanBulbieJr_90 Start: 52682, Stop: 53353, Start Num: 30
Candidate Starts for NormanBulbieJr_90:
(9, 52577), (16, 52631), (21, 52652), (Start: 30 @52682 has 116 MA's), (84, 52955), (93, 53018), (96, 53036), (114, 53126), (121, 53189),

Gene: ObLaDi_131 Start: 69395, Stop: 70054, Start Num: 30
Candidate Starts for ObLaDi_131:
(Start: 30 @69395 has 116 MA's), (69, 69614), (72, 69629), (111, 69812), (115, 69839), (144, 70013),

Gene: Ochi17_100 Start: 53106, Stop: 53777, Start Num: 30
Candidate Starts for Ochi17_100:
(9, 53001), (16, 53055), (21, 53076), (Start: 30 @53106 has 116 MA's), (84, 53379), (93, 53442), (114, 53550), (121, 53613),

Gene: OfUltron_102 Start: 53655, Stop: 54326, Start Num: 30
Candidate Starts for OfUltron_102:
(9, 53550), (16, 53604), (21, 53625), (Start: 30 @53655 has 116 MA's), (84, 53928), (93, 53991), (114, 54099), (121, 54162),

Gene: OlympiaSaint_96 Start: 52848, Stop: 53519, Start Num: 30
Candidate Starts for OlympiaSaint_96:
(9, 52743), (16, 52797), (21, 52818), (Start: 30 @52848 has 116 MA's), (84, 53121), (93, 53184), (96, 53202), (114, 53292), (121, 53355),

Gene: OwlsT2W_92 Start: 50775, Stop: 51407, Start Num: 30
Candidate Starts for OwlsT2W_92:
(Start: 30 @50775 has 116 MA's), (50, 50880), (55, 50904), (75, 51021), (76, 51024), (79, 51030), (100, 51114), (103, 51132), (106, 51141), (107, 51144), (114, 51174), (115, 51186), (116, 51192), (117, 51201), (125, 51267), (126, 51273), (127, 51282), (136, 51318), (142, 51357),

Gene: PSonyx_130 Start: 68417, Stop: 69157, Start Num: 23
Candidate Starts for PSonyx_130:
(Start: 23 @68417 has 1 MA's), (Start: 36 @68486 has 1 MA's), (37, 68489), (48, 68546), (83, 68738), (149, 69143),

Gene: Pacc40_90 Start: 53074, Stop: 53745, Start Num: 30
Candidate Starts for Pacc40_90:
(9, 52969), (16, 53023), (21, 53044), (Start: 30 @53074 has 116 MA's), (84, 53347), (93, 53410), (96, 53428), (114, 53518), (121, 53581),

Gene: PatoPoderoso_93 Start: 54572, Stop: 55243, Start Num: 30
Candidate Starts for PatoPoderoso_93:
(9, 54467), (16, 54521), (21, 54542), (Start: 30 @54572 has 116 MA's), (84, 54845), (93, 54908), (96, 54926), (114, 55016), (121, 55079),

Gene: Periwinkle_106 Start: 53913, Stop: 54566, Start Num: 34
Candidate Starts for Periwinkle_106:
(1, 53616), (3, 53703), (Start: 34 @53913 has 12 MA's), (44, 53973), (46, 53982), (62, 54096), (64, 54105), (121, 54408), (135, 54483),

Gene: PetriParty_83 Start: 44456, Stop: 45049, Start Num: 38
Candidate Starts for PetriParty_83:

(Start: 26 @44405 has 1 MA's), (38, 44456), (63, 44603), (80, 44675), (87, 44708), (91, 44723), (101, 44798), (110, 44834), (122, 44924), (141, 45029),

Gene: Phanphagia_97 Start: 53754, Stop: 54425, Start Num: 30
Candidate Starts for Phanphagia_97:
(9, 53649), (16, 53703), (21, 53724), (Start: 30 @53754 has 116 MA's), (84, 54027), (93, 54090), (96, 54108), (114, 54198), (121, 54261),

Gene: PhaoMing_77 Start: 46971, Stop: 47624, Start Num: 34
Candidate Starts for PhaoMing_77:
(2, 46686), (Start: 34 @46971 has 12 MA's), (46, 47040), (64, 47163), (112, 47391), (115, 47415), (121, 47466), (131, 47523), (144, 47592),

Gene: Philus_94 Start: 53590, Stop: 54261, Start Num: 30
Candidate Starts for Philus_94:
(9, 53485), (16, 53539), (21, 53560), (Start: 30 @53590 has 116 MA's), (84, 53863), (93, 53926), (96, 53944), (114, 54034), (121, 54097),

Gene: Phistory_100 Start: 51134, Stop: 51787, Start Num: 34
Candidate Starts for Phistory_100:
(29, 51122), (Start: 34 @51134 has 12 MA's), (46, 51203), (64, 51326), (89, 51416), (115, 51578), (117, 51593),

Gene: Pippy_90 Start: 50953, Stop: 51624, Start Num: 30
Candidate Starts for Pippy_90:
(9, 50848), (16, 50902), (21, 50923), (Start: 30 @50953 has 116 MA's), (84, 51226), (93, 51289), (96, 51307), (114, 51397), (121, 51460),

Gene: Pollywog_96 Start: 53903, Stop: 54574, Start Num: 30
Candidate Starts for Pollywog_96:
(9, 53798), (16, 53852), (21, 53873), (Start: 30 @53903 has 116 MA's), (84, 54176), (93, 54239), (96, 54257), (114, 54347), (121, 54410),

Gene: PopTart_85 Start: 49627, Stop: 50298, Start Num: 30
Candidate Starts for PopTart_85:
(9, 49522), (16, 49576), (21, 49597), (Start: 30 @49627 has 116 MA's), (84, 49900), (93, 49963), (114, 50071), (121, 50134),

Gene: Priscilla_93 Start: 52780, Stop: 53451, Start Num: 30
Candidate Starts for Priscilla_93:
(9, 52675), (16, 52729), (21, 52750), (Start: 30 @52780 has 116 MA's), (84, 53053), (93, 53116), (96, 53134), (114, 53224), (121, 53287),

Gene: Radiance_92 Start: 52189, Stop: 52860, Start Num: 30
Candidate Starts for Radiance_92:
(9, 52084), (16, 52138), (21, 52159), (Start: 30 @52189 has 116 MA's), (84, 52462), (93, 52525), (96, 52543), (114, 52633), (121, 52696),

Gene: Rita_94 Start: 53320, Stop: 53952, Start Num: 30
Candidate Starts for Rita_94:
(Start: 30 @53320 has 116 MA's), (50, 53425), (55, 53449), (75, 53566), (76, 53569), (79, 53575), (100, 53659), (103, 53677), (106, 53686), (107, 53689), (114, 53719), (115, 53731), (116, 53737), (117, 53746), (125, 53812), (126, 53818), (127, 53827), (136, 53863), (142, 53902),

Gene: RonRayGun_52 Start: 37468, Stop: 38157, Start Num: 24
Candidate Starts for RonRayGun_52:
(Start: 24 @37468 has 7 MA's), (65, 37693), (74, 37741), (102, 37876), (107, 37894), (141, 38101), (147, 38143), (148, 38146),

Gene: Saal_90 Start: 52344, Stop: 53015, Start Num: 30
Candidate Starts for Saal_90:
(9, 52239), (16, 52293), (21, 52314), (Start: 30 @52344 has 116 MA's), (84, 52617), (93, 52680), (96, 52698), (114, 52788), (121, 52851),

Gene: Sabbb_97 Start: 50784, Stop: 51455, Start Num: 30
Candidate Starts for Sabbb_97:
(9, 50679), (16, 50733), (21, 50754), (Start: 30 @50784 has 116 MA's), (84, 51057), (93, 51120), (96, 51138), (114, 51228), (121, 51291),

Gene: Sandalphon_92 Start: 53336, Stop: 54007, Start Num: 30
Candidate Starts for Sandalphon_92:
(9, 53231), (16, 53285), (21, 53306), (Start: 30 @53336 has 116 MA's), (84, 53609), (93, 53672), (96, 53690), (114, 53780), (121, 53843),

Gene: Sarma624_95 Start: 49527, Stop: 50198, Start Num: 30
Candidate Starts for Sarma624_95:
(9, 49422), (16, 49476), (21, 49497), (Start: 30 @49527 has 116 MA's), (84, 49800), (93, 49863), (96, 49881), (114, 49971), (121, 50034),

Gene: SassyB_85 Start: 49627, Stop: 50298, Start Num: 30
Candidate Starts for SassyB_85:
(9, 49522), (16, 49576), (21, 49597), (Start: 30 @49627 has 116 MA's), (84, 49900), (93, 49963), (114, 50071), (121, 50134),

Gene: Seabastian_102 Start: 53656, Stop: 54327, Start Num: 30
Candidate Starts for Seabastian_102:
(9, 53551), (16, 53605), (21, 53626), (Start: 30 @53656 has 116 MA's), (84, 53929), (93, 53992), (114, 54100), (121, 54163),

Gene: Shauna1_95 Start: 53370, Stop: 54041, Start Num: 30
Candidate Starts for Shauna1_95:
(9, 53265), (16, 53319), (21, 53340), (Start: 30 @53370 has 116 MA's), (84, 53643), (93, 53706), (96, 53724), (114, 53814), (121, 53877),

Gene: ShiLan_95 Start: 54361, Stop: 55032, Start Num: 30
Candidate Starts for ShiLan_95:
(9, 54256), (16, 54310), (21, 54331), (Start: 30 @54361 has 116 MA's), (84, 54634), (93, 54697), (96, 54715), (114, 54805), (121, 54868),

Gene: ShowerHandel_92 Start: 51180, Stop: 51851, Start Num: 30
Candidate Starts for ShowerHandel_92:
(9, 51075), (16, 51129), (21, 51150), (Start: 30 @51180 has 116 MA's), (84, 51453), (93, 51516), (96, 51534), (114, 51624), (121, 51687),

Gene: SiSi_90 Start: 51409, Stop: 52080, Start Num: 30
Candidate Starts for SiSi_90:

(9, 51304), (16, 51358), (21, 51379), (Start: 30 @51409 has 116 MA's), (84, 51682), (93, 51745), (96, 51763), (114, 51853), (121, 51916),

Gene: Soul22_94 Start: 49811, Stop: 50443, Start Num: 30
Candidate Starts for Soul22_94:
(Start: 30 @49811 has 116 MA's), (50, 49916), (55, 49940), (74, 50054), (75, 50057), (76, 50060), (79, 50066), (100, 50150), (103, 50168), (106, 50177), (107, 50180), (114, 50210), (115, 50222), (116, 50228), (117, 50237), (127, 50318), (128, 50324), (136, 50354), (142, 50393),

Gene: Sparkdehlily_102 Start: 51521, Stop: 52192, Start Num: 30
Candidate Starts for Sparkdehlily_102:
(9, 51416), (16, 51470), (21, 51491), (Start: 30 @51521 has 116 MA's), (84, 51794), (93, 51857), (96, 51875), (114, 51965), (121, 52028),

Gene: Spartoi_53 Start: 33823, Stop: 34419, Start Num: 41
Candidate Starts for Spartoi_53:
(39, 33802), (Start: 41 @33823 has 1 MA's), (43, 33826), (46, 33838), (47, 33844), (52, 33874), (56, 33892), (58, 33913), (61, 33937), (73, 33994), (77, 34006), (78, 34009), (81, 34015), (88, 34039), (97, 34117), (101, 34135), (121, 34258), (123, 34279), (140, 34375), (145, 34402),

Gene: Spooky_104 Start: 54440, Stop: 55093, Start Num: 34
Candidate Starts for Spooky_104:
(25, 54407), (Start: 34 @54440 has 12 MA's), (46, 54509), (101, 54815), (115, 54884), (118, 54902), (121, 54935), (129, 54986), (135, 55010),

Gene: Spoonbill_92 Start: 50274, Stop: 50945, Start Num: 30
Candidate Starts for Spoonbill_92:
(9, 50169), (16, 50223), (21, 50244), (Start: 30 @50274 has 116 MA's), (84, 50547), (93, 50610), (96, 50628), (114, 50718), (121, 50781),

Gene: Strokeseat_92 Start: 50510, Stop: 51181, Start Num: 30
Candidate Starts for Strokeseat_92:
(9, 50405), (16, 50459), (21, 50480), (Start: 30 @50510 has 116 MA's), (84, 50783), (93, 50846), (96, 50864), (114, 50954), (121, 51017),

Gene: SwagPigglett_94 Start: 53480, Stop: 54151, Start Num: 30
Candidate Starts for SwagPigglett_94:
(9, 53375), (16, 53429), (21, 53450), (Start: 30 @53480 has 116 MA's), (84, 53753), (93, 53816), (96, 53834), (114, 53924), (121, 53987),

Gene: TChen_90 Start: 52095, Stop: 52730, Start Num: 30
Candidate Starts for TChen_90:
(Start: 30 @52095 has 116 MA's), (50, 52200), (55, 52224), (66, 52299), (75, 52341), (76, 52344), (79, 52350), (101, 52443), (103, 52452), (114, 52494), (115, 52506), (116, 52512), (117, 52521), (125, 52587), (135, 52635), (136, 52638), (142, 52677),

Gene: TDanisky_103 Start: 51521, Stop: 52192, Start Num: 30
Candidate Starts for TDanisky_103:
(9, 51416), (16, 51470), (21, 51491), (Start: 30 @51521 has 116 MA's), (84, 51794), (93, 51857), (96, 51875), (114, 51965), (121, 52028),

Gene: Taotie_132 Start: 67207, Stop: 67974, Start Num: 15
Candidate Starts for Taotie_132:

(15, 67207), (Start: 23 @67234 has 1 MA's), (Start: 36 @67303 has 1 MA's), (37, 67306), (48, 67363), (83, 67555), (149, 67960),

Gene: Tchotchke_90 Start: 50912, Stop: 51583, Start Num: 30
Candidate Starts for Tchotchke_90:
(9, 50807), (16, 50861), (21, 50882), (Start: 30 @50912 has 116 MA's), (84, 51185), (93, 51248), (96, 51266), (114, 51356), (121, 51419),

Gene: ThetaBob_96 Start: 51425, Stop: 52084, Start Num: 28
Candidate Starts for ThetaBob_96:
(Start: 28 @51425 has 3 MA's), (66, 51641), (68, 51656), (79, 51692), (93, 51749), (95, 51758), (101, 51806), (103, 51815), (106, 51824), (117, 51884), (121, 51920), (125, 51950),

Gene: Tootsieroll_88 Start: 52746, Stop: 53417, Start Num: 30
Candidate Starts for Tootsieroll_88:
(9, 52641), (16, 52695), (21, 52716), (Start: 30 @52746 has 116 MA's), (84, 53019), (93, 53082), (96, 53100), (114, 53190), (121, 53253),

Gene: Topiatin_95 Start: 53116, Stop: 53787, Start Num: 30
Candidate Starts for Topiatin_95:
(9, 53011), (16, 53065), (21, 53086), (Start: 30 @53116 has 116 MA's), (84, 53389), (93, 53452), (96, 53470), (114, 53560), (121, 53623),

Gene: Toron_97 Start: 54406, Stop: 55059, Start Num: 30
Candidate Starts for Toron_97:
(Start: 30 @54406 has 116 MA's), (96, 54742), (103, 54790), (121, 54895), (124, 54922), (142, 55012),

Gene: VanLee_124 Start: 64456, Stop: 65103, Start Num: 35
Candidate Starts for VanLee_124:
(33, 64450), (Start: 35 @64456 has 2 MA's), (70, 64684), (113, 64879), (121, 64948),

Gene: Velveteen_90 Start: 49527, Stop: 50198, Start Num: 30
Candidate Starts for Velveteen_90:
(9, 49422), (16, 49476), (21, 49497), (Start: 30 @49527 has 116 MA's), (84, 49800), (93, 49863), (96, 49881), (114, 49971), (121, 50034),

Gene: Veteran_85 Start: 51277, Stop: 51948, Start Num: 30
Candidate Starts for Veteran_85:
(9, 51172), (16, 51226), (21, 51247), (Start: 30 @51277 has 116 MA's), (84, 51550), (93, 51613), (96, 51631), (114, 51721), (121, 51784),

Gene: Whatsapiecost_88 Start: 47394, Stop: 48065, Start Num: 30
Candidate Starts for Whatsapiecost_88:
(9, 47289), (16, 47343), (21, 47364), (Start: 30 @47394 has 116 MA's), (84, 47667), (93, 47730), (96, 47748), (114, 47838), (121, 47901),

Gene: Whitty_51 Start: 37023, Stop: 37712, Start Num: 24
Candidate Starts for Whitty_51:
(Start: 24 @37023 has 7 MA's), (65, 37248), (74, 37296), (102, 37431), (107, 37449), (141, 37656), (147, 37698), (148, 37701),

Gene: Whouxphf_95 Start: 52785, Stop: 53456, Start Num: 30
Candidate Starts for Whouxphf_95:

(9, 52680), (16, 52734), (21, 52755), (Start: 30 @52785 has 116 MA's), (84, 53058), (93, 53121), (114, 53229), (121, 53292),

Gene: Yorick_88 Start: 53021, Stop: 53692, Start Num: 30
Candidate Starts for Yorick_88:
(9, 52916), (16, 52970), (21, 52991), (Start: 30 @53021 has 116 MA's), (84, 53294), (93, 53357), (96, 53375), (114, 53465), (121, 53528),

Gene: Yoshi_105 Start: 53247, Stop: 53906, Start Num: 28
Candidate Starts for Yoshi_105:
(Start: 28 @53247 has 3 MA's), (66, 53463), (93, 53571), (103, 53637), (120, 53739), (121, 53742), (125, 53772), (144, 53868),

Gene: ZenTime222_51 Start: 37022, Stop: 37711, Start Num: 24
Candidate Starts for ZenTime222_51:
(Start: 24 @37022 has 7 MA's), (65, 37247), (74, 37295), (102, 37430), (107, 37448), (141, 37655), (147, 37697), (148, 37700),

Gene: Zerg_93 Start: 52279, Stop: 52950, Start Num: 30
Candidate Starts for Zerg_93:
(9, 52174), (16, 52228), (21, 52249), (Start: 30 @52279 has 116 MA's), (84, 52552), (93, 52615), (96, 52633), (114, 52723), (121, 52786),

Gene: Zizzle_95 Start: 53671, Stop: 54342, Start Num: 30
Candidate Starts for Zizzle_95:
(9, 53566), (16, 53620), (21, 53641), (Start: 30 @53671 has 116 MA's), (84, 53944), (93, 54007), (96, 54025), (114, 54115), (121, 54178),