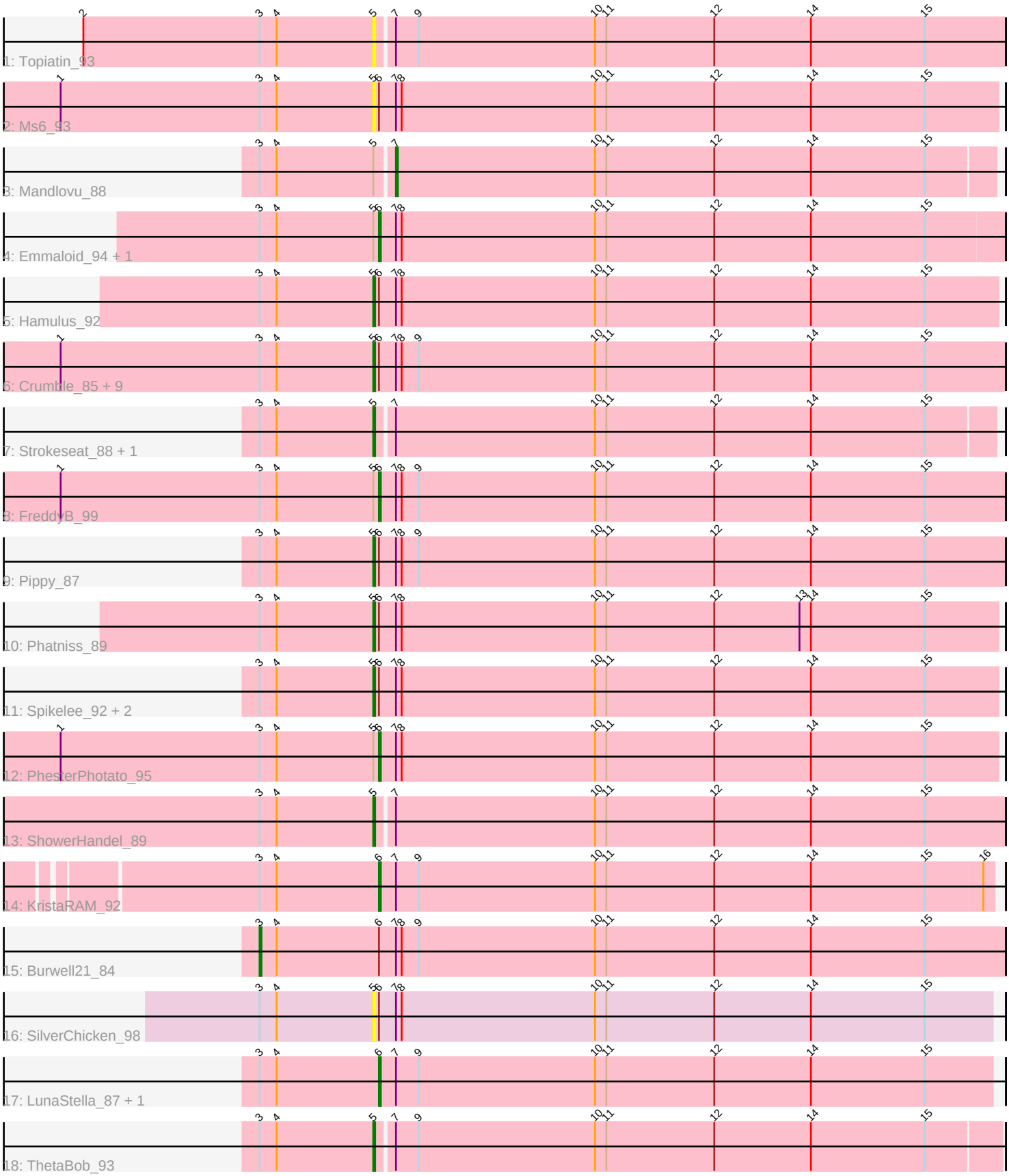
Pham 347890


1: Topiatin_93
2: Ms6_93
3: Mandlovu_88
4: Emmaloid_94 + 1
5: Hamulus_92
6: Crumble_85 + 9
7: Strokeseat_88 + 1
8: FreddyB_99
9: Pippy_87
10: Phatniss_89
11: Spikelee_92 + 2
12: PhesterPhotato_95
13: ShowerHandel_89
14: KristaRAM_92
15: Burwell21_84
16: SilverChicken_98
17: LunaStella_87 + 1
18: ThetaBob_93

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 347890 Report

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

Pham number 347890 has 32 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Topiatin_93
• Track 2 : Ms6_93
• Track 3 : Mandlovu_88
• Track 4 : Emmaloid_94, Slim_94
• Track 5 : Hamulus_92
• Track 6 : Crumble_85, SwagPigglett_91, BobaPhett_91, Brocalys_81, BlueCrab_92, Lizziana_91, Gorge_89, LastJedi_81, Cabrinians_86, Saal_87
• Track 7 : Strokeseat_88, Hlubikazi_88
• Track 8 : FreddyB_99
• Track 9 : Pippy_87
• Track 10 : Phatniss_89
• Track 11 : Spikelee_92, MilleniumForce_91, BuzzLyseyear_99
• Track 12 : PhesterPhotato_95
• Track 13 : ShowerHandel_89
• Track 14 : KristaRAM_92
• Track 15 : Burwell21_84
• Track 16 : SilverChicken_98
• Track 17 : LunaStella_87, TChen_89
• Track 18 : ThetaBob_93

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

The start number called the most often in the published annotations is 5, it was called in 20 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BlueCrab_92, BobaPhett_91, Brocalys_81, BuzzLyseyear_99, Cabrinians_86, Crumble_85, Gorge_89, Hamulus_92, Hlubikazi_88, LastJedi_81, Lizziana_91, MilleniumForce_91, Ms6_93, Phatniss_89, Pippy_87, Saal_87, ShowerHandel_89, SilverChicken_98, Spikelee_92, Strokeseat_88, SwagPigglett_91, ThetaBob_93, Topiatin_93,

Genes that have the "Most Annotated" start but do not call it:
• Emmaloid_94, FreddyB_99, Mandlovu_88, PhesterPhotato_95, Slim_94,

Genes that do not have the "Most Annotated" start:
• Burwell21_84, KristaRAM_92, LunaStella_87, TChen_89,

Summary by start number:

Start 3:
• Found in 32 of 32 (100.0%) of genes in pham
• Manual Annotations of this start: 1 of 29
• Called 3.1% of time when present
• Phage (with cluster) where this start called: Burwell21_84 (F1),

Start 5:
• Found in 28 of 32 (87.5%) of genes in pham
• Manual Annotations of this start: 20 of 29
• Called 82.1% of time when present
• Phage (with cluster) where this start called: BlueCrab_92 (F1), BobaPhett_91 (F1), Brocalys_81 (F1), BuzzLyseyear_99 (F1), Cabrinians_86 (F1), Crumble_85 (F1), Gorge_89 (F1), Hamulus_92 (F1), Hlubikazi_88 (F1), LastJedi_81 (F1), Lizziana_91 (F1), MilleniumForce_91 (F1), Ms6_93 (F1), Phatniss_89 (F1), Pippy_87 (F1), Saal_87 (F1), ShowerHandel_89 (F1), SilverChicken_98 (F2), Spikelee_92 (F1), Strokeseat_88 (F1), SwagPigglett_91 (F1), ThetaBob_93 (F4), Topiatin_93 (F1),

Start 6:
• Found in 26 of 32 (81.2%) of genes in pham
• Manual Annotations of this start: 7 of 29
• Called 26.9% of time when present
• Phage (with cluster) where this start called: Emmaloid_94 (F1), FreddyB_99 (F1), KristaRAM_92 (F1), LunaStella_87 (F4), PhesterPhotato_95 (F1), Slim_94 (F1), TChen_89 (F4),

Start 7:
• Found in 32 of 32 (100.0%) of genes in pham
• Manual Annotations of this start: 1 of 29
• Called 3.1% of time when present
• Phage (with cluster) where this start called: Mandlovu_88 (F1),

Summary by clusters:

There are 3 clusters represented in this pham: F1, F2, F4,

Info for manual annotations of cluster F1:
•Start number 3 was manually annotated 1 time for cluster F1.
•Start number 5 was manually annotated 19 times for cluster F1.
•Start number 6 was manually annotated 5 times for cluster F1.
•Start number 7 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F4:
•Start number 5 was manually annotated 1 time for cluster F4.
•Start number 6 was manually annotated 2 times for cluster F4.

Gene Information:

Gene: BlueCrab_92 Start: 52153, Stop: 52485, Start Num: 5
Candidate Starts for BlueCrab_92:
(1, 51988), (Start: 3 @52093 has 1 MA's), (4, 52102), (Start: 5 @52153 has 20 MA's), (Start: 6 @52156 has 7 MA's), (Start: 7 @52165 has 1 MA's), (8, 52168), (9, 52177), (10, 52270), (11, 52276), (12, 52333), (14, 52384), (15, 52444),

Gene: BobaPhett_91 Start: 52885, Stop: 53217, Start Num: 5
Candidate Starts for BobaPhett_91:
(1, 52720), (Start: 3 @52825 has 1 MA's), (4, 52834), (Start: 5 @52885 has 20 MA's), (Start: 6 @52888 has 7 MA's), (Start: 7 @52897 has 1 MA's), (8, 52900), (9, 52909), (10, 53002), (11, 53008), (12, 53065), (14, 53116), (15, 53176),

Gene: Brocalys_81 Start: 48365, Stop: 48697, Start Num: 5
Candidate Starts for Brocalys_81:
(1, 48200), (Start: 3 @48305 has 1 MA's), (4, 48314), (Start: 5 @48365 has 20 MA's), (Start: 6 @48368 has 7 MA's), (Start: 7 @48377 has 1 MA's), (8, 48380), (9, 48389), (10, 48482), (11, 48488), (12, 48545), (14, 48596), (15, 48656),

Gene: Burwell21_84 Start: 50591, Stop: 50983, Start Num: 3
Candidate Starts for Burwell21_84:
(Start: 3 @50591 has 1 MA's), (4, 50600), (Start: 6 @50654 has 7 MA's), (Start: 7 @50663 has 1 MA's), (8, 50666), (9, 50675), (10, 50768), (11, 50774), (12, 50831), (14, 50882), (15, 50942),

Gene: BuzzLyseyear_99 Start: 54015, Stop: 54335, Start Num: 5
Candidate Starts for BuzzLyseyear_99:
(Start: 3 @53955 has 1 MA's), (4, 53964), (Start: 5 @54015 has 20 MA's), (Start: 6 @54018 has 7 MA's), (Start: 7 @54027 has 1 MA's), (8, 54030), (10, 54132), (11, 54138), (12, 54195), (14, 54246), (15, 54306),

Gene: Cabrinians_86 Start: 50285, Stop: 50617, Start Num: 5
Candidate Starts for Cabrinians_86:
(1, 50120), (Start: 3 @50225 has 1 MA's), (4, 50234), (Start: 5 @50285 has 20 MA's), (Start: 6 @50288 has 7 MA's), (Start: 7 @50297 has 1 MA's), (8, 50300), (9, 50309), (10, 50402), (11, 50408), (12, 50465), (14, 50516), (15, 50576),

Gene: Crumble_85 Start: 47010, Stop: 47342, Start Num: 5
Candidate Starts for Crumble_85:
(1, 46845), (Start: 3 @46950 has 1 MA's), (4, 46959), (Start: 5 @47010 has 20 MA's), (Start: 6 @47013 has 7 MA's), (Start: 7 @47022 has 1 MA's), (8, 47025), (9, 47034), (10, 47127), (11, 47133), (12, 47190), (14, 47241), (15, 47301),

Gene: Emmaloid_94 Start: 51648, Stop: 51977, Start Num: 6
Candidate Starts for Emmaloid_94:
(Start: 3 @51585 has 1 MA's), (4, 51594), (Start: 5 @51645 has 20 MA's), (Start: 6 @51648 has 7 MA's), (Start: 7 @51657 has 1 MA's), (8, 51660), (10, 51762), (11, 51768), (12, 51825), (14, 51876), (15, 51936),

Gene: FreddyB_99 Start: 51935, Stop: 52264, Start Num: 6
Candidate Starts for FreddyB_99:
(1, 51767), (Start: 3 @51872 has 1 MA's), (4, 51881), (Start: 5 @51932 has 20 MA's), (Start: 6 @51935 has 7 MA's), (Start: 7 @51944 has 1 MA's), (8, 51947), (9, 51956), (10, 52049), (11, 52055), (12,

52112), (14, 52163), (15, 52223),

Gene: Gorge_89 Start: 51559, Stop: 51891, Start Num: 5
Candidate Starts for Gorge_89:
(1, 51394), (Start: 3 @51499 has 1 MA's), (4, 51508), (Start: 5 @51559 has 20 MA's), (Start: 6 @51562 has 7 MA's), (Start: 7 @51571 has 1 MA's), (8, 51574), (9, 51583), (10, 51676), (11, 51682), (12, 51739), (14, 51790), (15, 51850),

Gene: Hamulus_92 Start: 51197, Stop: 51526, Start Num: 5
Candidate Starts for Hamulus_92:
(Start: 3 @51137 has 1 MA's), (4, 51146), (Start: 5 @51197 has 20 MA's), (Start: 6 @51200 has 7 MA's), (Start: 7 @51209 has 1 MA's), (8, 51212), (10, 51314), (11, 51320), (12, 51377), (14, 51428), (15, 51488),

Gene: Hlubikazi_88 Start: 49062, Stop: 49385, Start Num: 5
Candidate Starts for Hlubikazi_88:
(Start: 3 @49002 has 1 MA's), (4, 49011), (Start: 5 @49062 has 20 MA's), (Start: 7 @49071 has 1 MA's), (10, 49176), (11, 49182), (12, 49239), (14, 49290), (15, 49350),

Gene: KristaRAM_92 Start: 50937, Stop: 51260, Start Num: 6
Candidate Starts for KristaRAM_92:
(Start: 3 @50874 has 1 MA's), (4, 50883), (Start: 6 @50937 has 7 MA's), (Start: 7 @50946 has 1 MA's), (9, 50958), (10, 51051), (11, 51057), (12, 51114), (14, 51165), (15, 51225), (16, 51255),

Gene: LastJedi_81 Start: 48759, Stop: 49091, Start Num: 5
Candidate Starts for LastJedi_81:
(1, 48594), (Start: 3 @48699 has 1 MA's), (4, 48708), (Start: 5 @48759 has 20 MA's), (Start: 6 @48762 has 7 MA's), (Start: 7 @48771 has 1 MA's), (8, 48774), (9, 48783), (10, 48876), (11, 48882), (12, 48939), (14, 48990), (15, 49050),

Gene: Lizziana_91 Start: 52008, Stop: 52340, Start Num: 5
Candidate Starts for Lizziana_91:
(1, 51843), (Start: 3 @51948 has 1 MA's), (4, 51957), (Start: 5 @52008 has 20 MA's), (Start: 6 @52011 has 7 MA's), (Start: 7 @52020 has 1 MA's), (8, 52023), (9, 52032), (10, 52125), (11, 52131), (12, 52188), (14, 52239), (15, 52299),

Gene: LunaStella_87 Start: 49824, Stop: 50147, Start Num: 6
Candidate Starts for LunaStella_87:
(Start: 3 @49761 has 1 MA's), (4, 49770), (Start: 6 @49824 has 7 MA's), (Start: 7 @49833 has 1 MA's), (9, 49845), (10, 49938), (11, 49944), (12, 50001), (14, 50052), (15, 50112),

Gene: Mandlovu_88 Start: 49013, Stop: 49327, Start Num: 7
Candidate Starts for Mandlovu_88:
(Start: 3 @48944 has 1 MA's), (4, 48953), (Start: 5 @49004 has 20 MA's), (Start: 7 @49013 has 1 MA's), (10, 49118), (11, 49124), (12, 49181), (14, 49232), (15, 49292),

Gene: MilleniumForce_91 Start: 51910, Stop: 52242, Start Num: 5
Candidate Starts for MilleniumForce_91:
(Start: 3 @51850 has 1 MA's), (4, 51859), (Start: 5 @51910 has 20 MA's), (Start: 6 @51913 has 7 MA's), (Start: 7 @51922 has 1 MA's), (8, 51925), (10, 52027), (11, 52033), (12, 52090), (14, 52141), (15, 52201),

Gene: Ms6_93 Start: 48079, Stop: 48408, Start Num: 5

Candidate Starts for Ms6_93:
(1, 47914), (Start: 3 @48019 has 1 MA's), (4, 48028), (Start: 5 @48079 has 20 MA's), (Start: 6 @48082 has 7 MA's), (Start: 7 @48091 has 1 MA's), (8, 48094), (10, 48196), (11, 48202), (12, 48259), (14, 48310), (15, 48370),

Gene: Phatniss_89 Start: 50807, Stop: 51136, Start Num: 5
Candidate Starts for Phatniss_89:
(Start: 3 @50747 has 1 MA's), (4, 50756), (Start: 5 @50807 has 20 MA's), (Start: 6 @50810 has 7 MA's), (Start: 7 @50819 has 1 MA's), (8, 50822), (10, 50924), (11, 50930), (12, 50987), (13, 51032), (14, 51038), (15, 51098),

Gene: PhesterPhotato_95 Start: 51458, Stop: 51784, Start Num: 6
Candidate Starts for PhesterPhotato_95:
(1, 51290), (Start: 3 @51395 has 1 MA's), (4, 51404), (Start: 5 @51455 has 20 MA's), (Start: 6 @51458 has 7 MA's), (Start: 7 @51467 has 1 MA's), (8, 51470), (10, 51572), (11, 51578), (12, 51635), (14, 51686), (15, 51746),

Gene: Pippy_87 Start: 49988, Stop: 50320, Start Num: 5
Candidate Starts for Pippy_87:
(Start: 3 @49928 has 1 MA's), (4, 49937), (Start: 5 @49988 has 20 MA's), (Start: 6 @49991 has 7 MA's), (Start: 7 @50000 has 1 MA's), (8, 50003), (9, 50012), (10, 50105), (11, 50111), (12, 50168), (14, 50219), (15, 50279),

Gene: Saal_87 Start: 51379, Stop: 51711, Start Num: 5
Candidate Starts for Saal_87:
(1, 51214), (Start: 3 @51319 has 1 MA's), (4, 51328), (Start: 5 @51379 has 20 MA's), (Start: 6 @51382 has 7 MA's), (Start: 7 @51391 has 1 MA's), (8, 51394), (9, 51403), (10, 51496), (11, 51502), (12, 51559), (14, 51610), (15, 51670),

Gene: ShowerHandel_89 Start: 50218, Stop: 50547, Start Num: 5
Candidate Starts for ShowerHandel_89:
(Start: 3 @50158 has 1 MA's), (4, 50167), (Start: 5 @50218 has 20 MA's), (Start: 7 @50227 has 1 MA's), (10, 50332), (11, 50338), (12, 50395), (14, 50446), (15, 50506),

Gene: SilverChicken_98 Start: 51417, Stop: 51743, Start Num: 5
Candidate Starts for SilverChicken_98:
(Start: 3 @51357 has 1 MA's), (4, 51366), (Start: 5 @51417 has 20 MA's), (Start: 6 @51420 has 7 MA's), (Start: 7 @51429 has 1 MA's), (8, 51432), (10, 51534), (11, 51540), (12, 51597), (14, 51648), (15, 51708),

Gene: Slim_94 Start: 51639, Stop: 51968, Start Num: 6
Candidate Starts for Slim_94:
(Start: 3 @51576 has 1 MA's), (4, 51585), (Start: 5 @51636 has 20 MA's), (Start: 6 @51639 has 7 MA's), (Start: 7 @51648 has 1 MA's), (8, 51651), (10, 51753), (11, 51759), (12, 51816), (14, 51867), (15, 51927),

Gene: Spikelee_92 Start: 53142, Stop: 53471, Start Num: 5
Candidate Starts for Spikelee_92:
(Start: 3 @53082 has 1 MA's), (4, 53091), (Start: 5 @53142 has 20 MA's), (Start: 6 @53145 has 7 MA's), (Start: 7 @53154 has 1 MA's), (8, 53157), (10, 53259), (11, 53265), (12, 53322), (14, 53373), (15, 53433),

Gene: Strokeseat_88 Start: 49061, Stop: 49384, Start Num: 5

Candidate Starts for Strokeseat_88:
(Start: 3 @49001 has 1 MA's), (4, 49010), (Start: 5 @49061 has 20 MA's), (Start: 7 @49070 has 1 MA's), (10, 49175), (11, 49181), (12, 49238), (14, 49289), (15, 49349),

Gene: SwagPigglett_91 Start: 52515, Stop: 52847, Start Num: 5
Candidate Starts for SwagPigglett_91:
(1, 52350), (Start: 3 @52455 has 1 MA's), (4, 52464), (Start: 5 @52515 has 20 MA's), (Start: 6 @52518 has 7 MA's), (Start: 7 @52527 has 1 MA's), (8, 52530), (9, 52539), (10, 52632), (11, 52638), (12, 52695), (14, 52746), (15, 52806),

Gene: TChen_89 Start: 51775, Stop: 52098, Start Num: 6
Candidate Starts for TChen_89:
(Start: 3 @51712 has 1 MA's), (4, 51721), (Start: 6 @51775 has 7 MA's), (Start: 7 @51784 has 1 MA's), (9, 51796), (10, 51889), (11, 51895), (12, 51952), (14, 52003), (15, 52063),

Gene: ThetaBob_93 Start: 50592, Stop: 50918, Start Num: 5
Candidate Starts for ThetaBob_93:
(Start: 3 @50532 has 1 MA's), (4, 50541), (Start: 5 @50592 has 20 MA's), (Start: 7 @50601 has 1 MA's), (9, 50613), (10, 50706), (11, 50712), (12, 50769), (14, 50820), (15, 50880),

Gene: Topiatin_93 Start: 52154, Stop: 52483, Start Num: 5
Candidate Starts for Topiatin_93:
(2, 52001), (Start: 3 @52094 has 1 MA's), (4, 52103), (Start: 5 @52154 has 20 MA's), (Start: 7 @52163 has 1 MA's), (9, 52175), (10, 52268), (11, 52274), (12, 52331), (14, 52382), (15, 52442),