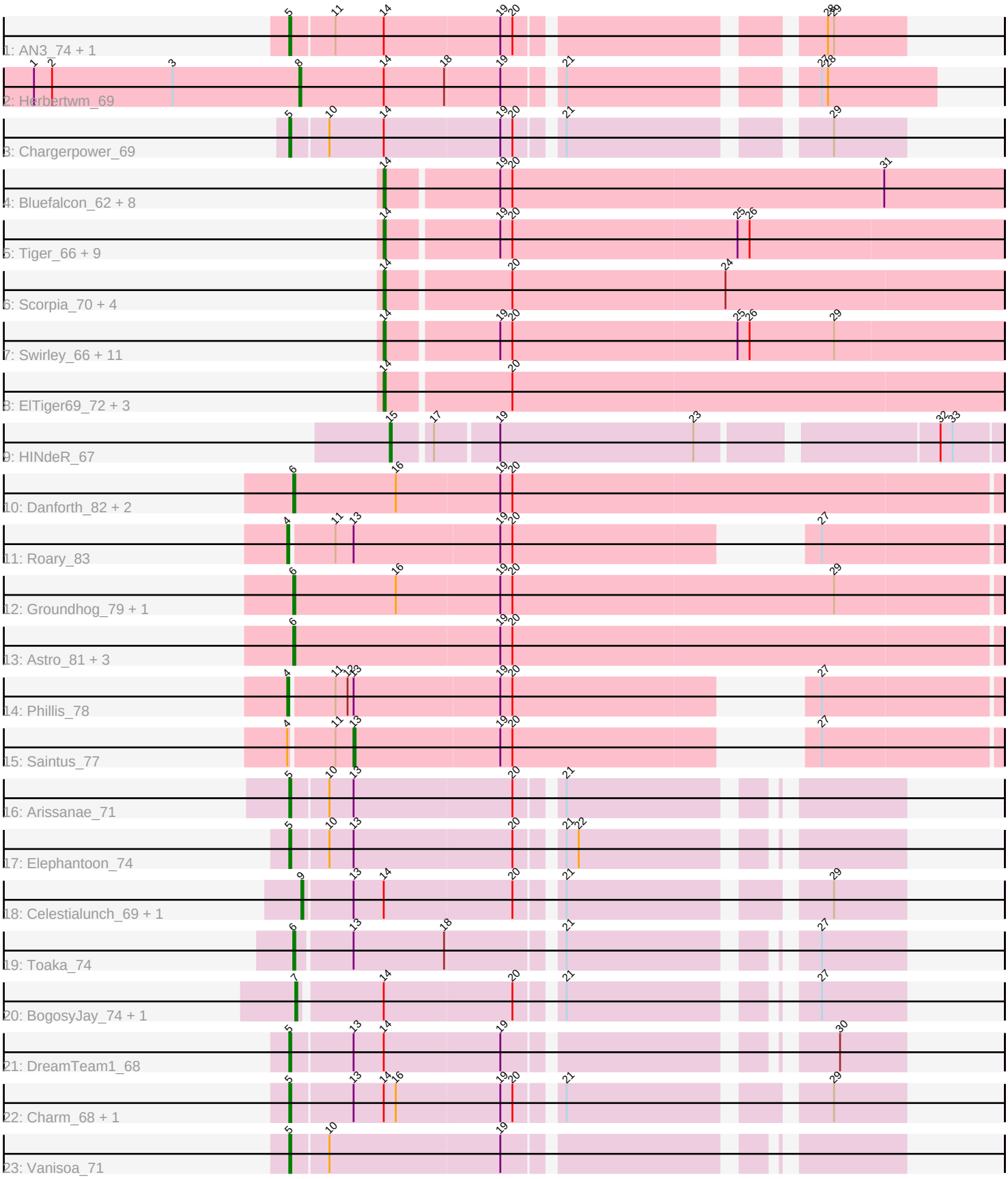
Pham 347586


1: AN3_74 + 1
2: Herbertwm_69
3: Chargerpower_69
4: Bluefalcon_62 + 8
5: Tiger_66 + 9
6: Scorpia_70 + 4
7: Swirley_66 + 11
8: ElTiger69_72 + 3
9: HINdeR_67
10: Danforth_82 + 2
11: Roary_83
12: Groundhog_79 + 1
13: Astro_81 + 3
14: Phillis_78
15: Saintus_77
16: Arissanae_71
17: Elephantoon_74
18: Celestialunch_69 + 1
19: Toaka_74
20: BogosyJay_74 + 1
21: DreamTeam1_68
22: Charm_68 + 1
23: Vanisoa_71

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 347586 Report

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

Pham number 347586 has 68 members, 3 are drafts.

Phages represented in each track:
• Track 1 : AN3_74, VA6_72
• Track 2 : Herbertwm_69
• Track 3 : Chargerpower_69
• Track 4 : Bluefalcon_62, Midas2_63, Coog_63, Theia_65, Cuco_65, Archetta_64, Ghoulboy_66, Zolita_65, SydNat_66
• Track 5 : Tiger_66, AgentM_66, Aragog_66, Phlorence_65, Discoknowium_64, PickleBack_67, Jovo_67, Lev2_67, ForGetIt_67, Conspiracy_67
• Track 6 : Scorpia_70, Benedict_70, PetterN_74, Chadwick_70, Naca_69
• Track 7 : Swirley_66, Bonamassa_66, LittleCherry_65, Prinashe11_65, Florence1_63, Micasa_66, Milcery_66, MarysWell_66, HuhtaEnerson15_64, Dublin_66, Tarynearal_65, Twigg_65
• Track 8 : ElTiger69_72, Jabiru_68, Airmid_69, UnionJack_70
• Track 9 : HINdeR_67
• Track 10 : Danforth_82, Stephig9_80, NearlyHeadless_82
• Track 11 : Roary_83
• Track 12 : Groundhog_79, Smeadley_81
• Track 13 : Astro_81, Caitlin_80, Dixon_80, Expelliarmus_78
• Track 14 : Phillis_78
• Track 15 : Saintus_77
• Track 16 : Arissanae_71
• Track 17 : Elephantoon_74
• Track 18 : Celestialunch_69, MegTheThird_69
• Track 19 : Toaka_74
• Track 20 : BogosyJay_74, Maminiaina_74
• Track 21 : DreamTeam1_68
• Track 22 : Charm_68, Klodlith_69
• Track 23 : Vanisoa_71

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

The start number called the most often in the published annotations is 14, it was called in 39 of the 65 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AgentM_66, Airmid_69, Aragog_66, Archetta_64, Benedict_70, Bluefalcon_62, Bonamassa_66, Chadwick_70, Conspiracy_67, Coog_63, Cuco_65, Discoknowium_64, Dublin_66, ElTiger69_72, Florence1_63, ForGetIt_67, Ghoulboy_66, HuhtaEnerson15_64, Jabiru_68, Jovo_67, Lev2_67, LittleCherry_65, MarysWell_66, Micasa_66, Midas2_63, Milcery_66, Naca_69, PetterN_74, Phlorence_65, PickleBack_67, Prinashe11_65, Scorpia_70, Swirley_66, SydNat_66, Tarynearal_65, Theia_65, Tiger_66, Twigg_65, UnionJack_70, Zolita_65,

Genes that have the "Most Annotated" start but do not call it:
• AN3_74, BogosyJay_74, Celestialunch_69, Chargerpower_69, Charm_68, DreamTeam1_68, Herbertwm_69, Klodlith_69, Maminiaina_74, MegTheThird_69, VA6_72,

Genes that do not have the "Most Annotated" start:
• Arissanae_71, Astro_81, Caitlin_80, Danforth_82, Dixon_80, Elephantoon_74, Expelliarmus_78, Groundhog_79, HINdeR_67, NearlyHeadless_82, Phillis_78, Roary_83, Saintus_77, Smeadley_81, Stephig9_80, Toaka_74, Vanisoa_71,

Summary by start number:

Start 4:
• Found in 3 of 68 (4.4%) of genes in pham
• Manual Annotations of this start: 2 of 65
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Phillis_78 (A8), Roary_83 (A8),

Start 5:
• Found in 9 of 68 (13.2%) of genes in pham
• Manual Annotations of this start: 8 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AN3_74 (A2), Arissanae_71 (A9), Chargerpower_69 (A22), Charm_68 (A9), DreamTeam1_68 (A9), Elephantoon_74 (A9), Klodlith_69 (A9), VA6_72 (A2), Vanisoa_71 (A9),

Start 6:
• Found in 10 of 68 (14.7%) of genes in pham
• Manual Annotations of this start: 10 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Astro_81 (A8), Caitlin_80 (A8), Danforth_82 (A8), Dixon_80 (A8), Expelliarmus_78 (A8), Groundhog_79 (A8), NearlyHeadless_82 (A8), Smeadley_81 (A8), Stephig9_80 (A8), Toaka_74 (A9),

Start 7:
• Found in 2 of 68 (2.9%) of genes in pham
• Manual Annotations of this start: 2 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BogosyJay_74 (A9), Maminiaina_74 (A9),

Start 8:
• Found in 1 of 68 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 65
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Herbertwm_69 (A2),

Start 9:
• Found in 2 of 68 (2.9%) of genes in pham
• Manual Annotations of this start: 1 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Celestialunch_69 (A9), MegTheThird_69 (A9),

Start 13:
• Found in 11 of 68 (16.2%) of genes in pham
• Manual Annotations of this start: 1 of 65
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Saintus_77 (A8),

Start 14:
• Found in 51 of 68 (75.0%) of genes in pham
• Manual Annotations of this start: 39 of 65
• Called 78.4% of time when present
• Phage (with cluster) where this start called: AgentM_66 (A5), Airmid_69 (A5), Aragog_66 (A5), Archetta_64 (A5), Benedict_70 (A5), Bluefalcon_62 (A5), Bonamassa_66 (A5), Chadwick_70 (A5), Conspiracy_67 (A5), Coog_63 (A5), Cuco_65 (A5), Discoknowium_64 (A5), Dublin_66 (A5), ElTiger69_72 (A5), Florence1_63 (A5), ForGetIt_67 (A5), Ghoulboy_66 (A5), HuhtaEnerson15_64 (A5), Jabiru_68 (A5), Jovo_67 (A5), Lev2_67 (A5), LittleCherry_65 (A5), MarysWell_66 (A5), Micasa_66 (A5), Midas2_63 (A5), Milcery_66 (A5), Naca_69 (A5), PetterN_74 (A5), Phlorence_65 (A5), PickleBack_67 (A5), Prinashe11_65 (A5), Scorpia_70 (A5), Swirley_66 (A5), SydNat_66 (A5), Tarynearal_65 (A5), Theia_65 (A5), Tiger_66 (A5), Twigg_65 (A5), UnionJack_70 (A5), Zolita_65 (A5),

Start 15:
• Found in 1 of 68 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: HINdeR_67 (A7),

Summary by clusters:

There are 6 clusters represented in this pham: A22, A2, A5, A7, A9, A8,

Info for manual annotations of cluster A2:
•Start number 5 was manually annotated 2 times for cluster A2.
•Start number 8 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A22:
•Start number 5 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A5:
•Start number 14 was manually annotated 39 times for cluster A5.

Info for manual annotations of cluster A7:
•Start number 15 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:
•Start number 4 was manually annotated 2 times for cluster A8.
•Start number 6 was manually annotated 9 times for cluster A8.
•Start number 13 was manually annotated 1 time for cluster A8.

Info for manual annotations of cluster A9:
•Start number 5 was manually annotated 5 times for cluster A9.
•Start number 6 was manually annotated 1 time for cluster A9.
•Start number 7 was manually annotated 2 times for cluster A9.
•Start number 9 was manually annotated 1 time for cluster A9.

Gene Information:

Gene: AN3_74 Start: 42283, Stop: 42008, Start Num: 5
Candidate Starts for AN3_74:
(Start: 5 @42283 has 8 MA's), (11, 42262), (Start: 14 @42238 has 39 MA's), (19, 42181), (20, 42175), (28, 42046), (29, 42043),

Gene: AgentM_66 Start: 41898, Stop: 41596, Start Num: 14
Candidate Starts for AgentM_66:
(Start: 14 @41898 has 39 MA's), (19, 41844), (20, 41838), (25, 41727), (26, 41721),

Gene: Airmid_69 Start: 42731, Stop: 42429, Start Num: 14
Candidate Starts for Airmid_69:
(Start: 14 @42731 has 39 MA's), (20, 42671),

Gene: Aragog_66 Start: 41918, Stop: 41616, Start Num: 14
Candidate Starts for Aragog_66:
(Start: 14 @41918 has 39 MA's), (19, 41864), (20, 41858), (25, 41747), (26, 41741),

Gene: Archetta_64 Start: 41864, Stop: 41562, Start Num: 14
Candidate Starts for Archetta_64:
(Start: 14 @41864 has 39 MA's), (19, 41810), (20, 41804), (31, 41621),

Gene: Arissanae_71 Start: 43153, Stop: 42884, Start Num: 5
Candidate Starts for Arissanae_71:
(Start: 5 @43153 has 8 MA's), (10, 43135), (Start: 13 @43123 has 1 MA's), (20, 43045), (21, 43027),

Gene: Astro_81 Start: 44417, Stop: 44070, Start Num: 6
Candidate Starts for Astro_81:
(Start: 6 @44417 has 10 MA's), (19, 44315), (20, 44309),

Gene: Benedict_70 Start: 42463, Stop: 42161, Start Num: 14
Candidate Starts for Benedict_70:
(Start: 14 @42463 has 39 MA's), (20, 42403), (24, 42298),

Gene: Bluefalcon_62 Start: 41884, Stop: 41582, Start Num: 14
Candidate Starts for Bluefalcon_62:
(Start: 14 @41884 has 39 MA's), (19, 41830), (20, 41824), (31, 41641),

Gene: BogosyJay_74 Start: 43112, Stop: 42849, Start Num: 7

Candidate Starts for BogosyJay_74:
(Start: 7 @43112 has 2 MA's), (Start: 14 @43073 has 39 MA's), (20, 43010), (21, 42992), (27, 42890),

Gene: Bonamassa_66 Start: 42093, Stop: 41791, Start Num: 14
Candidate Starts for Bonamassa_66:
(Start: 14 @42093 has 39 MA's), (19, 42039), (20, 42033), (25, 41922), (26, 41916), (29, 41874),

Gene: Caitlin_80 Start: 44109, Stop: 43762, Start Num: 6
Candidate Starts for Caitlin_80:
(Start: 6 @44109 has 10 MA's), (19, 44007), (20, 44001),

Gene: Celestialunch_69 Start: 42045, Stop: 41776, Start Num: 9
Candidate Starts for Celestialunch_69:
(Start: 9 @42045 has 1 MA's), (Start: 13 @42021 has 1 MA's), (Start: 14 @42006 has 39 MA's), (20, 41943), (21, 41925), (29, 41811),

Gene: Chadwick_70 Start: 42207, Stop: 41905, Start Num: 14
Candidate Starts for Chadwick_70:
(Start: 14 @42207 has 39 MA's), (20, 42147), (24, 42042),

Gene: Chargerpower_69 Start: 41165, Stop: 40890, Start Num: 5
Candidate Starts for Chargerpower_69:
(Start: 5 @41165 has 8 MA's), (10, 41147), (Start: 14 @41120 has 39 MA's), (19, 41063), (20, 41057), (21, 41039), (29, 40925),

Gene: Charm_68 Start: 41975, Stop: 41700, Start Num: 5
Candidate Starts for Charm_68:
(Start: 5 @41975 has 8 MA's), (Start: 13 @41945 has 1 MA's), (Start: 14 @41930 has 39 MA's), (16, 41924), (19, 41873), (20, 41867), (21, 41849), (29, 41735),

Gene: Conspiracy_67 Start: 42140, Stop: 41838, Start Num: 14
Candidate Starts for Conspiracy_67:
(Start: 14 @42140 has 39 MA's), (19, 42086), (20, 42080), (25, 41969), (26, 41963),

Gene: Coog_63 Start: 41911, Stop: 41609, Start Num: 14
Candidate Starts for Coog_63:
(Start: 14 @41911 has 39 MA's), (19, 41857), (20, 41851), (31, 41668),

Gene: Cuco_65 Start: 41771, Stop: 41469, Start Num: 14
Candidate Starts for Cuco_65:
(Start: 14 @41771 has 39 MA's), (19, 41717), (20, 41711), (31, 41528),

Gene: Danforth_82 Start: 44494, Stop: 44147, Start Num: 6
Candidate Starts for Danforth_82:
(Start: 6 @44494 has 10 MA's), (16, 44443), (19, 44392), (20, 44386),

Gene: Discoknowium_64 Start: 41657, Stop: 41355, Start Num: 14
Candidate Starts for Discoknowium_64:
(Start: 14 @41657 has 39 MA's), (19, 41603), (20, 41597), (25, 41486), (26, 41480),

Gene: Dixon_80 Start: 43976, Stop: 43629, Start Num: 6
Candidate Starts for Dixon_80:
(Start: 6 @43976 has 10 MA's), (19, 43874), (20, 43868),

Gene: DreamTeam1_68 Start: 41822, Stop: 41553, Start Num: 5
Candidate Starts for DreamTeam1_68:
(Start: 5 @41822 has 8 MA's), (Start: 13 @41792 has 1 MA's), (Start: 14 @41777 has 39 MA's), (19, 41720), (30, 41585),

Gene: Dublin_66 Start: 42050, Stop: 41748, Start Num: 14
Candidate Starts for Dublin_66:
(Start: 14 @42050 has 39 MA's), (19, 41996), (20, 41990), (25, 41879), (26, 41873), (29, 41831),

Gene: ElTiger69_72 Start: 43134, Stop: 42832, Start Num: 14
Candidate Starts for ElTiger69_72:
(Start: 14 @43134 has 39 MA's), (20, 43074),

Gene: Elephantoon_74 Start: 42749, Stop: 42480, Start Num: 5
Candidate Starts for Elephantoon_74:
(Start: 5 @42749 has 8 MA's), (10, 42731), (Start: 13 @42719 has 1 MA's), (20, 42641), (21, 42623), (22, 42617),

Gene: Expelliarmus_78 Start: 44190, Stop: 43843, Start Num: 6
Candidate Starts for Expelliarmus_78:
(Start: 6 @44190 has 10 MA's), (19, 44088), (20, 44082),

Gene: Florence1_63 Start: 41605, Stop: 41303, Start Num: 14
Candidate Starts for Florence1_63:
(Start: 14 @41605 has 39 MA's), (19, 41551), (20, 41545), (25, 41434), (26, 41428), (29, 41386),

Gene: ForGetIt_67 Start: 42165, Stop: 41863, Start Num: 14
Candidate Starts for ForGetIt_67:
(Start: 14 @42165 has 39 MA's), (19, 42111), (20, 42105), (25, 41994), (26, 41988),

Gene: Ghoulboy_66 Start: 42138, Stop: 41836, Start Num: 14
Candidate Starts for Ghoulboy_66:
(Start: 14 @42138 has 39 MA's), (19, 42084), (20, 42078), (31, 41895),

Gene: Groundhog_79 Start: 44246, Stop: 43899, Start Num: 6
Candidate Starts for Groundhog_79:
(Start: 6 @44246 has 10 MA's), (16, 44195), (19, 44144), (20, 44138), (29, 43979),

Gene: HINdeR_67 Start: 45176, Stop: 44895, Start Num: 15
Candidate Starts for HINdeR_67:
(Start: 15 @45176 has 1 MA's), (17, 45158), (19, 45128), (23, 45032), (32, 44924), (33, 44918),

Gene: Herbertwm_69 Start: 43036, Stop: 42749, Start Num: 8
Candidate Starts for Herbertwm_69:
(1, 43168), (2, 43159), (3, 43099), (Start: 8 @43036 has 1 MA's), (Start: 14 @42994 has 39 MA's), (18, 42964), (19, 42937), (21, 42913), (27, 42805), (28, 42802),

Gene: HuhtaEnerson15_64 Start: 41746, Stop: 41444, Start Num: 14
Candidate Starts for HuhtaEnerson15_64:
(Start: 14 @41746 has 39 MA's), (19, 41692), (20, 41686), (25, 41575), (26, 41569), (29, 41527),

Gene: Jabiru_68 Start: 42318, Stop: 42016, Start Num: 14

Candidate Starts for Jabiru_68:
(Start: 14 @42318 has 39 MA's), (20, 42258),

Gene: Jovo_67 Start: 42421, Stop: 42119, Start Num: 14
Candidate Starts for Jovo_67:
(Start: 14 @42421 has 39 MA's), (19, 42367), (20, 42361), (25, 42250), (26, 42244),

Gene: Klodlith_69 Start: 42042, Stop: 41767, Start Num: 5
Candidate Starts for Klodlith_69:
(Start: 5 @42042 has 8 MA's), (Start: 13 @42012 has 1 MA's), (Start: 14 @41997 has 39 MA's), (16, 41991), (19, 41940), (20, 41934), (21, 41916), (29, 41802),

Gene: Lev2_67 Start: 42053, Stop: 41751, Start Num: 14
Candidate Starts for Lev2_67:
(Start: 14 @42053 has 39 MA's), (19, 41999), (20, 41993), (25, 41882), (26, 41876),

Gene: LittleCherry_65 Start: 41616, Stop: 41314, Start Num: 14
Candidate Starts for LittleCherry_65:
(Start: 14 @41616 has 39 MA's), (19, 41562), (20, 41556), (25, 41445), (26, 41439), (29, 41397),

Gene: Maminiaina_74 Start: 43094, Stop: 42831, Start Num: 7
Candidate Starts for Maminiaina_74:
(Start: 7 @43094 has 2 MA's), (Start: 14 @43055 has 39 MA's), (20, 42992), (21, 42974), (27, 42872),

Gene: MarysWell_66 Start: 42293, Stop: 41991, Start Num: 14
Candidate Starts for MarysWell_66:
(Start: 14 @42293 has 39 MA's), (19, 42239), (20, 42233), (25, 42122), (26, 42116), (29, 42074),

Gene: MegTheThird_69 Start: 42044, Stop: 41775, Start Num: 9
Candidate Starts for MegTheThird_69:
(Start: 9 @42044 has 1 MA's), (Start: 13 @42020 has 1 MA's), (Start: 14 @42005 has 39 MA's), (20, 41942), (21, 41924), (29, 41810),

Gene: Micasa_66 Start: 42015, Stop: 41713, Start Num: 14
Candidate Starts for Micasa_66:
(Start: 14 @42015 has 39 MA's), (19, 41961), (20, 41955), (25, 41844), (26, 41838), (29, 41796),

Gene: Midas2_63 Start: 41911, Stop: 41609, Start Num: 14
Candidate Starts for Midas2_63:
(Start: 14 @41911 has 39 MA's), (19, 41857), (20, 41851), (31, 41668),

Gene: Milcery_66 Start: 41805, Stop: 41503, Start Num: 14
Candidate Starts for Milcery_66:
(Start: 14 @41805 has 39 MA's), (19, 41751), (20, 41745), (25, 41634), (26, 41628), (29, 41586),

Gene: Naca_69 Start: 43206, Stop: 42904, Start Num: 14
Candidate Starts for Naca_69:
(Start: 14 @43206 has 39 MA's), (20, 43146), (24, 43041),

Gene: NearlyHeadless_82 Start: 44260, Stop: 43913, Start Num: 6
Candidate Starts for NearlyHeadless_82:
(Start: 6 @44260 has 10 MA's), (16, 44209), (19, 44158), (20, 44152),

Gene: PetterN_74 Start: 42993, Stop: 42691, Start Num: 14
Candidate Starts for PetterN_74:
(Start: 14 @42993 has 39 MA's), (20, 42933), (24, 42828),

Gene: Phillis_78 Start: 43167, Stop: 42865, Start Num: 4
Candidate Starts for Phillis_78:
(Start: 4 @43167 has 2 MA's), (11, 43146), (12, 43140), (Start: 13 @43137 has 1 MA's), (19, 43065), (20, 43059), (27, 42951),

Gene: Phlorence_65 Start: 41798, Stop: 41496, Start Num: 14
Candidate Starts for Phlorence_65:
(Start: 14 @41798 has 39 MA's), (19, 41744), (20, 41738), (25, 41627), (26, 41621),

Gene: PickleBack_67 Start: 41975, Stop: 41673, Start Num: 14
Candidate Starts for PickleBack_67:
(Start: 14 @41975 has 39 MA's), (19, 41921), (20, 41915), (25, 41804), (26, 41798),

Gene: Prinashe11_65 Start: 41625, Stop: 41323, Start Num: 14
Candidate Starts for Prinashe11_65:
(Start: 14 @41625 has 39 MA's), (19, 41571), (20, 41565), (25, 41454), (26, 41448), (29, 41406),

Gene: Roary_83 Start: 44451, Stop: 44149, Start Num: 4
Candidate Starts for Roary_83:
(Start: 4 @44451 has 2 MA's), (11, 44430), (Start: 13 @44421 has 1 MA's), (19, 44349), (20, 44343), (27, 44235),

Gene: Saintus_77 Start: 41069, Stop: 40797, Start Num: 13
Candidate Starts for Saintus_77:
(Start: 4 @41099 has 2 MA's), (11, 41078), (Start: 13 @41069 has 1 MA's), (19, 40997), (20, 40991), (27, 40883),

Gene: Scorpia_70 Start: 42564, Stop: 42262, Start Num: 14
Candidate Starts for Scorpia_70:
(Start: 14 @42564 has 39 MA's), (20, 42504), (24, 42399),

Gene: Smeadley_81 Start: 44312, Stop: 43965, Start Num: 6
Candidate Starts for Smeadley_81:
(Start: 6 @44312 has 10 MA's), (16, 44261), (19, 44210), (20, 44204), (29, 44045),

Gene: Stephig9_80 Start: 44251, Stop: 43904, Start Num: 6
Candidate Starts for Stephig9_80:
(Start: 6 @44251 has 10 MA's), (16, 44200), (19, 44149), (20, 44143),

Gene: Swirley_66 Start: 41955, Stop: 41653, Start Num: 14
Candidate Starts for Swirley_66:
(Start: 14 @41955 has 39 MA's), (19, 41901), (20, 41895), (25, 41784), (26, 41778), (29, 41736),

Gene: SydNat_66 Start: 42147, Stop: 41845, Start Num: 14
Candidate Starts for SydNat_66:
(Start: 14 @42147 has 39 MA's), (19, 42093), (20, 42087), (31, 41904),

Gene: Tarynearal_65 Start: 41791, Stop: 41489, Start Num: 14
Candidate Starts for Tarynearal_65:

(Start: 14 @41791 has 39 MA's), (19, 41737), (20, 41731), (25, 41620), (26, 41614), (29, 41572),

Gene: Theia_65 Start: 42277, Stop: 41975, Start Num: 14
Candidate Starts for Theia_65:
(Start: 14 @42277 has 39 MA's), (19, 42223), (20, 42217), (31, 42034),

Gene: Tiger_66 Start: 41719, Stop: 41417, Start Num: 14
Candidate Starts for Tiger_66:
(Start: 14 @41719 has 39 MA's), (19, 41665), (20, 41659), (25, 41548), (26, 41542),

Gene: Toaka_74 Start: 43128, Stop: 42862, Start Num: 6
Candidate Starts for Toaka_74:
(Start: 6 @43128 has 10 MA's), (Start: 13 @43101 has 1 MA's), (18, 43056), (21, 43005), (27, 42903),

Gene: Twigg_65 Start: 41603, Stop: 41301, Start Num: 14
Candidate Starts for Twigg_65:
(Start: 14 @41603 has 39 MA's), (19, 41549), (20, 41543), (25, 41432), (26, 41426), (29, 41384),

Gene: UnionJack_70 Start: 42228, Stop: 41926, Start Num: 14
Candidate Starts for UnionJack_70:
(Start: 14 @42228 has 39 MA's), (20, 42168),

Gene: VA6_72 Start: 43461, Stop: 43186, Start Num: 5
Candidate Starts for VA6_72:
(Start: 5 @43461 has 8 MA's), (11, 43440), (Start: 14 @43416 has 39 MA's), (19, 43359), (20, 43353), (28, 43224), (29, 43221),

Gene: Vanisoa_71 Start: 43466, Stop: 43197, Start Num: 5
Candidate Starts for Vanisoa_71:
(Start: 5 @43466 has 8 MA's), (10, 43448), (19, 43364),

Gene: Zolita_65 Start: 42151, Stop: 41849, Start Num: 14
Candidate Starts for Zolita_65:
(Start: 14 @42151 has 39 MA's), (19, 42097), (20, 42091), (31, 41908),