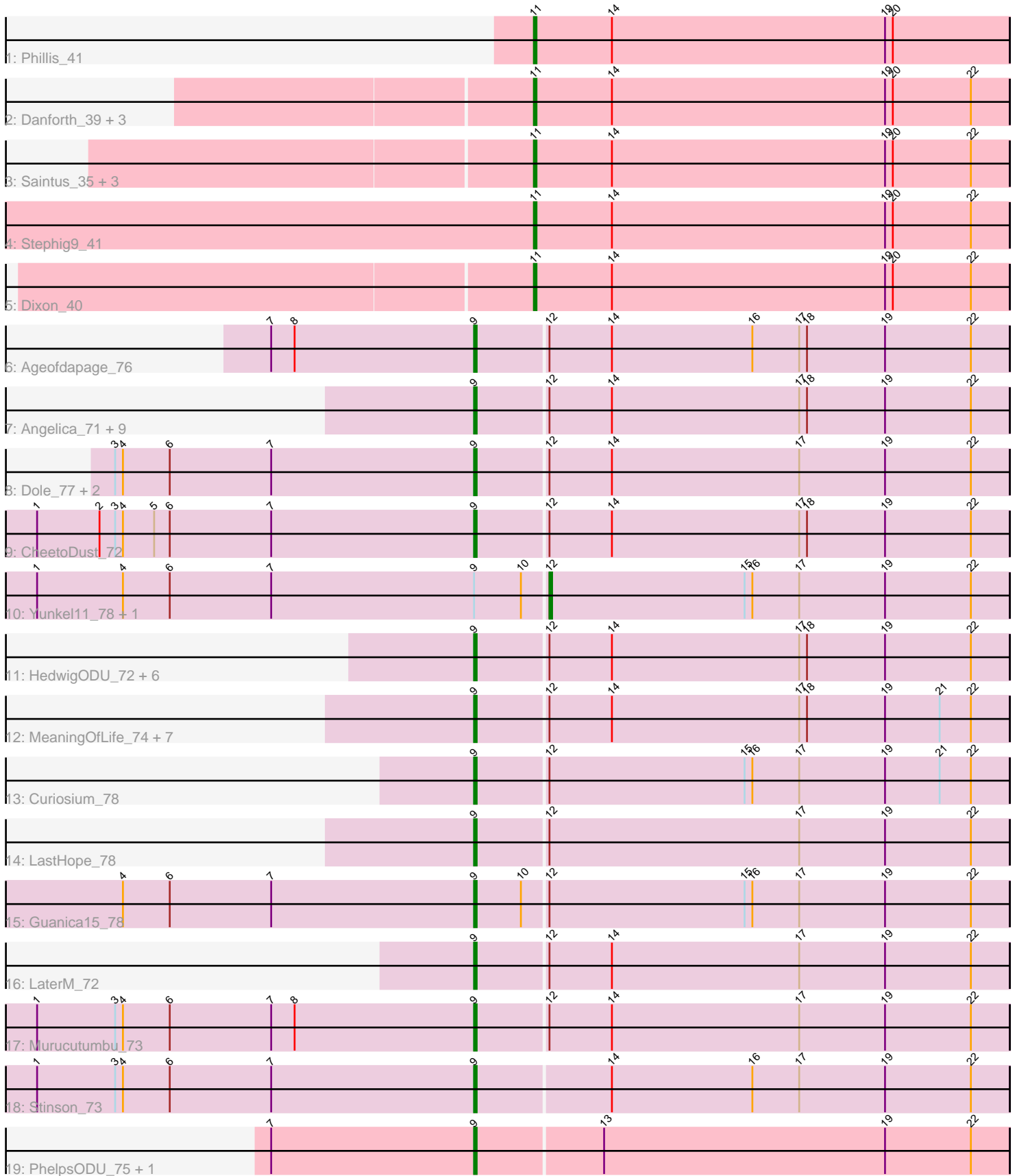


Pham 1881



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 1881 Report

This analysis was run 04/28/24 on database version 559.

Pham number 1881 has 51 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Phillis_41
- Track 2 : Danforth_39, Groundhog_38, Roary_40, Astro_39
- Track 3 : Saintus_35, NearlyHeadless_40, Expelliarmus_39, Smeadley_40
- Track 4 : Stephig9_41
- Track 5 : Dixon_40
- Track 6 : Ageofdapage_76
- Track 7 : Angelica_71, Padpat_76, Anaya_76, QuincyRose_70, Emerson_75, Ganymede_72, Geraldini_76, Adonis_72, Sulley_71, Pokerus_73
- Track 8 : Dole_77, Illumine_78, Devera_80
- Track 9 : CheetoDust_72
- Track 10 : Yunkel11_78, Efra2_79
- Track 11 : HedwigODU_72, Beezoo_75, YoureAdopted_72, ActinUp_73, Apocalypse_75, Zabiza_68, Joy99_73
- Track 12 : MeaningOfLife_74, Deby_72, TruffulaTree_74, Rapunzel97_75, Jayhawk_74, Mynx_74, BarrelRoll_73, Slimphazie_74
- Track 13 : Curiosium_78
- Track 14 : LastHope_78
- Track 15 : Guanica15_78
- Track 16 : LaterM_72
- Track 17 : Murucutumbu_73
- Track 18 : Stinson_73
- Track 19 : PhelpsODU_75, Unicorn_75

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

The start number called the most often in the published annotations is 9, it was called in 36 of the 49 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_73, Adonis_72, Ageofdapage_76, Anaya_76, Angelica_71, Apocalypse_75, BarrelRoll_73, Beezoo_75, CheetoDust_72, Curiosium_78, Deby_72, Devera_80, Dole_77, Emerson_75, Ganymede_72, Geraldini_76, Guanica15_78, HedwigODU_72, Illumine_78, Jayhawk_74, Joy99_73, LastHope_78, LaterM_72, MeaningOfLife_74, Murucutumbu_73, Mynx_74, Padpat_76,

PhelpsODU_75, Pokerus_73, QuincyRose_70, Rapunzel97_75, Slimphazie_74, Stinson_73, Sulley_71, TruffulaTree_74, Unicorn_75, YoureAdopted_72, Zabiza_68,

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

- Efra2_79, Yunkel11_78,

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

- Astro_39, Danforth_39, Dixon_40, Expelliarmus_39, Groundhog_38, NearlyHeadless_40, Phillis_41, Roary_40, Saintus_35, Smeadley_40, Stephig9_41,

Summary by start number:

Start 9:

- Found in 40 of 51 (78.4%) of genes in pham
- Manual Annotations of this start: 36 of 49
- Called 95.0% of time when present
- Phage (with cluster) where this start called: ActinUp_73 (K1), Adonis_72 (K1), Ageofdapage_76 (K1), Anaya_76 (K1), Angelica_71 (K1), Apocalypse_75 (K1), BarrelRoll_73 (K1), Beezoo_75 (K1), CheetoDust_72 (K1), Curiosium_78 (K1), Deby_72 (K1), Devera_80 (K1), Dole_77 (K1), Emerson_75 (K1), Ganymede_72 (K1), Geraldini_76 (K1), Guanica15_78 (K1), HedwigODU_72 (K1), Illumine_78 (K1), Jayhawk_74 (K1), Joy99_73 (K1), LastHope_78 (K1), LaterM_72 (K1), MeaningOfLife_74 (K1), Murucutumbu_73 (K1), Mynx_74 (K1), Padpat_76 (K1), PhelpsODU_75 (K6), Pokerus_73 (K1), QuincyRose_70 (K1), Rapunzel97_75 (K1), Slimphazie_74 (K1), Stinson_73 (K1), Sulley_71 (K1), TruffulaTree_74 (K1), Unicorn_75 (K6), YoureAdopted_72 (K1), Zabiza_68 (K1),

Start 11:

- Found in 11 of 51 (21.6%) of genes in pham
- Manual Annotations of this start: 11 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Astro_39 (A8), Danforth_39 (A8), Dixon_40 (A8), Expelliarmus_39 (A8), Groundhog_38 (A8), NearlyHeadless_40 (A8), Phillis_41 (A8), Roary_40 (A8), Saintus_35 (A8), Smeadley_40 (A8), Stephig9_41 (A8),

Start 12:

- Found in 37 of 51 (72.5%) of genes in pham
- Manual Annotations of this start: 2 of 49
- Called 5.4% of time when present
- Phage (with cluster) where this start called: Efra2_79 (K1), Yunkel11_78 (K1),

Summary by clusters:

There are 3 clusters represented in this pham: A8, K1, K6,

Info for manual annotations of cluster A8:

- Start number 11 was manually annotated 11 times for cluster A8.

Info for manual annotations of cluster K1:

- Start number 9 was manually annotated 34 times for cluster K1.
- Start number 12 was manually annotated 2 times for cluster K1.

Info for manual annotations of cluster K6:

- Start number 9 was manually annotated 2 times for cluster K6.

Gene Information:

Gene: ActinUp_73 Start: 48531, Stop: 48734, Start Num: 9

Candidate Starts for ActinUp_73:

(Start: 9 @48531 has 36 MA's), (Start: 12 @48558 has 2 MA's), (14, 48582), (17, 48654), (18, 48657), (19, 48687), (22, 48720),

Gene: Adonis_72 Start: 48803, Stop: 49006, Start Num: 9

Candidate Starts for Adonis_72:

(Start: 9 @48803 has 36 MA's), (Start: 12 @48830 has 2 MA's), (14, 48854), (17, 48926), (18, 48929), (19, 48959), (22, 48992),

Gene: Ageofdapage_76 Start: 49726, Stop: 49929, Start Num: 9

Candidate Starts for Ageofdapage_76:

(7, 49648), (8, 49657), (Start: 9 @49726 has 36 MA's), (Start: 12 @49753 has 2 MA's), (14, 49777), (16, 49831), (17, 49849), (18, 49852), (19, 49882), (22, 49915),

Gene: Anaya_76 Start: 49507, Stop: 49710, Start Num: 9

Candidate Starts for Anaya_76:

(Start: 9 @49507 has 36 MA's), (Start: 12 @49534 has 2 MA's), (14, 49558), (17, 49630), (18, 49633), (19, 49663), (22, 49696),

Gene: Angelica_71 Start: 48488, Stop: 48691, Start Num: 9

Candidate Starts for Angelica_71:

(Start: 9 @48488 has 36 MA's), (Start: 12 @48515 has 2 MA's), (14, 48539), (17, 48611), (18, 48614), (19, 48644), (22, 48677),

Gene: Apocalypse_75 Start: 49251, Stop: 49454, Start Num: 9

Candidate Starts for Apocalypse_75:

(Start: 9 @49251 has 36 MA's), (Start: 12 @49278 has 2 MA's), (14, 49302), (17, 49374), (18, 49377), (19, 49407), (22, 49440),

Gene: Astro_39 Start: 28079, Stop: 27897, Start Num: 11

Candidate Starts for Astro_39:

(Start: 11 @28079 has 11 MA's), (14, 28049), (19, 27944), (20, 27941), (22, 27911),

Gene: BarrelRoll_73 Start: 48969, Stop: 49172, Start Num: 9

Candidate Starts for BarrelRoll_73:

(Start: 9 @48969 has 36 MA's), (Start: 12 @48996 has 2 MA's), (14, 49020), (17, 49092), (18, 49095), (19, 49125), (21, 49146), (22, 49158),

Gene: Beezoo_75 Start: 49465, Stop: 49668, Start Num: 9

Candidate Starts for Beezoo_75:

(Start: 9 @49465 has 36 MA's), (Start: 12 @49492 has 2 MA's), (14, 49516), (17, 49588), (18, 49591), (19, 49621), (22, 49654),

Gene: CheetoDust_72 Start: 48164, Stop: 48367, Start Num: 9

Candidate Starts for CheetoDust_72:

(1, 47996), (2, 48020), (3, 48026), (4, 48029), (5, 48041), (6, 48047), (7, 48086), (Start: 9 @48164 has 36 MA's), (Start: 12 @48191 has 2 MA's), (14, 48215), (17, 48287), (18, 48290), (19, 48320), (22, 48353),

Gene: Curiosium_78 Start: 48456, Stop: 48659, Start Num: 9

Candidate Starts for Curiosium_78:

(Start: 9 @48456 has 36 MA's), (Start: 12 @48483 has 2 MA's), (15, 48558), (16, 48561), (17, 48579), (19, 48612), (21, 48633), (22, 48645),

Gene: Danforth_39 Start: 28107, Stop: 27925, Start Num: 11

Candidate Starts for Danforth_39:

(Start: 11 @28107 has 11 MA's), (14, 28077), (19, 27972), (20, 27969), (22, 27939),

Gene: Deby_72 Start: 48936, Stop: 49139, Start Num: 9

Candidate Starts for Deby_72:

(Start: 9 @48936 has 36 MA's), (Start: 12 @48963 has 2 MA's), (14, 48987), (17, 49059), (18, 49062), (19, 49092), (21, 49113), (22, 49125),

Gene: Devera_80 Start: 50277, Stop: 50480, Start Num: 9

Candidate Starts for Devera_80:

(3, 50139), (4, 50142), (6, 50160), (7, 50199), (Start: 9 @50277 has 36 MA's), (Start: 12 @50304 has 2 MA's), (14, 50328), (17, 50400), (19, 50433), (22, 50466),

Gene: Dixon_40 Start: 28260, Stop: 28078, Start Num: 11

Candidate Starts for Dixon_40:

(Start: 11 @28260 has 11 MA's), (14, 28230), (19, 28125), (20, 28122), (22, 28092),

Gene: Dole_77 Start: 50280, Stop: 50483, Start Num: 9

Candidate Starts for Dole_77:

(3, 50142), (4, 50145), (6, 50163), (7, 50202), (Start: 9 @50280 has 36 MA's), (Start: 12 @50307 has 2 MA's), (14, 50331), (17, 50403), (19, 50436), (22, 50469),

Gene: Efra2_79 Start: 49346, Stop: 49522, Start Num: 12

Candidate Starts for Efra2_79:

(1, 49151), (4, 49184), (6, 49202), (7, 49241), (Start: 9 @49319 has 36 MA's), (10, 49337), (Start: 12 @49346 has 2 MA's), (15, 49421), (16, 49424), (17, 49442), (19, 49475), (22, 49508),

Gene: Emerson_75 Start: 49003, Stop: 49206, Start Num: 9

Candidate Starts for Emerson_75:

(Start: 9 @49003 has 36 MA's), (Start: 12 @49030 has 2 MA's), (14, 49054), (17, 49126), (18, 49129), (19, 49159), (22, 49192),

Gene: Expelliarmus_39 Start: 28137, Stop: 27955, Start Num: 11

Candidate Starts for Expelliarmus_39:

(Start: 11 @28137 has 11 MA's), (14, 28107), (19, 28002), (20, 27999), (22, 27969),

Gene: Ganymede_72 Start: 48893, Stop: 49096, Start Num: 9

Candidate Starts for Ganymede_72:

(Start: 9 @48893 has 36 MA's), (Start: 12 @48920 has 2 MA's), (14, 48944), (17, 49016), (18, 49019), (19, 49049), (22, 49082),

Gene: Geraldini_76 Start: 49564, Stop: 49767, Start Num: 9

Candidate Starts for Geraldini_76:

(Start: 9 @49564 has 36 MA's), (Start: 12 @49591 has 2 MA's), (14, 49615), (17, 49687), (18, 49690), (19, 49720), (22, 49753),

Gene: Groundhog_38 Start: 28044, Stop: 27862, Start Num: 11

Candidate Starts for Groundhog_38:

(Start: 11 @28044 has 11 MA's), (14, 28014), (19, 27909), (20, 27906), (22, 27876),

Gene: Guanica15_78 Start: 49065, Stop: 49268, Start Num: 9

Candidate Starts for Guanica15_78:

(4, 48930), (6, 48948), (7, 48987), (Start: 9 @49065 has 36 MA's), (10, 49083), (Start: 12 @49092 has 2 MA's), (15, 49167), (16, 49170), (17, 49188), (19, 49221), (22, 49254),

Gene: HedwigODU_72 Start: 48531, Stop: 48734, Start Num: 9

Candidate Starts for HedwigODU_72:

(Start: 9 @48531 has 36 MA's), (Start: 12 @48558 has 2 MA's), (14, 48582), (17, 48654), (18, 48657), (19, 48687), (22, 48720),

Gene: Illumine_78 Start: 50279, Stop: 50482, Start Num: 9

Candidate Starts for Illumine_78:

(3, 50141), (4, 50144), (6, 50162), (7, 50201), (Start: 9 @50279 has 36 MA's), (Start: 12 @50306 has 2 MA's), (14, 50330), (17, 50402), (19, 50435), (22, 50468),

Gene: Jayhawk_74 Start: 49029, Stop: 49232, Start Num: 9

Candidate Starts for Jayhawk_74:

(Start: 9 @49029 has 36 MA's), (Start: 12 @49056 has 2 MA's), (14, 49080), (17, 49152), (18, 49155), (19, 49185), (21, 49206), (22, 49218),

Gene: Joy99_73 Start: 48615, Stop: 48818, Start Num: 9

Candidate Starts for Joy99_73:

(Start: 9 @48615 has 36 MA's), (Start: 12 @48642 has 2 MA's), (14, 48666), (17, 48738), (18, 48741), (19, 48771), (22, 48804),

Gene: LastHope_78 Start: 48175, Stop: 48378, Start Num: 9

Candidate Starts for LastHope_78:

(Start: 9 @48175 has 36 MA's), (Start: 12 @48202 has 2 MA's), (17, 48298), (19, 48331), (22, 48364),

Gene: LaterM_72 Start: 49144, Stop: 49347, Start Num: 9

Candidate Starts for LaterM_72:

(Start: 9 @49144 has 36 MA's), (Start: 12 @49171 has 2 MA's), (14, 49195), (17, 49267), (19, 49300), (22, 49333),

Gene: MeaningOfLife_74 Start: 49438, Stop: 49641, Start Num: 9

Candidate Starts for MeaningOfLife_74:

(Start: 9 @49438 has 36 MA's), (Start: 12 @49465 has 2 MA's), (14, 49489), (17, 49561), (18, 49564), (19, 49594), (21, 49615), (22, 49627),

Gene: Murucutumbu_73 Start: 49719, Stop: 49922, Start Num: 9

Candidate Starts for Murucutumbu_73:

(1, 49551), (3, 49581), (4, 49584), (6, 49602), (7, 49641), (8, 49650), (Start: 9 @49719 has 36 MA's), (Start: 12 @49746 has 2 MA's), (14, 49770), (17, 49842), (19, 49875), (22, 49908),

Gene: Mynx_74 Start: 49298, Stop: 49501, Start Num: 9

Candidate Starts for Mynx_74:

(Start: 9 @49298 has 36 MA's), (Start: 12 @49325 has 2 MA's), (14, 49349), (17, 49421), (18, 49424), (19, 49454), (21, 49475), (22, 49487),

Gene: NearlyHeadless_40 Start: 28190, Stop: 28008, Start Num: 11

Candidate Starts for NearlyHeadless_40:

(Start: 11 @28190 has 11 MA's), (14, 28160), (19, 28055), (20, 28052), (22, 28022),

Gene: Padpat_76 Start: 49003, Stop: 49206, Start Num: 9

Candidate Starts for Padpat_76:

(Start: 9 @49003 has 36 MA's), (Start: 12 @49030 has 2 MA's), (14, 49054), (17, 49126), (18, 49129), (19, 49159), (22, 49192),

Gene: PhelpsODU_75 Start: 48513, Stop: 48716, Start Num: 9

Candidate Starts for PhelpsODU_75:

(7, 48435), (Start: 9 @48513 has 36 MA's), (13, 48561), (19, 48669), (22, 48702),

Gene: Phillis_41 Start: 28458, Stop: 28276, Start Num: 11

Candidate Starts for Phillis_41:

(Start: 11 @28458 has 11 MA's), (14, 28428), (19, 28323), (20, 28320),

Gene: Pokerus_73 Start: 49012, Stop: 49215, Start Num: 9

Candidate Starts for Pokerus_73:

(Start: 9 @49012 has 36 MA's), (Start: 12 @49039 has 2 MA's), (14, 49063), (17, 49135), (18, 49138), (19, 49168), (22, 49201),

Gene: QuincyRose_70 Start: 48893, Stop: 49096, Start Num: 9

Candidate Starts for QuincyRose_70:

(Start: 9 @48893 has 36 MA's), (Start: 12 @48920 has 2 MA's), (14, 48944), (17, 49016), (18, 49019), (19, 49049), (22, 49082),

Gene: Rapunzel97_75 Start: 48984, Stop: 49187, Start Num: 9

Candidate Starts for Rapunzel97_75:

(Start: 9 @48984 has 36 MA's), (Start: 12 @49011 has 2 MA's), (14, 49035), (17, 49107), (18, 49110), (19, 49140), (21, 49161), (22, 49173),

Gene: Roary_40 Start: 28092, Stop: 27910, Start Num: 11

Candidate Starts for Roary_40:

(Start: 11 @28092 has 11 MA's), (14, 28062), (19, 27957), (20, 27954), (22, 27924),

Gene: Saintus_35 Start: 25120, Stop: 24938, Start Num: 11

Candidate Starts for Saintus_35:

(Start: 11 @25120 has 11 MA's), (14, 25090), (19, 24985), (20, 24982), (22, 24952),

Gene: Slimphazie_74 Start: 48984, Stop: 49187, Start Num: 9

Candidate Starts for Slimphazie_74:

(Start: 9 @48984 has 36 MA's), (Start: 12 @49011 has 2 MA's), (14, 49035), (17, 49107), (18, 49110), (19, 49140), (21, 49161), (22, 49173),

Gene: Smeadley_40 Start: 28259, Stop: 28077, Start Num: 11

Candidate Starts for Smeadley_40:

(Start: 11 @28259 has 11 MA's), (14, 28229), (19, 28124), (20, 28121), (22, 28091),

Gene: Stephig9_41 Start: 28275, Stop: 28093, Start Num: 11

Candidate Starts for Stephig9_41:

(Start: 11 @28275 has 11 MA's), (14, 28245), (19, 28140), (20, 28137), (22, 28107),

Gene: Stinson_73 Start: 49079, Stop: 49282, Start Num: 9

Candidate Starts for Stinson_73:

(1, 48911), (3, 48941), (4, 48944), (6, 48962), (7, 49001), (Start: 9 @49079 has 36 MA's), (14, 49130), (16, 49184), (17, 49202), (19, 49235), (22, 49268),

Gene: Sulley_71 Start: 48514, Stop: 48717, Start Num: 9

Candidate Starts for Sulley_71:

(Start: 9 @48514 has 36 MA's), (Start: 12 @48541 has 2 MA's), (14, 48565), (17, 48637), (18, 48640), (19, 48670), (22, 48703),

Gene: TruffulaTree_74 Start: 48980, Stop: 49183, Start Num: 9

Candidate Starts for TruffulaTree_74:

(Start: 9 @48980 has 36 MA's), (Start: 12 @49007 has 2 MA's), (14, 49031), (17, 49103), (18, 49106), (19, 49136), (21, 49157), (22, 49169),

Gene: Unicorn_75 Start: 48513, Stop: 48716, Start Num: 9

Candidate Starts for Unicorn_75:

(7, 48435), (Start: 9 @48513 has 36 MA's), (13, 48561), (19, 48669), (22, 48702),

Gene: YoureAdopted_72 Start: 48850, Stop: 49053, Start Num: 9

Candidate Starts for YoureAdopted_72:

(Start: 9 @48850 has 36 MA's), (Start: 12 @48877 has 2 MA's), (14, 48901), (17, 48973), (18, 48976), (19, 49006), (22, 49039),

Gene: Yunkel11_78 Start: 49097, Stop: 49273, Start Num: 12

Candidate Starts for Yunkel11_78:

(1, 48902), (4, 48935), (6, 48953), (7, 48992), (Start: 9 @49070 has 36 MA's), (10, 49088), (Start: 12 @49097 has 2 MA's), (15, 49172), (16, 49175), (17, 49193), (19, 49226), (22, 49259),

Gene: Zabiza_68 Start: 44836, Stop: 45039, Start Num: 9

Candidate Starts for Zabiza_68:

(Start: 9 @44836 has 36 MA's), (Start: 12 @44863 has 2 MA's), (14, 44887), (17, 44959), (18, 44962), (19, 44992), (22, 45025),