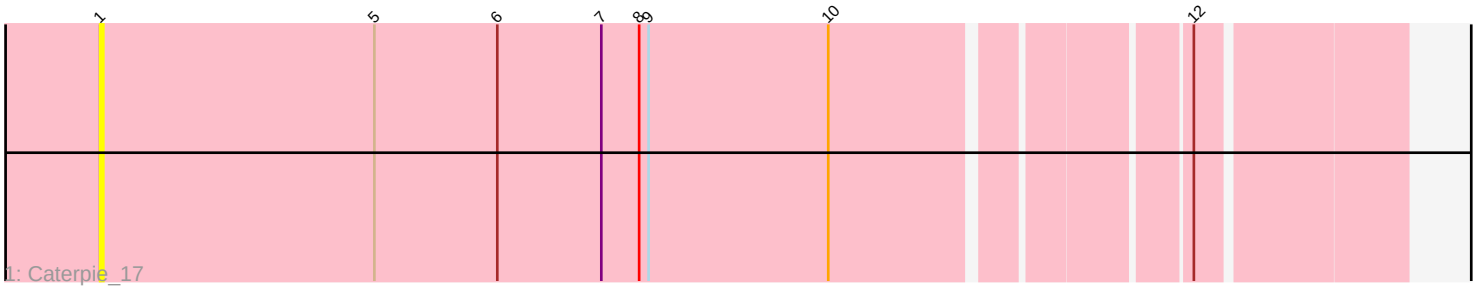
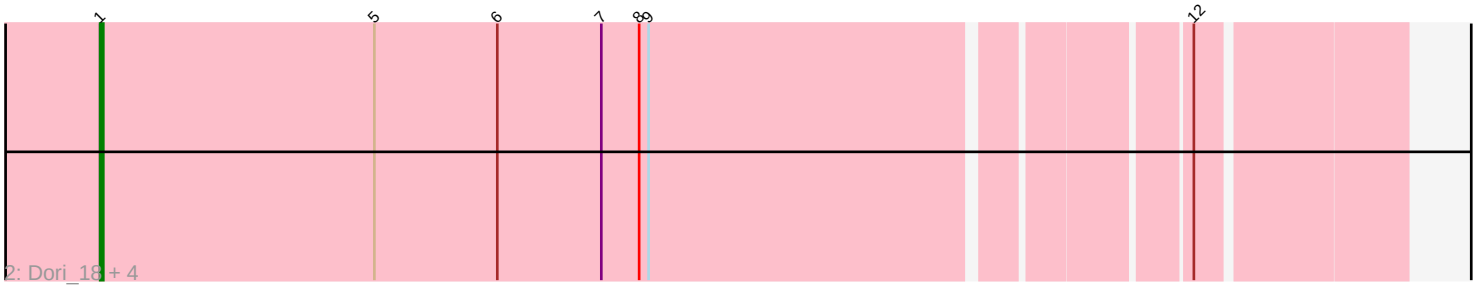
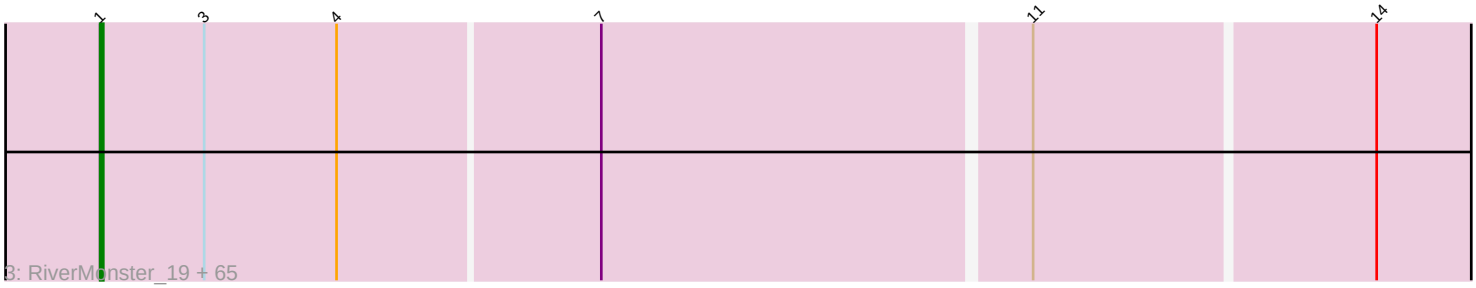
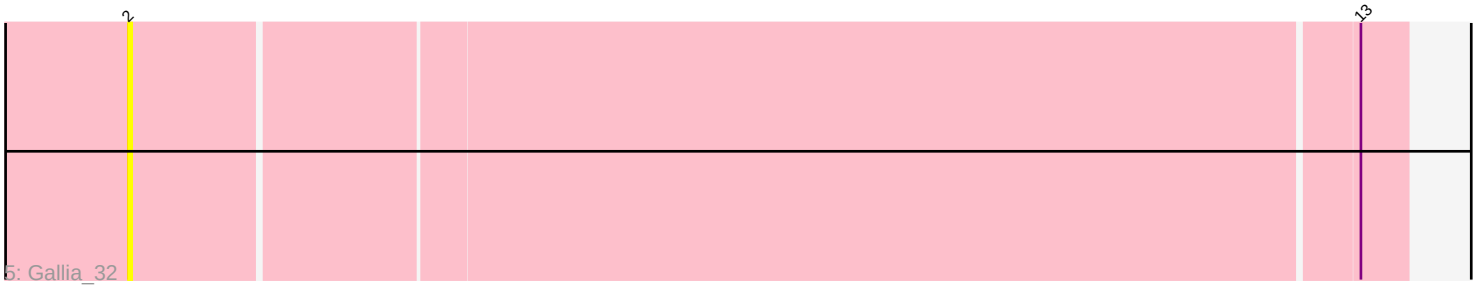
Pham 340988


1
5
6
7
8
9
10
12
1: Caterpie_17


1
5
6
7
8
9
12
2: Dori_18 + 4


1
3
4
7
11
14
3: RiverMonster_19 + 65


1
3
4
11
14
4: Terminus_19


2
13
5: Gallia_32

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 340988 Report

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

Pham number 340988 has 74 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Caterpie_17
• Track 2 : Dori_18, JohnLord_18, Mask_18, Sejanus_18, Mao1_17
• Track 3 : RiverMonster_19, Filch_20, Moldemort_20, AmericanBeauty_21, Easy2Say_20, Tarkin_21, Lilpickle_18, StolenFromERC_21, Paperbeatsrock_21, DrDrey_20, Simpliphy_20, JeTaime_21, Elph10_20, Phrux_19, BigBubba_19, Pumpkin_20, Bench_21, Ukulele_19, Gage_21, Cjw1_19, Dumbo_19, Czyszczon1_20, Becksu_19, Highbury_20, Saints25_20, Kimchi_21, Emmina_19, Youngblood_19, Misfit_19, Nimrod_19, HanKaySha_20, Kanye_21, ShereKhan_21, NoSleep_20, Stank_21, Greep_20, Petra64142_20, PaddyBaddy_20, Hoonter_21, Stark_20, Ptowny_19, Gemini_21, 244_20, Elite2014_18, Adnama_21, ChotaBhai_19, Teaspoon_19, Hopey_20, Pharsalus_20, Brewer_19, Lilac_21, GoldenSpark_21, Murphy_19, Argent26_21, Xandras_21, ChosenOne_18, MadamMonkfish_19, Porky_18, Wiggin_21, Thresher_20, TBrady12_21, Lilizi_21, Maxxinista_20, OrionPax_20, GooberAzure_21, NonchalantPear_19
• Track 4 : Terminus_19
• Track 5 : Gallia_32

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

The start number called the most often in the published annotations is 1, it was called in 66 of the 66 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 244_20, Adnama_21, AmericanBeauty_21, Argent26_21, Becksu_19, Bench_21, BigBubba_19, Brewer_19, Caterpie_17, ChosenOne_18, ChotaBhai_19, Cjw1_19, Czyszczon1_20, Dori_18, DrDrey_20, Dumbo_19, Easy2Say_20, Elite2014_18, Elph10_20, Emmina_19, Filch_20, Gage_21, Gemini_21, GoldenSpark_21, GooberAzure_21, Greep_20, HanKaySha_20, Highbury_20, Hoonter_21, Hopey_20, JeTaime_21, JohnLord_18, Kanye_21, Kimchi_21, Lilac_21, Lilizi_21, Lilpickle_18, MadamMonkfish_19, Mao1_17, Mask_18, Maxxinista_20, Misfit_19, Moldemort_20, Murphy_19, Nimrod_19, NoSleep_20, NonchalantPear_19, OrionPax_20, PaddyBaddy_20, Paperbeatsrock_21, Petra64142_20, Pharsalus_20, Phrux_19, Porky_18, Ptowny_19, Pumpkin_20, RiverMonster_19, Saints25_20, Sejanus_18, ShereKhan_21, Simpliphy_20, Stank_21, Stark_20, StolenFromERC_21,

TBrady12_21, Tarkin_21, Teaspoon_19, Terminus_19, Thresher_20, Ukulele_19, Wiggin_21, Xandras_21, Youngblood_19,

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

Genes that do not have the "Most Annotated" start:
• Gallia_32,

Summary by start number:

Start 1:
• Found in 73 of 74 (98.6%) of genes in pham
• Manual Annotations of this start: 66 of 66
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 244_20 (E), Adnama_21 (E), AmericanBeauty_21 (E), Argent26_21 (E), Becksu_19 (E), Bench_21 (E), BigBubba_19 (E), Brewer_19 (E), Caterpie_17 (AD), ChosenOne_18 (E), ChotaBhai_19 (E), Cjw1_19 (E), Czyszczon1_20 (E), Dori_18 (AD), DrDrey_20 (E), Dumbo_19 (E), Easy2Say_20 (E), Elite2014_18 (E), Elph10_20 (E), Emmina_19 (E), Filch_20 (E), Gage_21 (E), Gemini_21 (E), GoldenSpark_21 (E), GooberAzure_21 (E), Greep_20 (E), HanKaySha_20 (E), Highbury_20 (E), Hoonter_21 (E), Hopey_20 (E), JeTaime_21 (E), JohnLord_18 (AD), Kanye_21 (E), Kimchi_21 (E), Lilac_21 (E), Lilizi_21 (E), Lilpickle_18 (E), MadamMonkfish_19 (E), Mao1_17 (AD), Mask_18 (AD), Maxxinista_20 (E), Misfit_19 (E), Moldemort_20 (E), Murphy_19 (E), Nimrod_19 (E), NoSleep_20 (E), NonchalantPear_19 (E), OrionPax_20 (E), PaddyBaddy_20 (E), Paperbeatsrock_21 (E), Petra64142_20 (E), Pharsalus_20 (E), Phrux_19 (E), Porky_18 (E), Ptowny_19 (E), Pumpkin_20 (E), RiverMonster_19 (E), Saints25_20 (E), Sejanus_18 (AD), ShereKhan_21 (E), Simpliphy_20 (E), Stank_21 (E), Stark_20 (E), StolenFromERC_21 (E), TBrady12_21 (E), Tarkin_21 (E), Teaspoon_19 (E), Terminus_19 (E), Thresher_20 (E), Ukulele_19 (E), Wiggin_21 (E), Xandras_21 (E), Youngblood_19 (E),

Start 2:
• Found in 1 of 74 (1.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gallia_32 (singleton),

Summary by clusters:

There are 3 clusters represented in this pham: singleton, E, AD,

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

Info for manual annotations of cluster E:
•Start number 1 was manually annotated 62 times for cluster E.

Gene Information:

Gene: 244_20 Start: 11637, Stop: 12110, Start Num: 1
Candidate Starts for 244_20:
(Start: 1 @11637 has 66 MA's), (3, 11670), (4, 11712), (7, 11793), (11, 11925), (14, 12030),

Gene: Adnama_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for Adnama_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: AmericanBeauty_21 Start: 11866, Stop: 12339, Start Num: 1
Candidate Starts for AmericanBeauty_21:
(Start: 1 @11866 has 66 MA's), (3, 11899), (4, 11941), (7, 12022), (11, 12154), (14, 12259),

Gene: Argent26_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for Argent26_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: Becksu_19 Start: 12056, Stop: 12529, Start Num: 1
Candidate Starts for Becksu_19:
(Start: 1 @12056 has 66 MA's), (3, 12089), (4, 12131), (7, 12212), (11, 12344), (14, 12449),

Gene: Bench_21 Start: 11742, Stop: 12215, Start Num: 1
Candidate Starts for Bench_21:
(Start: 1 @11742 has 66 MA's), (3, 11775), (4, 11817), (7, 11898), (11, 12030), (14, 12135),

Gene: BigBubba_19 Start: 11125, Stop: 11598, Start Num: 1
Candidate Starts for BigBubba_19:
(Start: 1 @11125 has 66 MA's), (3, 11158), (4, 11200), (7, 11281), (11, 11413), (14, 11518),

Gene: Brewer_19 Start: 12124, Stop: 12597, Start Num: 1
Candidate Starts for Brewer_19:
(Start: 1 @12124 has 66 MA's), (3, 12157), (4, 12199), (7, 12280), (11, 12412), (14, 12517),

Gene: Caterpie_17 Start: 14376, Stop: 14771, Start Num: 1
Candidate Starts for Caterpie_17:
(Start: 1 @14376 has 66 MA's), (5, 14463), (6, 14502), (7, 14535), (8, 14547), (9, 14550), (10, 14607), (12, 14709),

Gene: ChosenOne_18 Start: 11089, Stop: 11562, Start Num: 1
Candidate Starts for ChosenOne_18:
(Start: 1 @11089 has 66 MA's), (3, 11122), (4, 11164), (7, 11245), (11, 11377), (14, 11482),

Gene: ChotaBhai_19 Start: 11125, Stop: 11598, Start Num: 1
Candidate Starts for ChotaBhai_19:
(Start: 1 @11125 has 66 MA's), (3, 11158), (4, 11200), (7, 11281), (11, 11413), (14, 11518),

Gene: Cjw1_19 Start: 12639, Stop: 13112, Start Num: 1
Candidate Starts for Cjw1_19:
(Start: 1 @12639 has 66 MA's), (3, 12672), (4, 12714), (7, 12795), (11, 12927), (14, 13032),

Gene: Czyszczon1_20 Start: 11624, Stop: 12097, Start Num: 1
Candidate Starts for Czyszczon1_20:
(Start: 1 @11624 has 66 MA's), (3, 11657), (4, 11699), (7, 11780), (11, 11912), (14, 12017),

Gene: Dori_18 Start: 14192, Stop: 14587, Start Num: 1
Candidate Starts for Dori_18:
(Start: 1 @14192 has 66 MA's), (5, 14279), (6, 14318), (7, 14351), (8, 14363), (9, 14366), (12, 14525),

Gene: DrDrey_20 Start: 12365, Stop: 12838, Start Num: 1
Candidate Starts for DrDrey_20:
(Start: 1 @12365 has 66 MA's), (3, 12398), (4, 12440), (7, 12521), (11, 12653), (14, 12758),

Gene: Dumbo_19 Start: 11346, Stop: 11819, Start Num: 1
Candidate Starts for Dumbo_19:
(Start: 1 @11346 has 66 MA's), (3, 11379), (4, 11421), (7, 11502), (11, 11634), (14, 11739),

Gene: Easy2Say_20 Start: 12612, Stop: 13085, Start Num: 1
Candidate Starts for Easy2Say_20:
(Start: 1 @12612 has 66 MA's), (3, 12645), (4, 12687), (7, 12768), (11, 12900), (14, 13005),

Gene: Elite2014_18 Start: 11089, Stop: 11562, Start Num: 1
Candidate Starts for Elite2014_18:
(Start: 1 @11089 has 66 MA's), (3, 11122), (4, 11164), (7, 11245), (11, 11377), (14, 11482),

Gene: Elph10_20 Start: 11349, Stop: 11822, Start Num: 1
Candidate Starts for Elph10_20:
(Start: 1 @11349 has 66 MA's), (3, 11382), (4, 11424), (7, 11505), (11, 11637), (14, 11742),

Gene: Emmina_19 Start: 11194, Stop: 11667, Start Num: 1
Candidate Starts for Emmina_19:
(Start: 1 @11194 has 66 MA's), (3, 11227), (4, 11269), (7, 11350), (11, 11482), (14, 11587),

Gene: Filch_20 Start: 11634, Stop: 12107, Start Num: 1
Candidate Starts for Filch_20:
(Start: 1 @11634 has 66 MA's), (3, 11667), (4, 11709), (7, 11790), (11, 11922), (14, 12027),

Gene: Gage_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for Gage_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: Gallia_32 Start: 20363, Stop: 20758, Start Num: 2
Candidate Starts for Gallia_32:
(2, 20363), (13, 20744),

Gene: Gemini_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for Gemini_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: GoldenSpark_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for GoldenSpark_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: GooberAzure_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for GooberAzure_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: Greep_20 Start: 12199, Stop: 12672, Start Num: 1

Candidate Starts for Greep_20:
(Start: 1 @12199 has 66 MA's), (3, 12232), (4, 12274), (7, 12355), (11, 12487), (14, 12592),

Gene: HanKaySha_20 Start: 11624, Stop: 12097, Start Num: 1
Candidate Starts for HanKaySha_20:
(Start: 1 @11624 has 66 MA's), (3, 11657), (4, 11699), (7, 11780), (11, 11912), (14, 12017),

Gene: Highbury_20 Start: 11543, Stop: 12016, Start Num: 1
Candidate Starts for Highbury_20:
(Start: 1 @11543 has 66 MA's), (3, 11576), (4, 11618), (7, 11699), (11, 11831), (14, 11936),

Gene: Hoonter_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for Hoonter_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: Hopey_20 Start: 11634, Stop: 12107, Start Num: 1
Candidate Starts for Hopey_20:
(Start: 1 @11634 has 66 MA's), (3, 11667), (4, 11709), (7, 11790), (11, 11922), (14, 12027),

Gene: JeTaime_21 Start: 12674, Stop: 13147, Start Num: 1
Candidate Starts for JeTaime_21:
(Start: 1 @12674 has 66 MA's), (3, 12707), (4, 12749), (7, 12830), (11, 12962), (14, 13067),

Gene: JohnLord_18 Start: 13895, Stop: 14290, Start Num: 1
Candidate Starts for JohnLord_18:
(Start: 1 @13895 has 66 MA's), (5, 13982), (6, 14021), (7, 14054), (8, 14066), (9, 14069), (12, 14228),

Gene: Kanye_21 Start: 12862, Stop: 13335, Start Num: 1
Candidate Starts for Kanye_21:
(Start: 1 @12862 has 66 MA's), (3, 12895), (4, 12937), (7, 13018), (11, 13150), (14, 13255),

Gene: Kimchi_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for Kimchi_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: Lilac_21 Start: 11370, Stop: 11843, Start Num: 1
Candidate Starts for Lilac_21:
(Start: 1 @11370 has 66 MA's), (3, 11403), (4, 11445), (7, 11526), (11, 11658), (14, 11763),

Gene: Lilizi_21 Start: 11581, Stop: 12054, Start Num: 1
Candidate Starts for Lilizi_21:
(Start: 1 @11581 has 66 MA's), (3, 11614), (4, 11656), (7, 11737), (11, 11869), (14, 11974),

Gene: Lilpickle_18 Start: 11089, Stop: 11562, Start Num: 1
Candidate Starts for Lilpickle_18:
(Start: 1 @11089 has 66 MA's), (3, 11122), (4, 11164), (7, 11245), (11, 11377), (14, 11482),

Gene: MadamMonkfish_19 Start: 11300, Stop: 11773, Start Num: 1
Candidate Starts for MadamMonkfish_19:
(Start: 1 @11300 has 66 MA's), (3, 11333), (4, 11375), (7, 11456), (11, 11588), (14, 11693),

Gene: Mao1_17 Start: 14588, Stop: 14983, Start Num: 1
Candidate Starts for Mao1_17:

(Start: 1 @14588 has 66 MA's), (5, 14675), (6, 14714), (7, 14747), (8, 14759), (9, 14762), (12, 14921),

Gene: Mask_18 Start: 14589, Stop: 14984, Start Num: 1
Candidate Starts for Mask_18:
(Start: 1 @14589 has 66 MA's), (5, 14676), (6, 14715), (7, 14748), (8, 14760), (9, 14763), (12, 14922),

Gene: Maxxinista_20 Start: 11349, Stop: 11822, Start Num: 1
Candidate Starts for Maxxinista_20:
(Start: 1 @11349 has 66 MA's), (3, 11382), (4, 11424), (7, 11505), (11, 11637), (14, 11742),

Gene: Misfit_19 Start: 11966, Stop: 12439, Start Num: 1
Candidate Starts for Misfit_19:
(Start: 1 @11966 has 66 MA's), (3, 11999), (4, 12041), (7, 12122), (11, 12254), (14, 12359),

Gene: Moldemort_20 Start: 11624, Stop: 12097, Start Num: 1
Candidate Starts for Moldemort_20:
(Start: 1 @11624 has 66 MA's), (3, 11657), (4, 11699), (7, 11780), (11, 11912), (14, 12017),

Gene: Murphy_19 Start: 11341, Stop: 11814, Start Num: 1
Candidate Starts for Murphy_19:
(Start: 1 @11341 has 66 MA's), (3, 11374), (4, 11416), (7, 11497), (11, 11629), (14, 11734),

Gene: Nimrod_19 Start: 12121, Stop: 12594, Start Num: 1
Candidate Starts for Nimrod_19:
(Start: 1 @12121 has 66 MA's), (3, 12154), (4, 12196), (7, 12277), (11, 12409), (14, 12514),

Gene: NoSleep_20 Start: 11621, Stop: 12094, Start Num: 1
Candidate Starts for NoSleep_20:
(Start: 1 @11621 has 66 MA's), (3, 11654), (4, 11696), (7, 11777), (11, 11909), (14, 12014),

Gene: NonchalantPear_19 Start: 11574, Stop: 12047, Start Num: 1
Candidate Starts for NonchalantPear_19:
(Start: 1 @11574 has 66 MA's), (3, 11607), (4, 11649), (7, 11730), (11, 11862), (14, 11967),

Gene: OrionPax_20 Start: 11624, Stop: 12097, Start Num: 1
Candidate Starts for OrionPax_20:
(Start: 1 @11624 has 66 MA's), (3, 11657), (4, 11699), (7, 11780), (11, 11912), (14, 12017),

Gene: PaddyBaddy_20 Start: 11634, Stop: 12107, Start Num: 1
Candidate Starts for PaddyBaddy_20:
(Start: 1 @11634 has 66 MA's), (3, 11667), (4, 11709), (7, 11790), (11, 11922), (14, 12027),

Gene: Paperbeatsrock_21 Start: 12856, Stop: 13329, Start Num: 1
Candidate Starts for Paperbeatsrock_21:
(Start: 1 @12856 has 66 MA's), (3, 12889), (4, 12931), (7, 13012), (11, 13144), (14, 13249),

Gene: Petra64142_20 Start: 12337, Stop: 12810, Start Num: 1
Candidate Starts for Petra64142_20:
(Start: 1 @12337 has 66 MA's), (3, 12370), (4, 12412), (7, 12493), (11, 12625), (14, 12730),

Gene: Pharsalus_20 Start: 12656, Stop: 13129, Start Num: 1
Candidate Starts for Pharsalus_20:
(Start: 1 @12656 has 66 MA's), (3, 12689), (4, 12731), (7, 12812), (11, 12944), (14, 13049),

Gene: Phrux_19 Start: 11620, Stop: 12093, Start Num: 1
Candidate Starts for Phrux_19:
(Start: 1 @11620 has 66 MA's), (3, 11653), (4, 11695), (7, 11776), (11, 11908), (14, 12013),

Gene: Porky_18 Start: 11194, Stop: 11667, Start Num: 1
Candidate Starts for Porky_18:
(Start: 1 @11194 has 66 MA's), (3, 11227), (4, 11269), (7, 11350), (11, 11482), (14, 11587),

Gene: Ptowny_19 Start: 11261, Stop: 11734, Start Num: 1
Candidate Starts for Ptowny_19:
(Start: 1 @11261 has 66 MA's), (3, 11294), (4, 11336), (7, 11417), (11, 11549), (14, 11654),

Gene: Pumpkin_20 Start: 11437, Stop: 11910, Start Num: 1
Candidate Starts for Pumpkin_20:
(Start: 1 @11437 has 66 MA's), (3, 11470), (4, 11512), (7, 11593), (11, 11725), (14, 11830),

Gene: RiverMonster_19 Start: 11634, Stop: 12107, Start Num: 1
Candidate Starts for RiverMonster_19:
(Start: 1 @11634 has 66 MA's), (3, 11667), (4, 11709), (7, 11790), (11, 11922), (14, 12027),

Gene: Saints25_20 Start: 11543, Stop: 12016, Start Num: 1
Candidate Starts for Saints25_20:
(Start: 1 @11543 has 66 MA's), (3, 11576), (4, 11618), (7, 11699), (11, 11831), (14, 11936),

Gene: Sejanus_18 Start: 15522, Stop: 15917, Start Num: 1
Candidate Starts for Sejanus_18:
(Start: 1 @15522 has 66 MA's), (5, 15609), (6, 15648), (7, 15681), (8, 15693), (9, 15696), (12, 15855),

Gene: ShereKhan_21 Start: 12862, Stop: 13335, Start Num: 1
Candidate Starts for ShereKhan_21:
(Start: 1 @12862 has 66 MA's), (3, 12895), (4, 12937), (7, 13018), (11, 13150), (14, 13255),

Gene: Simpliphy_20 Start: 11624, Stop: 12097, Start Num: 1
Candidate Starts for Simpliphy_20:
(Start: 1 @11624 has 66 MA's), (3, 11657), (4, 11699), (7, 11780), (11, 11912), (14, 12017),

Gene: Stank_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for Stank_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: Stark_20 Start: 11637, Stop: 12110, Start Num: 1
Candidate Starts for Stark_20:
(Start: 1 @11637 has 66 MA's), (3, 11670), (4, 11712), (7, 11793), (11, 11925), (14, 12030),

Gene: StolenFromERC_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for StolenFromERC_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: TBrady12_21 Start: 11866, Stop: 12339, Start Num: 1
Candidate Starts for TBrady12_21:
(Start: 1 @11866 has 66 MA's), (3, 11899), (4, 11941), (7, 12022), (11, 12154), (14, 12259),

Gene: Tarkin_21 Start: 12865, Stop: 13338, Start Num: 1
Candidate Starts for Tarkin_21:
(Start: 1 @12865 has 66 MA's), (3, 12898), (4, 12940), (7, 13021), (11, 13153), (14, 13258),

Gene: Teaspoon_19 Start: 11319, Stop: 11792, Start Num: 1
Candidate Starts for Teaspoon_19:
(Start: 1 @11319 has 66 MA's), (3, 11352), (4, 11394), (7, 11475), (11, 11607), (14, 11712),

Gene: Terminus_19 Start: 11966, Stop: 12439, Start Num: 1
Candidate Starts for Terminus_19:
(Start: 1 @11966 has 66 MA's), (3, 11999), (4, 12041), (11, 12254), (14, 12359),

Gene: Thresher_20 Start: 12627, Stop: 13100, Start Num: 1
Candidate Starts for Thresher_20:
(Start: 1 @12627 has 66 MA's), (3, 12660), (4, 12702), (7, 12783), (11, 12915), (14, 13020),

Gene: Ukulele_19 Start: 11637, Stop: 12110, Start Num: 1
Candidate Starts for Ukulele_19:
(Start: 1 @11637 has 66 MA's), (3, 11670), (4, 11712), (7, 11793), (11, 11925), (14, 12030),

Gene: Wiggin_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for Wiggin_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: Xandras_21 Start: 11869, Stop: 12342, Start Num: 1
Candidate Starts for Xandras_21:
(Start: 1 @11869 has 66 MA's), (3, 11902), (4, 11944), (7, 12025), (11, 12157), (14, 12262),

Gene: Youngblood_19 Start: 12047, Stop: 12520, Start Num: 1
Candidate Starts for Youngblood_19:
(Start: 1 @12047 has 66 MA's), (3, 12080), (4, 12122), (7, 12203), (11, 12335), (14, 12440),