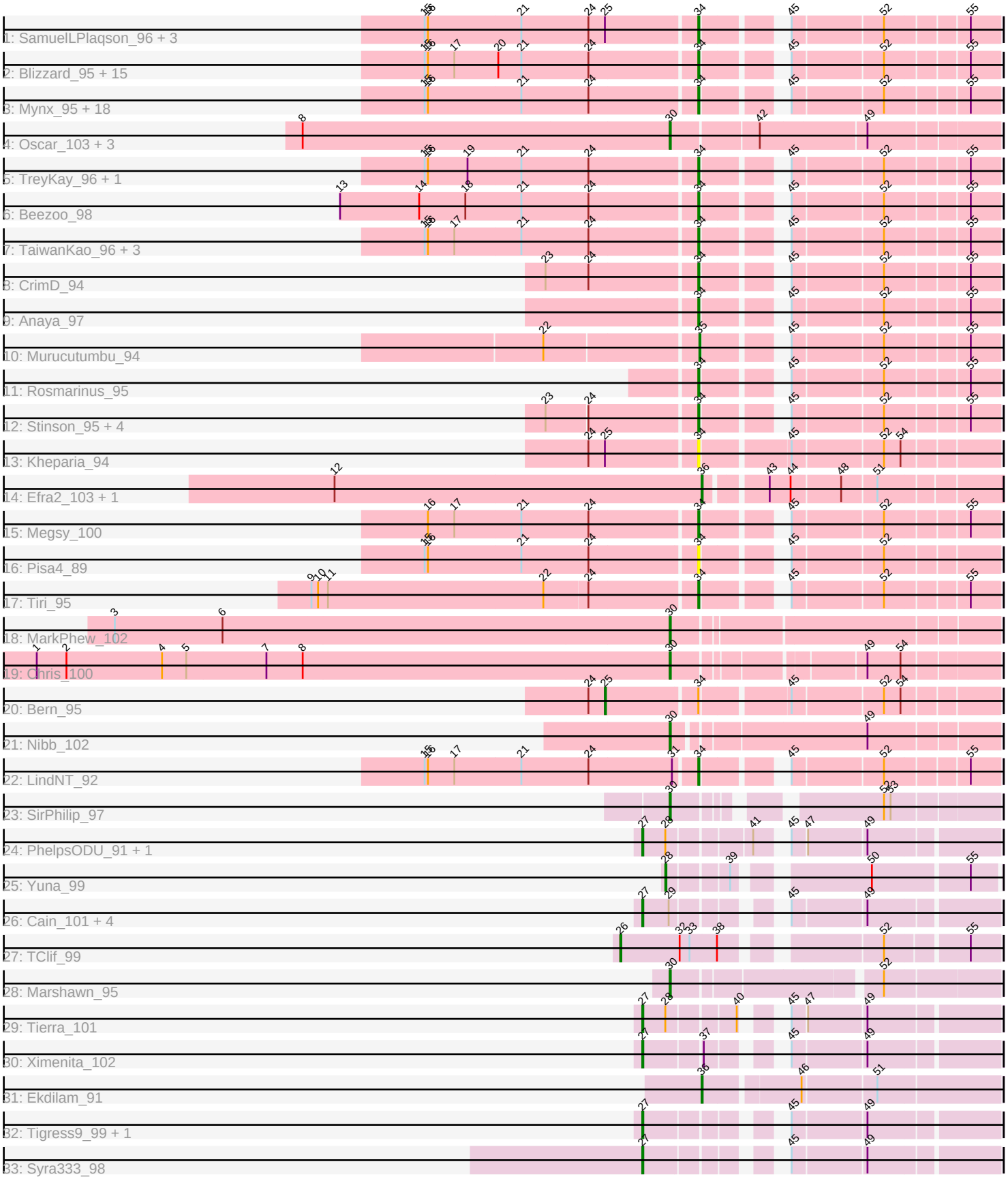
Pham 347496


1: SamuelLPlaqson_96 + 3
2: Blizzard_95 + 15
3: Mynx_95 + 18
4: Oscar_103 + 3
5: TreyKay_96 + 1
6: Beezoo_98
7: TaiwanKao_96 + 3
8: CrimD_94
9: Anaya_97
10: Murucutumbu_94
11: Rosmarinus_95
12: Stinson_95 + 4
13: Kheparia_94
14: Efra2_103 + 1
15: Megsy_100
16: Pisa4_89
17: Tiri_95
18: MarkPhew_102
19: Chris_100
20: Bern_95
21: Nibb_102
22: LindNT_92
23: SirPhilip_97
24: PhelpsODU_91 + 1
25: Yuna_99
26: Cain_101 + 4
27: TClif_99
28: Marshawn_95
29: Tierra_101
30: Ximenita_102
31: Ekdilam_91
32: Tigress9_99 + 1
33: Syra333_98

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 347496 Report

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

Pham number 347496 has 87 members, 3 are drafts.

Phages represented in each track:
• Track 1 : SamuelLPlaqson_96, DrHayes_96, Anma_94, Urkel_96
• Track 2 : Blizzard_95, Belladonna_95, Capricorn_95, Emerson_99, ShiaSurprise_97, Homura_93, Twitch_95, Durfee_95, Geraldini_95, CaseJules_98, CREW_93, Dalmuri_95, Boiiii_95, Asayake_95, BEEST_94, Jeckyll_95
• Track 3 : Mynx_95, Adonis_94, Veliki_95, Ganymede_94, Adephagia_93, JAWS_93, Tachez_95, QuincyRose_92, Ramen_95, Sulley_93, Jayhawk_98, BarrelRoll_94, Rapunzel97_97, BGlluviae_94, AlishaPH_87, Atiba_95, Pokerus_94, Zavala_96, Slimphazie_97
• Track 4 : Oscar_103, Scarlett_102, LeMond_102, KiSi_103
• Track 5 : TreyKay_96, Prithvi_96
• Track 6 : Beezoo_98
• Track 7 : TaiwanKao_96, Angelica_93, Deby_94, BaghaKamala_94
• Track 8 : CrimD_94
• Track 9 : Anaya_97
• Track 10 : Murucutumbu_94
• Track 11 : Rosmarinus_95
• Track 12 : Stinson_95, Devera_101, Illumine_98, LaterM_94, Dole_97
• Track 13 : Kheparia_94
• Track 14 : Efra2_103, Guanica15_102
• Track 15 : Megsy_100
• Track 16 : Pisa4_89
• Track 17 : Tiri_95
• Track 18 : MarkPhew_102
• Track 19 : Chris_100
• Track 20 : Bern_95
• Track 21 : Nibb_102
• Track 22 : LindNT_92
• Track 23 : SirPhilip_97
• Track 24 : PhelpsODU_91, Unicorn_101
• Track 25 : Yuna_99
• Track 26 : Cain_101, Bryler_93, Shadow1_99, Sunflower1121_99, Phrank_102
• Track 27 : TClif_99
• Track 28 : Marshawn_95
• Track 29 : Tierra_101
• Track 30 : Ximenita_102
• Track 31 : Ekdilam_91
• Track 32 : Tigress9_99, Krueger_100

• Track 33 : Syra333_98

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

The start number called the most often in the published annotations is 34, it was called in 56 of the 84 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adephagia_93, Adonis_94, AlishaPH_87, Anaya_97, Angelica_93, Anma_94, Asayake_95, Atiba_95, BEEST_94, BGlluviae_94, BaghaKamala_94, BarrelRoll_94, Beezoo_98, Belladonna_95, Blizzard_95, Boiiii_95, CREW_93, Capricorn_95, CaseJules_98, CrimD_94, Dalmuri_95, Deby_94, Devera_101, Dole_97, DrHayes_96, Durfee_95, Emerson_99, Ganymede_94, Geraldini_95, Homura_93, Illumine_98, JAWS_93, Jayhawk_98, Jeckyll_95, Kheparia_94, LaterM_94, LindNT_92, Megsy_100, Mynx_95, Pisa4_89, Pokerus_94, Prithvi_96, QuincyRose_92, Ramen_95, Rapunzel97_97, Rosmarinus_95, SamuelLPlaqson_96, ShiaSurprise_97, Slimphazie_97, Stinson_95, Sulley_93, Tachez_95, TaiwanKao_96, Tiri_95, TreyKay_96, Twitch_95, Urkel_96, Veliki_95, Zavala_96,

Genes that have the "Most Annotated" start but do not call it:
• Bern_95,

Genes that do not have the "Most Annotated" start:
• Bryler_93, Cain_101, Chris_100, Efra2_103, Ekdilam_91, Guanica15_102, KiSi_103, Krueger_100, LeMond_102, MarkPhew_102, Marshawn_95, Murucutumbu_94, Nibb_102, Oscar_103, PhelpsODU_91, Phrank_102, Scarlett_102, Shadow1_99, SirPhilip_97, Sunflower1121_99, Syra333_98, TClif_99, Tierra_101, Tigress9_99, Unicorn_101, Ximenita_102, Yuna_99,

Summary by start number:

Start 25:
• Found in 6 of 87 (6.9%) of genes in pham
• Manual Annotations of this start: 1 of 84
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Bern_95 (K1),

Start 26:
• Found in 1 of 87 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 84
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TClif_99 (K6),

Start 27:
• Found in 12 of 87 (13.8%) of genes in pham
• Manual Annotations of this start: 12 of 84
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bryler_93 (K6), Cain_101 (K6), Krueger_100 (K6), PhelpsODU_91 (K6), Phrank_102 (K6), Shadow1_99 (K6), Sunflower1121_99 (K6), Syra333_98 (K6), Tierra_101 (K6), Tigress9_99 (K6),

Unicorn_101 (K6), Ximenita_102 (K6),

Start 28:
• Found in 4 of 87 (4.6%) of genes in pham
• Manual Annotations of this start: 1 of 84
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Yuna_99 (K6),

Start 30:
• Found in 9 of 87 (10.3%) of genes in pham
• Manual Annotations of this start: 9 of 84
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chris_100 (K1), KiSi_103 (K1), LeMond_102 (K1), MarkPhew_102 (K1), Marshawn_95 (K6), Nibb_102 (K1), Oscar_103 (K1), Scarlett_102 (K1), SirPhilip_97 (K6),

Start 34:
• Found in 60 of 87 (69.0%) of genes in pham
• Manual Annotations of this start: 56 of 84
• Called 98.3% of time when present
• Phage (with cluster) where this start called: Adephagia_93 (K1), Adonis_94 (K1), AlishaPH_87 (K1), Anaya_97 (K1), Angelica_93 (K1), Anma_94 (K1), Asayake_95 (K1), Atiba_95 (K1), BEEST_94 (K1), BGlluviae_94 (K1), BaghaKamala_94 (K1), BarrelRoll_94 (K1), Beezoo_98 (K1), Belladonna_95 (K1), Blizzard_95 (K1), Boiiii_95 (K1), CREW_93 (K1), Capricorn_95 (K1), CaseJules_98 (K1), CrimD_94 (K1), Dalmuri_95 (K1), Deby_94 (K1), Devera_101 (K1), Dole_97 (K1), DrHayes_96 (K1), Durfee_95 (K1), Emerson_99 (K1), Ganymede_94 (K1), Geraldini_95 (K1), Homura_93 (K1), Illumine_98 (K1), JAWS_93 (K1), Jayhawk_98 (K1), Jeckyll_95 (K1), Kheparia_94 (K1), LaterM_94 (K1), LindNT_92 (K1), Megsy_100 (K1), Mynx_95 (K1), Pisa4_89 (K1), Pokerus_94 (K1), Prithvi_96 (K1), QuincyRose_92 (K1), Ramen_95 (K1), Rapunzel97_97 (K1), Rosmarinus_95 (K1), SamuelLPlaqson_96 (K1), ShiaSurprise_97 (K1), Slimphazie_97 (K1), Stinson_95 (K1), Sulley_93 (K1), Tachez_95 (K1), TaiwanKao_96 (K1), Tiri_95 (K1), TreyKay_96 (K1), Twitch_95 (K1), Urkel_96 (K1), Veliki_95 (K1), Zavala_96 (K1),

Start 35:
• Found in 1 of 87 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 84
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Murucutumbu_94 (K1),

Start 36:
• Found in 3 of 87 (3.4%) of genes in pham
• Manual Annotations of this start: 3 of 84
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Efra2_103 (K1), Ekdilam_91 (K6), Guanica15_102 (K1),

Summary by clusters:

There are 2 clusters represented in this pham: K1, K6,

Info for manual annotations of cluster K1:

•Start number 25 was manually annotated 1 time for cluster K1.
•Start number 30 was manually annotated 7 times for cluster K1.
•Start number 34 was manually annotated 56 times for cluster K1.
•Start number 35 was manually annotated 1 time for cluster K1.
•Start number 36 was manually annotated 2 times for cluster K1.

Info for manual annotations of cluster K6:
•Start number 26 was manually annotated 1 time for cluster K6.
•Start number 27 was manually annotated 12 times for cluster K6.
•Start number 28 was manually annotated 1 time for cluster K6.
•Start number 30 was manually annotated 2 times for cluster K6.
•Start number 36 was manually annotated 1 time for cluster K6.

Gene Information:

Gene: Adephagia_93 Start: 58879, Stop: 59109, Start Num: 34
Candidate Starts for Adephagia_93:
(15, 58639), (16, 58642), (21, 58726), (24, 58786), (Start: 34 @58879 has 56 MA's), (45, 58936), (52, 59014), (55, 59083),

Gene: Adonis_94 Start: 59264, Stop: 59494, Start Num: 34
Candidate Starts for Adonis_94:
(15, 59024), (16, 59027), (21, 59111), (24, 59171), (Start: 34 @59264 has 56 MA's), (45, 59321), (52, 59399), (55, 59468),

Gene: AlishaPH_87 Start: 56267, Stop: 56497, Start Num: 34
Candidate Starts for AlishaPH_87:
(15, 56027), (16, 56030), (21, 56114), (24, 56174), (Start: 34 @56267 has 56 MA's), (45, 56324), (52, 56402), (55, 56471),

Gene: Anaya_97 Start: 60067, Stop: 60297, Start Num: 34
Candidate Starts for Anaya_97:
(Start: 34 @60067 has 56 MA's), (45, 60124), (52, 60202), (55, 60271),

Gene: Angelica_93 Start: 58831, Stop: 59061, Start Num: 34
Candidate Starts for Angelica_93:
(15, 58591), (16, 58594), (17, 58618), (21, 58678), (24, 58738), (Start: 34 @58831 has 56 MA's), (45, 58888), (52, 58966), (55, 59035),

Gene: Anma_94 Start: 59765, Stop: 59995, Start Num: 34
Candidate Starts for Anma_94:
(15, 59525), (16, 59528), (21, 59612), (24, 59672), (Start: 25 @59687 has 1 MA's), (Start: 34 @59765 has 56 MA's), (45, 59822), (52, 59900), (55, 59969),

Gene: Asayake_95 Start: 59138, Stop: 59368, Start Num: 34
Candidate Starts for Asayake_95:
(15, 58898), (16, 58901), (17, 58925), (20, 58964), (21, 58985), (24, 59045), (Start: 34 @59138 has 56 MA's), (45, 59195), (52, 59273), (55, 59342),

Gene: Atiba_95 Start: 58789, Stop: 59019, Start Num: 34
Candidate Starts for Atiba_95:

(15, 58549), (16, 58552), (21, 58636), (24, 58696), (Start: 34 @58789 has 56 MA's), (45, 58846), (52, 58924), (55, 58993),

Gene: BEEST_94 Start: 59139, Stop: 59369, Start Num: 34
Candidate Starts for BEEST_94:
(15, 58899), (16, 58902), (17, 58926), (20, 58965), (21, 58986), (24, 59046), (Start: 34 @59139 has 56 MA's), (45, 59196), (52, 59274), (55, 59343),

Gene: BGlluviae_94 Start: 58541, Stop: 58771, Start Num: 34
Candidate Starts for BGlluviae_94:
(15, 58301), (16, 58304), (21, 58388), (24, 58448), (Start: 34 @58541 has 56 MA's), (45, 58598), (52, 58676), (55, 58745),

Gene: BaghaKamala_94 Start: 58365, Stop: 58595, Start Num: 34
Candidate Starts for BaghaKamala_94:
(15, 58125), (16, 58128), (17, 58152), (21, 58212), (24, 58272), (Start: 34 @58365 has 56 MA's), (45, 58422), (52, 58500), (55, 58569),

Gene: BarrelRoll_94 Start: 58905, Stop: 59135, Start Num: 34
Candidate Starts for BarrelRoll_94:
(15, 58665), (16, 58668), (21, 58752), (24, 58812), (Start: 34 @58905 has 56 MA's), (45, 58962), (52, 59040), (55, 59109),

Gene: Beezoo_98 Start: 59727, Stop: 59957, Start Num: 34
Candidate Starts for Beezoo_98:
(13, 59409), (14, 59481), (18, 59523), (21, 59574), (24, 59634), (Start: 34 @59727 has 56 MA's), (45, 59784), (52, 59862), (55, 59931),

Gene: Belladonna_95 Start: 58941, Stop: 59171, Start Num: 34
Candidate Starts for Belladonna_95:
(15, 58701), (16, 58704), (17, 58728), (20, 58767), (21, 58788), (24, 58848), (Start: 34 @58941 has 56 MA's), (45, 58998), (52, 59076), (55, 59145),

Gene: Bern_95 Start: 57508, Stop: 57831, Start Num: 25
Candidate Starts for Bern_95:
(24, 57493), (Start: 25 @57508 has 1 MA's), (Start: 34 @57586 has 56 MA's), (45, 57658), (52, 57736), (54, 57751),

Gene: Blizzard_95 Start: 59138, Stop: 59368, Start Num: 34
Candidate Starts for Blizzard_95:
(15, 58898), (16, 58901), (17, 58925), (20, 58964), (21, 58985), (24, 59045), (Start: 34 @59138 has 56 MA's), (45, 59195), (52, 59273), (55, 59342),

Gene: Boiiii_95 Start: 59140, Stop: 59370, Start Num: 34
Candidate Starts for Boiiii_95:
(15, 58900), (16, 58903), (17, 58927), (20, 58966), (21, 58987), (24, 59047), (Start: 34 @59140 has 56 MA's), (45, 59197), (52, 59275), (55, 59344),

Gene: Bryler_93 Start: 57045, Stop: 57311, Start Num: 27
Candidate Starts for Bryler_93:
(Start: 27 @57045 has 12 MA's), (29, 57069), (45, 57138), (49, 57201),

Gene: CREW_93 Start: 58940, Stop: 59170, Start Num: 34

Candidate Starts for CREW_93:
(15, 58700), (16, 58703), (17, 58727), (20, 58766), (21, 58787), (24, 58847), (Start: 34 @58940 has 56 MA's), (45, 58997), (52, 59075), (55, 59144),

Gene: Cain_101 Start: 60192, Stop: 60458, Start Num: 27
Candidate Starts for Cain_101:
(Start: 27 @60192 has 12 MA's), (29, 60216), (45, 60285), (49, 60348),

Gene: Capricorn_95 Start: 58941, Stop: 59171, Start Num: 34
Candidate Starts for Capricorn_95:
(15, 58701), (16, 58704), (17, 58728), (20, 58767), (21, 58788), (24, 58848), (Start: 34 @58941 has 56 MA's), (45, 58998), (52, 59076), (55, 59145),

Gene: CaseJules_98 Start: 59138, Stop: 59368, Start Num: 34
Candidate Starts for CaseJules_98:
(15, 58898), (16, 58901), (17, 58925), (20, 58964), (21, 58985), (24, 59045), (Start: 34 @59138 has 56 MA's), (45, 59195), (52, 59273), (55, 59342),

Gene: Chris_100 Start: 61462, Stop: 61725, Start Num: 30
Candidate Starts for Chris_100:
(1, 60892), (2, 60919), (4, 61006), (5, 61027), (7, 61099), (8, 61132), (Start: 30 @61462 has 9 MA's), (49, 61615), (54, 61645),

Gene: CrimD_94 Start: 59033, Stop: 59263, Start Num: 34
Candidate Starts for CrimD_94:
(23, 58901), (24, 58940), (Start: 34 @59033 has 56 MA's), (45, 59090), (52, 59168), (55, 59237),

Gene: Dalmuri_95 Start: 58941, Stop: 59171, Start Num: 34
Candidate Starts for Dalmuri_95:
(15, 58701), (16, 58704), (17, 58728), (20, 58767), (21, 58788), (24, 58848), (Start: 34 @58941 has 56 MA's), (45, 58998), (52, 59076), (55, 59145),

Gene: Deby_94 Start: 59696, Stop: 59926, Start Num: 34
Candidate Starts for Deby_94:
(15, 59456), (16, 59459), (17, 59483), (21, 59543), (24, 59603), (Start: 34 @59696 has 56 MA's), (45, 59753), (52, 59831), (55, 59900),

Gene: Devera_101 Start: 59853, Stop: 60083, Start Num: 34
Candidate Starts for Devera_101:
(23, 59724), (24, 59760), (Start: 34 @59853 has 56 MA's), (45, 59910), (52, 59988), (55, 60057),

Gene: Dole_97 Start: 59856, Stop: 60086, Start Num: 34
Candidate Starts for Dole_97:
(23, 59727), (24, 59763), (Start: 34 @59856 has 56 MA's), (45, 59913), (52, 59991), (55, 60060),

Gene: DrHayes_96 Start: 59765, Stop: 59995, Start Num: 34
Candidate Starts for DrHayes_96:
(15, 59525), (16, 59528), (21, 59612), (24, 59672), (Start: 25 @59687 has 1 MA's), (Start: 34 @59765 has 56 MA's), (45, 59822), (52, 59900), (55, 59969),

Gene: Durfee_95 Start: 59138, Stop: 59368, Start Num: 34
Candidate Starts for Durfee_95:

(15, 58898), (16, 58901), (17, 58925), (20, 58964), (21, 58985), (24, 59045), (Start: 34 @59138 has 56 MA's), (45, 59195), (52, 59273), (55, 59342),

Gene: Efra2_103 Start: 60683, Stop: 60925, Start Num: 36
Candidate Starts for Efra2_103:
(12, 60350), (Start: 36 @60683 has 3 MA's), (43, 60731), (44, 60749), (48, 60791), (51, 60821),

Gene: Ekdilam_91 Start: 61162, Stop: 61413, Start Num: 36
Candidate Starts for Ekdilam_91:
(Start: 36 @61162 has 3 MA's), (46, 61243), (51, 61306),

Gene: Emerson_99 Start: 59543, Stop: 59773, Start Num: 34
Candidate Starts for Emerson_99:
(15, 59303), (16, 59306), (17, 59330), (20, 59369), (21, 59390), (24, 59450), (Start: 34 @59543 has 56 MA's), (45, 59600), (52, 59678), (55, 59747),

Gene: Ganymede_94 Start: 58952, Stop: 59182, Start Num: 34
Candidate Starts for Ganymede_94:
(15, 58712), (16, 58715), (21, 58799), (24, 58859), (Start: 34 @58952 has 56 MA's), (45, 59009), (52, 59087), (55, 59156),

Gene: Geraldini_95 Start: 59051, Stop: 59281, Start Num: 34
Candidate Starts for Geraldini_95:
(15, 58811), (16, 58814), (17, 58838), (20, 58877), (21, 58898), (24, 58958), (Start: 34 @59051 has 56 MA's), (45, 59108), (52, 59186), (55, 59255),

Gene: Guanica15_102 Start: 60372, Stop: 60614, Start Num: 36
Candidate Starts for Guanica15_102:
(12, 60039), (Start: 36 @60372 has 3 MA's), (43, 60420), (44, 60438), (48, 60480), (51, 60510),

Gene: Homura_93 Start: 58941, Stop: 59171, Start Num: 34
Candidate Starts for Homura_93:
(15, 58701), (16, 58704), (17, 58728), (20, 58767), (21, 58788), (24, 58848), (Start: 34 @58941 has 56 MA's), (45, 58998), (52, 59076), (55, 59145),

Gene: Illumine_98 Start: 59855, Stop: 60085, Start Num: 34
Candidate Starts for Illumine_98:
(23, 59726), (24, 59762), (Start: 34 @59855 has 56 MA's), (45, 59912), (52, 59990), (55, 60059),

Gene: JAWS_93 Start: 58982, Stop: 59212, Start Num: 34
Candidate Starts for JAWS_93:
(15, 58742), (16, 58745), (21, 58829), (24, 58889), (Start: 34 @58982 has 56 MA's), (45, 59039), (52, 59117), (55, 59186),

Gene: Jayhawk_98 Start: 58965, Stop: 59195, Start Num: 34
Candidate Starts for Jayhawk_98:
(15, 58725), (16, 58728), (21, 58812), (24, 58872), (Start: 34 @58965 has 56 MA's), (45, 59022), (52, 59100), (55, 59169),

Gene: Jeckyll_95 Start: 58941, Stop: 59171, Start Num: 34
Candidate Starts for Jeckyll_95:
(15, 58701), (16, 58704), (17, 58728), (20, 58767), (21, 58788), (24, 58848), (Start: 34 @58941 has 56 MA's), (45, 58998), (52, 59076), (55, 59145),

Gene: Kheparia_94 Start: 56147, Stop: 56392, Start Num: 34
Candidate Starts for Kheparia_94:
(24, 56054), (Start: 25 @56069 has 1 MA's), (Start: 34 @56147 has 56 MA's), (45, 56219), (52, 56297), (54, 56312),

Gene: KiSi_103 Start: 61933, Stop: 62211, Start Num: 30
Candidate Starts for KiSi_103:
(8, 61603), (Start: 30 @61933 has 9 MA's), (42, 62008), (49, 62101),

Gene: Krueger_100 Start: 59699, Stop: 59965, Start Num: 27
Candidate Starts for Krueger_100:
(Start: 27 @59699 has 12 MA's), (45, 59792), (49, 59855),

Gene: LaterM_94 Start: 59378, Stop: 59608, Start Num: 34
Candidate Starts for LaterM_94:
(23, 59249), (24, 59285), (Start: 34 @59378 has 56 MA's), (45, 59435), (52, 59513), (55, 59582),

Gene: LeMond_102 Start: 61890, Stop: 62168, Start Num: 30
Candidate Starts for LeMond_102:
(8, 61560), (Start: 30 @61890 has 9 MA's), (42, 61965), (49, 62058),

Gene: LindNT_92 Start: 59288, Stop: 59518, Start Num: 34
Candidate Starts for LindNT_92:
(15, 59048), (16, 59051), (17, 59075), (21, 59135), (24, 59195), (31, 59270), (Start: 34 @59288 has 56 MA's), (45, 59345), (52, 59423), (55, 59492),

Gene: MarkPhew_102 Start: 61533, Stop: 61808, Start Num: 30
Candidate Starts for MarkPhew_102:
(3, 61035), (6, 61131), (Start: 30 @61533 has 9 MA's),

Gene: Marshawn_95 Start: 60831, Stop: 61100, Start Num: 30
Candidate Starts for Marshawn_95:
(Start: 30 @60831 has 9 MA's), (52, 61002),

Gene: Megsy_100 Start: 59426, Stop: 59656, Start Num: 34
Candidate Starts for Megsy_100:
(16, 59189), (17, 59213), (21, 59273), (24, 59333), (Start: 34 @59426 has 56 MA's), (45, 59483), (52, 59561), (55, 59630),

Gene: Murucutumbu_94 Start: 59843, Stop: 60073, Start Num: 35
Candidate Starts for Murucutumbu_94:
(22, 59711), (Start: 35 @59843 has 1 MA's), (45, 59900), (52, 59978), (55, 60047),

Gene: Mynx_95 Start: 59288, Stop: 59518, Start Num: 34
Candidate Starts for Mynx_95:
(15, 59048), (16, 59051), (21, 59135), (24, 59195), (Start: 34 @59288 has 56 MA's), (45, 59345), (52, 59423), (55, 59492),

Gene: Nibb_102 Start: 61676, Stop: 61948, Start Num: 30
Candidate Starts for Nibb_102:
(Start: 30 @61676 has 9 MA's), (49, 61838),

Gene: Oscar_103 Start: 61812, Stop: 62090, Start Num: 30
Candidate Starts for Oscar_103:
(8, 61482), (Start: 30 @61812 has 9 MA's), (42, 61887), (49, 61980),

Gene: PhelpsODU_91 Start: 55946, Stop: 56224, Start Num: 27
Candidate Starts for PhelpsODU_91:
(Start: 27 @55946 has 12 MA's), (Start: 28 @55967 has 1 MA's), (41, 56033), (45, 56051), (47, 56063), (49, 56114),

Gene: Phrank_102 Start: 60490, Stop: 60756, Start Num: 27
Candidate Starts for Phrank_102:
(Start: 27 @60490 has 12 MA's), (29, 60514), (45, 60583), (49, 60646),

Gene: Pisa4_89 Start: 55047, Stop: 55277, Start Num: 34
Candidate Starts for Pisa4_89:
(15, 54807), (16, 54810), (21, 54894), (24, 54954), (Start: 34 @55047 has 56 MA's), (45, 55104), (52, 55182),

Gene: Pokerus_94 Start: 59008, Stop: 59238, Start Num: 34
Candidate Starts for Pokerus_94:
(15, 58768), (16, 58771), (21, 58855), (24, 58915), (Start: 34 @59008 has 56 MA's), (45, 59065), (52, 59143), (55, 59212),

Gene: Prithvi_96 Start: 59546, Stop: 59776, Start Num: 34
Candidate Starts for Prithvi_96:
(15, 59306), (16, 59309), (19, 59345), (21, 59393), (24, 59453), (Start: 34 @59546 has 56 MA's), (45, 59603), (52, 59681), (55, 59750),

Gene: QuincyRose_92 Start: 58952, Stop: 59182, Start Num: 34
Candidate Starts for QuincyRose_92:
(15, 58712), (16, 58715), (21, 58799), (24, 58859), (Start: 34 @58952 has 56 MA's), (45, 59009), (52, 59087), (55, 59156),

Gene: Ramen_95 Start: 58695, Stop: 58925, Start Num: 34
Candidate Starts for Ramen_95:
(15, 58455), (16, 58458), (21, 58542), (24, 58602), (Start: 34 @58695 has 56 MA's), (45, 58752), (52, 58830), (55, 58899),

Gene: Rapunzel97_97 Start: 58920, Stop: 59150, Start Num: 34
Candidate Starts for Rapunzel97_97:
(15, 58680), (16, 58683), (21, 58767), (24, 58827), (Start: 34 @58920 has 56 MA's), (45, 58977), (52, 59055), (55, 59124),

Gene: Rosmarinus_95 Start: 58929, Stop: 59159, Start Num: 34
Candidate Starts for Rosmarinus_95:
(Start: 34 @58929 has 56 MA's), (45, 58986), (52, 59064), (55, 59133),

Gene: SamuelLPlaqson_96 Start: 59765, Stop: 59995, Start Num: 34
Candidate Starts for SamuelLPlaqson_96:
(15, 59525), (16, 59528), (21, 59612), (24, 59672), (Start: 25 @59687 has 1 MA's), (Start: 34 @59765 has 56 MA's), (45, 59822), (52, 59900), (55, 59969),

Gene: Scarlett_102 Start: 61681, Stop: 61959, Start Num: 30

Candidate Starts for Scarlett_102:
(8, 61351), (Start: 30 @61681 has 9 MA's), (42, 61756), (49, 61849),

Gene: Shadow1_99 Start: 59836, Stop: 60102, Start Num: 27
Candidate Starts for Shadow1_99:
(Start: 27 @59836 has 12 MA's), (29, 59860), (45, 59929), (49, 59992),

Gene: ShiaSurprise_97 Start: 59138, Stop: 59368, Start Num: 34
Candidate Starts for ShiaSurprise_97:
(15, 58898), (16, 58901), (17, 58925), (20, 58964), (21, 58985), (24, 59045), (Start: 34 @59138 has 56 MA's), (45, 59195), (52, 59273), (55, 59342),

Gene: SirPhilip_97 Start: 61295, Stop: 61543, Start Num: 30
Candidate Starts for SirPhilip_97:
(Start: 30 @61295 has 9 MA's), (52, 61448), (53, 61454),

Gene: Slimphazie_97 Start: 59376, Stop: 59606, Start Num: 34
Candidate Starts for Slimphazie_97:
(15, 59136), (16, 59139), (21, 59223), (24, 59283), (Start: 34 @59376 has 56 MA's), (45, 59433), (52, 59511), (55, 59580),

Gene: Stinson_95 Start: 59153, Stop: 59383, Start Num: 34
Candidate Starts for Stinson_95:
(23, 59024), (24, 59060), (Start: 34 @59153 has 56 MA's), (45, 59210), (52, 59288), (55, 59357),

Gene: Sulley_93 Start: 59106, Stop: 59336, Start Num: 34
Candidate Starts for Sulley_93:
(15, 58866), (16, 58869), (21, 58953), (24, 59013), (Start: 34 @59106 has 56 MA's), (45, 59163), (52, 59241), (55, 59310),

Gene: Sunflower1121_99 Start: 59594, Stop: 59860, Start Num: 27
Candidate Starts for Sunflower1121_99:
(Start: 27 @59594 has 12 MA's), (29, 59618), (45, 59687), (49, 59750),

Gene: Syra333_98 Start: 59676, Stop: 59942, Start Num: 27
Candidate Starts for Syra333_98:
(Start: 27 @59676 has 12 MA's), (45, 59769), (49, 59832),

Gene: TClif_99 Start: 60813, Stop: 61112, Start Num: 26
Candidate Starts for TClif_99:
(Start: 26 @60813 has 1 MA's), (32, 60864), (33, 60873), (38, 60897), (52, 61017), (55, 61086),

Gene: Tachez_95 Start: 58789, Stop: 59019, Start Num: 34
Candidate Starts for Tachez_95:
(15, 58549), (16, 58552), (21, 58636), (24, 58696), (Start: 34 @58789 has 56 MA's), (45, 58846), (52, 58924), (55, 58993),

Gene: TaiwanKao_96 Start: 59201, Stop: 59431, Start Num: 34
Candidate Starts for TaiwanKao_96:
(15, 58961), (16, 58964), (17, 58988), (21, 59048), (24, 59108), (Start: 34 @59201 has 56 MA's), (45, 59258), (52, 59336), (55, 59405),

Gene: Tierra_101 Start: 60797, Stop: 61063, Start Num: 27

Candidate Starts for Tierra_101:
(Start: 27 @60797 has 12 MA's), (Start: 28 @60818 has 1 MA's), (40, 60872), (45, 60890), (47, 60902), (49, 60953),

Gene: Tigress9_99 Start: 60027, Stop: 60293, Start Num: 27
Candidate Starts for Tigress9_99:
(Start: 27 @60027 has 12 MA's), (45, 60120), (49, 60183),

Gene: Tiri_95 Start: 58682, Stop: 58912, Start Num: 34
Candidate Starts for Tiri_95:
(9, 58340), (10, 58346), (11, 58355), (22, 58550), (24, 58589), (Start: 34 @58682 has 56 MA's), (45, 58739), (52, 58817), (55, 58886),

Gene: TreyKay_96 Start: 59546, Stop: 59776, Start Num: 34
Candidate Starts for TreyKay_96:
(15, 59306), (16, 59309), (19, 59345), (21, 59393), (24, 59453), (Start: 34 @59546 has 56 MA's), (45, 59603), (52, 59681), (55, 59750),

Gene: Twitch_95 Start: 58944, Stop: 59174, Start Num: 34
Candidate Starts for Twitch_95:
(15, 58704), (16, 58707), (17, 58731), (20, 58770), (21, 58791), (24, 58851), (Start: 34 @58944 has 56 MA's), (45, 59001), (52, 59079), (55, 59148),

Gene: Unicorn_101 Start: 60574, Stop: 60852, Start Num: 27
Candidate Starts for Unicorn_101:
(Start: 27 @60574 has 12 MA's), (Start: 28 @60595 has 1 MA's), (41, 60661), (45, 60679), (47, 60691), (49, 60742),

Gene: Urkel_96 Start: 59765, Stop: 59995, Start Num: 34
Candidate Starts for Urkel_96:
(15, 59525), (16, 59528), (21, 59612), (24, 59672), (Start: 25 @59687 has 1 MA's), (Start: 34 @59765 has 56 MA's), (45, 59822), (52, 59900), (55, 59969),

Gene: Veliki_95 Start: 58967, Stop: 59197, Start Num: 34
Candidate Starts for Veliki_95:
(15, 58727), (16, 58730), (21, 58814), (24, 58874), (Start: 34 @58967 has 56 MA's), (45, 59024), (52, 59102), (55, 59171),

Gene: Ximenita_102 Start: 60409, Stop: 60675, Start Num: 27
Candidate Starts for Ximenita_102:
(Start: 27 @60409 has 12 MA's), (37, 60457), (45, 60502), (49, 60565),

Gene: Yuna_99 Start: 61586, Stop: 61840, Start Num: 28
Candidate Starts for Yuna_99:
(Start: 28 @61586 has 1 MA's), (39, 61634), (50, 61733), (55, 61817),

Gene: Zavala_96 Start: 59202, Stop: 59432, Start Num: 34
Candidate Starts for Zavala_96:
(15, 58962), (16, 58965), (21, 59049), (24, 59109), (Start: 34 @59202 has 56 MA's), (45, 59259), (52, 59337), (55, 59406),