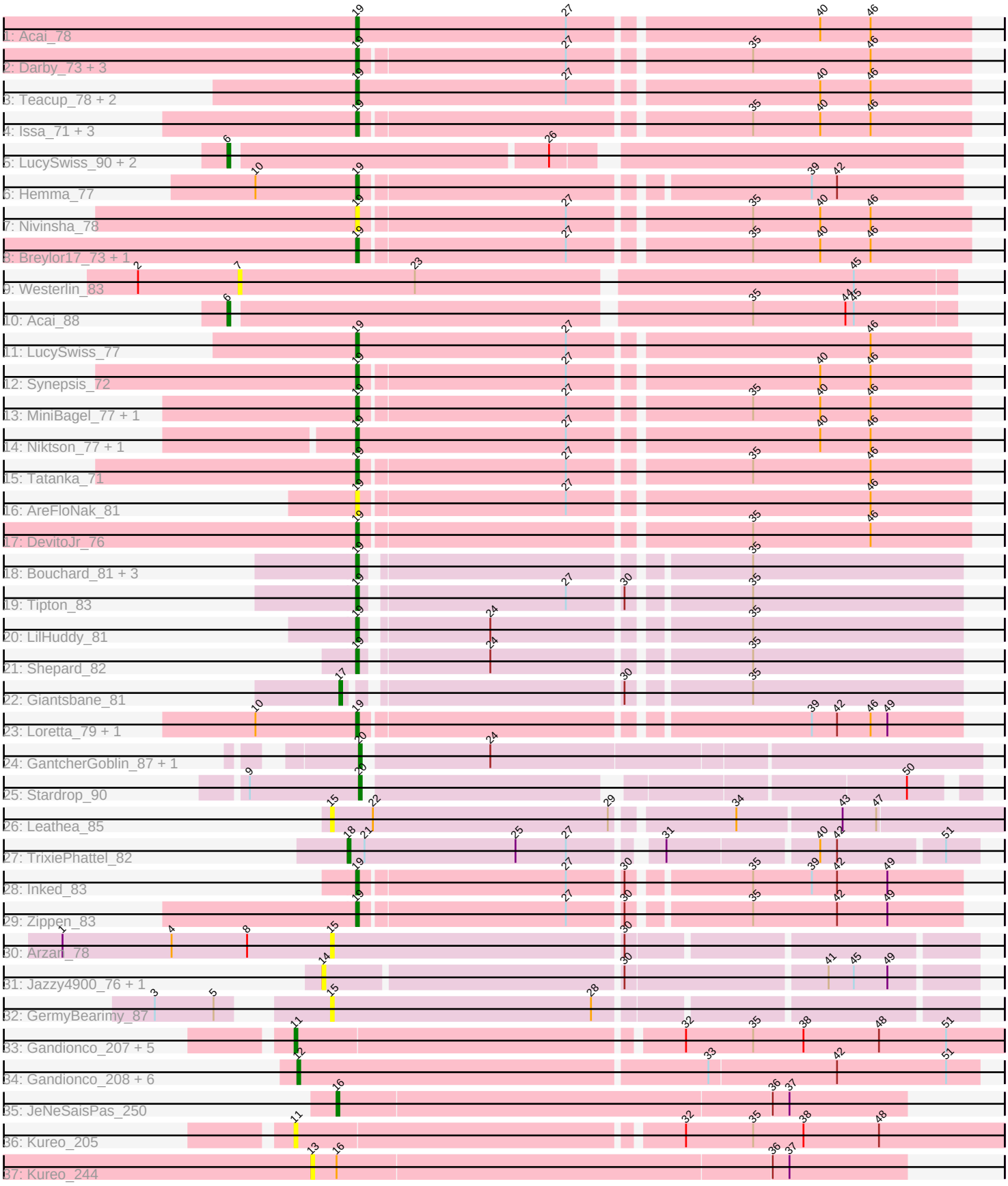
Pham 347592


1: Acai_78
2: Darby_73 + 3
3: Teacup_78 + 2
4: Issa_71 + 3
5: LucySwiss_90 + 2
6: Hemma_77
7: Nivinsha_78
8: Breylor17_73 + 1
9: Westerlin_83
10: Acai_88
11: LucySwiss_77
12: Synepsis_72
13: MiniBagel_77 + 1
14: Niktson_77 + 1
15: Tatanka_71
16: AreFloNak_81
17: DevitoJr_76
18: Bouchard_81 + 3
19: Tipton_83
20: LilHuddy_81
21: Shepard_82
22: Giantsbane_81
23: Loretta_79 + 1
24: GantcherGoblin_87 + 1
25: Stardrop_90
26: Leathea_85
27: TrixiePhattel_82
28: Inked_83
29: Zippen_83
30: Arzan_78
31: Jazzy4900_76 + 1
32: GermyBearimy_87
33: Gandionco_207 + 5
34: Gandionco_208 + 6
35: JeNeSaisPas_250
36: Kureo_205
37: Kureo_244

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 347592 Report

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

Pham number 347592 has 67 members, 17 are drafts.

Phages represented in each track:
• Track 1 : Acai_78
• Track 2 : Darby_73, ScienceWizSam_78, Gordon_73, CastorTray_79
• Track 3 : Teacup_78, Brunswick_78, Nightmare_78
• Track 4 : Issa_71, Dinallo_71, CapnMurica_73, Tenno_76
• Track 5 : LucySwiss_90, Brunswick_90, Issa_80
• Track 6 : Hemma_77
• Track 7 : Nivinsha_78
• Track 8 : Breylor17_73, Trustiboi_75
• Track 9 : Westerlin_83
• Track 10 : Acai_88
• Track 11 : LucySwiss_77
• Track 12 : Synepsis_72
• Track 13 : MiniBagel_77, Westerlin_74
• Track 14 : Niktson_77, ElephantMan_77
• Track 15 : Tatanka_71
• Track 16 : AreFloNak_81
• Track 17 : DevitoJr_76
• Track 18 : Bouchard_81, Tokki_87, Chlochlo_82, Phaby_83
• Track 19 : Tipton_83
• Track 20 : LilHuddy_81
• Track 21 : Shepard_82
• Track 22 : Giantsbane_81
• Track 23 : Loretta_79, Ingrid_83
• Track 24 : GantcherGoblin_87, Tenney120_89
• Track 25 : Stardrop_90
• Track 26 : Leathea_85
• Track 27 : TrixiePhattel_82
• Track 28 : Inked_83
• Track 29 : Zippen_83
• Track 30 : Arzan_78
• Track 31 : Jazzy4900_76, Sunny4976_75
• Track 32 : GermyBearimy_87
• Track 33 : Gandionco_207, Elver_208, Qui_209, JeNeSaisPas_210, Marianna39_207, Paella_209
• Track 34 : Gandionco_208, Kureo_206, JeNeSaisPas_211, Marianna39_208, Elver_209, Paella_210, Qui_210
• Track 35 : JeNeSaisPas_250

• Track 36 : Kureo_205
• Track 37 : Kureo_244

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

The start number called the most often in the published annotations is 19, it was called in 32 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acai_78, AreFloNak_81, Bouchard_81, Breylor17_73, Brunswick_78, CapnMurica_73, CastorTray_79, Chlochlo_82, Darby_73, DevitoJr_76, Dinallo_71, ElephantMan_77, Gordon_73, Hemma_77, Ingrid_83, Inked_83, Issa_71, LilHuddy_81, Loretta_79, LucySwiss_77, MiniBagel_77, Nightmare_78, Niktson_77, Nivinsha_78, Phaby_83, ScienceWizSam_78, Shepard_82, Synepsis_72, Tatanka_71, Teacup_78, Tenno_76, Tipton_83, Tokki_87, Trustiboi_75, Westerlin_74, Zippen_83,

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

Genes that do not have the "Most Annotated" start:
• Acai_88, Arzan_78, Brunswick_90, Elver_208, Elver_209, Gandionco_207, Gandionco_208, GantcherGoblin_87, GermyBearimy_87, Giantsbane_81, Issa_80, Jazzy4900_76, JeNeSaisPas_210, JeNeSaisPas_211, JeNeSaisPas_250, Kureo_205, Kureo_206, Kureo_244, Leathea_85, LucySwiss_90, Marianna39_207, Marianna39_208, Paella_209, Paella_210, Qui_209, Qui_210, Stardrop_90, Sunny4976_75, Tenney120_89, TrixiePhattel_82, Westerlin_83,

Summary by start number:

Start 6:
• Found in 4 of 67 (6.0%) of genes in pham
• Manual Annotations of this start: 4 of 50
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acai_88 (AU1), Brunswick_90 (AU1), Issa_80 (AU1), LucySwiss_90 (AU1),

Start 7:
• Found in 1 of 67 (1.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Westerlin_83 (AU1),

Start 11:
• Found in 7 of 67 (10.4%) of genes in pham
• Manual Annotations of this start: 4 of 50
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elver_208 (FK), Gandionco_207 (FK), JeNeSaisPas_210 (FK), Kureo_205 (FK), Marianna39_207 (FK), Paella_209 (FK), Qui_209 (FK),

Start 12:
• Found in 7 of 67 (10.4%) of genes in pham
• Manual Annotations of this start: 4 of 50
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elver_209 (FK), Gandionco_208 (FK), JeNeSaisPas_211 (FK), Kureo_206 (FK), Marianna39_208 (FK), Paella_210 (FK), Qui_210 (FK),

Start 13:
• Found in 1 of 67 (1.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kureo_244 (FK),

Start 14:
• Found in 2 of 67 (3.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jazzy4900_76 (FI), Sunny4976_75 (FI),

Start 15:
• Found in 3 of 67 (4.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arzan_78 (FI), GermyBearimy_87 (FI), Leathea_85 (AU6),

Start 16:
• Found in 2 of 67 (3.0%) of genes in pham
• Manual Annotations of this start: 1 of 50
• Called 50.0% of time when present
• Phage (with cluster) where this start called: JeNeSaisPas_250 (FK),

Start 17:
• Found in 1 of 67 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 50
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Giantsbane_81 (AU2),

Start 18:
• Found in 1 of 67 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 50
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TrixiePhattel_82 (AU6),

Start 19:
• Found in 36 of 67 (53.7%) of genes in pham
• Manual Annotations of this start: 32 of 50
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acai_78 (AU1), AreFloNak_81 (AU1), Bouchard_81 (AU2), Breylor17_73 (AU1), Brunswick_78 (AU1), CapnMurica_73 (AU1), CastorTray_79 (AU1), Chlochlo_82 (AU2), Darby_73 (AU1), DevitoJr_76

(AU1), Dinallo_71 (AU1), ElephantMan_77 (AU1), Gordon_73 (AU1), Hemma_77 (AU1), Ingrid_83 (AU3), Inked_83 (AU7), Issa_71 (AU1), LilHuddy_81 (AU2), Loretta_79 (AU3), LucySwiss_77 (AU1), MiniBagel_77 (AU1), Nightmare_78 (AU1), Niktson_77 (AU1), Nivinsha_78 (AU1), Phaby_83 (AU2), ScienceWizSam_78 (AU1), Shepard_82 (AU2), Synepsis_72 (AU1), Tatanka_71 (AU1), Teacup_78 (AU1), Tenno_76 (AU1), Tipton_83 (AU2), Tokki_87 (AU2), Trustiboi_75 (AU1), Westerlin_74 (AU1), Zippen_83 (AU7),

Start 20:
• Found in 3 of 67 (4.5%) of genes in pham
• Manual Annotations of this start: 3 of 50
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GantcherGoblin_87 (AU6), Stardrop_90 (AU6), Tenney120_89 (AU6),

Summary by clusters:

There are 7 clusters represented in this pham: AU1, AU3, AU2, AU7, AU6, FI, FK,

Info for manual annotations of cluster AU1:
•Start number 6 was manually annotated 4 times for cluster AU1.
•Start number 19 was manually annotated 21 times for cluster AU1.

Info for manual annotations of cluster AU2:
•Start number 17 was manually annotated 1 time for cluster AU2.
•Start number 19 was manually annotated 7 times for cluster AU2.

Info for manual annotations of cluster AU3:
•Start number 19 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU6:
•Start number 18 was manually annotated 1 time for cluster AU6.
•Start number 20 was manually annotated 3 times for cluster AU6.

Info for manual annotations of cluster AU7:
•Start number 19 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster FK:
•Start number 11 was manually annotated 4 times for cluster FK.
•Start number 12 was manually annotated 4 times for cluster FK.
•Start number 16 was manually annotated 1 time for cluster FK.

Gene Information:

Gene: Acai_78 Start: 50664, Stop: 50876, Start Num: 19
Candidate Starts for Acai_78:
(Start: 19 @50664 has 32 MA's), (27, 50739), (40, 50823), (46, 50841),

Gene: Acai_88 Start: 53254, Stop: 53502, Start Num: 6
Candidate Starts for Acai_88:

(Start: 6 @53254 has 4 MA's), (35, 53431), (44, 53464), (45, 53467),

Gene: AreFloNak_81 Start: 50522, Stop: 50731, Start Num: 19
Candidate Starts for AreFloNak_81:
(Start: 19 @50522 has 32 MA's), (27, 50594), (46, 50696),

Gene: Arzan_78 Start: 49144, Stop: 49362, Start Num: 15
Candidate Starts for Arzan_78:
(1, 49048), (4, 49087), (8, 49114), (15, 49144), (30, 49246),

Gene: Bouchard_81 Start: 51329, Stop: 51529, Start Num: 19
Candidate Starts for Bouchard_81:
(Start: 19 @51329 has 32 MA's), (35, 51455),

Gene: Breylor17_73 Start: 50912, Stop: 51121, Start Num: 19
Candidate Starts for Breylor17_73:
(Start: 19 @50912 has 32 MA's), (27, 50984), (35, 51044), (40, 51068), (46, 51086),

Gene: Brunswick_78 Start: 50656, Stop: 50868, Start Num: 19
Candidate Starts for Brunswick_78:
(Start: 19 @50656 has 32 MA's), (27, 50731), (40, 50815), (46, 50833),

Gene: Brunswick_90 Start: 53603, Stop: 53848, Start Num: 6
Candidate Starts for Brunswick_90:
(Start: 6 @53603 has 4 MA's), (26, 53711),

Gene: CapnMurica_73 Start: 50988, Stop: 51197, Start Num: 19
Candidate Starts for CapnMurica_73:
(Start: 19 @50988 has 32 MA's), (35, 51120), (40, 51144), (46, 51162),

Gene: CastorTray_79 Start: 51040, Stop: 51249, Start Num: 19
Candidate Starts for CastorTray_79:
(Start: 19 @51040 has 32 MA's), (27, 51112), (35, 51172), (46, 51214),

Gene: Chlochlo_82 Start: 50848, Stop: 51048, Start Num: 19
Candidate Starts for Chlochlo_82:
(Start: 19 @50848 has 32 MA's), (35, 50974),

Gene: Darby_73 Start: 50086, Stop: 50295, Start Num: 19
Candidate Starts for Darby_73:
(Start: 19 @50086 has 32 MA's), (27, 50158), (35, 50218), (46, 50260),

Gene: DevitoJr_76 Start: 50468, Stop: 50677, Start Num: 19
Candidate Starts for DevitoJr_76:
(Start: 19 @50468 has 32 MA's), (35, 50600), (46, 50642),

Gene: Dinallo_71 Start: 51234, Stop: 51443, Start Num: 19
Candidate Starts for Dinallo_71:
(Start: 19 @51234 has 32 MA's), (35, 51366), (40, 51390), (46, 51408),

Gene: ElephantMan_77 Start: 51249, Stop: 51461, Start Num: 19
Candidate Starts for ElephantMan_77:
(Start: 19 @51249 has 32 MA's), (27, 51324), (40, 51408), (46, 51426),

Gene: Elver_208 Start: 97047, Stop: 97292, Start Num: 11
Candidate Starts for Elver_208:
(Start: 11 @97047 has 4 MA's), (32, 97179), (35, 97203), (38, 97221), (48, 97248), (51, 97272),

Gene: Elver_209 Start: 97289, Stop: 97528, Start Num: 12
Candidate Starts for Elver_209:
(Start: 12 @97289 has 4 MA's), (33, 97433), (42, 97478), (51, 97517),

Gene: Gandionco_207 Start: 96608, Stop: 96853, Start Num: 11
Candidate Starts for Gandionco_207:
(Start: 11 @96608 has 4 MA's), (32, 96740), (35, 96764), (38, 96782), (48, 96809), (51, 96833),

Gene: Gandionco_208 Start: 96850, Stop: 97089, Start Num: 12
Candidate Starts for Gandionco_208:
(Start: 12 @96850 has 4 MA's), (33, 96994), (42, 97039), (51, 97078),

Gene: GantcherGoblin_87 Start: 50825, Stop: 51037, Start Num: 20
Candidate Starts for GantcherGoblin_87:
(Start: 20 @50825 has 3 MA's), (24, 50867),

Gene: GermyBearimy_87 Start: 50764, Stop: 50982, Start Num: 15
Candidate Starts for GermyBearimy_87:
(3, 50716), (5, 50737), (15, 50764), (28, 50857),

Gene: Giantsbane_81 Start: 49891, Stop: 50094, Start Num: 17
Candidate Starts for Giantsbane_81:
(Start: 17 @49891 has 1 MA's), (30, 49981), (35, 50020),

Gene: Gordon_73 Start: 50882, Stop: 51091, Start Num: 19
Candidate Starts for Gordon_73:
(Start: 19 @50882 has 32 MA's), (27, 50954), (35, 51014), (46, 51056),

Gene: Hemma_77 Start: 48302, Stop: 48505, Start Num: 19
Candidate Starts for Hemma_77:
(10, 48266), (Start: 19 @48302 has 32 MA's), (39, 48452), (42, 48461),

Gene: Ingrid_83 Start: 50857, Stop: 51060, Start Num: 19
Candidate Starts for Ingrid_83:
(10, 50821), (Start: 19 @50857 has 32 MA's), (39, 51007), (42, 51016), (46, 51028), (49, 51034),

Gene: Inked_83 Start: 51558, Stop: 51761, Start Num: 19
Candidate Starts for Inked_83:
(Start: 19 @51558 has 32 MA's), (27, 51630), (30, 51648), (35, 51687), (39, 51708), (42, 51717), (49, 51735),

Gene: Issa_71 Start: 50059, Stop: 50268, Start Num: 19
Candidate Starts for Issa_71:
(Start: 19 @50059 has 32 MA's), (35, 50191), (40, 50215), (46, 50233),

Gene: Issa_80 Start: 52854, Stop: 53099, Start Num: 6
Candidate Starts for Issa_80:
(Start: 6 @52854 has 4 MA's), (26, 52962),

Gene: Jazzy4900_76 Start: 49976, Stop: 50197, Start Num: 14
Candidate Starts for Jazzy4900_76:
(14, 49976), (30, 50078), (41, 50147), (45, 50156), (49, 50168),

Gene: JeNeSaisPas_210 Start: 97168, Stop: 97413, Start Num: 11
Candidate Starts for JeNeSaisPas_210:
(Start: 11 @97168 has 4 MA's), (32, 97300), (35, 97324), (38, 97342), (48, 97369), (51, 97393),

Gene: JeNeSaisPas_211 Start: 97410, Stop: 97649, Start Num: 12
Candidate Starts for JeNeSaisPas_211:
(Start: 12 @97410 has 4 MA's), (33, 97554), (42, 97599), (51, 97638),

Gene: JeNeSaisPas_250 Start: 109405, Stop: 109605, Start Num: 16
Candidate Starts for JeNeSaisPas_250:
(Start: 16 @109405 has 1 MA's), (36, 109558), (37, 109564),

Gene: Kureo_206 Start: 95954, Stop: 96193, Start Num: 12
Candidate Starts for Kureo_206:
(Start: 12 @95954 has 4 MA's), (33, 96098), (42, 96143), (51, 96182),

Gene: Kureo_205 Start: 95712, Stop: 95957, Start Num: 11
Candidate Starts for Kureo_205:
(Start: 11 @95712 has 4 MA's), (32, 95844), (35, 95868), (38, 95886), (48, 95913),

Gene: Kureo_244 Start: 107619, Stop: 107828, Start Num: 13
Candidate Starts for Kureo_244:
(13, 107619), (Start: 16 @107628 has 1 MA's), (36, 107781), (37, 107787),

Gene: Leathea_85 Start: 48722, Stop: 48952, Start Num: 15
Candidate Starts for Leathea_85:
(15, 48722), (22, 48737), (29, 48821), (34, 48860), (43, 48896), (47, 48908),

Gene: LilHuddy_81 Start: 51056, Stop: 51256, Start Num: 19
Candidate Starts for LilHuddy_81:
(Start: 19 @51056 has 32 MA's), (24, 51098), (35, 51182),

Gene: Loretta_79 Start: 50857, Stop: 51060, Start Num: 19
Candidate Starts for Loretta_79:
(10, 50821), (Start: 19 @50857 has 32 MA's), (39, 51007), (42, 51016), (46, 51028), (49, 51034),

Gene: LucySwiss_90 Start: 53700, Stop: 53945, Start Num: 6
Candidate Starts for LucySwiss_90:
(Start: 6 @53700 has 4 MA's), (26, 53808),

Gene: LucySwiss_77 Start: 50317, Stop: 50529, Start Num: 19
Candidate Starts for LucySwiss_77:
(Start: 19 @50317 has 32 MA's), (27, 50392), (46, 50494),

Gene: Marianna39_207 Start: 97211, Stop: 97456, Start Num: 11
Candidate Starts for Marianna39_207:
(Start: 11 @97211 has 4 MA's), (32, 97343), (35, 97367), (38, 97385), (48, 97412), (51, 97436),

Gene: Marianna39_208 Start: 97453, Stop: 97692, Start Num: 12
Candidate Starts for Marianna39_208:
(Start: 12 @97453 has 4 MA's), (33, 97597), (42, 97642), (51, 97681),

Gene: MiniBagel_77 Start: 50992, Stop: 51201, Start Num: 19
Candidate Starts for MiniBagel_77:
(Start: 19 @50992 has 32 MA's), (27, 51064), (35, 51124), (40, 51148), (46, 51166),

Gene: Nightmare_78 Start: 51419, Stop: 51631, Start Num: 19
Candidate Starts for Nightmare_78:
(Start: 19 @51419 has 32 MA's), (27, 51494), (40, 51578), (46, 51596),

Gene: Niktson_77 Start: 51249, Stop: 51461, Start Num: 19
Candidate Starts for Niktson_77:
(Start: 19 @51249 has 32 MA's), (27, 51324), (40, 51408), (46, 51426),

Gene: Nivinsha_78 Start: 50523, Stop: 50732, Start Num: 19
Candidate Starts for Nivinsha_78:
(Start: 19 @50523 has 32 MA's), (27, 50595), (35, 50655), (40, 50679), (46, 50697),

Gene: Paella_209 Start: 97932, Stop: 98177, Start Num: 11
Candidate Starts for Paella_209:
(Start: 11 @97932 has 4 MA's), (32, 98064), (35, 98088), (38, 98106), (48, 98133), (51, 98157),

Gene: Paella_210 Start: 98174, Stop: 98413, Start Num: 12
Candidate Starts for Paella_210:
(Start: 12 @98174 has 4 MA's), (33, 98318), (42, 98363), (51, 98402),

Gene: Phaby_83 Start: 51533, Stop: 51733, Start Num: 19
Candidate Starts for Phaby_83:
(Start: 19 @51533 has 32 MA's), (35, 51659),

Gene: Qui_209 Start: 97920, Stop: 98165, Start Num: 11
Candidate Starts for Qui_209:
(Start: 11 @97920 has 4 MA's), (32, 98052), (35, 98076), (38, 98094), (48, 98121), (51, 98145),

Gene: Qui_210 Start: 98162, Stop: 98401, Start Num: 12
Candidate Starts for Qui_210:
(Start: 12 @98162 has 4 MA's), (33, 98306), (42, 98351), (51, 98390),

Gene: ScienceWizSam_78 Start: 50641, Stop: 50850, Start Num: 19
Candidate Starts for ScienceWizSam_78:
(Start: 19 @50641 has 32 MA's), (27, 50713), (35, 50773), (46, 50815),

Gene: Shepard_82 Start: 50925, Stop: 51125, Start Num: 19
Candidate Starts for Shepard_82:
(Start: 19 @50925 has 32 MA's), (24, 50967), (35, 51051),

Gene: Stardrop_90 Start: 52087, Stop: 52284, Start Num: 20
Candidate Starts for Stardrop_90:
(9, 52048), (Start: 20 @52087 has 3 MA's), (50, 52264),

Gene: Sunny4976_75 Start: 49976, Stop: 50197, Start Num: 14

Candidate Starts for Sunny4976_75:
(14, 49976), (30, 50078), (41, 50147), (45, 50156), (49, 50168),

Gene: Synepsis_72 Start: 50449, Stop: 50658, Start Num: 19
Candidate Starts for Synepsis_72:
(Start: 19 @50449 has 32 MA's), (27, 50521), (40, 50605), (46, 50623),

Gene: Tatanka_71 Start: 50627, Stop: 50836, Start Num: 19
Candidate Starts for Tatanka_71:
(Start: 19 @50627 has 32 MA's), (27, 50699), (35, 50759), (46, 50801),

Gene: Teacup_78 Start: 51310, Stop: 51522, Start Num: 19
Candidate Starts for Teacup_78:
(Start: 19 @51310 has 32 MA's), (27, 51385), (40, 51469), (46, 51487),

Gene: Tenney120_89 Start: 51376, Stop: 51588, Start Num: 20
Candidate Starts for Tenney120_89:
(Start: 20 @51376 has 3 MA's), (24, 51418),

Gene: Tenno_76 Start: 51025, Stop: 51234, Start Num: 19
Candidate Starts for Tenno_76:
(Start: 19 @51025 has 32 MA's), (35, 51157), (40, 51181), (46, 51199),

Gene: Tipton_83 Start: 51409, Stop: 51609, Start Num: 19
Candidate Starts for Tipton_83:
(Start: 19 @51409 has 32 MA's), (27, 51478), (30, 51496), (35, 51535),

Gene: Tokki_87 Start: 51338, Stop: 51538, Start Num: 19
Candidate Starts for Tokki_87:
(Start: 19 @51338 has 32 MA's), (35, 51464),

Gene: TrixiePhattel_82 Start: 48318, Stop: 48527, Start Num: 18
Candidate Starts for TrixiePhattel_82:
(Start: 18 @48318 has 1 MA's), (21, 48324), (25, 48378), (27, 48396), (31, 48423), (40, 48474), (42, 48480), (51, 48516),

Gene: Trustiboi_75 Start: 50730, Stop: 50939, Start Num: 19
Candidate Starts for Trustiboi_75:
(Start: 19 @50730 has 32 MA's), (27, 50802), (35, 50862), (40, 50886), (46, 50904),

Gene: Westerlin_83 Start: 54487, Stop: 54735, Start Num: 7
Candidate Starts for Westerlin_83:
(2, 54451), (7, 54487), (23, 54550), (45, 54700),

Gene: Westerlin_74 Start: 51649, Stop: 51858, Start Num: 19
Candidate Starts for Westerlin_74:
(Start: 19 @51649 has 32 MA's), (27, 51721), (35, 51781), (40, 51805), (46, 51823),

Gene: Zippen_83 Start: 51432, Stop: 51635, Start Num: 19
Candidate Starts for Zippen_83:
(Start: 19 @51432 has 32 MA's), (27, 51504), (30, 51522), (35, 51561), (42, 51591), (49, 51609),