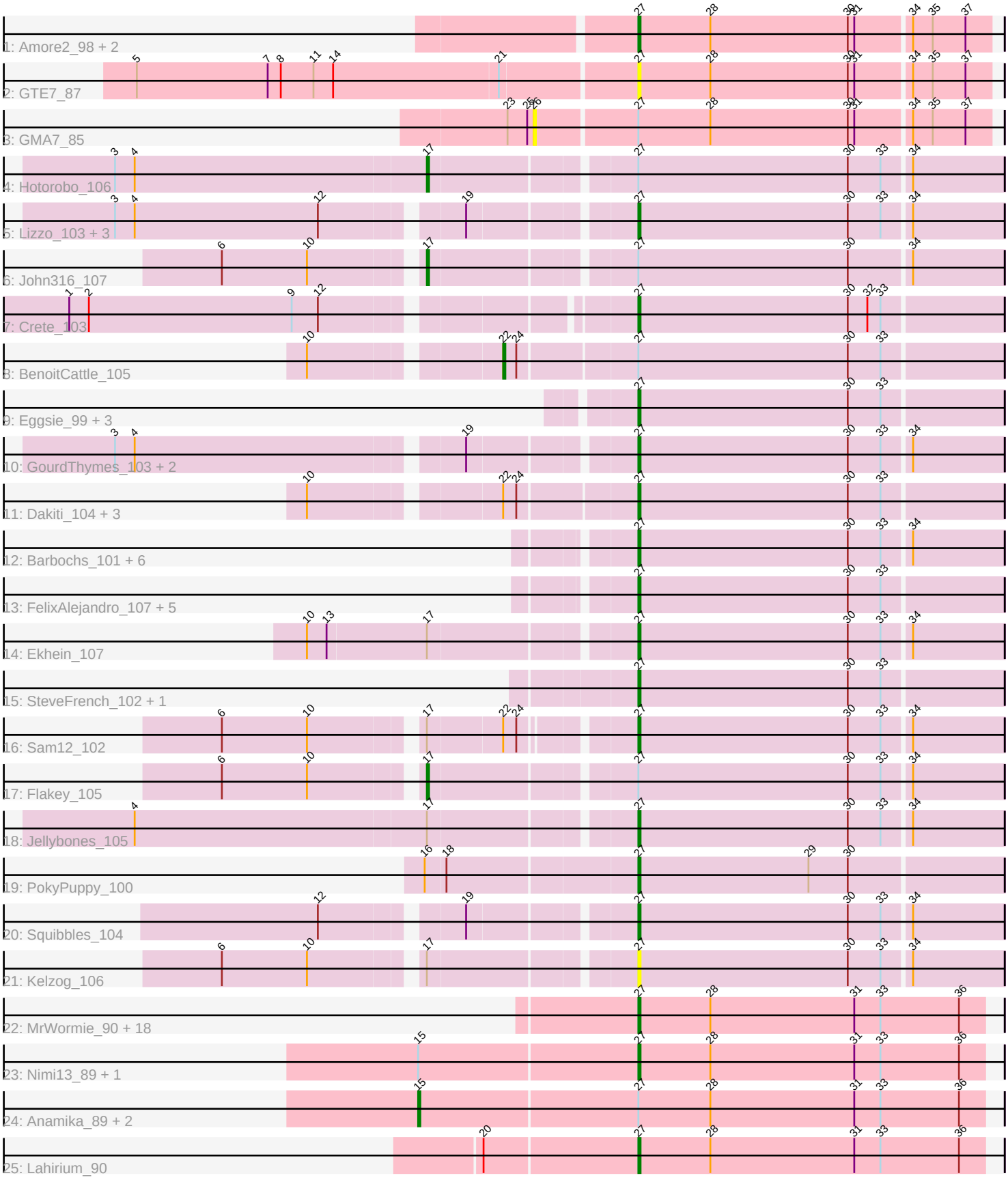
Pham 347572


1: Amore2_98 + 2
2: GTE7_87
3: GMA7_85
4: Hotorobo_106
5: Lizzo_103 + 3
6: John316_107
7: Crete_103
8: BenoitCattle_105
9: Eggsie_99 + 3
10: GourdThymes_103 + 2
11: Dakiti_104 + 3
12: Barbochs_101 + 6
13: FelixAlejandro_107 + 5
14: Ekhein_107
15: SteveFrench_102 + 1
16: Sam12_102
17: Flakey_105
18: Jellybones_105
19: PokyPuppy_100
20: Squibbles_104
21: Kelzog_106
22: MrWormie_90 + 18
23: Nimi13_89 + 1
24: Anamika_89 + 2
25: Lahirium_90

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 347572 Report

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

Pham number 347572 has 71 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Amore2_98, Austin_96, HayZem_98
• Track 2 : GTE7_87
• Track 3 : GMA7_85
• Track 4 : Hotorobo_106
• Track 5 : Lizzo_103, CathyBurgh_103, RemRem_107, Exiguo_101
• Track 6 : John316_107
• Track 7 : Crete_103
• Track 8 : BenoitCattle_105
• Track 9 : Eggsie_99, Linetti_104, Diabla_107, Adgers_106
• Track 10 : GourdThymes_103, Gorko_102, Monty_103
• Track 11 : Dakiti_104, Chelms_103, BigShaq_105, PierreThree_103
• Track 12 : Barbochs_101, BillyBobJr_108, CinnamonToast_108, Breezic_105, Worcestershire_103, Sombrero_105, Beaver_107
• Track 13 : FelixAlejandro_107, Boneham_106, Msay19_108, Poland_108, BirksAndSocks_107, Butterball_105
• Track 14 : Ekhein_107
• Track 15 : SteveFrench_102, RoyalG_103
• Track 16 : Sam12_102
• Track 17 : Flakey_105
• Track 18 : Jellybones_105
• Track 19 : PokyPuppy_100
• Track 20 : Squibbles_104
• Track 21 : Kelzog_106
• Track 22 : MrWormie_90, Neoevie_89, Harambe_89, Lidong_90, Jormungandr_89, Woes_89, Newt_91, Hail2Pitt_88, Damp_90, Hello_89, GalacticEye_90, Teal_89, Sticker17_90, Berries_90, Luker_91, Jams_90, Minos_91, Shelley_90, Kaseim_90
• Track 23 : Nimi13_89, Guillaume_89
• Track 24 : Anamika_89, Charianelly_90, Bianmat_90
• Track 25 : Lahirium_90

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

The start number called the most often in the published annotations is 27, it was called in 59 of the 66 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adgers_106, Amore2_98, Austin_96, Barbochs_101, Beaver_107, Berries_90, BigShaq_105, BillyBobJr_108, BirksAndSocks_107, Boneham_106, Breezic_105, Butterball_105, CathyBurgh_103, Chelms_103, CinnamonToast_108, Crete_103, Dakiti_104, Damp_90, Diabla_107, Eggsie_99, Ekhein_107, Exiguo_101, FelixAlejandro_107, GTE7_87, GalacticEye_90, Gorko_102, GourdThymes_103, Guillaume_89, Hail2Pitt_88, Harambe_89, HayZem_98, Hello_89, Jams_90, Jellybones_105, Jormungandr_89, Kaseim_90, Kelzog_106, Lahirium_90, Lidong_90, Linetti_104, Lizzo_103, Luker_91, Minos_91, Monty_103, MrWormie_90, Msay19_108, Neoevie_89, Newt_91, Nimi13_89, PierreThree_103, PokyPuppy_100, Poland_108, RemRem_107, RoyalG_103, Sam12_102, Shelley_90, Sombrero_105, Squibbles_104, SteveFrench_102, Sticker17_90, Teal_89, Woes_89, Worcestershire_103,

Genes that have the "Most Annotated" start but do not call it:
• Anamika_89, BenoitCattle_105, Bianmat_90, Charianelly_90, Flakey_105, GMA7_85, Hotorobo_106, John316_107,

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

Summary by start number:

Start 15:
• Found in 5 of 71 (7.0%) of genes in pham
• Manual Annotations of this start: 3 of 66
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Anamika_89 (CS3), Bianmat_90 (CS3), Charianelly_90 (CS3),

Start 17:
• Found in 7 of 71 (9.9%) of genes in pham
• Manual Annotations of this start: 3 of 66
• Called 42.9% of time when present
• Phage (with cluster) where this start called: Flakey_105 (CS2), Hotorobo_106 (CS2), John316_107 (CS2),

Start 22:
• Found in 6 of 71 (8.5%) of genes in pham
• Manual Annotations of this start: 1 of 66
• Called 16.7% of time when present
• Phage (with cluster) where this start called: BenoitCattle_105 (CS2),

Start 26:
• Found in 1 of 71 (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: GMA7_85 (CS1),

Start 27:
• Found in 71 of 71 (100.0%) of genes in pham
• Manual Annotations of this start: 59 of 66

• Called 88.7% of time when present
• Phage (with cluster) where this start called: Adgers_106 (CS2), Amore2_98 (CS1), Austin_96 (CS1), Barbochs_101 (CS2), Beaver_107 (CS2), Berries_90 (CS3), BigShaq_105 (CS2), BillyBobJr_108 (CS2), BirksAndSocks_107 (CS2), Boneham_106 (CS2), Breezic_105 (CS2), Butterball_105 (CS2), CathyBurgh_103 (CS2), Chelms_103 (CS2), CinnamonToast_108 (CS2), Crete_103 (CS2), Dakiti_104 (CS2), Damp_90 (CS3), Diabla_107 (CS2), Eggsie_99 (CS2), Ekhein_107 (CS2), Exiguo_101 (CS2), FelixAlejandro_107 (CS2), GTE7_87 (CS1), GalacticEye_90 (CS3), Gorko_102 (CS2), GourdThymes_103 (CS2), Guillaume_89 (CS3), Hail2Pitt_88 (CS3), Harambe_89 (CS3), HayZem_98 (CS1), Hello_89 (CS3), Jams_90 (CS3), Jellybones_105 (CS2), Jormungandr_89 (CS3), Kaseim_90 (CS3), Kelzog_106 (CS2), Lahirium_90 (CS3), Lidong_90 (CS3), Linetti_104 (CS2), Lizzo_103 (CS2), Luker_91 (CS3), Minos_91 (CS3), Monty_103 (CS2), MrWormie_90 (CS3), Msay19_108 (CS2), Neoevie_89 (CS3), Newt_91 (CS3), Nimi13_89 (CS3), PierreThree_103 (CS2), PokyPuppy_100 (CS2), Poland_108 (CS2), RemRem_107 (CS2), RoyalG_103 (CS2), Sam12_102 (CS2), Shelley_90 (CS3), Sombrero_105 (CS2), Squibbles_104 (CS2), SteveFrench_102 (CS2), Sticker17_90 (CS3), Teal_89 (CS3), Woes_89 (CS3), Worcestershire_103 (CS2),

Summary by clusters:

There are 3 clusters represented in this pham: CS1, CS3, CS2,

Info for manual annotations of cluster CS1:
•Start number 27 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:
•Start number 17 was manually annotated 3 times for cluster CS2.
•Start number 22 was manually annotated 1 time for cluster CS2.
•Start number 27 was manually annotated 34 times for cluster CS2.

Info for manual annotations of cluster CS3:
•Start number 15 was manually annotated 3 times for cluster CS3.
•Start number 27 was manually annotated 22 times for cluster CS3.

Gene Information:

Gene: Adgers_106 Start: 73212, Stop: 73048, Start Num: 27
Candidate Starts for Adgers_106:
(Start: 27 @73212 has 59 MA's), (30, 73116), (33, 73101),

Gene: Amore2_98 Start: 71254, Stop: 71096, Start Num: 27
Candidate Starts for Amore2_98:
(Start: 27 @71254 has 59 MA's), (28, 71221), (30, 71158), (31, 71155), (34, 71131), (35, 71122), (37, 71107),

Gene: Anamika_89 Start: 70826, Stop: 70569, Start Num: 15
Candidate Starts for Anamika_89:
(Start: 15 @70826 has 3 MA's), (Start: 27 @70727 has 59 MA's), (28, 70694), (31, 70628), (33, 70616), (36, 70580),

Gene: Austin_96 Start: 71087, Stop: 70929, Start Num: 27
Candidate Starts for Austin_96:
(Start: 27 @71087 has 59 MA's), (28, 71054), (30, 70991), (31, 70988), (34, 70964), (35, 70955), (37, 70940),

Gene: Barbochs_101 Start: 72406, Stop: 72242, Start Num: 27
Candidate Starts for Barbochs_101:
(Start: 27 @72406 has 59 MA's), (30, 72310), (33, 72295), (34, 72283),

Gene: Beaver_107 Start: 74554, Stop: 74390, Start Num: 27
Candidate Starts for Beaver_107:
(Start: 27 @74554 has 59 MA's), (30, 74458), (33, 74443), (34, 74431),

Gene: BenoitCattle_105 Start: 73827, Stop: 73606, Start Num: 22
Candidate Starts for BenoitCattle_105:
(10, 73905), (Start: 22 @73827 has 1 MA's), (24, 73821), (Start: 27 @73770 has 59 MA's), (30, 73674), (33, 73659),

Gene: Berries_90 Start: 70699, Stop: 70541, Start Num: 27
Candidate Starts for Berries_90:
(Start: 27 @70699 has 59 MA's), (28, 70666), (31, 70600), (33, 70588), (36, 70552),

Gene: Bianmat_90 Start: 70838, Stop: 70581, Start Num: 15
Candidate Starts for Bianmat_90:
(Start: 15 @70838 has 3 MA's), (Start: 27 @70739 has 59 MA's), (28, 70706), (31, 70640), (33, 70628), (36, 70592),

Gene: BigShaq_105 Start: 73565, Stop: 73401, Start Num: 27
Candidate Starts for BigShaq_105:
(10, 73700), (Start: 22 @73622 has 1 MA's), (24, 73616), (Start: 27 @73565 has 59 MA's), (30, 73469), (33, 73454),

Gene: BillyBobJr_108 Start: 74657, Stop: 74493, Start Num: 27
Candidate Starts for BillyBobJr_108:
(Start: 27 @74657 has 59 MA's), (30, 74561), (33, 74546), (34, 74534),

Gene: BirksAndSocks_107 Start: 74167, Stop: 74003, Start Num: 27
Candidate Starts for BirksAndSocks_107:
(Start: 27 @74167 has 59 MA's), (30, 74071), (33, 74056),

Gene: Boneham_106 Start: 74092, Stop: 73928, Start Num: 27
Candidate Starts for Boneham_106:
(Start: 27 @74092 has 59 MA's), (30, 73996), (33, 73981),

Gene: Breezic_105 Start: 73104, Stop: 72940, Start Num: 27
Candidate Starts for Breezic_105:
(Start: 27 @73104 has 59 MA's), (30, 73008), (33, 72993), (34, 72981),

Gene: Butterball_105 Start: 74097, Stop: 73933, Start Num: 27
Candidate Starts for Butterball_105:
(Start: 27 @74097 has 59 MA's), (30, 74001), (33, 73986),

Gene: CathyBurgh_103 Start: 72939, Stop: 72775, Start Num: 27

Candidate Starts for CathyBurgh_103:
(3, 73158), (4, 73149), (12, 73065), (19, 73008), (Start: 27 @72939 has 59 MA's), (30, 72843), (33, 72828), (34, 72816),

Gene: Charianelly_90 Start: 70551, Stop: 70294, Start Num: 15
Candidate Starts for Charianelly_90:
(Start: 15 @70551 has 3 MA's), (Start: 27 @70452 has 59 MA's), (28, 70419), (31, 70353), (33, 70341), (36, 70305),

Gene: Chelms_103 Start: 73508, Stop: 73344, Start Num: 27
Candidate Starts for Chelms_103:
(10, 73643), (Start: 22 @73565 has 1 MA's), (24, 73559), (Start: 27 @73508 has 59 MA's), (30, 73412), (33, 73397),

Gene: CinnamonToast_108 Start: 74657, Stop: 74493, Start Num: 27
Candidate Starts for CinnamonToast_108:
(Start: 27 @74657 has 59 MA's), (30, 74561), (33, 74546), (34, 74534),

Gene: Crete_103 Start: 73609, Stop: 73445, Start Num: 27
Candidate Starts for Crete_103:
(1, 73849), (2, 73840), (9, 73747), (12, 73735), (Start: 27 @73609 has 59 MA's), (30, 73513), (32, 73504), (33, 73498),

Gene: Dakiti_104 Start: 74451, Stop: 74287, Start Num: 27
Candidate Starts for Dakiti_104:
(10, 74586), (Start: 22 @74508 has 1 MA's), (24, 74502), (Start: 27 @74451 has 59 MA's), (30, 74355), (33, 74340),

Gene: Damp_90 Start: 69595, Stop: 69437, Start Num: 27
Candidate Starts for Damp_90:
(Start: 27 @69595 has 59 MA's), (28, 69562), (31, 69496), (33, 69484), (36, 69448),

Gene: Diabla_107 Start: 73814, Stop: 73650, Start Num: 27
Candidate Starts for Diabla_107:
(Start: 27 @73814 has 59 MA's), (30, 73718), (33, 73703),

Gene: Eggsie_99 Start: 71370, Stop: 71206, Start Num: 27
Candidate Starts for Eggsie_99:
(Start: 27 @71370 has 59 MA's), (30, 71274), (33, 71259),

Gene: Ekhein_107 Start: 73157, Stop: 72993, Start Num: 27
Candidate Starts for Ekhein_107:
(10, 73298), (13, 73289), (Start: 17 @73244 has 3 MA's), (Start: 27 @73157 has 59 MA's), (30, 73061), (33, 73046), (34, 73034),

Gene: Exiguo_101 Start: 72370, Stop: 72206, Start Num: 27
Candidate Starts for Exiguo_101:
(3, 72589), (4, 72580), (12, 72496), (19, 72439), (Start: 27 @72370 has 59 MA's), (30, 72274), (33, 72259), (34, 72247),

Gene: FelixAlejandro_107 Start: 74610, Stop: 74446, Start Num: 27
Candidate Starts for FelixAlejandro_107:
(Start: 27 @74610 has 59 MA's), (30, 74514), (33, 74499),

Gene: Flakey_105 Start: 74135, Stop: 73884, Start Num: 17
Candidate Starts for Flakey_105:
(6, 74219), (10, 74180), (Start: 17 @74135 has 3 MA's), (Start: 27 @74048 has 59 MA's), (30, 73952), (33, 73937), (34, 73925),

Gene: GMA7_85 Start: 65061, Stop: 64858, Start Num: 26
Candidate Starts for GMA7_85:
(23, 65073), (25, 65064), (26, 65061), (Start: 27 @65016 has 59 MA's), (28, 64983), (30, 64920), (31, 64917), (34, 64893), (35, 64884), (37, 64869),

Gene: GTE7_87 Start: 65923, Stop: 65765, Start Num: 27
Candidate Starts for GTE7_87:
(5, 66148), (7, 66088), (8, 66082), (11, 66067), (14, 66058), (21, 65983), (Start: 27 @65923 has 59 MA's), (28, 65890), (30, 65827), (31, 65824), (34, 65800), (35, 65791), (37, 65776),

Gene: GalacticEye_90 Start: 70382, Stop: 70224, Start Num: 27
Candidate Starts for GalacticEye_90:
(Start: 27 @70382 has 59 MA's), (28, 70349), (31, 70283), (33, 70271), (36, 70235),

Gene: Gorko_102 Start: 72317, Stop: 72153, Start Num: 27
Candidate Starts for Gorko_102:
(3, 72536), (4, 72527), (19, 72386), (Start: 27 @72317 has 59 MA's), (30, 72221), (33, 72206), (34, 72194),

Gene: GourdThymes_103 Start: 72966, Stop: 72802, Start Num: 27
Candidate Starts for GourdThymes_103:
(3, 73185), (4, 73176), (19, 73035), (Start: 27 @72966 has 59 MA's), (30, 72870), (33, 72855), (34, 72843),

Gene: Guillaume_89 Start: 70460, Stop: 70302, Start Num: 27
Candidate Starts for Guillaume_89:
(Start: 15 @70559 has 3 MA's), (Start: 27 @70460 has 59 MA's), (28, 70427), (31, 70361), (33, 70349), (36, 70313),

Gene: Hail2Pitt_88 Start: 70933, Stop: 70775, Start Num: 27
Candidate Starts for Hail2Pitt_88:
(Start: 27 @70933 has 59 MA's), (28, 70900), (31, 70834), (33, 70822), (36, 70786),

Gene: Harambe_89 Start: 70727, Stop: 70569, Start Num: 27
Candidate Starts for Harambe_89:
(Start: 27 @70727 has 59 MA's), (28, 70694), (31, 70628), (33, 70616), (36, 70580),

Gene: HayZem_98 Start: 71094, Stop: 70936, Start Num: 27
Candidate Starts for HayZem_98:
(Start: 27 @71094 has 59 MA's), (28, 71061), (30, 70998), (31, 70995), (34, 70971), (35, 70962), (37, 70947),

Gene: Hello_89 Start: 70682, Stop: 70524, Start Num: 27
Candidate Starts for Hello_89:
(Start: 27 @70682 has 59 MA's), (28, 70649), (31, 70583), (33, 70571), (36, 70535),

Gene: Hotorobo_106 Start: 74095, Stop: 73844, Start Num: 17

Candidate Starts for Hotorobo_106:
(3, 74236), (4, 74227), (Start: 17 @74095 has 3 MA's), (Start: 27 @74008 has 59 MA's), (30, 73912), (33, 73897), (34, 73885),

Gene: Jams_90 Start: 69737, Stop: 69579, Start Num: 27
Candidate Starts for Jams_90:
(Start: 27 @69737 has 59 MA's), (28, 69704), (31, 69638), (33, 69626), (36, 69590),

Gene: Jellybones_105 Start: 74298, Stop: 74134, Start Num: 27
Candidate Starts for Jellybones_105:
(4, 74517), (Start: 17 @74385 has 3 MA's), (Start: 27 @74298 has 59 MA's), (30, 74202), (33, 74187), (34, 74175),

Gene: John316_107 Start: 74362, Stop: 74111, Start Num: 17
Candidate Starts for John316_107:
(6, 74446), (10, 74407), (Start: 17 @74362 has 3 MA's), (Start: 27 @74275 has 59 MA's), (30, 74179), (34, 74152),

Gene: Jormungandr_89 Start: 70442, Stop: 70284, Start Num: 27
Candidate Starts for Jormungandr_89:
(Start: 27 @70442 has 59 MA's), (28, 70409), (31, 70343), (33, 70331), (36, 70295),

Gene: Kaseim_90 Start: 69884, Stop: 69726, Start Num: 27
Candidate Starts for Kaseim_90:
(Start: 27 @69884 has 59 MA's), (28, 69851), (31, 69785), (33, 69773), (36, 69737),

Gene: Kelzog_106 Start: 73542, Stop: 73378, Start Num: 27
Candidate Starts for Kelzog_106:
(6, 73713), (10, 73674), (Start: 17 @73629 has 3 MA's), (Start: 27 @73542 has 59 MA's), (30, 73446), (33, 73431), (34, 73419),

Gene: Lahirium_90 Start: 71478, Stop: 71320, Start Num: 27
Candidate Starts for Lahirium_90:
(20, 71547), (Start: 27 @71478 has 59 MA's), (28, 71445), (31, 71379), (33, 71367), (36, 71331),

Gene: Lidong_90 Start: 70699, Stop: 70541, Start Num: 27
Candidate Starts for Lidong_90:
(Start: 27 @70699 has 59 MA's), (28, 70666), (31, 70600), (33, 70588), (36, 70552),

Gene: Linetti_104 Start: 74728, Stop: 74564, Start Num: 27
Candidate Starts for Linetti_104:
(Start: 27 @74728 has 59 MA's), (30, 74632), (33, 74617),

Gene: Lizzo_103 Start: 72939, Stop: 72775, Start Num: 27
Candidate Starts for Lizzo_103:
(3, 73158), (4, 73149), (12, 73065), (19, 73008), (Start: 27 @72939 has 59 MA's), (30, 72843), (33, 72828), (34, 72816),

Gene: Luker_91 Start: 70752, Stop: 70594, Start Num: 27
Candidate Starts for Luker_91:
(Start: 27 @70752 has 59 MA's), (28, 70719), (31, 70653), (33, 70641), (36, 70605),

Gene: Minos_91 Start: 70426, Stop: 70268, Start Num: 27

Candidate Starts for Minos_91:
(Start: 27 @70426 has 59 MA's), (28, 70393), (31, 70327), (33, 70315), (36, 70279),

Gene: Monty_103 Start: 72841, Stop: 72677, Start Num: 27
Candidate Starts for Monty_103:
(3, 73060), (4, 73051), (19, 72910), (Start: 27 @72841 has 59 MA's), (30, 72745), (33, 72730), (34, 72718),

Gene: MrWormie_90 Start: 69440, Stop: 69282, Start Num: 27
Candidate Starts for MrWormie_90:
(Start: 27 @69440 has 59 MA's), (28, 69407), (31, 69341), (33, 69329), (36, 69293),

Gene: Msay19_108 Start: 74914, Stop: 74750, Start Num: 27
Candidate Starts for Msay19_108:
(Start: 27 @74914 has 59 MA's), (30, 74818), (33, 74803),

Gene: Neoevie_89 Start: 70700, Stop: 70542, Start Num: 27
Candidate Starts for Neoevie_89:
(Start: 27 @70700 has 59 MA's), (28, 70667), (31, 70601), (33, 70589), (36, 70553),

Gene: Newt_91 Start: 70769, Stop: 70611, Start Num: 27
Candidate Starts for Newt_91:
(Start: 27 @70769 has 59 MA's), (28, 70736), (31, 70670), (33, 70658), (36, 70622),

Gene: Nimi13_89 Start: 70450, Stop: 70292, Start Num: 27
Candidate Starts for Nimi13_89:
(Start: 15 @70549 has 3 MA's), (Start: 27 @70450 has 59 MA's), (28, 70417), (31, 70351), (33, 70339), (36, 70303),

Gene: PierreThree_103 Start: 74082, Stop: 73918, Start Num: 27
Candidate Starts for PierreThree_103:
(10, 74217), (Start: 22 @74139 has 1 MA's), (24, 74133), (Start: 27 @74082 has 59 MA's), (30, 73986), (33, 73971),

Gene: PokyPuppy_100 Start: 73128, Stop: 72964, Start Num: 27
Candidate Starts for PokyPuppy_100:
(16, 73221), (18, 73212), (Start: 27 @73128 has 59 MA's), (29, 73050), (30, 73032),

Gene: Poland_108 Start: 74875, Stop: 74711, Start Num: 27
Candidate Starts for Poland_108:
(Start: 27 @74875 has 59 MA's), (30, 74779), (33, 74764),

Gene: RemRem_107 Start: 73125, Stop: 72961, Start Num: 27
Candidate Starts for RemRem_107:
(3, 73344), (4, 73335), (12, 73251), (19, 73194), (Start: 27 @73125 has 59 MA's), (30, 73029), (33, 73014), (34, 73002),

Gene: RoyalG_103 Start: 72840, Stop: 72676, Start Num: 27
Candidate Starts for RoyalG_103:
(Start: 27 @72840 has 59 MA's), (30, 72744), (33, 72729),

Gene: Sam12_102 Start: 72367, Stop: 72203, Start Num: 27
Candidate Starts for Sam12_102:

(6, 72535), (10, 72496), (Start: 17 @72451 has 3 MA's), (Start: 22 @72418 has 1 MA's), (24, 72412), (Start: 27 @72367 has 59 MA's), (30, 72271), (33, 72256), (34, 72244),

Gene: Shelley_90 Start: 69926, Stop: 69768, Start Num: 27
Candidate Starts for Shelley_90:
(Start: 27 @69926 has 59 MA's), (28, 69893), (31, 69827), (33, 69815), (36, 69779),

Gene: Sombrero_105 Start: 73178, Stop: 73014, Start Num: 27
Candidate Starts for Sombrero_105:
(Start: 27 @73178 has 59 MA's), (30, 73082), (33, 73067), (34, 73055),

Gene: Squibbles_104 Start: 73651, Stop: 73487, Start Num: 27
Candidate Starts for Squibbles_104:
(12, 73777), (19, 73720), (Start: 27 @73651 has 59 MA's), (30, 73555), (33, 73540), (34, 73528),

Gene: SteveFrench_102 Start: 73079, Stop: 72915, Start Num: 27
Candidate Starts for SteveFrench_102:
(Start: 27 @73079 has 59 MA's), (30, 72983), (33, 72968),

Gene: Sticker17_90 Start: 70399, Stop: 70241, Start Num: 27
Candidate Starts for Sticker17_90:
(Start: 27 @70399 has 59 MA's), (28, 70366), (31, 70300), (33, 70288), (36, 70252),

Gene: Teal_89 Start: 70905, Stop: 70747, Start Num: 27
Candidate Starts for Teal_89:
(Start: 27 @70905 has 59 MA's), (28, 70872), (31, 70806), (33, 70794), (36, 70758),

Gene: Woes_89 Start: 70949, Stop: 70791, Start Num: 27
Candidate Starts for Woes_89:
(Start: 27 @70949 has 59 MA's), (28, 70916), (31, 70850), (33, 70838), (36, 70802),

Gene: Worcestershire_103 Start: 72559, Stop: 72395, Start Num: 27
Candidate Starts for Worcestershire_103:
(Start: 27 @72559 has 59 MA's), (30, 72463), (33, 72448), (34, 72436),