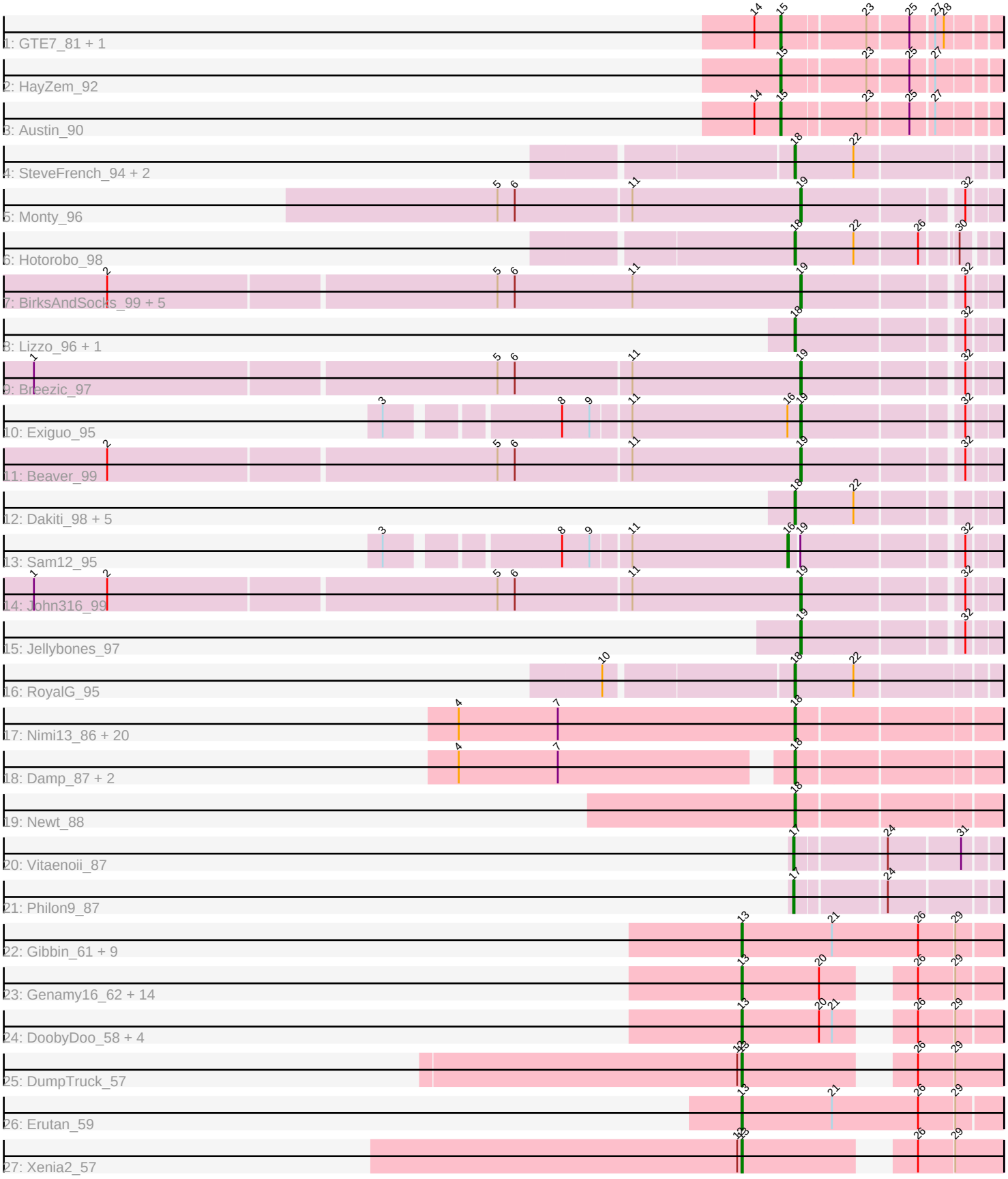
Pham 345611


1: GTE7_81 + 1
2: HayZem_92
3: Austin_90
4: SteveFrench_94 + 2
5: Monty_96
6: Hotorobo_98
7: BirksAndSocks_99 + 5
8: Lizzo_96 + 1
9: Breezic_97
10: Exiguo_95
11: Beaver_99
12: Dakiti_98 + 5
13: Sam12_95
14: John316_99
15: Jellybones_97
16: RoyalG_95
17: Nimi13_86 + 20
18: Damp_87 + 2
19: Newt_88
20: Vitaenoii_87
21: Philon9_87
22: Gibbin_61 + 9
23: Genamy16_62 + 14
24: DoobyDoo_58 + 4
25: DumpTruck_57
26: Erutan_59
27: Xenia2_57

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 345611 Report

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

Pham number 345611 has 90 members, 2 are drafts.

Phages represented in each track:
• Track 1 : GTE7_81, Amore2_92
• Track 2 : HayZem_92
• Track 3 : Austin_90
• Track 4 : SteveFrench_94, Diabla_100, Eggsie_93
• Track 5 : Monty_96
• Track 6 : Hotorobo_98
• Track 7 : BirksAndSocks_99, Boneham_98, Poland_100, Butterball_97, FelixAlejandro_99, Msay19_100
• Track 8 : Lizzo_96, CathyBurgh_96
• Track 9 : Breezic_97
• Track 10 : Exiguo_95
• Track 11 : Beaver_99
• Track 12 : Dakiti_98, BenoitCattle_98, Chelms_96, GourdThymes_96, BigShaq_97, PierreThree_96
• Track 13 : Sam12_95
• Track 14 : John316_99
• Track 15 : Jellybones_97
• Track 16 : RoyalG_95
• Track 17 : Nimi13_86, Luker_88, Anamika_86, Shelley_87, Hello_86, Berries_87, Teal_86, Kaseim_87, Neoevie_86, Minos_88, Lidong_87, Lahirium_87, Woes_86, Hail2Pitt_85, Guillaume_86, Bianmat_87, Jams_87, MrWormie_87, Jormungandr_86, Harambe_86, Charianelly_87
• Track 18 : Damp_87, GalacticEye_87, Sticker17_87
• Track 19 : Newt_88
• Track 20 : Vitaenoii_87
• Track 21 : Philon9_87
• Track 22 : Gibbin_61, Alephilan_59, Patos_62, BirthdayBoy_61, NorManre_62, Nettle_60, Yikes_61, Fulcrum_59, GOATification_59, ParvusTarda_58
• Track 23 : Genamy16_62, Astralis_59, RazorC_59, NovaSharks_61, Mima20_59, Avian_58, Stormer_59, Charminar_58, DaviePasture_59, Alyssamiracle_62, Lila22_60, Lambo_57, Ranch_59, Rumi_60, Riduram_58
• Track 24 : DoobyDoo_58, OtterstedtS21_59, Sadboi_60, MoiGyank_62, GretelLyn_59
• Track 25 : DumpTruck_57
• Track 26 : Erutan_59
• Track 27 : Xenia2_57

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

The start number called the most often in the published annotations is 18, it was called in 38 of the 88 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Anamika_86, BenoitCattle_98, Berries_87, Bianmat_87, BigShaq_97, CathyBurgh_96, Charianelly_87, Chelms_96, Dakiti_98, Damp_87, Diabla_100, Eggsie_93, GalacticEye_87, GourdThymes_96, Guillaume_86, Hail2Pitt_85, Harambe_86, Hello_86, Hotorobo_98, Jams_87, Jormungandr_86, Kaseim_87, Lahirium_87, Lidong_87, Lizzo_96, Luker_88, Minos_88, MrWormie_87, Neoevie_86, Newt_88, Nimi13_86, PierreThree_96, RoyalG_95, Shelley_87, SteveFrench_94, Sticker17_87, Teal_86, Woes_86,

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

Genes that do not have the "Most Annotated" start:
• Alephilan_59, Alyssamiracle_62, Amore2_92, Astralis_59, Austin_90, Avian_58, Beaver_99, BirksAndSocks_99, BirthdayBoy_61, Boneham_98, Breezic_97, Butterball_97, Charminar_58, DaviePasture_59, DoobyDoo_58, DumpTruck_57, Erutan_59, Exiguo_95, FelixAlejandro_99, Fulcrum_59, GOATification_59, GTE7_81, Genamy16_62, Gibbin_61, GretelLyn_59, HayZem_92, Jellybones_97, John316_99, Lambo_57, Lila22_60, Mima20_59, MoiGyank_62, Monty_96, Msay19_100, Nettle_60, NorManre_62, NovaSharks_61, OtterstedtS21_59, ParvusTarda_58, Patos_62, Philon9_87, Poland_100, Ranch_59, RazorC_59, Riduram_58, Rumi_60, Sadboi_60, Sam12_95, Stormer_59, Vitaenoii_87, Xenia2_57, Yikes_61,

Summary by start number:

Start 13:
• Found in 33 of 90 (36.7%) of genes in pham
• Manual Annotations of this start: 32 of 88
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alephilan_59 (DV), Alyssamiracle_62 (DV), Astralis_59 (DV), Avian_58 (DV), BirthdayBoy_61 (DV), Charminar_58 (DV), DaviePasture_59 (DV), DoobyDoo_58 (DV), DumpTruck_57 (DV), Erutan_59 (DV), Fulcrum_59 (DV), GOATification_59 (DV), Genamy16_62 (DV), Gibbin_61 (DV), GretelLyn_59 (DV), Lambo_57 (DV), Lila22_60 (DV), Mima20_59 (DV), MoiGyank_62 (DV), Nettle_60 (DV), NorManre_62 (DV), NovaSharks_61 (DV), OtterstedtS21_59 (DV), ParvusTarda_58 (DV), Patos_62 (DV), Ranch_59 (DV), RazorC_59 (DV), Riduram_58 (DV), Rumi_60 (DV), Sadboi_60 (DV), Stormer_59 (DV), Xenia2_57 (DV), Yikes_61 (DV),

Start 15:
• Found in 4 of 90 (4.4%) of genes in pham
• Manual Annotations of this start: 3 of 88
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amore2_92 (CS1), Austin_90 (CS1), GTE7_81 (CS1), HayZem_92 (CS1),

Start 16:
• Found in 2 of 90 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 88
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Sam12_95 (CS2),

Start 17:
• Found in 2 of 90 (2.2%) of genes in pham
• Manual Annotations of this start: 2 of 88
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Philon9_87 (CS4), Vitaenoii_87 (CS4),

Start 18:
• Found in 38 of 90 (42.2%) of genes in pham
• Manual Annotations of this start: 38 of 88
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anamika_86 (CS3), BenoitCattle_98 (CS2), Berries_87 (CS3), Bianmat_87 (CS3), BigShaq_97 (CS2), CathyBurgh_96 (CS2), Charianelly_87 (CS3), Chelms_96 (CS2), Dakiti_98 (CS2), Damp_87 (CS3), Diabla_100 (CS2), Eggsie_93 (CS2), GalacticEye_87 (CS3), GourdThymes_96 (CS2), Guillaume_86 (CS3), Hail2Pitt_85 (CS3), Harambe_86 (CS3), Hello_86 (CS3), Hotorobo_98 (CS2), Jams_87 (CS3), Jormungandr_86 (CS3), Kaseim_87 (CS3), Lahirium_87 (CS3), Lidong_87 (CS3), Lizzo_96 (CS2), Luker_88 (CS3), Minos_88 (CS3), MrWormie_87 (CS3), Neoevie_86 (CS3), Newt_88 (CS3), Nimi13_86 (CS3), PierreThree_96 (CS2), RoyalG_95 (CS2), Shelley_87 (CS3), SteveFrench_94 (CS2), Sticker17_87 (CS3), Teal_86 (CS3), Woes_86 (CS3),

Start 19:
• Found in 13 of 90 (14.4%) of genes in pham
• Manual Annotations of this start: 12 of 88
• Called 92.3% of time when present
• Phage (with cluster) where this start called: Beaver_99 (CS2), BirksAndSocks_99 (CS2), Boneham_98 (CS2), Breezic_97 (CS2), Butterball_97 (CS2), Exiguo_95 (CS2), FelixAlejandro_99 (CS2), Jellybones_97 (CS2), John316_99 (CS2), Monty_96 (CS2), Msay19_100 (CS2), Poland_100 (CS2),

Summary by clusters:

There are 5 clusters represented in this pham: DV, CS4, CS1, CS3, CS2,

Info for manual annotations of cluster CS1:
•Start number 15 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:
•Start number 16 was manually annotated 1 time for cluster CS2.
•Start number 18 was manually annotated 13 times for cluster CS2.
•Start number 19 was manually annotated 12 times for cluster CS2.

Info for manual annotations of cluster CS3:
•Start number 18 was manually annotated 25 times for cluster CS3.

Info for manual annotations of cluster CS4:

•Start number 17 was manually annotated 2 times for cluster CS4.

Info for manual annotations of cluster DV:
•Start number 13 was manually annotated 32 times for cluster DV.

Gene Information:

Gene: Alephilan_59 Start: 40571, Stop: 40747, Start Num: 13
Candidate Starts for Alephilan_59:
(Start: 13 @40571 has 32 MA's), (21, 40634), (26, 40694), (29, 40718),

Gene: Alyssamiracle_62 Start: 39704, Stop: 39853, Start Num: 13
Candidate Starts for Alyssamiracle_62:
(Start: 13 @39704 has 32 MA's), (20, 39758), (26, 39800), (29, 39824),

Gene: Amore2_92 Start: 68732, Stop: 68598, Start Num: 15
Candidate Starts for Amore2_92:
(14, 68750), (Start: 15 @68732 has 3 MA's), (23, 68678), (25, 68651), (27, 68636), (28, 68630),

Gene: Anamika_86 Start: 69030, Stop: 68899, Start Num: 18
Candidate Starts for Anamika_86:
(4, 69264), (7, 69195), (Start: 18 @69030 has 38 MA's),

Gene: Astralis_59 Start: 39282, Stop: 39431, Start Num: 13
Candidate Starts for Astralis_59:
(Start: 13 @39282 has 32 MA's), (20, 39336), (26, 39378), (29, 39402),

Gene: Austin_90 Start: 68549, Stop: 68415, Start Num: 15
Candidate Starts for Austin_90:
(14, 68567), (Start: 15 @68549 has 3 MA's), (23, 68495), (25, 68468), (27, 68453),

Gene: Avian_58 Start: 39432, Stop: 39581, Start Num: 13
Candidate Starts for Avian_58:
(Start: 13 @39432 has 32 MA's), (20, 39486), (26, 39528), (29, 39552),

Gene: Beaver_99 Start: 72089, Stop: 71967, Start Num: 19
Candidate Starts for Beaver_99:
(2, 72560), (5, 72296), (6, 72284), (11, 72206), (Start: 19 @72089 has 12 MA's), (32, 71987),

Gene: BenoitCattle_98 Start: 71490, Stop: 71365, Start Num: 18
Candidate Starts for BenoitCattle_98:
(Start: 18 @71490 has 38 MA's), (22, 71451),

Gene: Berries_87 Start: 69002, Stop: 68871, Start Num: 18
Candidate Starts for Berries_87:
(4, 69236), (7, 69167), (Start: 18 @69002 has 38 MA's),

Gene: Bianmat_87 Start: 69042, Stop: 68911, Start Num: 18
Candidate Starts for Bianmat_87:
(4, 69276), (7, 69207), (Start: 18 @69042 has 38 MA's),

Gene: BigShaq_97 Start: 71089, Stop: 70964, Start Num: 18
Candidate Starts for BigShaq_97:
(Start: 18 @71089 has 38 MA's), (22, 71050),

Gene: BirksAndSocks_99 Start: 71703, Stop: 71581, Start Num: 19
Candidate Starts for BirksAndSocks_99:
(2, 72177), (5, 71913), (6, 71901), (11, 71820), (Start: 19 @71703 has 12 MA's), (32, 71601),

Gene: BirthdayBoy_61 Start: 40989, Stop: 41165, Start Num: 13
Candidate Starts for BirthdayBoy_61:
(Start: 13 @40989 has 32 MA's), (21, 41052), (26, 41112), (29, 41136),

Gene: Boneham_98 Start: 71628, Stop: 71506, Start Num: 19
Candidate Starts for Boneham_98:
(2, 72102), (5, 71838), (6, 71826), (11, 71745), (Start: 19 @71628 has 12 MA's), (32, 71526),

Gene: Breezic_97 Start: 70637, Stop: 70515, Start Num: 19
Candidate Starts for Breezic_97:
(1, 71159), (5, 70844), (6, 70832), (11, 70754), (Start: 19 @70637 has 12 MA's), (32, 70535),

Gene: Butterball_97 Start: 71633, Stop: 71511, Start Num: 19
Candidate Starts for Butterball_97:
(2, 72107), (5, 71843), (6, 71831), (11, 71750), (Start: 19 @71633 has 12 MA's), (32, 71531),

Gene: CathyBurgh_96 Start: 70670, Stop: 70545, Start Num: 18
Candidate Starts for CathyBurgh_96:
(Start: 18 @70670 has 38 MA's), (32, 70565),

Gene: Charianelly_87 Start: 68752, Stop: 68621, Start Num: 18
Candidate Starts for Charianelly_87:
(4, 68986), (7, 68917), (Start: 18 @68752 has 38 MA's),

Gene: Charminar_58 Start: 39050, Stop: 39199, Start Num: 13
Candidate Starts for Charminar_58:
(Start: 13 @39050 has 32 MA's), (20, 39104), (26, 39146), (29, 39170),

Gene: Chelms_96 Start: 71227, Stop: 71102, Start Num: 18
Candidate Starts for Chelms_96:
(Start: 18 @71227 has 38 MA's), (22, 71188),

Gene: Dakiti_98 Start: 72170, Stop: 72045, Start Num: 18
Candidate Starts for Dakiti_98:
(Start: 18 @72170 has 38 MA's), (22, 72131),

Gene: Damp_87 Start: 67916, Stop: 67785, Start Num: 18
Candidate Starts for Damp_87:
(4, 68132), (7, 68063), (Start: 18 @67916 has 38 MA's),

Gene: DaviePasture_59 Start: 40624, Stop: 40773, Start Num: 13
Candidate Starts for DaviePasture_59:
(Start: 13 @40624 has 32 MA's), (20, 40678), (26, 40720), (29, 40744),

Gene: Diabla_100 Start: 71646, Stop: 71515, Start Num: 18

Candidate Starts for Diabla_100:
(Start: 18 @71646 has 38 MA's), (22, 71607),

Gene: DoobyDoo_58 Start: 39646, Stop: 39795, Start Num: 13
Candidate Starts for DoobyDoo_58:
(Start: 13 @39646 has 32 MA's), (20, 39700), (21, 39709), (26, 39742), (29, 39766),

Gene: DumpTruck_57 Start: 39119, Stop: 39271, Start Num: 13
Candidate Starts for DumpTruck_57:
(12, 39116), (Start: 13 @39119 has 32 MA's), (26, 39215), (29, 39239),

Gene: Eggsie_93 Start: 69202, Stop: 69071, Start Num: 18
Candidate Starts for Eggsie_93:
(Start: 18 @69202 has 38 MA's), (22, 69163),

Gene: Erutan_59 Start: 40269, Stop: 40445, Start Num: 13
Candidate Starts for Erutan_59:
(Start: 13 @40269 has 32 MA's), (21, 40332), (26, 40392), (29, 40416),

Gene: Exiguo_95 Start: 70100, Stop: 69978, Start Num: 19
Candidate Starts for Exiguo_95:
(3, 70361), (8, 70256), (9, 70238), (11, 70214), (Start: 16 @70106 has 1 MA's), (Start: 19 @70100 has 12 MA's), (32, 69998),

Gene: FelixAlejandro_99 Start: 72146, Stop: 72024, Start Num: 19
Candidate Starts for FelixAlejandro_99:
(2, 72620), (5, 72353), (6, 72341), (11, 72263), (Start: 19 @72146 has 12 MA's), (32, 72044),

Gene: Fulcrum_59 Start: 40285, Stop: 40461, Start Num: 13
Candidate Starts for Fulcrum_59:
(Start: 13 @40285 has 32 MA's), (21, 40348), (26, 40408), (29, 40432),

Gene: GOATification_59 Start: 40285, Stop: 40461, Start Num: 13
Candidate Starts for GOATification_59:
(Start: 13 @40285 has 32 MA's), (21, 40348), (26, 40408), (29, 40432),

Gene: GTE7_81 Start: 63408, Stop: 63274, Start Num: 15
Candidate Starts for GTE7_81:
(14, 63426), (Start: 15 @63408 has 3 MA's), (23, 63354), (25, 63327), (27, 63312), (28, 63306),

Gene: GalacticEye_87 Start: 68710, Stop: 68579, Start Num: 18
Candidate Starts for GalacticEye_87:
(4, 68926), (7, 68857), (Start: 18 @68710 has 38 MA's),

Gene: Genamy16_62 Start: 39690, Stop: 39839, Start Num: 13
Candidate Starts for Genamy16_62:
(Start: 13 @39690 has 32 MA's), (20, 39744), (26, 39786), (29, 39810),

Gene: Gibbin_61 Start: 41094, Stop: 41270, Start Num: 13
Candidate Starts for Gibbin_61:
(Start: 13 @41094 has 32 MA's), (21, 41157), (26, 41217), (29, 41241),

Gene: GourdThymes_96 Start: 70697, Stop: 70572, Start Num: 18

Candidate Starts for GourdThymes_96:
(Start: 18 @70697 has 38 MA's), (22, 70658),

Gene: GretelLyn_59 Start: 41168, Stop: 41317, Start Num: 13
Candidate Starts for GretelLyn_59:
(Start: 13 @41168 has 32 MA's), (20, 41222), (21, 41231), (26, 41264), (29, 41288),

Gene: Guillaume_86 Start: 68763, Stop: 68632, Start Num: 18
Candidate Starts for Guillaume_86:
(4, 68997), (7, 68928), (Start: 18 @68763 has 38 MA's),

Gene: Hail2Pitt_85 Start: 69236, Stop: 69105, Start Num: 18
Candidate Starts for Hail2Pitt_85:
(4, 69470), (7, 69401), (Start: 18 @69236 has 38 MA's),

Gene: Harambe_86 Start: 69030, Stop: 68899, Start Num: 18
Candidate Starts for Harambe_86:
(4, 69264), (7, 69195), (Start: 18 @69030 has 38 MA's),

Gene: HayZem_92 Start: 68549, Stop: 68415, Start Num: 15
Candidate Starts for HayZem_92:
(Start: 15 @68549 has 3 MA's), (23, 68495), (25, 68468), (27, 68453),

Gene: Hello_86 Start: 68992, Stop: 68861, Start Num: 18
Candidate Starts for Hello_86:
(4, 69226), (7, 69157), (Start: 18 @68992 has 38 MA's),

Gene: Hotorobo_98 Start: 71557, Stop: 71435, Start Num: 18
Candidate Starts for Hotorobo_98:
(Start: 18 @71557 has 38 MA's), (22, 71518), (26, 71476), (30, 71455),

Gene: Jams_87 Start: 68040, Stop: 67909, Start Num: 18
Candidate Starts for Jams_87:
(4, 68274), (7, 68205), (Start: 18 @68040 has 38 MA's),

Gene: Jellybones_97 Start: 71834, Stop: 71712, Start Num: 19
Candidate Starts for Jellybones_97:
(Start: 19 @71834 has 12 MA's), (32, 71732),

Gene: John316_99 Start: 71808, Stop: 71686, Start Num: 19
Candidate Starts for John316_99:
(1, 72330), (2, 72279), (5, 72015), (6, 72003), (11, 71925), (Start: 19 @71808 has 12 MA's), (32, 71706),

Gene: Jormungandr_86 Start: 68745, Stop: 68614, Start Num: 18
Candidate Starts for Jormungandr_86:
(4, 68979), (7, 68910), (Start: 18 @68745 has 38 MA's),

Gene: Kaseim_87 Start: 68187, Stop: 68056, Start Num: 18
Candidate Starts for Kaseim_87:
(4, 68421), (7, 68352), (Start: 18 @68187 has 38 MA's),

Gene: Lahirium_87 Start: 69781, Stop: 69650, Start Num: 18

Candidate Starts for Lahirium_87:
(4, 70015), (7, 69946), (Start: 18 @69781 has 38 MA's),

Gene: Lambo_57 Start: 40122, Stop: 40271, Start Num: 13
Candidate Starts for Lambo_57:
(Start: 13 @40122 has 32 MA's), (20, 40176), (26, 40218), (29, 40242),

Gene: Lidong_87 Start: 69002, Stop: 68871, Start Num: 18
Candidate Starts for Lidong_87:
(4, 69236), (7, 69167), (Start: 18 @69002 has 38 MA's),

Gene: Lila22_60 Start: 41073, Stop: 41222, Start Num: 13
Candidate Starts for Lila22_60:
(Start: 13 @41073 has 32 MA's), (20, 41127), (26, 41169), (29, 41193),

Gene: Lizzo_96 Start: 70670, Stop: 70545, Start Num: 18
Candidate Starts for Lizzo_96:
(Start: 18 @70670 has 38 MA's), (32, 70565),

Gene: Luker_88 Start: 69055, Stop: 68924, Start Num: 18
Candidate Starts for Luker_88:
(4, 69289), (7, 69220), (Start: 18 @69055 has 38 MA's),

Gene: Mima20_59 Start: 40676, Stop: 40825, Start Num: 13
Candidate Starts for Mima20_59:
(Start: 13 @40676 has 32 MA's), (20, 40730), (26, 40772), (29, 40796),

Gene: Minos_88 Start: 68729, Stop: 68598, Start Num: 18
Candidate Starts for Minos_88:
(4, 68963), (7, 68894), (Start: 18 @68729 has 38 MA's),

Gene: MoiGyank_62 Start: 41449, Stop: 41598, Start Num: 13
Candidate Starts for MoiGyank_62:
(Start: 13 @41449 has 32 MA's), (20, 41503), (21, 41512), (26, 41545), (29, 41569),

Gene: Monty_96 Start: 70369, Stop: 70247, Start Num: 19
Candidate Starts for Monty_96:
(5, 70576), (6, 70564), (11, 70486), (Start: 19 @70369 has 12 MA's), (32, 70267),

Gene: MrWormie_87 Start: 67743, Stop: 67612, Start Num: 18
Candidate Starts for MrWormie_87:
(4, 67977), (7, 67908), (Start: 18 @67743 has 38 MA's),

Gene: Msay19_100 Start: 72429, Stop: 72307, Start Num: 19
Candidate Starts for Msay19_100:
(2, 72903), (5, 72639), (6, 72627), (11, 72546), (Start: 19 @72429 has 12 MA's), (32, 72327),

Gene: Neoevie_86 Start: 69003, Stop: 68872, Start Num: 18
Candidate Starts for Neoevie_86:
(4, 69237), (7, 69168), (Start: 18 @69003 has 38 MA's),

Gene: Nettle_60 Start: 41076, Stop: 41252, Start Num: 13
Candidate Starts for Nettle_60:

(Start: 13 @41076 has 32 MA's), (21, 41139), (26, 41199), (29, 41223),

Gene: Newt_88 Start: 69072, Stop: 68941, Start Num: 18
Candidate Starts for Newt_88:
(Start: 18 @69072 has 38 MA's),

Gene: Nimi13_86 Start: 68753, Stop: 68622, Start Num: 18
Candidate Starts for Nimi13_86:
(4, 68987), (7, 68918), (Start: 18 @68753 has 38 MA's),

Gene: NorManre_62 Start: 40806, Stop: 40982, Start Num: 13
Candidate Starts for NorManre_62:
(Start: 13 @40806 has 32 MA's), (21, 40869), (26, 40929), (29, 40953),

Gene: NovaSharks_61 Start: 39281, Stop: 39430, Start Num: 13
Candidate Starts for NovaSharks_61:
(Start: 13 @39281 has 32 MA's), (20, 39335), (26, 39377), (29, 39401),

Gene: OtterstedtS21_59 Start: 40455, Stop: 40604, Start Num: 13
Candidate Starts for OtterstedtS21_59:
(Start: 13 @40455 has 32 MA's), (20, 40509), (21, 40518), (26, 40551), (29, 40575),

Gene: ParvusTarda_58 Start: 39803, Stop: 39979, Start Num: 13
Candidate Starts for ParvusTarda_58:
(Start: 13 @39803 has 32 MA's), (21, 39866), (26, 39926), (29, 39950),

Gene: Patos_62 Start: 40805, Stop: 40981, Start Num: 13
Candidate Starts for Patos_62:
(Start: 13 @40805 has 32 MA's), (21, 40868), (26, 40928), (29, 40952),

Gene: Philon9_87 Start: 70109, Stop: 69981, Start Num: 17
Candidate Starts for Philon9_87:
(Start: 17 @70109 has 2 MA's), (24, 70052),

Gene: PierreThree_96 Start: 71801, Stop: 71676, Start Num: 18
Candidate Starts for PierreThree_96:
(Start: 18 @71801 has 38 MA's), (22, 71762),

Gene: Poland_100 Start: 72411, Stop: 72289, Start Num: 19
Candidate Starts for Poland_100:
(2, 72885), (5, 72621), (6, 72609), (11, 72528), (Start: 19 @72411 has 12 MA's), (32, 72309),

Gene: Ranch_59 Start: 39287, Stop: 39436, Start Num: 13
Candidate Starts for Ranch_59:
(Start: 13 @39287 has 32 MA's), (20, 39341), (26, 39383), (29, 39407),

Gene: RazorC_59 Start: 39434, Stop: 39583, Start Num: 13
Candidate Starts for RazorC_59:
(Start: 13 @39434 has 32 MA's), (20, 39488), (26, 39530), (29, 39554),

Gene: Riduram_58 Start: 39010, Stop: 39159, Start Num: 13
Candidate Starts for Riduram_58:
(Start: 13 @39010 has 32 MA's), (20, 39064), (26, 39106), (29, 39130),

Gene: RoyalG_95 Start: 70393, Stop: 70262, Start Num: 18
Candidate Starts for RoyalG_95:
(10, 70516), (Start: 18 @70393 has 38 MA's), (22, 70354),

Gene: Rumi_60 Start: 38978, Stop: 39127, Start Num: 13
Candidate Starts for Rumi_60:
(Start: 13 @38978 has 32 MA's), (20, 39032), (26, 39074), (29, 39098),

Gene: Sadboi_60 Start: 41169, Stop: 41318, Start Num: 13
Candidate Starts for Sadboi_60:
(Start: 13 @41169 has 32 MA's), (20, 41223), (21, 41232), (26, 41265), (29, 41289),

Gene: Sam12_95 Start: 70103, Stop: 69975, Start Num: 16
Candidate Starts for Sam12_95:
(3, 70358), (8, 70253), (9, 70235), (11, 70211), (Start: 16 @70103 has 1 MA's), (Start: 19 @70097 has 12 MA's), (32, 69995),

Gene: Shelley_87 Start: 68229, Stop: 68098, Start Num: 18
Candidate Starts for Shelley_87:
(4, 68463), (7, 68394), (Start: 18 @68229 has 38 MA's),

Gene: SteveFrench_94 Start: 70633, Stop: 70502, Start Num: 18
Candidate Starts for SteveFrench_94:
(Start: 18 @70633 has 38 MA's), (22, 70594),

Gene: Sticker17_87 Start: 68717, Stop: 68586, Start Num: 18
Candidate Starts for Sticker17_87:
(4, 68933), (7, 68864), (Start: 18 @68717 has 38 MA's),

Gene: Stormer_59 Start: 38982, Stop: 39131, Start Num: 13
Candidate Starts for Stormer_59:
(Start: 13 @38982 has 32 MA's), (20, 39036), (26, 39078), (29, 39102),

Gene: Teal_86 Start: 69208, Stop: 69077, Start Num: 18
Candidate Starts for Teal_86:
(4, 69442), (7, 69373), (Start: 18 @69208 has 38 MA's),

Gene: Vitaenoii_87 Start: 70093, Stop: 69965, Start Num: 17
Candidate Starts for Vitaenoii_87:
(Start: 17 @70093 has 2 MA's), (24, 70036), (31, 69988),

Gene: Woes_86 Start: 69259, Stop: 69128, Start Num: 18
Candidate Starts for Woes_86:
(4, 69493), (7, 69424), (Start: 18 @69259 has 38 MA's),

Gene: Xenia2_57 Start: 38866, Stop: 39018, Start Num: 13
Candidate Starts for Xenia2_57:
(12, 38863), (Start: 13 @38866 has 32 MA's), (26, 38962), (29, 38986),

Gene: Yikes_61 Start: 41580, Stop: 41756, Start Num: 13
Candidate Starts for Yikes_61:
(Start: 13 @41580 has 32 MA's), (21, 41643), (26, 41703), (29, 41727),