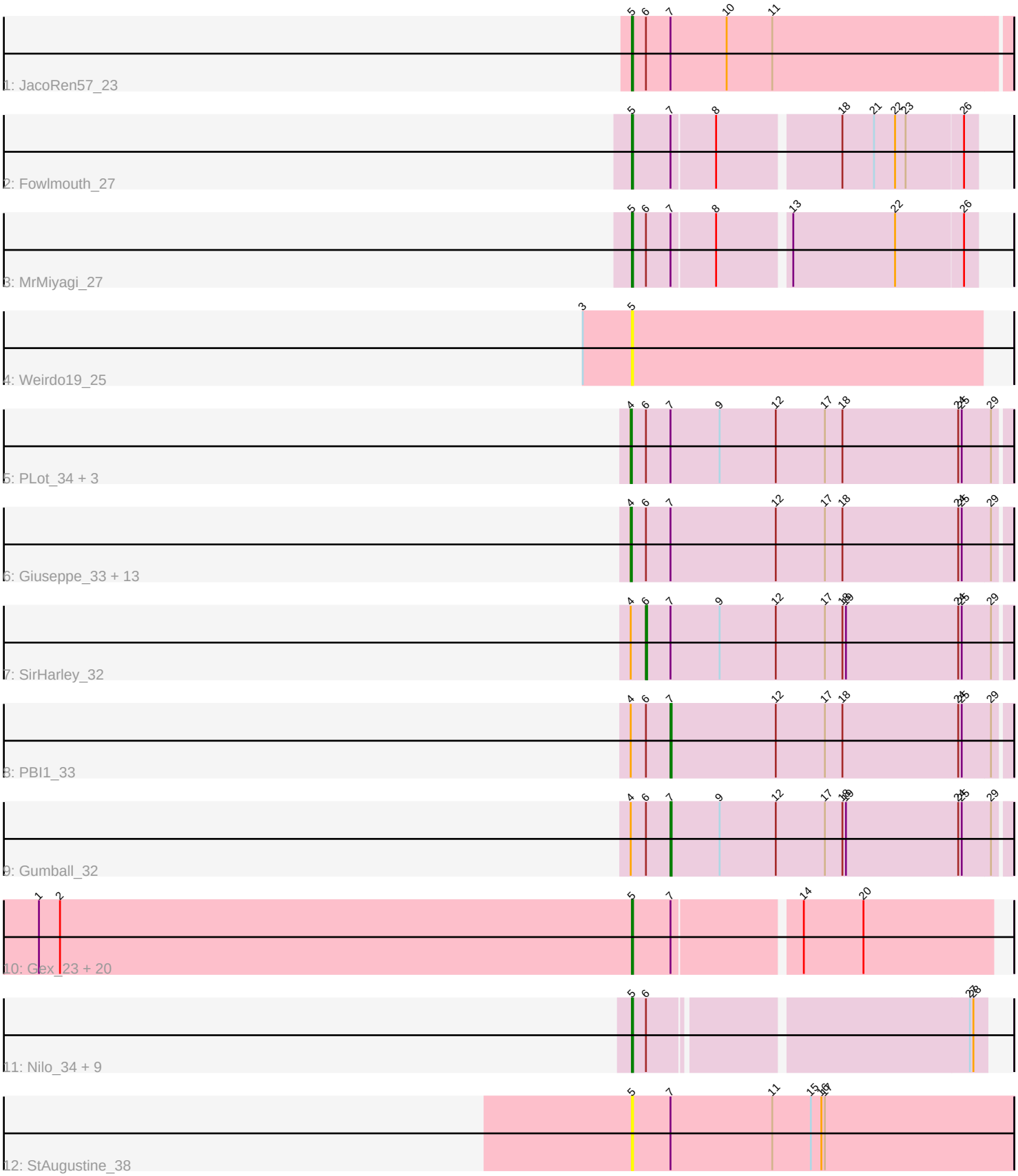
Pham 1815


1: JacoRen57_23
2: Fowlmouth_27
3: MrMiyagi_27
4: Weirdo19_25
5: PLot_34 + 3
6: Giuseppe_33 + 13
7: SirHarley_32
8: PBI1_33
9: Gumball_32
10: Gex_23 + 20
11: Nilo_34 + 9
12: StAugustine_38

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 1815 Report

This analysis was run 04/28/24 on database version 559.

Pham number 1815 has 57 members, 10 are drafts.

Phages represented in each track:
• Track 1 : JacoRen57_23
• Track 2 : Fowlmouth_27
• Track 3 : MrMiyagi_27
• Track 4 : Weirdo19_25
• Track 5 : PLot_34, KandZ_33, Nova_33, Erk16_33
• Track 6 : Giuseppe_33, WaldoWhy_34, Adjutor_34, Mopey_33, Delton_33, Thoth_33, Visconti_33, Prager_33, Penelope2018_33, Chill_34, Butterscotch_33, Helpful_34, BigMama_31, Troll4_33
• Track 7 : SirHarley_32
• Track 8 : PBI1_33
• Track 9 : Gumball_32
• Track 10 : Gex_23, Journey_24, Xerxes_23, Magsby_23, Charlie_23, Melville_23, Smurph_23, Chewbacca_23, LilSpotty_26, Pipsqueaks_23, Philonius_23, Schnauzer_23, Silvy_23, Duplicity_23, MulchSalad_21, Tapioca_23, Bosection6_23, Parmesanjohn_23, Carcharodon_23, Aggie_23, Silvafighter_23
• Track 11 : Nilo_34, Rope_33, Yelo_33, Send513_33, Weiss13_33, Papyrus_33, Zenon_34, MontyDev_33, Riparian_33, Candle_33
• Track 12 : StAugustine_38

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

The start number called the most often in the published annotations is 5, it was called in 27 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aggie_23, Bosection6_23, Candle_33, Carcharodon_23, Charlie_23, Chewbacca_23, Duplicity_23, Fowlmouth_27, Gex_23, JacoRen57_23, Journey_24, LilSpotty_26, Magsby_23, Melville_23, MontyDev_33, MrMiyagi_27, MulchSalad_21, Nilo_34, Papyrus_33, Parmesanjohn_23, Philonius_23, Pipsqueaks_23, Riparian_33, Rope_33, Schnauzer_23, Send513_33, Silvafighter_23, Silvy_23, Smurph_23, StAugustine_38, Tapioca_23, Weirdo19_25, Weiss13_33, Xerxes_23, Yelo_33, Zenon_34,

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

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Genes that do not have the "Most Annotated" start:
• Adjutor_34, BigMama_31, Butterscotch_33, Chill_34, Delton_33, Erk16_33, Giuseppe_33, Gumball_32, Helpful_34, KandZ_33, Mopey_33, Nova_33, PBI1_33, PLot_34, Penelope2018_33, Prager_33, SirHarley_32, Thoth_33, Troll4_33, Visconti_33, WaldoWhy_34,

Summary by start number:

Start 4:
• Found in 21 of 57 (36.8%) of genes in pham
• Manual Annotations of this start: 17 of 47
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Adjutor_34 (D1), BigMama_31 (D1), Butterscotch_33 (D1), Chill_34 (D1), Delton_33 (D1), Erk16_33 (D1), Giuseppe_33 (D1), Helpful_34 (D1), KandZ_33 (D1), Mopey_33 (D1), Nova_33 (D1), PLot_34 (D1), Penelope2018_33 (D1), Prager_33 (D1), Thoth_33 (D1), Troll4_33 (D1), Visconti_33 (D1), WaldoWhy_34 (D1),

Start 5:
• Found in 36 of 57 (63.2%) of genes in pham
• Manual Annotations of this start: 27 of 47
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aggie_23 (N), Bosection6_23 (N), Candle_33 (R), Carcharodon_23 (N), Charlie_23 (N), Chewbacca_23 (N), Duplicity_23 (N), Fowlmouth_27 (AC), Gex_23 (N), JacoRen57_23 (AB), Journey_24 (N), LilSpotty_26 (singleton), Magsby_23 (N), Melville_23 (N), MontyDev_33 (R), MrMiyagi_27 (AC), MulchSalad_21 (F), Nilo_34 (R), Papyrus_33 (R), Parmesanjohn_23 (N), Philonius_23 (N), Pipsqueaks_23 (N), Riparian_33 (R), Rope_33 (R), Schnauzer_23 (N), Send513_33 (R), Silvafighter_23 (N), Silvy_23 (N), Smurph_23 (N), StAugustine_38 (singleton), Tapioca_23 (N), Weirdo19_25 (AH), Weiss13_33 (R), Xerxes_23 (N), Yelo_33 (R), Zenon_34 (R),

Start 6:
• Found in 33 of 57 (57.9%) of genes in pham
• Manual Annotations of this start: 1 of 47
• Called 3.0% of time when present
• Phage (with cluster) where this start called: SirHarley_32 (D1),

Start 7:
• Found in 46 of 57 (80.7%) of genes in pham
• Manual Annotations of this start: 2 of 47
• Called 4.3% of time when present
• Phage (with cluster) where this start called: Gumball_32 (D1), PBI1_33 (D1),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, AB, F, AH, AC, N, R, D1,

Info for manual annotations of cluster AB:
•Start number 5 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster AC:
•Start number 5 was manually annotated 2 times for cluster AC.

Info for manual annotations of cluster D1:
•Start number 4 was manually annotated 17 times for cluster D1.
•Start number 6 was manually annotated 1 time for cluster D1.
•Start number 7 was manually annotated 2 times for cluster D1.

Info for manual annotations of cluster N:
•Start number 5 was manually annotated 15 times for cluster N.

Info for manual annotations of cluster R:
•Start number 5 was manually annotated 8 times for cluster R.

Gene Information:

Gene: Adjutor_34 Start: 29450, Stop: 29770, Start Num: 4
Candidate Starts for Adjutor_34:
(Start: 4 @29450 has 17 MA's), (Start: 6 @29462 has 1 MA's), (Start: 7 @29483 has 2 MA's), (12, 29573), (17, 29615), (18, 29630), (24, 29729), (25, 29732), (29, 29756),

Gene: Aggie_23 Start: 21447, Stop: 21743, Start Num: 5
Candidate Starts for Aggie_23:
(1, 20940), (2, 20958), (Start: 5 @21447 has 27 MA's), (Start: 7 @21480 has 2 MA's), (14, 21582), (20, 21633),

Gene: BigMama_31 Start: 29526, Stop: 29846, Start Num: 4
Candidate Starts for BigMama_31:
(Start: 4 @29526 has 17 MA's), (Start: 6 @29538 has 1 MA's), (Start: 7 @29559 has 2 MA's), (12, 29649), (17, 29691), (18, 29706), (24, 29805), (25, 29808), (29, 29832),

Gene: Bosection6_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Bosection6_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Butterscotch_33 Start: 29510, Stop: 29830, Start Num: 4
Candidate Starts for Butterscotch_33:
(Start: 4 @29510 has 17 MA's), (Start: 6 @29522 has 1 MA's), (Start: 7 @29543 has 2 MA's), (12, 29633), (17, 29675), (18, 29690), (24, 29789), (25, 29792), (29, 29816),

Gene: Candle_33 Start: 31877, Stop: 32161, Start Num: 5
Candidate Starts for Candle_33:
(Start: 5 @31877 has 27 MA's), (Start: 6 @31889 has 1 MA's), (27, 32147), (28, 32150),

Gene: Carcharodon_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Carcharodon_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Charlie_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Charlie_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Chewbacca_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Chewbacca_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Chill_34 Start: 29516, Stop: 29836, Start Num: 4
Candidate Starts for Chill_34:
(Start: 4 @29516 has 17 MA's), (Start: 6 @29528 has 1 MA's), (Start: 7 @29549 has 2 MA's), (12, 29639), (17, 29681), (18, 29696), (24, 29795), (25, 29798), (29, 29822),

Gene: Delton_33 Start: 29522, Stop: 29842, Start Num: 4
Candidate Starts for Delton_33:
(Start: 4 @29522 has 17 MA's), (Start: 6 @29534 has 1 MA's), (Start: 7 @29555 has 2 MA's), (12, 29645), (17, 29687), (18, 29702), (24, 29801), (25, 29804), (29, 29828),

Gene: Duplicity_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Duplicity_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Erk16_33 Start: 29513, Stop: 29833, Start Num: 4
Candidate Starts for Erk16_33:
(Start: 4 @29513 has 17 MA's), (Start: 6 @29525 has 1 MA's), (Start: 7 @29546 has 2 MA's), (9, 29588), (12, 29636), (17, 29678), (18, 29693), (24, 29792), (25, 29795), (29, 29819),

Gene: Fowlmouth_27 Start: 26911, Stop: 27192, Start Num: 5
Candidate Starts for Fowlmouth_27:
(Start: 5 @26911 has 27 MA's), (Start: 7 @26944 has 2 MA's), (8, 26980), (18, 27079), (21, 27106), (22, 27124), (23, 27133), (26, 27181),

Gene: Gex_23 Start: 21442, Stop: 21738, Start Num: 5
Candidate Starts for Gex_23:
(1, 20935), (2, 20953), (Start: 5 @21442 has 27 MA's), (Start: 7 @21475 has 2 MA's), (14, 21577), (20, 21628),

Gene: Giuseppe_33 Start: 29502, Stop: 29822, Start Num: 4
Candidate Starts for Giuseppe_33:
(Start: 4 @29502 has 17 MA's), (Start: 6 @29514 has 1 MA's), (Start: 7 @29535 has 2 MA's), (12, 29625), (17, 29667), (18, 29682), (24, 29781), (25, 29784), (29, 29808),

Gene: Gumball_32 Start: 29493, Stop: 29780, Start Num: 7
Candidate Starts for Gumball_32:
(Start: 4 @29460 has 17 MA's), (Start: 6 @29472 has 1 MA's), (Start: 7 @29493 has 2 MA's), (9, 29535), (12, 29583), (17, 29625), (18, 29640), (19, 29643), (24, 29739), (25, 29742), (29, 29766),

Gene: Helpful_34 Start: 29510, Stop: 29830, Start Num: 4
Candidate Starts for Helpful_34:

(Start: 4 @29510 has 17 MA's), (Start: 6 @29522 has 1 MA's), (Start: 7 @29543 has 2 MA's), (12, 29633), (17, 29675), (18, 29690), (24, 29789), (25, 29792), (29, 29816),

Gene: JacoRen57_23 Start: 23654, Stop: 23974, Start Num: 5
Candidate Starts for JacoRen57_23:
(Start: 5 @23654 has 27 MA's), (Start: 6 @23666 has 1 MA's), (Start: 7 @23687 has 2 MA's), (10, 23735), (11, 23774),

Gene: Journey_24 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Journey_24:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: KandZ_33 Start: 29610, Stop: 29930, Start Num: 4
Candidate Starts for KandZ_33:
(Start: 4 @29610 has 17 MA's), (Start: 6 @29622 has 1 MA's), (Start: 7 @29643 has 2 MA's), (9, 29685), (12, 29733), (17, 29775), (18, 29790), (24, 29889), (25, 29892), (29, 29916),

Gene: LilSpotty_26 Start: 22414, Stop: 22710, Start Num: 5
Candidate Starts for LilSpotty_26:
(1, 21907), (2, 21925), (Start: 5 @22414 has 27 MA's), (Start: 7 @22447 has 2 MA's), (14, 22549), (20, 22600),

Gene: Magsby_23 Start: 21443, Stop: 21739, Start Num: 5
Candidate Starts for Magsby_23:
(1, 20936), (2, 20954), (Start: 5 @21443 has 27 MA's), (Start: 7 @21476 has 2 MA's), (14, 21578), (20, 21629),

Gene: Melville_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Melville_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: MontyDev_33 Start: 31524, Stop: 31808, Start Num: 5
Candidate Starts for MontyDev_33:
(Start: 5 @31524 has 27 MA's), (Start: 6 @31536 has 1 MA's), (27, 31794), (28, 31797),

Gene: Mopey_33 Start: 29510, Stop: 29830, Start Num: 4
Candidate Starts for Mopey_33:
(Start: 4 @29510 has 17 MA's), (Start: 6 @29522 has 1 MA's), (Start: 7 @29543 has 2 MA's), (12, 29633), (17, 29675), (18, 29690), (24, 29789), (25, 29792), (29, 29816),

Gene: MrMiyagi_27 Start: 26922, Stop: 27203, Start Num: 5
Candidate Starts for MrMiyagi_27:
(Start: 5 @26922 has 27 MA's), (Start: 6 @26934 has 1 MA's), (Start: 7 @26955 has 2 MA's), (8, 26991), (13, 27048), (22, 27135), (26, 27192),

Gene: MulchSalad_21 Start: 21215, Stop: 21511, Start Num: 5
Candidate Starts for MulchSalad_21:
(1, 20708), (2, 20726), (Start: 5 @21215 has 27 MA's), (Start: 7 @21248 has 2 MA's), (14, 21350), (20, 21401),

Gene: Nilo_34 Start: 31880, Stop: 32164, Start Num: 5

Candidate Starts for Nilo_34:
(Start: 5 @31880 has 27 MA's), (Start: 6 @31892 has 1 MA's), (27, 32150), (28, 32153),

Gene: Nova_33 Start: 29937, Stop: 30257, Start Num: 4
Candidate Starts for Nova_33:
(Start: 4 @29937 has 17 MA's), (Start: 6 @29949 has 1 MA's), (Start: 7 @29970 has 2 MA's), (9, 30012), (12, 30060), (17, 30102), (18, 30117), (24, 30216), (25, 30219), (29, 30243),

Gene: PBI1_33 Start: 29474, Stop: 29761, Start Num: 7
Candidate Starts for PBI1_33:
(Start: 4 @29441 has 17 MA's), (Start: 6 @29453 has 1 MA's), (Start: 7 @29474 has 2 MA's), (12, 29564), (17, 29606), (18, 29621), (24, 29720), (25, 29723), (29, 29747),

Gene: PLot_34 Start: 29513, Stop: 29833, Start Num: 4
Candidate Starts for PLot_34:
(Start: 4 @29513 has 17 MA's), (Start: 6 @29525 has 1 MA's), (Start: 7 @29546 has 2 MA's), (9, 29588), (12, 29636), (17, 29678), (18, 29693), (24, 29792), (25, 29795), (29, 29819),

Gene: Papyrus_33 Start: 31539, Stop: 31823, Start Num: 5
Candidate Starts for Papyrus_33:
(Start: 5 @31539 has 27 MA's), (Start: 6 @31551 has 1 MA's), (27, 31809), (28, 31812),

Gene: Parmesanjohn_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Parmesanjohn_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Penelope2018_33 Start: 29510, Stop: 29830, Start Num: 4
Candidate Starts for Penelope2018_33:
(Start: 4 @29510 has 17 MA's), (Start: 6 @29522 has 1 MA's), (Start: 7 @29543 has 2 MA's), (12, 29633), (17, 29675), (18, 29690), (24, 29789), (25, 29792), (29, 29816),

Gene: Philonius_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Philonius_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Pipsqueaks_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Pipsqueaks_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Prager_33 Start: 29522, Stop: 29842, Start Num: 4
Candidate Starts for Prager_33:
(Start: 4 @29522 has 17 MA's), (Start: 6 @29534 has 1 MA's), (Start: 7 @29555 has 2 MA's), (12, 29645), (17, 29687), (18, 29702), (24, 29801), (25, 29804), (29, 29828),

Gene: Riparian_33 Start: 31341, Stop: 31625, Start Num: 5
Candidate Starts for Riparian_33:
(Start: 5 @31341 has 27 MA's), (Start: 6 @31353 has 1 MA's), (27, 31611), (28, 31614),

Gene: Rope_33 Start: 31521, Stop: 31805, Start Num: 5
Candidate Starts for Rope_33:

(Start: 5 @31521 has 27 MA's), (Start: 6 @31533 has 1 MA's), (27, 31791), (28, 31794),

Gene: Schnauzer_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Schnauzer_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Send513_33 Start: 31877, Stop: 32161, Start Num: 5
Candidate Starts for Send513_33:
(Start: 5 @31877 has 27 MA's), (Start: 6 @31889 has 1 MA's), (27, 32147), (28, 32150),

Gene: Silvafighter_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Silvafighter_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Silvy_23 Start: 21447, Stop: 21743, Start Num: 5
Candidate Starts for Silvy_23:
(1, 20940), (2, 20958), (Start: 5 @21447 has 27 MA's), (Start: 7 @21480 has 2 MA's), (14, 21582), (20, 21633),

Gene: SirHarley_32 Start: 29454, Stop: 29762, Start Num: 6
Candidate Starts for SirHarley_32:
(Start: 4 @29442 has 17 MA's), (Start: 6 @29454 has 1 MA's), (Start: 7 @29475 has 2 MA's), (9, 29517), (12, 29565), (17, 29607), (18, 29622), (19, 29625), (24, 29721), (25, 29724), (29, 29748),

Gene: Smurph_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Smurph_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: StAugustine_38 Start: 36862, Stop: 37188, Start Num: 5
Candidate Starts for StAugustine_38:
(Start: 5 @36862 has 27 MA's), (Start: 7 @36895 has 2 MA's), (11, 36982), (15, 37015), (16, 37024), (17, 37027),

Gene: Tapioca_23 Start: 21446, Stop: 21742, Start Num: 5
Candidate Starts for Tapioca_23:
(1, 20939), (2, 20957), (Start: 5 @21446 has 27 MA's), (Start: 7 @21479 has 2 MA's), (14, 21581), (20, 21632),

Gene: Thoth_33 Start: 29507, Stop: 29827, Start Num: 4
Candidate Starts for Thoth_33:
(Start: 4 @29507 has 17 MA's), (Start: 6 @29519 has 1 MA's), (Start: 7 @29540 has 2 MA's), (12, 29630), (17, 29672), (18, 29687), (24, 29786), (25, 29789), (29, 29813),

Gene: Troll4_33 Start: 29511, Stop: 29831, Start Num: 4
Candidate Starts for Troll4_33:
(Start: 4 @29511 has 17 MA's), (Start: 6 @29523 has 1 MA's), (Start: 7 @29544 has 2 MA's), (12, 29634), (17, 29676), (18, 29691), (24, 29790), (25, 29793), (29, 29817),

Gene: Visconti_33 Start: 29520, Stop: 29840, Start Num: 4
Candidate Starts for Visconti_33:

(Start: 4 @29520 has 17 MA's), (Start: 6 @29532 has 1 MA's), (Start: 7 @29553 has 2 MA's), (12, 29643), (17, 29685), (18, 29700), (24, 29799), (25, 29802), (29, 29826),

Gene: WaldoWhy_34 Start: 29516, Stop: 29836, Start Num: 4
Candidate Starts for WaldoWhy_34:
(Start: 4 @29516 has 17 MA's), (Start: 6 @29528 has 1 MA's), (Start: 7 @29549 has 2 MA's), (12, 29639), (17, 29681), (18, 29696), (24, 29795), (25, 29798), (29, 29822),

Gene: Weirdo19_25 Start: 24707, Stop: 25006, Start Num: 5
Candidate Starts for Weirdo19_25:
(3, 24665), (Start: 5 @24707 has 27 MA's),

Gene: Weiss13_33 Start: 31573, Stop: 31857, Start Num: 5
Candidate Starts for Weiss13_33:
(Start: 5 @31573 has 27 MA's), (Start: 6 @31585 has 1 MA's), (27, 31843), (28, 31846),

Gene: Xerxes_23 Start: 21443, Stop: 21739, Start Num: 5
Candidate Starts for Xerxes_23:
(1, 20936), (2, 20954), (Start: 5 @21443 has 27 MA's), (Start: 7 @21476 has 2 MA's), (14, 21578), (20, 21629),

Gene: Yelo_33 Start: 31866, Stop: 32150, Start Num: 5
Candidate Starts for Yelo_33:
(Start: 5 @31866 has 27 MA's), (Start: 6 @31878 has 1 MA's), (27, 32136), (28, 32139),

Gene: Zenon_34 Start: 31885, Stop: 32169, Start Num: 5
Candidate Starts for Zenon_34:
(Start: 5 @31885 has 27 MA's), (Start: 6 @31897 has 1 MA's), (27, 32155), (28, 32158),