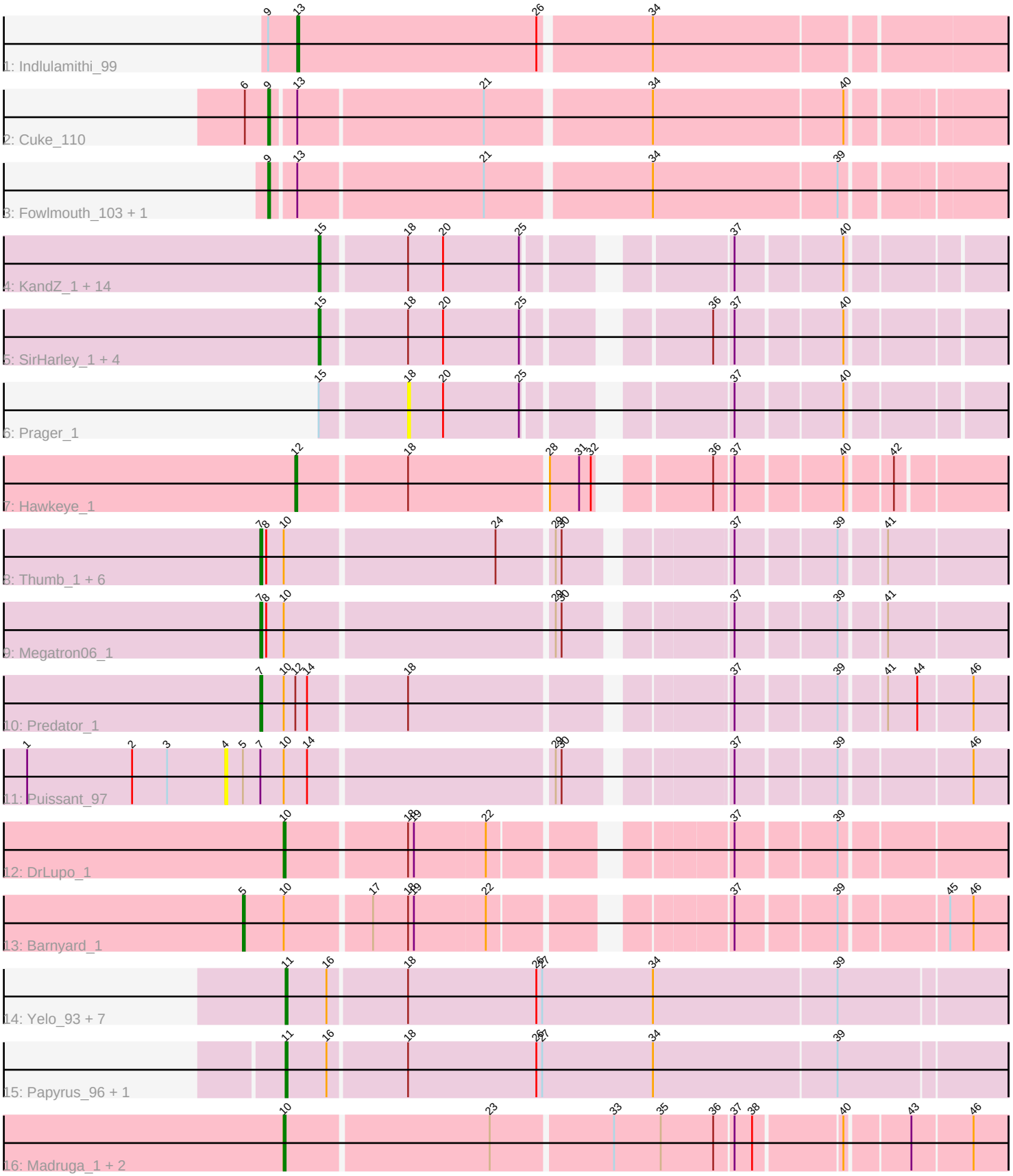
Pham 196599


1: Indlulamithi_99
2: Cuke_110
3: Fowlmouth_103 + 1
4: KandZ_1 + 14
5: SirHarley_1 + 4
6: Prager_1
7: Hawkeye_1
8: Thumb_1 + 6
9: Megatron06_1
10: Predator_1
11: Puissant_97
12: DrLupo_1
13: Barnyard_1
14: Yelo_93 + 7
15: Papyrus_96 + 1
16: Madruga_1 + 2

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 196599 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196599 has 51 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Indlulamithi_99
• Track 2 : Cuke_110
• Track 3 : Fowlmouth_103, MrMiyagi_101
• Track 4 : KandZ_1, Erk16_1, Helpful_1, Delton_1, Butterscotch_1, Penelope2018_1, PBI1_1, PLot_1, Visconti_1, Troll4_1, Adjutor_1, Chill_1, Giuseppe_1, WaldoWhy_1, BigMama_1
• Track 5 : SirHarley_1, Nova_1, Thoth_1, Gumball_1, Mopey_1
• Track 6 : Prager_1
• Track 7 : Hawkeye_1
• Track 8 : Thumb_1, Konstantine_1, Damien_1, Beckerton_1, Oaker_1, Phreeze_1, Cborch11_1
• Track 9 : Megatron06_1
• Track 10 : Predator_1
• Track 11 : Puissant_97
• Track 12 : DrLupo_1
• Track 13 : Barnyard_1
• Track 14 : Yelo_93, Send513_95, Riparian_98, Nilo_99, MontyDev_98, Weiss13_96, Rope_95, Zenon_98
• Track 15 : Papyrus_96, Candle_92
• Track 16 : Madruga_1, Patience_1, Labelle_1

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

The start number called the most often in the published annotations is 15, it was called in 20 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adjutor_1, BigMama_1, Butterscotch_1, Chill_1, Delton_1, Erk16_1, Giuseppe_1, Gumball_1, Helpful_1, KandZ_1, Mopey_1, Nova_1, PBI1_1, PLot_1, Penelope2018_1, SirHarley_1, Thoth_1, Troll4_1, Visconti_1, WaldoWhy_1,

Genes that have the "Most Annotated" start but do not call it:
• Prager_1,

Genes that do not have the "Most Annotated" start:
• Barnyard_1, Beckerton_1, Candle_92, Cborch11_1, Cuke_110, Damien_1, DrLupo_1, Fowlmouth_103, Hawkeye_1, Indlulamithi_99, Konstantine_1, Labelle_1, Madruga_1, Megatron06_1, MontyDev_98, MrMiyagi_101, Nilo_99, Oaker_1, Papyrus_96, Patience_1, Phreeze_1, Predator_1, Puissant_97, Riparian_98, Rope_95, Send513_95, Thumb_1, Weiss13_96, Yelo_93, Zenon_98,

Summary by start number:

Start 4:
• Found in 1 of 51 (2.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Puissant_97 (H1),

Start 5:
• Found in 2 of 51 (3.9%) of genes in pham
• Manual Annotations of this start: 1 of 48
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Barnyard_1 (H2),

Start 7:
• Found in 10 of 51 (19.6%) of genes in pham
• Manual Annotations of this start: 9 of 48
• Called 90.0% of time when present
• Phage (with cluster) where this start called: Beckerton_1 (H1), Cborch11_1 (H1), Damien_1 (H1), Konstantine_1 (H1), Megatron06_1 (H1), Oaker_1 (H1), Phreeze_1 (H1), Predator_1 (H1), Thumb_1 (H1),

Start 9:
• Found in 4 of 51 (7.8%) of genes in pham
• Manual Annotations of this start: 3 of 48
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Cuke_110 (AC), Fowlmouth_103 (AC), MrMiyagi_101 (AC),

Start 10:
• Found in 15 of 51 (29.4%) of genes in pham
• Manual Annotations of this start: 4 of 48
• Called 26.7% of time when present
• Phage (with cluster) where this start called: DrLupo_1 (H2), Labelle_1 (U), Madruga_1 (U), Patience_1 (U),

Start 11:
• Found in 10 of 51 (19.6%) of genes in pham
• Manual Annotations of this start: 9 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Candle_92 (R), MontyDev_98 (R), Nilo_99 (R), Papyrus_96 (R), Riparian_98 (R), Rope_95 (R), Send513_95 (R), Weiss13_96 (R), Yelo_93 (R), Zenon_98 (R),

Start 12:
• Found in 2 of 51 (3.9%) of genes in pham

• Manual Annotations of this start: 1 of 48
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Hawkeye_1 (D2),

Start 13:
• Found in 4 of 51 (7.8%) of genes in pham
• Manual Annotations of this start: 1 of 48
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Indlulamithi_99 (AC),

Start 15:
• Found in 21 of 51 (41.2%) of genes in pham
• Manual Annotations of this start: 20 of 48
• Called 95.2% of time when present
• Phage (with cluster) where this start called: Adjutor_1 (D1), BigMama_1 (D1), Butterscotch_1 (D1), Chill_1 (D1), Delton_1 (D1), Erk16_1 (D1), Giuseppe_1 (D1), Gumball_1 (D1), Helpful_1 (D1), KandZ_1 (D1), Mopey_1 (D1), Nova_1 (D1), PBI1_1 (D1), PLot_1 (D1), Penelope2018_1 (D1), SirHarley_1 (D1), Thoth_1 (D1), Troll4_1 (D1), Visconti_1 (D1), WaldoWhy_1 (D1),

Start 18:
• Found in 35 of 51 (68.6%) of genes in pham
• No Manual Annotations of this start.
• Called 2.9% of time when present
• Phage (with cluster) where this start called: Prager_1 (D1),

Summary by clusters:

There are 7 clusters represented in this pham: AC, H2, H1, R, U, D2, D1,

Info for manual annotations of cluster AC:
•Start number 9 was manually annotated 3 times for cluster AC.
•Start number 13 was manually annotated 1 time for cluster AC.

Info for manual annotations of cluster D1:
•Start number 15 was manually annotated 20 times for cluster D1.

Info for manual annotations of cluster D2:
•Start number 12 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster H1:
•Start number 7 was manually annotated 9 times for cluster H1.

Info for manual annotations of cluster H2:
•Start number 5 was manually annotated 1 time for cluster H2.
•Start number 10 was manually annotated 1 time for cluster H2.

Info for manual annotations of cluster R:
•Start number 11 was manually annotated 9 times for cluster R.

Info for manual annotations of cluster U:
•Start number 10 was manually annotated 3 times for cluster U.

Gene Information:

Gene: Adjutor_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Adjutor_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Barnyard_1 Start: 1, Stop: 351, Start Num: 5
Candidate Starts for Barnyard_1:
(Start: 5 @1 has 1 MA's), (Start: 10 @22 has 4 MA's), (17, 64), (18, 82), (19, 85), (22, 121), (37, 223), (39, 271), (45, 322), (46, 334),

Gene: Beckerton_1 Start: 1, Stop: 348, Start Num: 7
Candidate Starts for Beckerton_1:
(Start: 7 @1 has 9 MA's), (8, 4), (Start: 10 @13 has 4 MA's), (24, 118), (29, 145), (30, 148), (37, 220), (39, 268), (41, 289),

Gene: BigMama_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for BigMama_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Butterscotch_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Butterscotch_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Candle_92 Start: 69971, Stop: 70333, Start Num: 11
Candidate Starts for Candle_92:
(Start: 11 @69971 has 9 MA's), (16, 69992), (18, 70031), (26, 70097), (27, 70100), (34, 70157), (39, 70250),

Gene: Cborch11_1 Start: 1, Stop: 348, Start Num: 7
Candidate Starts for Cborch11_1:
(Start: 7 @1 has 9 MA's), (8, 4), (Start: 10 @13 has 4 MA's), (24, 118), (29, 145), (30, 148), (37, 220), (39, 268), (41, 289),

Gene: Chill_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Chill_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Cuke_110 Start: 62225, Stop: 62581, Start Num: 9
Candidate Starts for Cuke_110:
(6, 62213), (Start: 9 @62225 has 3 MA's), (Start: 13 @62237 has 1 MA's), (21, 62330), (34, 62411), (40, 62507),

Gene: Damien_1 Start: 1, Stop: 348, Start Num: 7
Candidate Starts for Damien_1:
(Start: 7 @1 has 9 MA's), (8, 4), (Start: 10 @13 has 4 MA's), (24, 118), (29, 145), (30, 148), (37, 220), (39, 268), (41, 289),

Gene: Delton_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Delton_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: DrLupo_1 Start: 1, Stop: 330, Start Num: 10
Candidate Starts for DrLupo_1:
(Start: 10 @1 has 4 MA's), (18, 61), (19, 64), (22, 100), (37, 202), (39, 250),

Gene: Erk16_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Erk16_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Fowlmouth_103 Start: 62697, Stop: 63053, Start Num: 9
Candidate Starts for Fowlmouth_103:
(Start: 9 @62697 has 3 MA's), (Start: 13 @62709 has 1 MA's), (21, 62802), (34, 62883), (39, 62976),

Gene: Giuseppe_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Giuseppe_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Gumball_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Gumball_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (36, 175), (37, 184), (40, 235),

Gene: Hawkeye_1 Start: 1, Stop: 324, Start Num: 12
Candidate Starts for Hawkeye_1:
(Start: 12 @1 has 1 MA's), (18, 55), (28, 124), (31, 139), (32, 145), (36, 190), (37, 199), (40, 250), (42, 271),

Gene: Helpful_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Helpful_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Indlulamithi_99 Start: 65931, Stop: 66281, Start Num: 13
Candidate Starts for Indlulamithi_99:
(Start: 9 @65916 has 3 MA's), (Start: 13 @65931 has 1 MA's), (26, 66054), (34, 66108),

Gene: KandZ_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for KandZ_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Konstantine_1 Start: 1, Stop: 348, Start Num: 7
Candidate Starts for Konstantine_1:
(Start: 7 @1 has 9 MA's), (8, 4), (Start: 10 @13 has 4 MA's), (24, 118), (29, 145), (30, 148), (37, 220), (39, 268), (41, 289),

Gene: Labelle_1 Start: 1, Stop: 351, Start Num: 10
Candidate Starts for Labelle_1:
(Start: 10 @1 has 4 MA's), (23, 103), (33, 163), (35, 187), (36, 214), (37, 223), (38, 232), (40, 274), (43, 304), (46, 334),

Gene: Madruga_1 Start: 1, Stop: 351, Start Num: 10
Candidate Starts for Madruga_1:
(Start: 10 @1 has 4 MA's), (23, 103), (33, 163), (35, 187), (36, 214), (37, 223), (38, 232), (40, 274), (43, 304), (46, 334),

Gene: Megatron06_1 Start: 1, Stop: 348, Start Num: 7
Candidate Starts for Megatron06_1:
(Start: 7 @1 has 9 MA's), (8, 4), (Start: 10 @13 has 4 MA's), (29, 145), (30, 148), (37, 220), (39, 268), (41, 289),

Gene: MontyDev_98 Start: 69838, Stop: 70200, Start Num: 11
Candidate Starts for MontyDev_98:
(Start: 11 @69838 has 9 MA's), (16, 69859), (18, 69898), (26, 69964), (27, 69967), (34, 70024), (39, 70117),

Gene: Mopey_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Mopey_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (36, 175), (37, 184), (40, 235),

Gene: MrMiyagi_101 Start: 62958, Stop: 63314, Start Num: 9
Candidate Starts for MrMiyagi_101:
(Start: 9 @62958 has 3 MA's), (Start: 13 @62970 has 1 MA's), (21, 63063), (34, 63144), (39, 63237),

Gene: Nilo_99 Start: 70339, Stop: 70701, Start Num: 11
Candidate Starts for Nilo_99:
(Start: 11 @70339 has 9 MA's), (16, 70360), (18, 70399), (26, 70465), (27, 70468), (34, 70525), (39, 70618),

Gene: Nova_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Nova_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (36, 175), (37, 184), (40, 235),

Gene: Oaker_1 Start: 1, Stop: 348, Start Num: 7
Candidate Starts for Oaker_1:
(Start: 7 @1 has 9 MA's), (8, 4), (Start: 10 @13 has 4 MA's), (24, 118), (29, 145), (30, 148), (37, 220), (39, 268), (41, 289),

Gene: PBI1_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for PBI1_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: PLot_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for PLot_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Papyrus_96 Start: 69269, Stop: 69631, Start Num: 11
Candidate Starts for Papyrus_96:
(Start: 11 @69269 has 9 MA's), (16, 69290), (18, 69329), (26, 69395), (27, 69398), (34, 69455), (39, 69548),

Gene: Patience_1 Start: 1, Stop: 351, Start Num: 10
Candidate Starts for Patience_1:
(Start: 10 @1 has 4 MA's), (23, 103), (33, 163), (35, 187), (36, 214), (37, 223), (38, 232), (40, 274), (43, 304), (46, 334),

Gene: Penelope2018_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Penelope2018_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Phreeze_1 Start: 1, Stop: 348, Start Num: 7
Candidate Starts for Phreeze_1:
(Start: 7 @1 has 9 MA's), (8, 4), (Start: 10 @13 has 4 MA's), (24, 118), (29, 145), (30, 148), (37, 220), (39, 268), (41, 289),

Gene: Prager_1 Start: 43, Stop: 309, Start Num: 18
Candidate Starts for Prager_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Predator_1 Start: 1, Stop: 348, Start Num: 7
Candidate Starts for Predator_1:
(Start: 7 @1 has 9 MA's), (Start: 10 @13 has 4 MA's), (Start: 12 @19 has 1 MA's), (14, 25), (18, 73), (37, 220), (39, 268), (41, 289), (44, 304), (46, 331),

Gene: Puissant_97 Start: 69332, Stop: 348, Start Num: 4
Candidate Starts for Puissant_97:
(1, 69230), (2, 69284), (3, 69302), (4, 69332), (Start: 5 @69341 has 1 MA's), (Start: 7 @69350 has 9 MA's), (Start: 10 @69362 has 4 MA's), (14, 69374), (29, 69494), (30, 69497), (37, 69569), (39, 69617), (46, 69680),

Gene: Riparian_98 Start: 69783, Stop: 70145, Start Num: 11
Candidate Starts for Riparian_98:
(Start: 11 @69783 has 9 MA's), (16, 69804), (18, 69843), (26, 69909), (27, 69912), (34, 69969), (39, 70062),

Gene: Rope_95 Start: 69591, Stop: 69953, Start Num: 11
Candidate Starts for Rope_95:
(Start: 11 @69591 has 9 MA's), (16, 69612), (18, 69651), (26, 69717), (27, 69720), (34, 69777), (39, 69870),

Gene: Send513_95 Start: 70128, Stop: 70490, Start Num: 11
Candidate Starts for Send513_95:
(Start: 11 @70128 has 9 MA's), (16, 70149), (18, 70188), (26, 70254), (27, 70257), (34, 70314), (39, 70407),

Gene: SirHarley_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for SirHarley_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (36, 175), (37, 184), (40, 235),

Gene: Thoth_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Thoth_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (36, 175), (37, 184), (40, 235),

Gene: Thumb_1 Start: 1, Stop: 348, Start Num: 7
Candidate Starts for Thumb_1:
(Start: 7 @1 has 9 MA's), (8, 4), (Start: 10 @13 has 4 MA's), (24, 118), (29, 145), (30, 148), (37, 220), (39, 268), (41, 289),

Gene: Troll4_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Troll4_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Visconti_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for Visconti_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: WaldoWhy_1 Start: 1, Stop: 309, Start Num: 15
Candidate Starts for WaldoWhy_1:
(Start: 15 @1 has 20 MA's), (18, 43), (20, 61), (25, 100), (37, 184), (40, 235),

Gene: Weiss13_96 Start: 70021, Stop: 70383, Start Num: 11
Candidate Starts for Weiss13_96:
(Start: 11 @70021 has 9 MA's), (16, 70042), (18, 70081), (26, 70147), (27, 70150), (34, 70207), (39, 70300),

Gene: Yelo_93 Start: 70021, Stop: 70383, Start Num: 11
Candidate Starts for Yelo_93:
(Start: 11 @70021 has 9 MA's), (16, 70042), (18, 70081), (26, 70147), (27, 70150), (34, 70207), (39, 70300),

Gene: Zenon_98 Start: 70314, Stop: 70676, Start Num: 11
Candidate Starts for Zenon_98:
(Start: 11 @70314 has 9 MA's), (16, 70335), (18, 70374), (26, 70440), (27, 70443), (34, 70500), (39, 70593),