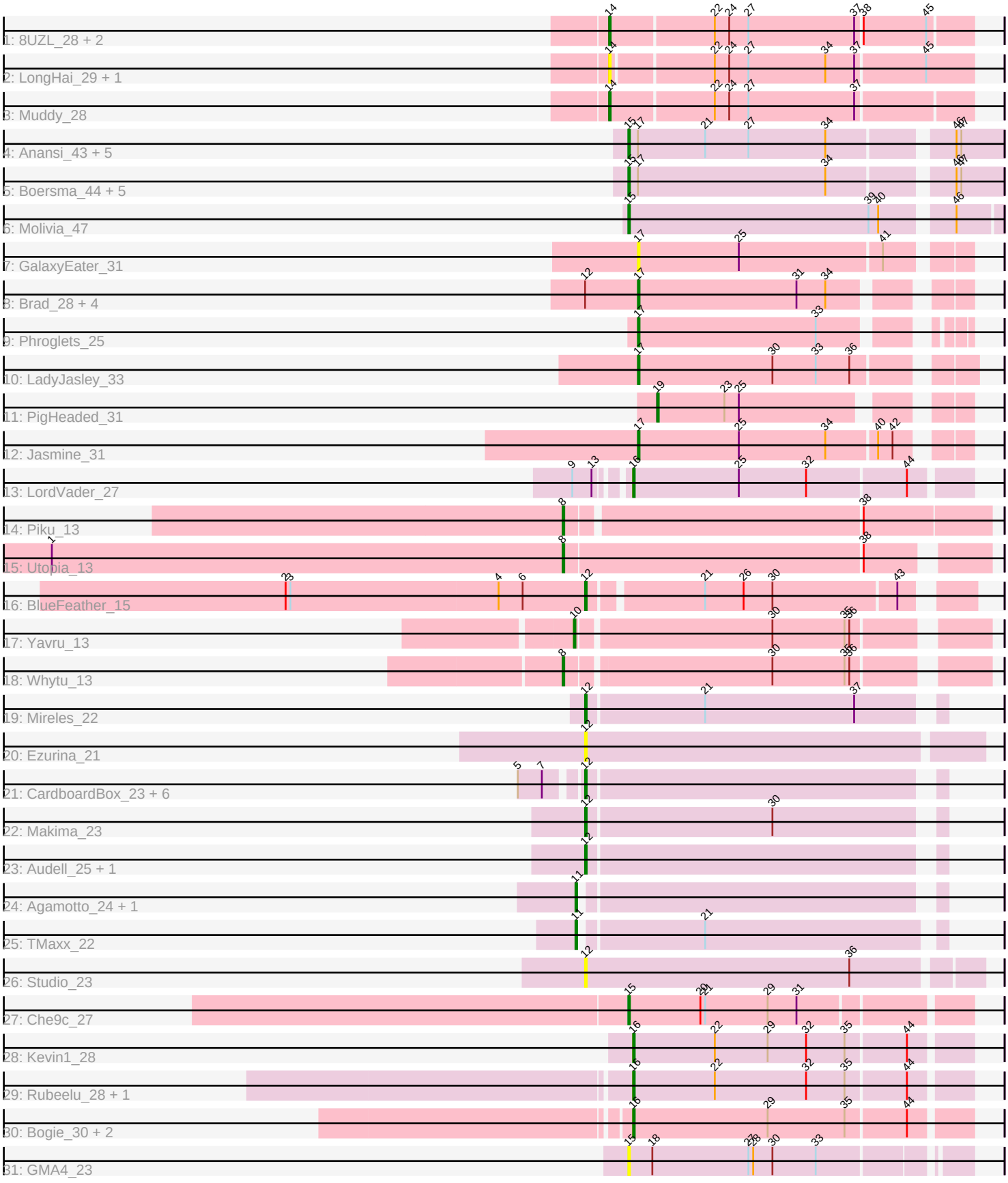
Pham 347650


1: 8UZL_28 + 2
2: LongHai_29 + 1
3: Muddy_28
4: Anansi_43 + 5
5: Boersma_44 + 5
6: Molivia_47
7: GalaxyEater_31
8: Brad_28 + 4
9: Phroglets_25
10: LadyJasley_33
11: PigHeaded_31
12: Jasmine_31
13: LordVader_27
14: Piku_13
15: Utopia_13
16: BlueFeather_15
17: Yavru_13
18: Whytu_13
19: Mireles_22
20: Ezurina_21
21: CardboardBox_23 + 6
22: Makima_23
23: Audell_25 + 1
24: Agamotto_24 + 1
25: TMaxx_22
26: Studio_23
27: Che9c_27
28: Kevin1_28
29: Rubeelu_28 + 1
30: Bogie_30 + 2
31: GMA4_23

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 347650 Report

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

Pham number 347650 has 59 members, 11 are drafts.

Phages represented in each track:
• Track 1 : 8UZL_28, FF47_28, Maco6_26
• Track 2 : LongHai_29, Salvus_29
• Track 3 : Muddy_28
• Track 4 : Anansi_43, Heylee_46, Rings_42, Gorgeous_43, SorJuana_43, Amavida_46
• Track 5 : Boersma_44, Amigo_43, Ichor_42, Thunderclap_43, Jaek_42, Yeezus_42
• Track 6 : Molivia_47
• Track 7 : GalaxyEater_31
• Track 8 : Brad_28, Adat_28, GurgleFerb_28, Nellie_28, Casserole_29
• Track 9 : Phroglets_25
• Track 10 : LadyJasley_33
• Track 11 : PigHeaded_31
• Track 12 : Jasmine_31
• Track 13 : LordVader_27
• Track 14 : Piku_13
• Track 15 : Utopia_13
• Track 16 : BlueFeather_15
• Track 17 : Yavru_13
• Track 18 : Whytu_13
• Track 19 : Mireles_22
• Track 20 : Ezurina_21
• Track 21 : CardboardBox_23, ChipsNGuac_22, Gerri43_22, Roberts_22, ChamoyPickle_23, Neuvillette_22, AnnabelLee_22
• Track 22 : Makima_23
• Track 23 : Audell_25, LastNadiia_25
• Track 24 : Agamotto_24, TripleC_25
• Track 25 : TMaxx_22
• Track 26 : Studio_23
• Track 27 : Che9c_27
• Track 28 : Kevin1_28
• Track 29 : Rubeelu_28, Butters_28
• Track 30 : Bogie_30, Brujita_31, Island3_31
• Track 31 : GMA4_23

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 14 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amavida_46, Amigo_43, Anansi_43, Boersma_44, Che9c_27, GMA4_23, Gorgeous_43, Heylee_46, Ichor_42, Jaek_42, Molivia_47, Rings_42, SorJuana_43, Thunderclap_43, Yeezus_42,

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

Genes that do not have the "Most Annotated" start:
• 8UZL_28, Adat_28, Agamotto_24, AnnabelLee_22, Audell_25, BlueFeather_15, Bogie_30, Brad_28, Brujita_31, Butters_28, CardboardBox_23, Casserole_29, ChamoyPickle_23, ChipsNGuac_22, Ezurina_21, FF47_28, GalaxyEater_31, Gerri43_22, GurgleFerb_28, Island3_31, Jasmine_31, Kevin1_28, LadyJasley_33, LastNadiia_25, LongHai_29, LordVader_27, Maco6_26, Makima_23, Mireles_22, Muddy_28, Nellie_28, Neuvillette_22, Phroglets_25, PigHeaded_31, Piku_13, Roberts_22, Rubeelu_28, Salvus_29, Studio_23, TMaxx_22, TripleC_25, Utopia_13, Whytu_13, Yavru_13,

Summary by start number:

Start 8:
• Found in 3 of 59 (5.1%) of genes in pham
• Manual Annotations of this start: 3 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Piku_13 (FE), Utopia_13 (FE), Whytu_13 (FE),

Start 10:
• Found in 1 of 59 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yavru_13 (FE),

Start 11:
• Found in 3 of 59 (5.1%) of genes in pham
• Manual Annotations of this start: 3 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Agamotto_24 (FR), TMaxx_22 (FR), TripleC_25 (FR),

Start 12:
• Found in 19 of 59 (32.2%) of genes in pham
• Manual Annotations of this start: 9 of 48
• Called 73.7% of time when present
• Phage (with cluster) where this start called: AnnabelLee_22 (FR), Audell_25 (FR), BlueFeather_15 (FE), CardboardBox_23 (FR), ChamoyPickle_23 (FR), ChipsNGuac_22 (FR), Ezurina_21 (FR), Gerri43_22 (FR), LastNadiia_25 (FR), Makima_23 (FR), Mireles_22 (FR), Neuvillette_22 (FR), Roberts_22 (FR), Studio_23 (FR),

Start 14:
• Found in 6 of 59 (10.2%) of genes in pham
• Manual Annotations of this start: 2 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 8UZL_28 (AB), FF47_28 (AB), LongHai_29 (AB), Maco6_26 (AB), Muddy_28 (AB), Salvus_29 (AB),

Start 15:
• Found in 15 of 59 (25.4%) of genes in pham
• Manual Annotations of this start: 14 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amavida_46 (AQ), Amigo_43 (AQ), Anansi_43 (AQ), Boersma_44 (AQ), Che9c_27 (I2), GMA4_23 (singleton), Gorgeous_43 (AQ), Heylee_46 (AQ), Ichor_42 (AQ), Jaek_42 (AQ), Molivia_47 (AQ), Rings_42 (AQ), SorJuana_43 (AQ), Thunderclap_43 (AQ), Yeezus_42 (AQ),

Start 16:
• Found in 7 of 59 (11.9%) of genes in pham
• Manual Annotations of this start: 7 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bogie_30 (P1), Brujita_31 (I1), Butters_28 (N), Island3_31 (I1), Kevin1_28 (N), LordVader_27 (F), Rubeelu_28 (N),

Start 17:
• Found in 21 of 59 (35.6%) of genes in pham
• Manual Annotations of this start: 8 of 48
• Called 42.9% of time when present
• Phage (with cluster) where this start called: Adat_28 (AV), Brad_28 (AV), Casserole_29 (AV), GalaxyEater_31 (AV), GurgleFerb_28 (AV), Jasmine_31 (AV), LadyJasley_33 (AV), Nellie_28 (AV), Phroglets_25 (AV),

Start 19:
• Found in 1 of 59 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PigHeaded_31 (AV),

Summary by clusters:

There are 11 clusters represented in this pham: FR, AB, F, I1, I2, singleton, N, AQ, P1, FE, AV,

Info for manual annotations of cluster AB:
•Start number 14 was manually annotated 2 times for cluster AB.

Info for manual annotations of cluster AQ:
•Start number 15 was manually annotated 13 times for cluster AQ.

Info for manual annotations of cluster AV:
•Start number 17 was manually annotated 8 times for cluster AV.
•Start number 19 was manually annotated 1 time for cluster AV.

Info for manual annotations of cluster F:
•Start number 16 was manually annotated 1 time for cluster F.

Info for manual annotations of cluster FE:
•Start number 8 was manually annotated 3 times for cluster FE.
•Start number 10 was manually annotated 1 time for cluster FE.
•Start number 12 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster FR:
•Start number 11 was manually annotated 3 times for cluster FR.
•Start number 12 was manually annotated 8 times for cluster FR.

Info for manual annotations of cluster I1:
•Start number 16 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster I2:
•Start number 15 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:
•Start number 16 was manually annotated 3 times for cluster N.

Info for manual annotations of cluster P1:
•Start number 16 was manually annotated 1 time for cluster P1.

Gene Information:

Gene: 8UZL_28 Start: 24083, Stop: 24301, Start Num: 14
Candidate Starts for 8UZL_28:
(Start: 14 @24083 has 2 MA's), (22, 24146), (24, 24155), (27, 24167), (37, 24233), (38, 24236), (45, 24275),

Gene: Adat_28 Start: 27242, Stop: 27427, Start Num: 17
Candidate Starts for Adat_28:
(Start: 12 @27209 has 9 MA's), (Start: 17 @27242 has 8 MA's), (31, 27341), (34, 27359),

Gene: Agamotto_24 Start: 18040, Stop: 18249, Start Num: 11
Candidate Starts for Agamotto_24:
(Start: 11 @18040 has 3 MA's),

Gene: Amavida_46 Start: 30744, Stop: 30965, Start Num: 15
Candidate Starts for Amavida_46:
(Start: 15 @30744 has 14 MA's), (Start: 17 @30750 has 8 MA's), (21, 30792), (27, 30819), (34, 30867), (46, 30936), (47, 30939),

Gene: Amigo_43 Start: 30618, Stop: 30839, Start Num: 15
Candidate Starts for Amigo_43:
(Start: 15 @30618 has 14 MA's), (Start: 17 @30624 has 8 MA's), (34, 30741), (46, 30810), (47, 30813),

Gene: Anansi_43 Start: 30618, Stop: 30839, Start Num: 15
Candidate Starts for Anansi_43:

(Start: 15 @30618 has 14 MA's), (Start: 17 @30624 has 8 MA's), (21, 30666), (27, 30693), (34, 30741), (46, 30810), (47, 30813),

Gene: AnnabelLee_22 Start: 15054, Stop: 15263, Start Num: 12
Candidate Starts for AnnabelLee_22:
(5, 15021), (7, 15036), (Start: 12 @15054 has 9 MA's),

Gene: Audell_25 Start: 18348, Stop: 18557, Start Num: 12
Candidate Starts for Audell_25:
(Start: 12 @18348 has 9 MA's),

Gene: BlueFeather_15 Start: 11595, Stop: 11813, Start Num: 12
Candidate Starts for BlueFeather_15:
(2, 11409), (3, 11412), (4, 11541), (6, 11556), (Start: 12 @11595 has 9 MA's), (21, 11661), (26, 11685), (30, 11703), (43, 11778),

Gene: Boersma_44 Start: 30618, Stop: 30839, Start Num: 15
Candidate Starts for Boersma_44:
(Start: 15 @30618 has 14 MA's), (Start: 17 @30624 has 8 MA's), (34, 30741), (46, 30810), (47, 30813),

Gene: Bogie_30 Start: 27068, Stop: 27271, Start Num: 16
Candidate Starts for Bogie_30:
(Start: 16 @27068 has 7 MA's), (29, 27152), (35, 27200), (44, 27236),

Gene: Brad_28 Start: 27240, Stop: 27425, Start Num: 17
Candidate Starts for Brad_28:
(Start: 12 @27207 has 9 MA's), (Start: 17 @27240 has 8 MA's), (31, 27339), (34, 27357),

Gene: Brujita_31 Start: 27423, Stop: 27626, Start Num: 16
Candidate Starts for Brujita_31:
(Start: 16 @27423 has 7 MA's), (29, 27507), (35, 27555), (44, 27591),

Gene: Butters_28 Start: 23934, Stop: 24137, Start Num: 16
Candidate Starts for Butters_28:
(Start: 16 @23934 has 7 MA's), (22, 23985), (32, 24042), (35, 24066), (44, 24102),

Gene: CardboardBox_23 Start: 15054, Stop: 15263, Start Num: 12
Candidate Starts for CardboardBox_23:
(5, 15021), (7, 15036), (Start: 12 @15054 has 9 MA's),

Gene: Casserole_29 Start: 28530, Stop: 28715, Start Num: 17
Candidate Starts for Casserole_29:
(Start: 12 @28497 has 9 MA's), (Start: 17 @28530 has 8 MA's), (31, 28629), (34, 28647),

Gene: ChamoyPickle_23 Start: 15054, Stop: 15263, Start Num: 12
Candidate Starts for ChamoyPickle_23:
(5, 15021), (7, 15036), (Start: 12 @15054 has 9 MA's),

Gene: Che9c_27 Start: 25454, Stop: 25657, Start Num: 15
Candidate Starts for Che9c_27:
(Start: 15 @25454 has 14 MA's), (20, 25499), (21, 25502), (29, 25541), (31, 25559),

Gene: ChipsNGuac_22 Start: 15054, Stop: 15263, Start Num: 12

Candidate Starts for ChipsNGuac_22:
(5, 15021), (7, 15036), (Start: 12 @15054 has 9 MA's),

Gene: Ezurina_21 Start: 15509, Stop: 15751, Start Num: 12
Candidate Starts for Ezurina_21:
(Start: 12 @15509 has 9 MA's),

Gene: FF47_28 Start: 24010, Stop: 24228, Start Num: 14
Candidate Starts for FF47_28:
(Start: 14 @24010 has 2 MA's), (22, 24073), (24, 24082), (27, 24094), (37, 24160), (38, 24163), (45, 24202),

Gene: GMA4_23 Start: 21682, Stop: 21882, Start Num: 15
Candidate Starts for GMA4_23:
(Start: 15 @21682 has 14 MA's), (18, 21697), (27, 21757), (28, 21760), (30, 21772), (33, 21799),

Gene: GalaxyEater_31 Start: 28813, Stop: 29007, Start Num: 17
Candidate Starts for GalaxyEater_31:
(Start: 17 @28813 has 8 MA's), (25, 28876), (41, 28963),

Gene: Gerri43_22 Start: 15054, Stop: 15263, Start Num: 12
Candidate Starts for Gerri43_22:
(5, 15021), (7, 15036), (Start: 12 @15054 has 9 MA's),

Gene: Gorgeous_43 Start: 30618, Stop: 30839, Start Num: 15
Candidate Starts for Gorgeous_43:
(Start: 15 @30618 has 14 MA's), (Start: 17 @30624 has 8 MA's), (21, 30666), (27, 30693), (34, 30741), (46, 30810), (47, 30813),

Gene: GurgleFerb_28 Start: 27241, Stop: 27426, Start Num: 17
Candidate Starts for GurgleFerb_28:
(Start: 12 @27208 has 9 MA's), (Start: 17 @27241 has 8 MA's), (31, 27340), (34, 27358),

Gene: Heylee_46 Start: 30744, Stop: 30965, Start Num: 15
Candidate Starts for Heylee_46:
(Start: 15 @30744 has 14 MA's), (Start: 17 @30750 has 8 MA's), (21, 30792), (27, 30819), (34, 30867), (46, 30936), (47, 30939),

Gene: Ichor_42 Start: 30618, Stop: 30839, Start Num: 15
Candidate Starts for Ichor_42:
(Start: 15 @30618 has 14 MA's), (Start: 17 @30624 has 8 MA's), (34, 30741), (46, 30810), (47, 30813),

Gene: Island3_31 Start: 27423, Stop: 27626, Start Num: 16
Candidate Starts for Island3_31:
(Start: 16 @27423 has 7 MA's), (29, 27507), (35, 27555), (44, 27591),

Gene: Jaek_42 Start: 30618, Stop: 30839, Start Num: 15
Candidate Starts for Jaek_42:
(Start: 15 @30618 has 14 MA's), (Start: 17 @30624 has 8 MA's), (34, 30741), (46, 30810), (47, 30813),

Gene: Jasmine_31 Start: 29111, Stop: 29302, Start Num: 17
Candidate Starts for Jasmine_31:
(Start: 17 @29111 has 8 MA's), (25, 29174), (34, 29228), (40, 29258), (42, 29267),

Gene: Kevin1_28 Start: 23931, Stop: 24134, Start Num: 16
Candidate Starts for Kevin1_28:
(Start: 16 @23931 has 7 MA's), (22, 23982), (29, 24015), (32, 24039), (35, 24063), (44, 24099),

Gene: LadyJasley_33 Start: 28290, Stop: 28484, Start Num: 17
Candidate Starts for LadyJasley_33:
(Start: 17 @28290 has 8 MA's), (30, 28374), (33, 28401), (36, 28422),

Gene: LastNadiia_25 Start: 17300, Stop: 17509, Start Num: 12
Candidate Starts for LastNadiia_25:
(Start: 12 @17300 has 9 MA's),

Gene: LongHai_29 Start: 24385, Stop: 24603, Start Num: 14
Candidate Starts for LongHai_29:
(Start: 14 @24385 has 2 MA's), (22, 24445), (24, 24454), (27, 24466), (34, 24514), (37, 24532), (45, 24574),

Gene: LordVader_27 Start: 23743, Stop: 23946, Start Num: 16
Candidate Starts for LordVader_27:
(9, 23716), (13, 23728), (Start: 16 @23743 has 7 MA's), (25, 23809), (32, 23851), (44, 23911),

Gene: Maco6_26 Start: 23344, Stop: 23565, Start Num: 14
Candidate Starts for Maco6_26:
(Start: 14 @23344 has 2 MA's), (22, 23407), (24, 23416), (27, 23428), (37, 23494), (38, 23497), (45, 23536),

Gene: Makima_23 Start: 16383, Stop: 16592, Start Num: 12
Candidate Starts for Makima_23:
(Start: 12 @16383 has 9 MA's), (30, 16497),

Gene: Mireles_22 Start: 14951, Stop: 15160, Start Num: 12
Candidate Starts for Mireles_22:
(Start: 12 @14951 has 9 MA's), (21, 15023), (37, 15116),

Gene: Molivia_47 Start: 29639, Stop: 29860, Start Num: 15
Candidate Starts for Molivia_47:
(Start: 15 @29639 has 14 MA's), (39, 29789), (40, 29795), (46, 29834),

Gene: Muddy_28 Start: 24291, Stop: 24509, Start Num: 14
Candidate Starts for Muddy_28:
(Start: 14 @24291 has 2 MA's), (22, 24354), (24, 24363), (27, 24375), (37, 24441),

Gene: Nellie_28 Start: 27242, Stop: 27427, Start Num: 17
Candidate Starts for Nellie_28:
(Start: 12 @27209 has 9 MA's), (Start: 17 @27242 has 8 MA's), (31, 27341), (34, 27359),

Gene: Neuvillette_22 Start: 15054, Stop: 15263, Start Num: 12
Candidate Starts for Neuvillette_22:
(5, 15021), (7, 15036), (Start: 12 @15054 has 9 MA's),

Gene: Phroglets_25 Start: 27257, Stop: 27436, Start Num: 17
Candidate Starts for Phroglets_25:

(Start: 17 @27257 has 8 MA's), (33, 27368),

Gene: PigHeaded_31 Start: 27415, Stop: 27585, Start Num: 19
Candidate Starts for PigHeaded_31:
(Start: 19 @27415 has 1 MA's), (23, 27457), (25, 27466),

Gene: Piku_13 Start: 11763, Stop: 12017, Start Num: 8
Candidate Starts for Piku_13:
(Start: 8 @11763 has 3 MA's), (38, 11940),

Gene: Rings_42 Start: 30740, Stop: 30961, Start Num: 15
Candidate Starts for Rings_42:
(Start: 15 @30740 has 14 MA's), (Start: 17 @30746 has 8 MA's), (21, 30788), (27, 30815), (34, 30863), (46, 30932), (47, 30935),

Gene: Roberts_22 Start: 15054, Stop: 15263, Start Num: 12
Candidate Starts for Roberts_22:
(5, 15021), (7, 15036), (Start: 12 @15054 has 9 MA's),

Gene: Rubeelu_28 Start: 23934, Stop: 24137, Start Num: 16
Candidate Starts for Rubeelu_28:
(Start: 16 @23934 has 7 MA's), (22, 23985), (32, 24042), (35, 24066), (44, 24102),

Gene: Salvus_29 Start: 24385, Stop: 24603, Start Num: 14
Candidate Starts for Salvus_29:
(Start: 14 @24385 has 2 MA's), (22, 24445), (24, 24454), (27, 24466), (34, 24514), (37, 24532), (45, 24574),

Gene: SorJuana_43 Start: 30618, Stop: 30839, Start Num: 15
Candidate Starts for SorJuana_43:
(Start: 15 @30618 has 14 MA's), (Start: 17 @30624 has 8 MA's), (21, 30666), (27, 30693), (34, 30741), (46, 30810), (47, 30813),

Gene: Studio_23 Start: 15667, Stop: 15906, Start Num: 12
Candidate Starts for Studio_23:
(Start: 12 @15667 has 9 MA's), (36, 15832),

Gene: TMaxx_22 Start: 14862, Stop: 15074, Start Num: 11
Candidate Starts for TMaxx_22:
(Start: 11 @14862 has 3 MA's), (21, 14934),

Gene: Thunderclap_43 Start: 30647, Stop: 30868, Start Num: 15
Candidate Starts for Thunderclap_43:
(Start: 15 @30647 has 14 MA's), (Start: 17 @30653 has 8 MA's), (34, 30770), (46, 30839), (47, 30842),

Gene: TripleC_25 Start: 18356, Stop: 18565, Start Num: 11
Candidate Starts for TripleC_25:
(Start: 11 @18356 has 3 MA's),

Gene: Utopia_13 Start: 11737, Stop: 11985, Start Num: 8
Candidate Starts for Utopia_13:
(1, 11419), (Start: 8 @11737 has 3 MA's), (38, 11920),

Gene: Whytu_13 Start: 11841, Stop: 12083, Start Num: 8
Candidate Starts for Whytu_13:
(Start: 8 @11841 has 3 MA's), (30, 11964), (35, 12009), (36, 12012),

Gene: Yavru_13 Start: 11742, Stop: 11978, Start Num: 10
Candidate Starts for Yavru_13:
(Start: 10 @11742 has 1 MA's), (30, 11859), (35, 11904), (36, 11907),

Gene: Yeezus_42 Start: 30617, Stop: 30838, Start Num: 15
Candidate Starts for Yeezus_42:
(Start: 15 @30617 has 14 MA's), (Start: 17 @30623 has 8 MA's), (34, 30740), (46, 30809), (47, 30812),