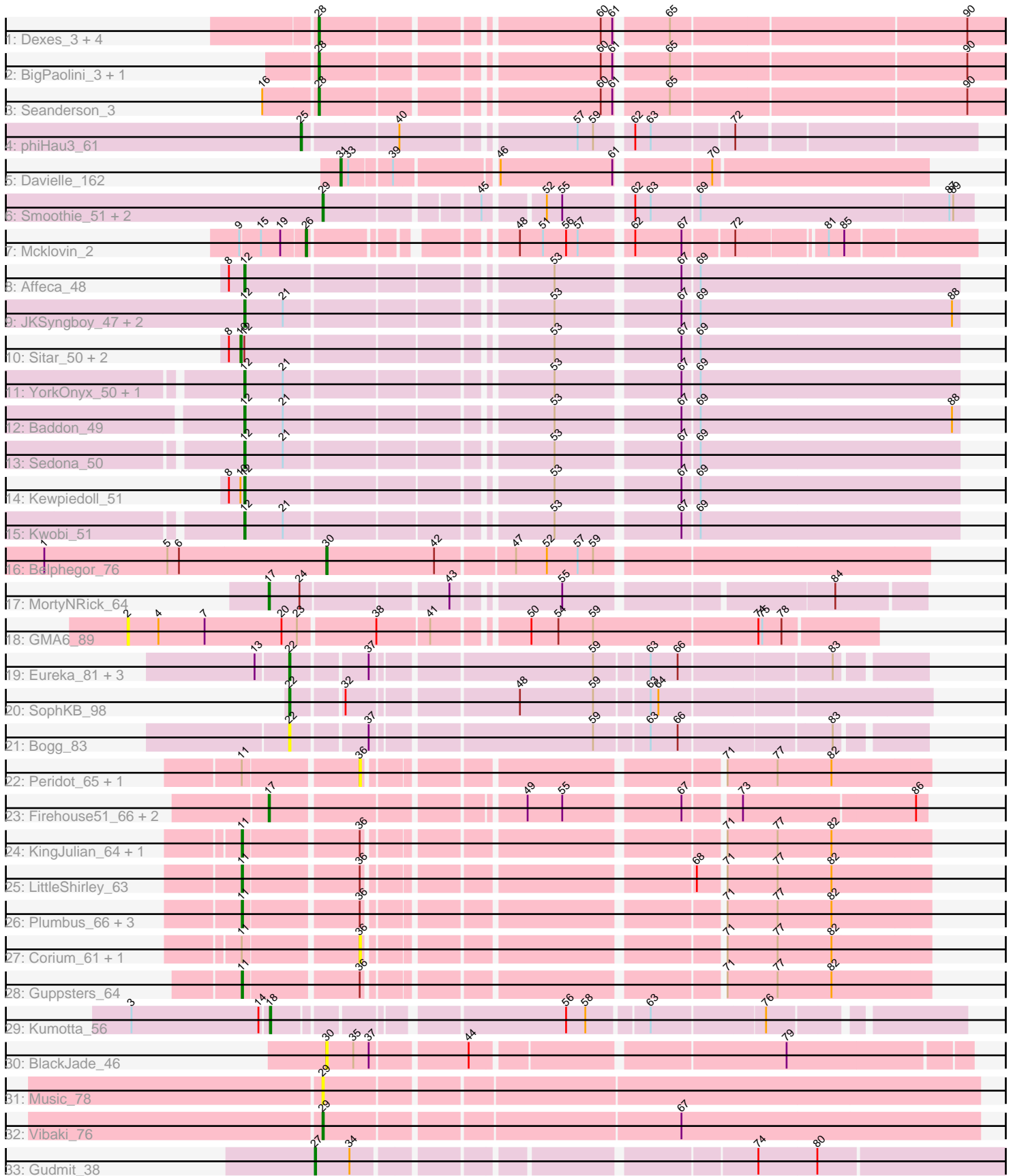


Pham 311647



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 311647 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311647 has 56 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Dexes_3, Whitspit_3, Smeagol_2, Gyzlar_3, Smairt_2
- Track 2 : BigPaolini_3, Licorice_4
- Track 3 : Seanderson_3
- Track 4 : phiHau3_61
- Track 5 : Davielle_162
- Track 6 : Smoothie_51, Engineer_51, Lozinak_50
- Track 7 : Mcklovin_2
- Track 8 : Affeca_48
- Track 9 : JKSyngboy_47, Saronaya_49, Gustavo_49
- Track 10 : Sitar_50, Angelicage_48, Lennon_50
- Track 11 : YorkOnyx_50, Bibwit_48
- Track 12 : Baddon_49
- Track 13 : Sedona_50
- Track 14 : Kewpiedoll_51
- Track 15 : Kwobi_51
- Track 16 : Belphegor_76
- Track 17 : MortyNRick_64
- Track 18 : GMA6_89
- Track 19 : Eureka_81, BaboJay_80, Goku_81, Manda_84
- Track 20 : SophKB_98
- Track 21 : Bogg_83
- Track 22 : Peridot_65, Ms6_60
- Track 23 : Firehouse51_66, EleanorGeorge_65, Mutaforma13_69
- Track 24 : KingJulian_64, Byougenkin_63
- Track 25 : LittleShirley_63
- Track 26 : Plumbus_66, Slim_65, Emmaloid_65, Totinger_63
- Track 27 : Corium_61, PatoPoderoso_61
- Track 28 : Guppsters_64
- Track 29 : Kumotta_56
- Track 30 : BlackJade_46
- Track 31 : Music_78
- Track 32 : Vibaki_76
- Track 33 : Gudmit_38

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

The start number called the most often in the published annotations is 12, it was called in 10 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Affeca_48, Baddon_49, Bibwit_48, Gustavo_49, JKSyngboy_47, Kewpiedoll_51, Kwobi_51, Saronaya_49, Sedona_50, YorkOnyx_50,

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

- Angelicage_48, Lennon_50, Sitar_50,

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

- BaboJay_80, Belphegor_76, BigPaolini_3, BlackJade_46, Bogg_83, Byougenkin_63, Corium_61, Davielle_162, Dexes_3, EleanorGeorge_65, Emmaloid_65, Engineer_51, Eureka_81, Firehouse51_66, GMA6_89, Goku_81, Gudmit_38, Guppsters_64, Gyzlar_3, KingJulian_64, Kumotta_56, Licorice_4, LittleShirley_63, Lozinak_50, Manda_84, Mcklovin_2, MortyNRick_64, Ms6_60, Music_78, Mutaforma13_69, PatoPoderoso_61, Peridot_65, Plumbus_66, Seanderson_3, Slim_65, Smairt_2, Smeagol_2, Smoothie_51, SophKB_98, Totinger_63, Vibaki_76, Whitspit_3, phiHau3_61,

Summary by start number:

Start 2:

- Found in 1 of 56 (1.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6_89 (DQ),

Start 10:

- Found in 4 of 56 (7.1%) of genes in pham
- Manual Annotations of this start: 3 of 47
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Angelicage_48 (DE1), Lennon_50 (DE1), Sitar_50 (DE1),

Start 11:

- Found in 12 of 56 (21.4%) of genes in pham
- Manual Annotations of this start: 8 of 47
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Byougenkin_63 (F1), Emmaloid_65 (F1), Guppsters_64 (F1), KingJulian_64 (F1), LittleShirley_63 (F1), Plumbus_66 (F1), Slim_65 (F1), Totinger_63 (F1),

Start 12:

- Found in 13 of 56 (23.2%) of genes in pham
- Manual Annotations of this start: 10 of 47
- Called 76.9% of time when present
- Phage (with cluster) where this start called: Affeca_48 (DE1), Baddon_49 (DE1), Bibwit_48 (DE1), Gustavo_49 (DE1), JKSyngboy_47 (DE1), Kewpiedoll_51 (DE1), Kwobi_51 (DE1), Saronaya_49 (DE1), Sedona_50 (DE1), YorkOnyx_50 (DE1),

Start 17:

- Found in 4 of 56 (7.1%) of genes in pham
- Manual Annotations of this start: 4 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EleanorGeorge_65 (F1), Firehouse51_66 (F1), MortyNRick_64 (DN), Mutaforma13_69 (F1),

Start 18:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumotta_56 (FB),

Start 22:

- Found in 6 of 56 (10.7%) of genes in pham
- Manual Annotations of this start: 5 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaboJay_80 (E), Bogg_83 (E), Eureka_81 (E), Goku_81 (E), Manda_84 (E), SophKB_98 (E),

Start 25:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: phiHau3_61 (BD4),

Start 26:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mcklovin_2 (CZ4),

Start 27:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gudmit_38 (singleton),

Start 28:

- Found in 8 of 56 (14.3%) of genes in pham
- Manual Annotations of this start: 7 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigPaolini_3 (A1), Dexes_3 (A1), Gyzlar_3 (A1), Licorice_4 (A1), Seanderson_3 (A1), Smairt_2 (A1), Smeagol_2 (A1), Whitspit_3 (A1),

Start 29:

- Found in 5 of 56 (8.9%) of genes in pham
- Manual Annotations of this start: 4 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Engineer_51 (CQ1), Lozinak_50 (CQ1), Music_78 (FL), Smoothie_51 (CQ1), Vibaki_76 (FL),

Start 30:

- Found in 2 of 56 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belphegor_76 (DE2), BlackJade_46 (FL),

Start 31:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Davielle_162 (BE1),

Start 36:

- Found in 12 of 56 (21.4%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Corium_61 (F1), Ms6_60 (F1), PatoPoderoso_61 (F1), Peridot_65 (F1),

Summary by clusters:

There are 14 clusters represented in this pham: DN, F1, singleton, E, DE1, DE2, CZ4, A1, BD4, FB, CQ1, BE1, FL, DQ,

Info for manual annotations of cluster A1:

- Start number 28 was manually annotated 7 times for cluster A1.

Info for manual annotations of cluster BD4:

- Start number 25 was manually annotated 1 time for cluster BD4.

Info for manual annotations of cluster BE1:

- Start number 31 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster CQ1:

- Start number 29 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster CZ4:

- Start number 26 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DE1:

- Start number 10 was manually annotated 3 times for cluster DE1.
- Start number 12 was manually annotated 10 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 30 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster DN:

- Start number 17 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster E:

- Start number 22 was manually annotated 5 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 11 was manually annotated 8 times for cluster F1.
- Start number 17 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster FB:

- Start number 18 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FL:

- Start number 29 was manually annotated 1 time for cluster FL.

Gene Information:

Gene: Affeca_48 Start: 42397, Stop: 42915, Start Num: 12

Candidate Starts for Affeca_48:

(8, 42385), (Start: 12 @42397 has 10 MA's), (53, 42613), (67, 42703), (69, 42715),

Gene: Angelicage_48 Start: 42812, Stop: 43333, Start Num: 10

Candidate Starts for Angelicage_48:

(8, 42803), (Start: 10 @42812 has 3 MA's), (Start: 12 @42815 has 10 MA's), (53, 43031), (67, 43121), (69, 43133),

Gene: BaboJay_80 Start: 51126, Stop: 51572, Start Num: 22

Candidate Starts for BaboJay_80:

(13, 51102), (Start: 22 @51126 has 5 MA's), (37, 51180), (59, 51339), (63, 51378), (66, 51399), (83, 51510),

Gene: Baddon_49 Start: 43084, Stop: 43602, Start Num: 12

Candidate Starts for Baddon_49:

(Start: 12 @43084 has 10 MA's), (21, 43114), (53, 43300), (67, 43390), (69, 43402), (88, 43597),

Gene: Belphegor_76 Start: 56290, Stop: 56739, Start Num: 30

Candidate Starts for Belphegor_76:

(1, 56071), (5, 56167), (6, 56176), (Start: 30 @56290 has 1 MA's), (42, 56374), (47, 56431), (52, 56455), (57, 56479), (59, 56491),

Gene: Bibwit_48 Start: 41643, Stop: 42161, Start Num: 12

Candidate Starts for Bibwit_48:

(Start: 12 @41643 has 10 MA's), (21, 41673), (53, 41859), (67, 41949), (69, 41961),

Gene: BigPaolini_3 Start: 1128, Stop: 1637, Start Num: 28

Candidate Starts for BigPaolini_3:

(Start: 28 @1128 has 7 MA's), (60, 1323), (61, 1332), (65, 1368), (90, 1590),

Gene: BlackJade_46 Start: 31841, Stop: 32305, Start Num: 30

Candidate Starts for BlackJade_46:

(Start: 30 @31841 has 1 MA's), (35, 31862), (37, 31874), (44, 31943), (79, 32168),

Gene: Bogg_83 Start: 50869, Stop: 51315, Start Num: 22

Candidate Starts for Bogg_83:

(Start: 22 @50869 has 5 MA's), (37, 50923), (59, 51082), (63, 51121), (66, 51142), (83, 51253),

Gene: Byougenkin_63 Start: 41134, Stop: 41616, Start Num: 11
Candidate Starts for Byougenkin_63:
(Start: 11 @41134 has 8 MA's), (36, 41218), (71, 41461), (77, 41500), (82, 41542),

Gene: Corium_61 Start: 40510, Stop: 40908, Start Num: 36
Candidate Starts for Corium_61:
(Start: 11 @40426 has 8 MA's), (36, 40510), (71, 40753), (77, 40792), (82, 40834),

Gene: Davielle_162 Start: 91589, Stop: 92011, Start Num: 31
Candidate Starts for Davielle_162:
(Start: 31 @91589 has 1 MA's), (33, 91595), (39, 91625), (46, 91694), (61, 91781), (70, 91847),

Gene: Dexes_3 Start: 1113, Stop: 1622, Start Num: 28
Candidate Starts for Dexes_3:
(Start: 28 @1113 has 7 MA's), (60, 1308), (61, 1317), (65, 1353), (90, 1575),

Gene: EleanorGeorge_65 Start: 42284, Stop: 42745, Start Num: 17
Candidate Starts for EleanorGeorge_65:
(Start: 17 @42284 has 4 MA's), (49, 42458), (55, 42485), (67, 42569), (73, 42608), (86, 42737),

Gene: Emmaloid_65 Start: 42008, Stop: 42490, Start Num: 11
Candidate Starts for Emmaloid_65:
(Start: 11 @42008 has 8 MA's), (36, 42092), (71, 42335), (77, 42374), (82, 42416),

Gene: Engineer_51 Start: 31923, Stop: 32384, Start Num: 29
Candidate Starts for Engineer_51:
(Start: 29 @31923 has 4 MA's), (45, 32031), (52, 32070), (55, 32082), (62, 32130), (63, 32142), (69, 32178), (87, 32367), (89, 32370),

Gene: Eureka_81 Start: 51417, Stop: 51863, Start Num: 22
Candidate Starts for Eureka_81:
(13, 51393), (Start: 22 @51417 has 5 MA's), (37, 51471), (59, 51630), (63, 51669), (66, 51690), (83, 51801),

Gene: Firehouse51_66 Start: 45330, Stop: 45791, Start Num: 17
Candidate Starts for Firehouse51_66:
(Start: 17 @45330 has 4 MA's), (49, 45504), (55, 45531), (67, 45615), (73, 45654), (86, 45783),

Gene: GMA6_89 Start: 67162, Stop: 67716, Start Num: 2
Candidate Starts for GMA6_89:
(2, 67162), (4, 67186), (7, 67222), (20, 67282), (23, 67294), (38, 67351), (41, 67390), (50, 67453), (54, 67474), (59, 67501), (74, 67627), (75, 67630), (78, 67645),

Gene: Goku_81 Start: 51146, Stop: 51592, Start Num: 22
Candidate Starts for Goku_81:
(13, 51122), (Start: 22 @51146 has 5 MA's), (37, 51200), (59, 51359), (63, 51398), (66, 51419), (83, 51530),

Gene: Gudmit_38 Start: 27363, Stop: 27896, Start Num: 27
Candidate Starts for Gudmit_38:
(Start: 27 @27363 has 1 MA's), (34, 27390), (74, 27666), (80, 27711),

Gene: Guppsters_64 Start: 40923, Stop: 41405, Start Num: 11

Candidate Starts for Guppsters_64:

(Start: 11 @40923 has 8 MA's), (36, 41007), (71, 41250), (77, 41289), (82, 41331),

Gene: Gustavo_49 Start: 42016, Stop: 42534, Start Num: 12

Candidate Starts for Gustavo_49:

(Start: 12 @42016 has 10 MA's), (21, 42046), (53, 42232), (67, 42322), (69, 42334), (88, 42529),

Gene: Gyzlar_3 Start: 1073, Stop: 1582, Start Num: 28

Candidate Starts for Gyzlar_3:

(Start: 28 @1073 has 7 MA's), (60, 1268), (61, 1277), (65, 1313), (90, 1535),

Gene: JKSyngboy_47 Start: 42615, Stop: 43133, Start Num: 12

Candidate Starts for JKSyngboy_47:

(Start: 12 @42615 has 10 MA's), (21, 42645), (53, 42831), (67, 42921), (69, 42933), (88, 43128),

Gene: Kewpiedoll_51 Start: 43059, Stop: 43577, Start Num: 12

Candidate Starts for Kewpiedoll_51:

(8, 43047), (Start: 10 @43056 has 3 MA's), (Start: 12 @43059 has 10 MA's), (53, 43275), (67, 43365), (69, 43377),

Gene: KingJulian_64 Start: 40426, Stop: 40908, Start Num: 11

Candidate Starts for KingJulian_64:

(Start: 11 @40426 has 8 MA's), (36, 40510), (71, 40753), (77, 40792), (82, 40834),

Gene: Kumotta_56 Start: 32485, Stop: 32964, Start Num: 18

Candidate Starts for Kumotta_56:

(3, 32380), (14, 32479), (Start: 18 @32485 has 1 MA's), (56, 32686), (58, 32701), (63, 32743), (76, 32827),

Gene: Kwobi_51 Start: 42725, Stop: 43243, Start Num: 12

Candidate Starts for Kwobi_51:

(Start: 12 @42725 has 10 MA's), (21, 42755), (53, 42941), (67, 43031), (69, 43043),

Gene: Lennon_50 Start: 43707, Stop: 44228, Start Num: 10

Candidate Starts for Lennon_50:

(8, 43698), (Start: 10 @43707 has 3 MA's), (Start: 12 @43710 has 10 MA's), (53, 43926), (67, 44016), (69, 44028),

Gene: Licorice_4 Start: 1283, Stop: 1792, Start Num: 28

Candidate Starts for Licorice_4:

(Start: 28 @1283 has 7 MA's), (60, 1478), (61, 1487), (65, 1523), (90, 1745),

Gene: LittleShirley_63 Start: 41739, Stop: 42221, Start Num: 11

Candidate Starts for LittleShirley_63:

(Start: 11 @41739 has 8 MA's), (36, 41823), (68, 42048), (71, 42066), (77, 42105), (82, 42147),

Gene: Lozinak_50 Start: 31978, Stop: 32439, Start Num: 29

Candidate Starts for Lozinak_50:

(Start: 29 @31978 has 4 MA's), (45, 32086), (52, 32125), (55, 32137), (62, 32185), (63, 32197), (69, 32233), (87, 32422), (89, 32425),

Gene: Manda_84 Start: 52535, Stop: 52981, Start Num: 22

Candidate Starts for Manda_84:

(13, 52511), (Start: 22 @52535 has 5 MA's), (37, 52589), (59, 52748), (63, 52787), (66, 52808), (83, 52919),

Gene: Mcklovin_2 Start: 532, Stop: 981, Start Num: 26

Candidate Starts for Mcklovin_2:

(9, 484), (15, 499), (19, 514), (Start: 26 @532 has 1 MA's), (48, 658), (51, 676), (56, 694), (57, 703), (62, 739), (67, 775), (72, 811), (81, 874), (85, 886),

Gene: MortyNRick_64 Start: 42082, Stop: 42537, Start Num: 17

Candidate Starts for MortyNRick_64:

(Start: 17 @42082 has 4 MA's), (24, 42106), (43, 42211), (55, 42283), (84, 42475),

Gene: Ms6_60 Start: 36767, Stop: 37165, Start Num: 36

Candidate Starts for Ms6_60:

(Start: 11 @36683 has 8 MA's), (36, 36767), (71, 37010), (77, 37049), (82, 37091),

Gene: Music_78 Start: 47190, Stop: 47681, Start Num: 29

Candidate Starts for Music_78:

(Start: 29 @47190 has 4 MA's),

Gene: Mutaforma13_69 Start: 44640, Stop: 45101, Start Num: 17

Candidate Starts for Mutaforma13_69:

(Start: 17 @44640 has 4 MA's), (49, 44814), (55, 44841), (67, 44925), (73, 44964), (86, 45093),

Gene: PatoPoderoso_61 Start: 40510, Stop: 40908, Start Num: 36

Candidate Starts for PatoPoderoso_61:

(Start: 11 @40426 has 8 MA's), (36, 40510), (71, 40753), (77, 40792), (82, 40834),

Gene: Peridot_65 Start: 40742, Stop: 41140, Start Num: 36

Candidate Starts for Peridot_65:

(Start: 11 @40658 has 8 MA's), (36, 40742), (71, 40985), (77, 41024), (82, 41066),

Gene: Plumbus_66 Start: 41519, Stop: 42001, Start Num: 11

Candidate Starts for Plumbus_66:

(Start: 11 @41519 has 8 MA's), (36, 41603), (71, 41846), (77, 41885), (82, 41927),

Gene: Saronaya_49 Start: 42016, Stop: 42534, Start Num: 12

Candidate Starts for Saronaya_49:

(Start: 12 @42016 has 10 MA's), (21, 42046), (53, 42232), (67, 42322), (69, 42334), (88, 42529),

Gene: Seanderson_3 Start: 1096, Stop: 1605, Start Num: 28

Candidate Starts for Seanderson_3:

(16, 1057), (Start: 28 @1096 has 7 MA's), (60, 1291), (61, 1300), (65, 1336), (90, 1558),

Gene: Sedona_50 Start: 43310, Stop: 43828, Start Num: 12

Candidate Starts for Sedona_50:

(Start: 12 @43310 has 10 MA's), (21, 43340), (53, 43526), (67, 43616), (69, 43628),

Gene: Sitar_50 Start: 43707, Stop: 44228, Start Num: 10

Candidate Starts for Sitar_50:

(8, 43698), (Start: 10 @43707 has 3 MA's), (Start: 12 @43710 has 10 MA's), (53, 43926), (67, 44016), (69, 44028),

Gene: Slim_65 Start: 41999, Stop: 42481, Start Num: 11
Candidate Starts for Slim_65:
(Start: 11 @41999 has 8 MA's), (36, 42083), (71, 42326), (77, 42365), (82, 42407),

Gene: Smairt_2 Start: 926, Stop: 1435, Start Num: 28
Candidate Starts for Smairt_2:
(Start: 28 @926 has 7 MA's), (60, 1121), (61, 1130), (65, 1166), (90, 1388),

Gene: Smeagol_2 Start: 927, Stop: 1436, Start Num: 28
Candidate Starts for Smeagol_2:
(Start: 28 @927 has 7 MA's), (60, 1122), (61, 1131), (65, 1167), (90, 1389),

Gene: Smoothie_51 Start: 31978, Stop: 32439, Start Num: 29
Candidate Starts for Smoothie_51:
(Start: 29 @31978 has 4 MA's), (45, 32086), (52, 32125), (55, 32137), (62, 32185), (63, 32197), (69, 32233), (87, 32422), (89, 32425),

Gene: SophKB_98 Start: 59438, Stop: 59899, Start Num: 22
Candidate Starts for SophKB_98:
(Start: 22 @59438 has 5 MA's), (32, 59474), (48, 59594), (59, 59651), (63, 59690), (64, 59696),

Gene: Totinger_63 Start: 40465, Stop: 40947, Start Num: 11
Candidate Starts for Totinger_63:
(Start: 11 @40465 has 8 MA's), (36, 40549), (71, 40792), (77, 40831), (82, 40873),

Gene: Vibaki_76 Start: 46752, Stop: 47243, Start Num: 29
Candidate Starts for Vibaki_76:
(Start: 29 @46752 has 4 MA's), (67, 47013),

Gene: Whitspit_3 Start: 1078, Stop: 1587, Start Num: 28
Candidate Starts for Whitspit_3:
(Start: 28 @1078 has 7 MA's), (60, 1273), (61, 1282), (65, 1318), (90, 1540),

Gene: YorkOnyx_50 Start: 42214, Stop: 42732, Start Num: 12
Candidate Starts for YorkOnyx_50:
(Start: 12 @42214 has 10 MA's), (21, 42244), (53, 42430), (67, 42520), (69, 42532),

Gene: phiHau3_61 Start: 41644, Stop: 41168, Start Num: 25
Candidate Starts for phiHau3_61:
(Start: 25 @41644 has 1 MA's), (40, 41575), (57, 41452), (59, 41440), (62, 41416), (63, 41404), (72, 41344),