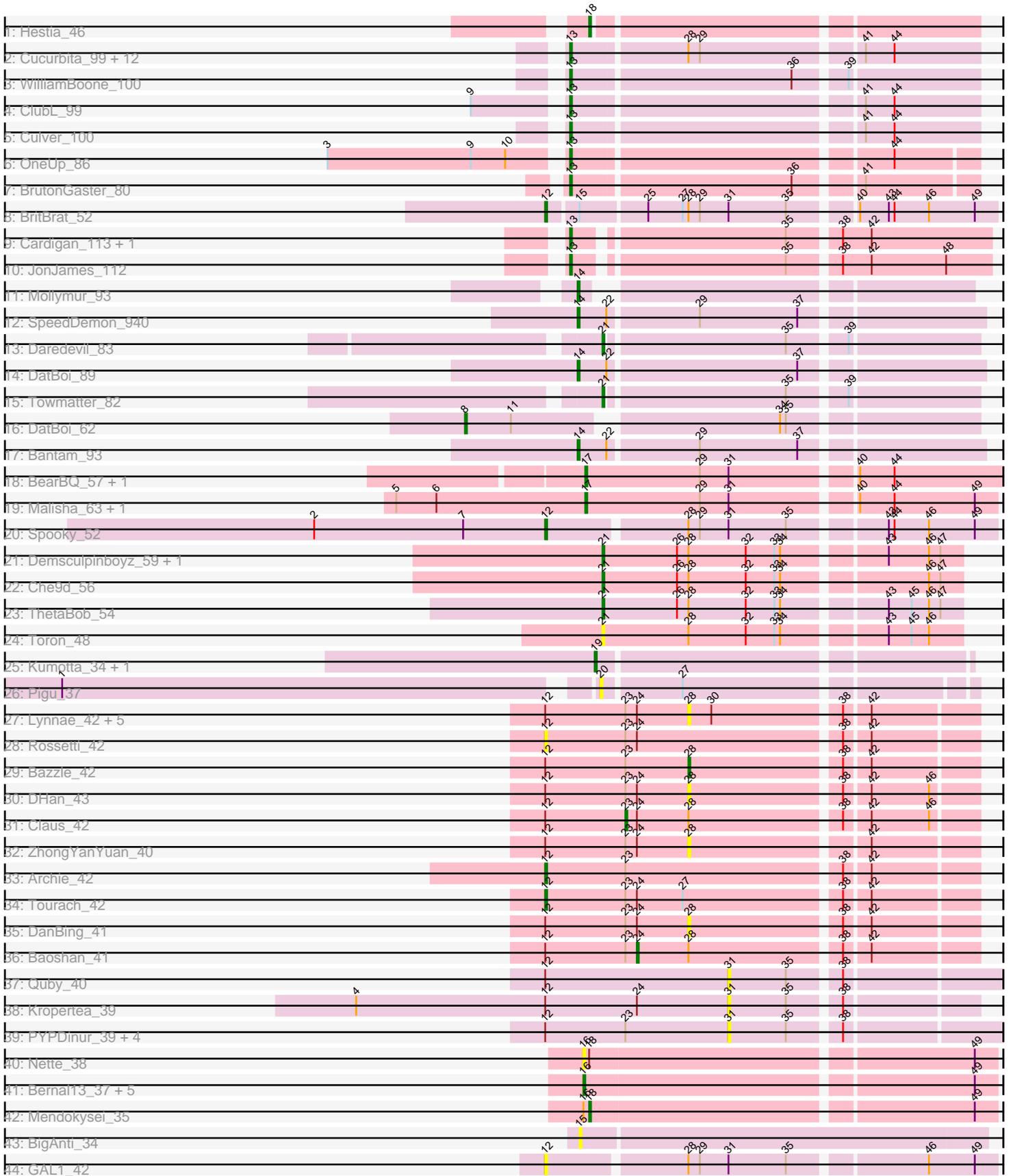


Pham 291114



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 291114 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291114 has 75 members, 24 are drafts.

Phages represented in each track:

- Track 1 : Hestia_46
- Track 2 : Cucurbita_99, Toniann_100, Aphelion_99, Miskis_92, Abscondus_97, Geeche_97, Bachita_100, Engineer_99, Smoothie_99, Norvs_100, PhinkBoden_97, Lozinak_98, Dusty_96
- Track 3 : WilliamBoone_100
- Track 4 : ClubL_99
- Track 5 : Culver_100
- Track 6 : OneUp_86
- Track 7 : BrutonGaster_80
- Track 8 : BritBrat_52
- Track 9 : Cardigan_113, Yvonnetastic_109
- Track 10 : JonJames_112
- Track 11 : Mollymur_93
- Track 12 : SpeedDemon_940
- Track 13 : Daredevil_83
- Track 14 : DatBoi_89
- Track 15 : Towmatter_82
- Track 16 : DatBoi_62
- Track 17 : Bantam_93
- Track 18 : BearBQ_57, MortyNRick_55
- Track 19 : Malisha_63, Squiddly_59
- Track 20 : Spooky_52
- Track 21 : Demsculpinboyz_59, Yoshi_61
- Track 22 : Che9d_56
- Track 23 : ThetaBob_54
- Track 24 : Toron_48
- Track 25 : Kumotta_34, MargaretKali_34
- Track 26 : Pigu_37
- Track 27 : Lynnae_42, Soap141_42, Sarshaun_42, SoJulia_43, OverPar_43, Hafay_42
- Track 28 : Rossetti_42
- Track 29 : Bazzle_42
- Track 30 : DHan_43
- Track 31 : Claus_42
- Track 32 : ZhongYanYuan_40
- Track 33 : Archie_42
- Track 34 : Tourach_42

- Track 35 : DanBing_41
- Track 36 : Baoshan_41
- Track 37 : Quby_40
- Track 38 : Kropertea_39
- Track 39 : PYPDinur_39, ChutneyChips_39, FarmResident_40, BrainDrainer_40, Douzhi_39
- Track 40 : Nette_38
- Track 41 : Bernal13_37, Nairb_36, Ibrahim_37, RonRayGun_37, ZenTime222_36, Whitty_37
- Track 42 : Mendokysei_35
- Track 43 : BigAnti_34
- Track 44 : GAL1_42

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

The start number called the most often in the published annotations is 13, it was called in 19 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus_97, Aphelion_99, Bachita_100, BrutonGaster_80, Cardigan_113, ClubL_99, Cucurbita_99, Culver_100, Dusty_96, Engineer_99, Geeche_97, JonJames_112, Lozinak_98, Miskis_92, Norvs_100, OneUp_86, PhinkBoden_97, Smoothie_99, Toniann_100, WilliamBoone_100, Yvonnetastic_109,

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

-

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

- Archie_42, Bantam_93, Baoshan_41, Bazzle_42, BearBQ_57, Bernal13_37, BigAnti_34, BrainDrainer_40, BritBrat_52, Che9d_56, ChutneyChips_39, Claus_42, DHan_43, DanBing_41, Daredevil_83, DatBoi_62, DatBoi_89, Demsculpinboyz_59, Douzhi_39, FarmResident_40, GAL1_42, Hafay_42, Hestia_46, Ibrahim_37, Kropertea_39, Kumotta_34, Lynnae_42, Malisha_63, MargaretKali_34, Mendokysei_35, Mollymur_93, MortyNRick_55, Nairb_36, Nette_38, OverPar_43, PYPDinur_39, Pigu_37, Quby_40, RonRayGun_37, Rossetti_42, Sarshaun_42, SoJulia_43, Soap141_42, SpeedDemon_940, Spooky_52, Squiddly_59, ThetaBob_54, Toron_48, Tourach_42, Towmatter_82, Whitty_37, Yoshi_61, ZenTime222_36, ZhongYanYuan_40,

Summary by start number:

Start 8:

- Found in 1 of 75 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DatBoi_62 (DL),

Start 12:

- Found in 25 of 75 (33.3%) of genes in pham
- Manual Annotations of this start: 4 of 51

- Called 24.0% of time when present
- Phage (with cluster) where this start called: Archie_42 (L2), BritBrat_52 (CY2), GAL1_42 (singleton), Rossetti_42 (L2), Spooky_52 (DN2), Tourach_42 (L2),

Start 13:

- Found in 21 of 75 (28.0%) of genes in pham
- Manual Annotations of this start: 19 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus_97 (CQ1), Aphelion_99 (CQ1), Bachita_100 (CQ1), BrutonGaster_80 (CQ2), Cardigan_113 (DD), ClubL_99 (CQ1), Cucurbita_99 (CQ1), Culver_100 (CQ1), Dusty_96 (CQ1), Engineer_99 (CQ1), Geeche_97 (CQ1), JonJames_112 (DD), Lozinak_98 (CQ1), Miskis_92 (CQ1), Norvs_100 (CQ1), OneUp_86 (CQ2), PhinkBoden_97 (CQ1), Smoothie_99 (CQ1), Toniann_100 (CQ1), WilliamBoone_100 (CQ1), Yvonnestic_109 (DD),

Start 14:

- Found in 4 of 75 (5.3%) of genes in pham
- Manual Annotations of this start: 4 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam_93 (DL), DatBoi_89 (DL), Mollymur_93 (DL), SpeedDemon_940 (DL),

Start 15:

- Found in 2 of 75 (2.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BigAnti_34 (singleton),

Start 16:

- Found in 8 of 75 (10.7%) of genes in pham
- Manual Annotations of this start: 6 of 51
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Bernal13_37 (T), Ibrahim_37 (T), Nairb_36 (T), Nette_38 (T), RonRayGun_37 (T), Whitty_37 (T), ZenTime222_36 (T),

Start 17:

- Found in 4 of 75 (5.3%) of genes in pham
- Manual Annotations of this start: 4 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BearBQ_57 (DN), Malisha_63 (DN), MortyNRick_55 (DN), Squiddly_59 (DN2),

Start 18:

- Found in 3 of 75 (4.0%) of genes in pham
- Manual Annotations of this start: 2 of 51
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Hestia_46 (AY), Mendokysei_35 (T),

Start 19:

- Found in 2 of 75 (2.7%) of genes in pham
- Manual Annotations of this start: 2 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumotta_34 (FB), MargaretKali_34 (FB),

Start 20:

- Found in 1 of 75 (1.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pigu_37 (FB),

Start 21:

- Found in 7 of 75 (9.3%) of genes in pham
- Manual Annotations of this start: 6 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Che9d_56 (F2), Daredevil_83 (DL), Demsculpinboyz_59 (F2), ThetaBob_54 (F4), Toron_48 (F6), Towmatter_82 (DL), Yoshi_61 (F2),

Start 23:

- Found in 20 of 75 (26.7%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Claus_42 (L2),

Start 24:

- Found in 14 of 75 (18.7%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Baoshan_41 (L2),

Start 28:

- Found in 33 of 75 (44.0%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 30.3% of time when present
- Phage (with cluster) where this start called: Bazzle_42 (L2), DHan_43 (L2), DanBing_41 (L2), Hafay_42 (L2), Lynnae_42 (L2), OverPar_43 (L2), Sarshaun_42 (L2), SoJulia_43 (L2), Soap141_42 (L2), ZhongYanYuan_40 (L2),

Start 31:

- Found in 14 of 75 (18.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BrainDrainer_40 (L4), ChutneyChips_39 (L4), Douzhi_39 (L4), FarmResident_40 (L4), Kropertea_39 (L4), PYPDinur_39 (L4), Quby_40 (L4),

Summary by clusters:

There are 16 clusters represented in this pham: DN, CY2, DL, F2, F6, F4, FB, singleton, L4, L2, T, DN2, AY, CQ2, CQ1, DD,

Info for manual annotations of cluster AY:

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

Info for manual annotations of cluster CQ1:

- Start number 13 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 13 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CY2:

- Start number 12 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DD:

- Start number 13 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 8 was manually annotated 1 time for cluster DL.
- Start number 14 was manually annotated 4 times for cluster DL.
- Start number 21 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DN:

- Start number 17 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN2:

- Start number 12 was manually annotated 1 time for cluster DN2.
- Start number 17 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster F2:

- Start number 21 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F4:

- Start number 21 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster FB:

- Start number 19 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster L2:

- Start number 12 was manually annotated 2 times for cluster L2.
- Start number 23 was manually annotated 1 time for cluster L2.
- Start number 24 was manually annotated 1 time for cluster L2.
- Start number 28 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster T:

- Start number 16 was manually annotated 6 times for cluster T.
- Start number 18 was manually annotated 1 time for cluster T.

Gene Information:

Gene: Abscondus_97 Start: 58989, Stop: 59189, Start Num: 13

Candidate Starts for Abscondus_97:

(Start: 13 @58989 has 19 MA's), (Start: 28 @59046 has 1 MA's), (29, 59052), (41, 59130), (44, 59145),

Gene: Aphelion_99 Start: 60542, Stop: 60742, Start Num: 13

Candidate Starts for Aphelion_99:

(Start: 13 @60542 has 19 MA's), (Start: 28 @60599 has 1 MA's), (29, 60605), (41, 60683), (44, 60698),

Gene: Archie_42 Start: 34898, Stop: 35113, Start Num: 12

Candidate Starts for Archie_42:

(Start: 12 @34898 has 4 MA's), (Start: 23 @34940 has 1 MA's), (38, 35048), (42, 35060),

Gene: Bachita_100 Start: 60200, Stop: 60400, Start Num: 13

Candidate Starts for Bachita_100:

(Start: 13 @60200 has 19 MA's), (Start: 28 @60257 has 1 MA's), (29, 60263), (41, 60341), (44, 60356),

Gene: Bantam_93 Start: 62206, Stop: 62006, Start Num: 14

Candidate Starts for Bantam_93:

(Start: 14 @62206 has 4 MA's), (22, 62191), (29, 62146), (37, 62095),

Gene: Baoshan_41 Start: 34603, Stop: 34770, Start Num: 24

Candidate Starts for Baoshan_41:

(Start: 12 @34555 has 4 MA's), (Start: 23 @34597 has 1 MA's), (Start: 24 @34603 has 1 MA's), (Start: 28 @34630 has 1 MA's), (38, 34705), (42, 34717),

Gene: Bazzle_42 Start: 35005, Stop: 35145, Start Num: 28

Candidate Starts for Bazzle_42:

(Start: 12 @34930 has 4 MA's), (Start: 23 @34972 has 1 MA's), (Start: 28 @35005 has 1 MA's), (38, 35080), (42, 35092),

Gene: BearBQ_57 Start: 39707, Stop: 39916, Start Num: 17

Candidate Starts for BearBQ_57:

(Start: 17 @39707 has 4 MA's), (29, 39767), (31, 39782), (40, 39842), (44, 39860),

Gene: Bernal13_37 Start: 30311, Stop: 30517, Start Num: 16

Candidate Starts for Bernal13_37:

(Start: 16 @30311 has 6 MA's), (49, 30506),

Gene: BigAnti_34 Start: 36676, Stop: 36885, Start Num: 15

Candidate Starts for BigAnti_34:

(15, 36676),

Gene: BrainDrainer_40 Start: 33711, Stop: 33842, Start Num: 31

Candidate Starts for BrainDrainer_40:

(Start: 12 @33615 has 4 MA's), (Start: 23 @33657 has 1 MA's), (31, 33711), (35, 33741), (38, 33765),

Gene: BritBrat_52 Start: 37915, Stop: 38136, Start Num: 12

Candidate Starts for BritBrat_52:

(Start: 12 @37915 has 4 MA's), (15, 37930), (25, 37963), (27, 37981), (Start: 28 @37984 has 1 MA's), (29, 37990), (31, 38005), (35, 38035), (40, 38065), (43, 38080), (44, 38083), (46, 38101), (49, 38125),

Gene: BrutonGaster_80 Start: 54552, Stop: 54749, Start Num: 13

Candidate Starts for BrutonGaster_80:

(Start: 13 @54552 has 19 MA's), (36, 54663), (41, 54693),

Gene: Cardigan_113 Start: 64662, Stop: 64865, Start Num: 13

Candidate Starts for Cardigan_113:

(Start: 13 @64662 has 19 MA's), (35, 64764), (38, 64788), (42, 64803),

Gene: Che9d_56 Start: 35970, Stop: 36149, Start Num: 21

Candidate Starts for Che9d_56:

(Start: 21 @35970 has 6 MA's), (26, 36009), (Start: 28 @36015 has 1 MA's), (32, 36045), (33, 36060), (34, 36063), (46, 36132), (47, 36138),

Gene: ChutneyChips_39 Start: 33708, Stop: 33839, Start Num: 31

Candidate Starts for ChutneyChips_39:

(Start: 12 @33612 has 4 MA's), (Start: 23 @33654 has 1 MA's), (31, 33708), (35, 33738), (38, 33762),

Gene: Claus_42 Start: 34755, Stop: 34928, Start Num: 23

Candidate Starts for Claus_42:

(Start: 12 @34713 has 4 MA's), (Start: 23 @34755 has 1 MA's), (Start: 24 @34761 has 1 MA's), (Start: 28 @34788 has 1 MA's), (38, 34863), (42, 34875), (46, 34905),

Gene: ClubL_99 Start: 59132, Stop: 59332, Start Num: 13

Candidate Starts for ClubL_99:

(9, 59090), (Start: 13 @59132 has 19 MA's), (41, 59273), (44, 59288),

Gene: Cucurbita_99 Start: 60707, Stop: 60907, Start Num: 13

Candidate Starts for Cucurbita_99:

(Start: 13 @60707 has 19 MA's), (Start: 28 @60764 has 1 MA's), (29, 60770), (41, 60848), (44, 60863),

Gene: Culver_100 Start: 59032, Stop: 59232, Start Num: 13

Candidate Starts for Culver_100:

(Start: 13 @59032 has 19 MA's), (41, 59173), (44, 59188),

Gene: DHan_43 Start: 34729, Stop: 34869, Start Num: 28

Candidate Starts for DHan_43:

(Start: 12 @34654 has 4 MA's), (Start: 23 @34696 has 1 MA's), (Start: 24 @34702 has 1 MA's), (Start: 28 @34729 has 1 MA's), (38, 34804), (42, 34816), (46, 34846),

Gene: DanBing_41 Start: 34621, Stop: 34761, Start Num: 28

Candidate Starts for DanBing_41:

(Start: 12 @34546 has 4 MA's), (Start: 23 @34588 has 1 MA's), (Start: 24 @34594 has 1 MA's), (Start: 28 @34621 has 1 MA's), (38, 34696), (42, 34708),

Gene: Daredevil_83 Start: 57872, Stop: 57690, Start Num: 21

Candidate Starts for Daredevil_83:

(Start: 21 @57872 has 6 MA's), (35, 57782), (39, 57755),

Gene: DatBoi_89 Start: 61354, Stop: 61154, Start Num: 14

Candidate Starts for DatBoi_89:

(Start: 14 @61354 has 4 MA's), (22, 61339), (37, 61243),

Gene: DatBoi_62 Start: 46946, Stop: 47191, Start Num: 8

Candidate Starts for DatBoi_62:

(Start: 8 @46946 has 1 MA's), (11, 46970), (34, 47096), (35, 47099),

Gene: Demsculpinboyz_59 Start: 36079, Stop: 36258, Start Num: 21

Candidate Starts for Demsculpinboyz_59:

(Start: 21 @36079 has 6 MA's), (26, 36118), (Start: 28 @36124 has 1 MA's), (32, 36154), (33, 36169), (34, 36172), (43, 36220), (46, 36241), (47, 36247),

Gene: Douzhi_39 Start: 33572, Stop: 33703, Start Num: 31
Candidate Starts for Douzhi_39:
(Start: 12 @33476 has 4 MA's), (Start: 23 @33518 has 1 MA's), (31, 33572), (35, 33602), (38, 33626),

Gene: Dusty_96 Start: 59048, Stop: 59248, Start Num: 13
Candidate Starts for Dusty_96:
(Start: 13 @59048 has 19 MA's), (Start: 28 @59105 has 1 MA's), (29, 59111), (41, 59189), (44, 59204),

Gene: Engineer_99 Start: 60173, Stop: 60373, Start Num: 13
Candidate Starts for Engineer_99:
(Start: 13 @60173 has 19 MA's), (Start: 28 @60230 has 1 MA's), (29, 60236), (41, 60314), (44, 60329),

Gene: FarmResident_40 Start: 33510, Stop: 33641, Start Num: 31
Candidate Starts for FarmResident_40:
(Start: 12 @33414 has 4 MA's), (Start: 23 @33456 has 1 MA's), (31, 33510), (35, 33540), (38, 33564),

Gene: GAL1_42 Start: 33753, Stop: 33974, Start Num: 12
Candidate Starts for GAL1_42:
(Start: 12 @33753 has 4 MA's), (Start: 28 @33822 has 1 MA's), (29, 33828), (31, 33843), (35, 33873),
(46, 33939), (49, 33963),

Gene: Geeche_97 Start: 59271, Stop: 59471, Start Num: 13
Candidate Starts for Geeche_97:
(Start: 13 @59271 has 19 MA's), (Start: 28 @59328 has 1 MA's), (29, 59334), (41, 59412), (44, 59427),

Gene: Hafay_42 Start: 34803, Stop: 34943, Start Num: 28
Candidate Starts for Hafay_42:
(Start: 12 @34728 has 4 MA's), (Start: 23 @34770 has 1 MA's), (Start: 24 @34776 has 1 MA's), (Start:
28 @34803 has 1 MA's), (30, 34815), (38, 34878), (42, 34890),

Gene: Hestia_46 Start: 29789, Stop: 29977, Start Num: 18
Candidate Starts for Hestia_46:
(Start: 18 @29789 has 2 MA's),

Gene: Ibrahim_37 Start: 30757, Stop: 30963, Start Num: 16
Candidate Starts for Ibrahim_37:
(Start: 16 @30757 has 6 MA's), (49, 30952),

Gene: JonJames_112 Start: 65173, Stop: 65376, Start Num: 13
Candidate Starts for JonJames_112:
(Start: 13 @65173 has 19 MA's), (35, 65275), (38, 65299), (42, 65314), (48, 65353),

Gene: Kropertea_39 Start: 33623, Stop: 33742, Start Num: 31
Candidate Starts for Kropertea_39:
(4, 33428), (Start: 12 @33527 has 4 MA's), (Start: 24 @33575 has 1 MA's), (31, 33623), (35, 33653),
(38, 33677),

Gene: Kumotta_34 Start: 26417, Stop: 26599, Start Num: 19
Candidate Starts for Kumotta_34:
(Start: 19 @26417 has 2 MA's),

Gene: Lozinak_98 Start: 60011, Stop: 60211, Start Num: 13
Candidate Starts for Lozinak_98:

(Start: 13 @60011 has 19 MA's), (Start: 28 @60068 has 1 MA's), (29, 60074), (41, 60152), (44, 60167),

Gene: Lynnae_42 Start: 34758, Stop: 34898, Start Num: 28

Candidate Starts for Lynnae_42:

(Start: 12 @34683 has 4 MA's), (Start: 23 @34725 has 1 MA's), (Start: 24 @34731 has 1 MA's), (Start: 28 @34758 has 1 MA's), (30, 34770), (38, 34833), (42, 34845),

Gene: Malisha_63 Start: 40533, Stop: 40739, Start Num: 17

Candidate Starts for Malisha_63:

(5, 40434), (6, 40455), (Start: 17 @40533 has 4 MA's), (29, 40593), (31, 40608), (40, 40668), (44, 40686), (49, 40728),

Gene: MargaretKali_34 Start: 26052, Stop: 26234, Start Num: 19

Candidate Starts for MargaretKali_34:

(Start: 19 @26052 has 2 MA's),

Gene: Mendokysei_35 Start: 29852, Stop: 30055, Start Num: 18

Candidate Starts for Mendokysei_35:

(Start: 16 @29849 has 6 MA's), (Start: 18 @29852 has 2 MA's), (49, 30044),

Gene: Miskis_92 Start: 58711, Stop: 58911, Start Num: 13

Candidate Starts for Miskis_92:

(Start: 13 @58711 has 19 MA's), (Start: 28 @58768 has 1 MA's), (29, 58774), (41, 58852), (44, 58867),

Gene: Mollymur_93 Start: 63027, Stop: 62845, Start Num: 14

Candidate Starts for Mollymur_93:

(Start: 14 @63027 has 4 MA's),

Gene: MortyNRick_55 Start: 39746, Stop: 39955, Start Num: 17

Candidate Starts for MortyNRick_55:

(Start: 17 @39746 has 4 MA's), (29, 39806), (31, 39821), (40, 39881), (44, 39899),

Gene: Nairb_36 Start: 30311, Stop: 30517, Start Num: 16

Candidate Starts for Nairb_36:

(Start: 16 @30311 has 6 MA's), (49, 30506),

Gene: Nette_38 Start: 29858, Stop: 30064, Start Num: 16

Candidate Starts for Nette_38:

(Start: 16 @29858 has 6 MA's), (Start: 18 @29861 has 2 MA's), (49, 30053),

Gene: Norvs_100 Start: 60040, Stop: 60240, Start Num: 13

Candidate Starts for Norvs_100:

(Start: 13 @60040 has 19 MA's), (Start: 28 @60097 has 1 MA's), (29, 60103), (41, 60181), (44, 60196),

Gene: OneUp_86 Start: 56418, Stop: 56615, Start Num: 13

Candidate Starts for OneUp_86:

(3, 56301), (9, 56376), (10, 56394), (Start: 13 @56418 has 19 MA's), (44, 56574),

Gene: OverPar_43 Start: 34801, Stop: 34941, Start Num: 28

Candidate Starts for OverPar_43:

(Start: 12 @34726 has 4 MA's), (Start: 23 @34768 has 1 MA's), (Start: 24 @34774 has 1 MA's), (Start: 28 @34801 has 1 MA's), (30, 34813), (38, 34876), (42, 34888),

Gene: PYPDinur_39 Start: 33572, Stop: 33703, Start Num: 31
Candidate Starts for PYPDinur_39:
(Start: 12 @33476 has 4 MA's), (Start: 23 @33518 has 1 MA's), (31, 33572), (35, 33602), (38, 33626),

Gene: PhinkBoden_97 Start: 59801, Stop: 60001, Start Num: 13
Candidate Starts for PhinkBoden_97:
(Start: 13 @59801 has 19 MA's), (Start: 28 @59858 has 1 MA's), (29, 59864), (41, 59942), (44, 59957),

Gene: Pigu_37 Start: 25613, Stop: 25792, Start Num: 20
Candidate Starts for Pigu_37:
(1, 25346), (20, 25613), (27, 25652),

Gene: Quby_40 Start: 33466, Stop: 33597, Start Num: 31
Candidate Starts for Quby_40:
(Start: 12 @33370 has 4 MA's), (31, 33466), (35, 33496), (38, 33520),

Gene: RonRayGun_37 Start: 30757, Stop: 30963, Start Num: 16
Candidate Starts for RonRayGun_37:
(Start: 16 @30757 has 6 MA's), (49, 30952),

Gene: Rossetti_42 Start: 34961, Stop: 35176, Start Num: 12
Candidate Starts for Rossetti_42:
(Start: 12 @34961 has 4 MA's), (Start: 23 @35003 has 1 MA's), (Start: 24 @35009 has 1 MA's), (38, 35111), (42, 35123),

Gene: Sarshaun_42 Start: 34803, Stop: 34943, Start Num: 28
Candidate Starts for Sarshaun_42:
(Start: 12 @34728 has 4 MA's), (Start: 23 @34770 has 1 MA's), (Start: 24 @34776 has 1 MA's), (Start: 28 @34803 has 1 MA's), (30, 34815), (38, 34878), (42, 34890),

Gene: Smoothie_99 Start: 60011, Stop: 60211, Start Num: 13
Candidate Starts for Smoothie_99:
(Start: 13 @60011 has 19 MA's), (Start: 28 @60068 has 1 MA's), (29, 60074), (41, 60152), (44, 60167),

Gene: SoJulia_43 Start: 35029, Stop: 35169, Start Num: 28
Candidate Starts for SoJulia_43:
(Start: 12 @34954 has 4 MA's), (Start: 23 @34996 has 1 MA's), (Start: 24 @35002 has 1 MA's), (Start: 28 @35029 has 1 MA's), (30, 35041), (38, 35104), (42, 35116),

Gene: Soap141_42 Start: 34803, Stop: 34943, Start Num: 28
Candidate Starts for Soap141_42:
(Start: 12 @34728 has 4 MA's), (Start: 23 @34770 has 1 MA's), (Start: 24 @34776 has 1 MA's), (Start: 28 @34803 has 1 MA's), (30, 34815), (38, 34878), (42, 34890),

Gene: SpeedDemon_940 Start: 64127, Stop: 63927, Start Num: 14
Candidate Starts for SpeedDemon_940:
(Start: 14 @64127 has 4 MA's), (22, 64112), (29, 64067), (37, 64016),

Gene: Spooky_52 Start: 37230, Stop: 37451, Start Num: 12
Candidate Starts for Spooky_52:
(2, 37110), (7, 37188), (Start: 12 @37230 has 4 MA's), (Start: 28 @37299 has 1 MA's), (29, 37305), (31, 37320), (35, 37350), (43, 37395), (44, 37398), (46, 37416), (49, 37440),

Gene: Squiddly_59 Start: 40046, Stop: 40252, Start Num: 17
Candidate Starts for Squiddly_59:
(5, 39947), (6, 39968), (Start: 17 @40046 has 4 MA's), (29, 40106), (31, 40121), (40, 40181), (44, 40199), (49, 40241),

Gene: ThetaBob_54 Start: 36886, Stop: 37065, Start Num: 21
Candidate Starts for ThetaBob_54:
(Start: 21 @36886 has 6 MA's), (26, 36925), (Start: 28 @36931 has 1 MA's), (32, 36961), (33, 36976), (34, 36979), (43, 37027), (45, 37039), (46, 37048), (47, 37054),

Gene: Toniann_100 Start: 59980, Stop: 60180, Start Num: 13
Candidate Starts for Toniann_100:
(Start: 13 @59980 has 19 MA's), (Start: 28 @60037 has 1 MA's), (29, 60043), (41, 60121), (44, 60136),

Gene: Toron_48 Start: 36637, Stop: 36816, Start Num: 21
Candidate Starts for Toron_48:
(Start: 21 @36637 has 6 MA's), (Start: 28 @36682 has 1 MA's), (32, 36712), (33, 36727), (34, 36730), (43, 36778), (45, 36790), (46, 36799),

Gene: Tourach_42 Start: 34709, Stop: 34924, Start Num: 12
Candidate Starts for Tourach_42:
(Start: 12 @34709 has 4 MA's), (Start: 23 @34751 has 1 MA's), (Start: 24 @34757 has 1 MA's), (27, 34781), (38, 34859), (42, 34871),

Gene: Towmatter_82 Start: 57951, Stop: 57769, Start Num: 21
Candidate Starts for Towmatter_82:
(Start: 21 @57951 has 6 MA's), (35, 57861), (39, 57834),

Gene: Whitty_37 Start: 30311, Stop: 30517, Start Num: 16
Candidate Starts for Whitty_37:
(Start: 16 @30311 has 6 MA's), (49, 30506),

Gene: WilliamBoone_100 Start: 58743, Stop: 58943, Start Num: 13
Candidate Starts for WilliamBoone_100:
(Start: 13 @58743 has 19 MA's), (36, 58854), (39, 58878),

Gene: Yoshi_61 Start: 38120, Stop: 38299, Start Num: 21
Candidate Starts for Yoshi_61:
(Start: 21 @38120 has 6 MA's), (26, 38159), (Start: 28 @38165 has 1 MA's), (32, 38195), (33, 38210), (34, 38213), (43, 38261), (46, 38282), (47, 38288),

Gene: Yvonnetastic_109 Start: 62358, Stop: 62561, Start Num: 13
Candidate Starts for Yvonnetastic_109:
(Start: 13 @62358 has 19 MA's), (35, 62460), (38, 62484), (42, 62499),

Gene: ZenTime222_36 Start: 30311, Stop: 30517, Start Num: 16
Candidate Starts for ZenTime222_36:
(Start: 16 @30311 has 6 MA's), (49, 30506),

Gene: ZhongYanYuan_40 Start: 34630, Stop: 34770, Start Num: 28
Candidate Starts for ZhongYanYuan_40:
(Start: 12 @34555 has 4 MA's), (Start: 23 @34597 has 1 MA's), (Start: 24 @34603 has 1 MA's), (Start: 28 @34630 has 1 MA's), (42, 34717),

