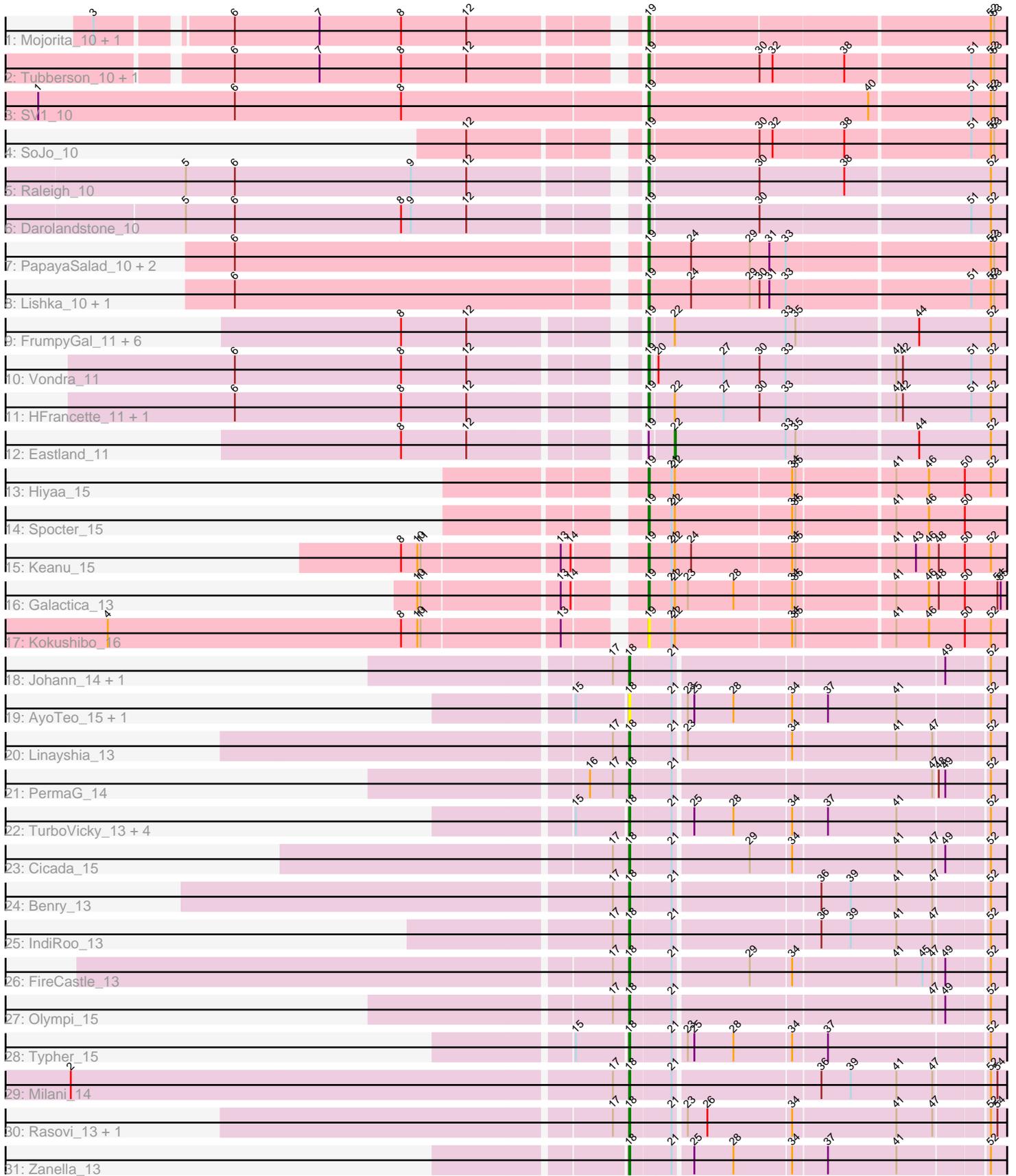


Pham 283893



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 283893 Report

This analysis was run 02/23/26 on database version 636.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 283893 has 50 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Mojorita_10, Picard_10
- Track 2 : Tubberson_10, DaRealMyers_10
- Track 3 : SV1_10
- Track 4 : SoJo_10
- Track 5 : Raleigh_10
- Track 6 : Darolandstone_10
- Track 7 : PapayaSalad_10, Bioscum_10, Ididsumtinwong_10
- Track 8 : Lishka_10, Austintatious_10
- Track 9 : FrumpyGal_11, Piccadilly_11, Schlegelian_11, Eklok_11, Cumberbatch_11, AxeJC_11, ArizonaGT_11
- Track 10 : Vondra_11
- Track 11 : HFrancette_11, Ignacio_11
- Track 12 : Eastland_11
- Track 13 : Hiyaa_15
- Track 14 : Spocter_15
- Track 15 : Keanu_15
- Track 16 : Galactica_13
- Track 17 : Kokushibo_16
- Track 18 : Johann_14, Goodman_14
- Track 19 : AyoTeo_15, Labella_15
- Track 20 : Linayshia_13
- Track 21 : PermaG_14
- Track 22 : TurboVicky_13, Rootkit7_13, Jera_14, Alove_13, SBlackberry_13
- Track 23 : Cicada_15
- Track 24 : Benry_13
- Track 25 : IndiRoo_13
- Track 26 : FireCastle_13
- Track 27 : Olympi_15
- Track 28 : Typher_15
- Track 29 : Milani_14
- Track 30 : Rasovi_13, Htur_13
- Track 31 : Zanella_13

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

The start number called the most often in the published annotations is 19, it was called in 26 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArizonaGT_11, Austintatious_10, AxeJC_11, Bioscum_10, Cumberbatch_11, DaRealMyers_10, Darolandstone_10, Eklok_11, FrumpyGal_11, Galactica_13, HFrancette_11, Hiyaa_15, Ididsumtinwong_10, Ignacio_11, Keanu_15, Kokushibo_16, Lishka_10, Mojorita_10, PapayaSalad_10, Picard_10, Piccadilly_11, Raleigh_10, SV1_10, Schlegelian_11, SoJo_10, Spocter_15, Tubberson_10, Vondra_11,

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

- Eastland_11,

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

- Alove_13, AyoTeo_15, Benry_13, Cicada_15, FireCastle_13, Goodman_14, Htur_13, IndiRoo_13, Jera_14, Johann_14, Labella_15, Linayshia_13, Milani_14, Olympi_15, PermaG_14, Rasovi_13, Rootkit7_13, SBlackberry_13, TurboVicky_13, Typher_15, Zanella_13,

Summary by start number:

Start 18:

- Found in 21 of 50 (42.0%) of genes in pham
- Manual Annotations of this start: 17 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alove_13 (EJ), AyoTeo_15 (EJ), Benry_13 (EJ), Cicada_15 (EJ), FireCastle_13 (EJ), Goodman_14 (EJ), Htur_13 (EJ), IndiRoo_13 (EJ), Jera_14 (EJ), Johann_14 (EJ), Labella_15 (EJ), Linayshia_13 (EJ), Milani_14 (EJ), Olympi_15 (EJ), PermaG_14 (EJ), Rasovi_13 (EJ), Rootkit7_13 (EJ), SBlackberry_13 (EJ), TurboVicky_13 (EJ), Typher_15 (EJ), Zanella_13 (EJ),

Start 19:

- Found in 29 of 50 (58.0%) of genes in pham
- Manual Annotations of this start: 26 of 44
- Called 96.6% of time when present
- Phage (with cluster) where this start called: ArizonaGT_11 (BP), Austintatious_10 (BC3), AxeJC_11 (BP), Bioscum_10 (BC3), Cumberbatch_11 (BP), DaRealMyers_10 (BC1), Darolandstone_10 (BC2), Eklok_11 (BP), FrumpyGal_11 (BP), Galactica_13 (BQ), HFrancette_11 (BP), Hiyaa_15 (BQ), Ididsumtinwong_10 (BC3), Ignacio_11 (BP), Keanu_15 (BQ), Kokushibo_16 (BQ), Lishka_10 (BC3), Mojorita_10 (BC1), PapayaSalad_10 (BC3), Picard_10 (BC1), Piccadilly_11 (BP), Raleigh_10 (BC2), SV1_10 (BC1), Schlegelian_11 (BP), SoJo_10 (BC1), Spocter_15 (BQ), Tubberson_10 (BC1), Vondra_11 (BP),

Start 22:

- Found in 15 of 50 (30.0%) of genes in pham
- Manual Annotations of this start: 1 of 44

- Called 6.7% of time when present
- Phage (with cluster) where this start called: Eastland_11 (BP),

Summary by clusters:

There are 6 clusters represented in this pham: EJ, BP, BQ, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:

- Start number 19 was manually annotated 5 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 19 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 19 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BP:

- Start number 19 was manually annotated 10 times for cluster BP.
- Start number 22 was manually annotated 1 time for cluster BP.

Info for manual annotations of cluster BQ:

- Start number 19 was manually annotated 4 times for cluster BQ.

Info for manual annotations of cluster EJ:

- Start number 18 was manually annotated 17 times for cluster EJ.

Gene Information:

Gene: Alove_13 Start: 10895, Stop: 11218, Start Num: 18

Candidate Starts for Alove_13:

(15, 10850), (Start: 18 @10895 has 17 MA's), (21, 10931), (25, 10946), (28, 10982), (34, 11033), (37, 11063), (41, 11126), (52, 11204),

Gene: ArizonaGT_11 Start: 7651, Stop: 7968, Start Num: 19

Candidate Starts for ArizonaGT_11:

(8, 7459), (12, 7519), (Start: 19 @7651 has 26 MA's), (Start: 22 @7672 has 1 MA's), (33, 7774), (35, 7783), (44, 7888), (52, 7954),

Gene: Austintatious_10 Start: 7516, Stop: 7836, Start Num: 19

Candidate Starts for Austintatious_10:

(6, 7162), (Start: 19 @7516 has 26 MA's), (24, 7555), (29, 7609), (30, 7618), (31, 7627), (33, 7642), (51, 7804), (52, 7822), (53, 7825),

Gene: AxeJC_11 Start: 7664, Stop: 7981, Start Num: 19

Candidate Starts for AxeJC_11:

(8, 7472), (12, 7532), (Start: 19 @7664 has 26 MA's), (Start: 22 @7685 has 1 MA's), (33, 7787), (35, 7796), (44, 7901), (52, 7967),

Gene: AyoTeo_15 Start: 11026, Stop: 11349, Start Num: 18

Candidate Starts for AyoTeo_15:

(15, 10981), (Start: 18 @11026 has 17 MA's), (21, 11062), (23, 11071), (25, 11077), (28, 11113), (34, 11164), (37, 11194), (41, 11257), (52, 11335),

Gene: Benry_13 Start: 9080, Stop: 9403, Start Num: 18

Candidate Starts for Benry_13:

(17, 9071), (Start: 18 @9080 has 17 MA's), (21, 9116), (36, 9242), (39, 9269), (41, 9311), (47, 9344), (52, 9389),

Gene: Bioscum_10 Start: 7552, Stop: 7872, Start Num: 19

Candidate Starts for Bioscum_10:

(6, 7198), (Start: 19 @7552 has 26 MA's), (24, 7591), (29, 7645), (31, 7663), (33, 7678), (52, 7858), (53, 7861),

Gene: Cicada_15 Start: 11149, Stop: 11472, Start Num: 18

Candidate Starts for Cicada_15:

(17, 11140), (Start: 18 @11149 has 17 MA's), (21, 11185), (29, 11251), (34, 11287), (41, 11380), (47, 11413), (49, 11422), (52, 11458),

Gene: Cumberbatch_11 Start: 7651, Stop: 7968, Start Num: 19

Candidate Starts for Cumberbatch_11:

(8, 7459), (12, 7519), (Start: 19 @7651 has 26 MA's), (Start: 22 @7672 has 1 MA's), (33, 7774), (35, 7783), (44, 7888), (52, 7954),

Gene: DaRealMyers_10 Start: 7746, Stop: 8063, Start Num: 19

Candidate Starts for DaRealMyers_10:

(6, 7398), (7, 7476), (8, 7551), (12, 7611), (Start: 19 @7746 has 26 MA's), (30, 7845), (32, 7857), (38, 7920), (51, 8031), (52, 8049), (53, 8052),

Gene: Darolandstone_10 Start: 7986, Stop: 8303, Start Num: 19

Candidate Starts for Darolandstone_10:

(5, 7593), (6, 7638), (8, 7791), (9, 7800), (12, 7851), (Start: 19 @7986 has 26 MA's), (30, 8085), (51, 8271), (52, 8289),

Gene: Eastland_11 Start: 7673, Stop: 7969, Start Num: 22

Candidate Starts for Eastland_11:

(8, 7460), (12, 7520), (Start: 19 @7652 has 26 MA's), (Start: 22 @7673 has 1 MA's), (33, 7775), (35, 7784), (44, 7889), (52, 7955),

Gene: Eklok_11 Start: 7664, Stop: 7981, Start Num: 19

Candidate Starts for Eklok_11:

(8, 7472), (12, 7532), (Start: 19 @7664 has 26 MA's), (Start: 22 @7685 has 1 MA's), (33, 7787), (35, 7796), (44, 7901), (52, 7967),

Gene: FireCastle_13 Start: 10810, Stop: 11133, Start Num: 18

Candidate Starts for FireCastle_13:

(17, 10801), (Start: 18 @10810 has 17 MA's), (21, 10846), (29, 10912), (34, 10948), (41, 11041), (45, 11065), (47, 11074), (49, 11083), (52, 11119),

Gene: FrumpyGal_11 Start: 7652, Stop: 7969, Start Num: 19

Candidate Starts for FrumpyGal_11:

(8, 7460), (12, 7520), (Start: 19 @7652 has 26 MA's), (Start: 22 @7673 has 1 MA's), (33, 7775), (35, 7784), (44, 7889), (52, 7955),

Gene: Galactica_13 Start: 12489, Stop: 12806, Start Num: 19

Candidate Starts for Galactica_13:

(10, 12306), (11, 12309), (13, 12429), (14, 12438), (Start: 19 @12489 has 26 MA's), (21, 12510), (Start: 22 @12513 has 1 MA's), (23, 12525), (28, 12567), (34, 12618), (35, 12621), (41, 12705), (46, 12735), (48, 12744), (50, 12768), (54, 12798), (55, 12801),

Gene: Goodman_14 Start: 11061, Stop: 11384, Start Num: 18

Candidate Starts for Goodman_14:

(17, 11052), (Start: 18 @11061 has 17 MA's), (21, 11097), (49, 11334), (52, 11370),

Gene: HFrancette_11 Start: 7660, Stop: 7977, Start Num: 19

Candidate Starts for HFrancette_11:

(6, 7315), (8, 7468), (12, 7528), (Start: 19 @7660 has 26 MA's), (Start: 22 @7681 has 1 MA's), (27, 7726), (30, 7759), (33, 7783), (41, 7876), (42, 7882), (51, 7945), (52, 7963),

Gene: Hiyaa_15 Start: 13527, Stop: 13844, Start Num: 19

Candidate Starts for Hiyaa_15:

(Start: 19 @13527 has 26 MA's), (21, 13548), (Start: 22 @13551 has 1 MA's), (34, 13656), (35, 13659), (41, 13743), (46, 13773), (50, 13806), (52, 13830),

Gene: Htur_13 Start: 11064, Stop: 11387, Start Num: 18

Candidate Starts for Htur_13:

(17, 11055), (Start: 18 @11064 has 17 MA's), (21, 11100), (23, 11109), (26, 11127), (34, 11202), (41, 11295), (47, 11328), (52, 11373), (54, 11379),

Gene: Ididsumtinwong_10 Start: 7552, Stop: 7872, Start Num: 19

Candidate Starts for Ididsumtinwong_10:

(6, 7198), (Start: 19 @7552 has 26 MA's), (24, 7591), (29, 7645), (31, 7663), (33, 7678), (52, 7858), (53, 7861),

Gene: Ignacio_11 Start: 7660, Stop: 7977, Start Num: 19

Candidate Starts for Ignacio_11:

(6, 7315), (8, 7468), (12, 7528), (Start: 19 @7660 has 26 MA's), (Start: 22 @7681 has 1 MA's), (27, 7726), (30, 7759), (33, 7783), (41, 7876), (42, 7882), (51, 7945), (52, 7963),

Gene: IndiRoo_13 Start: 9088, Stop: 9411, Start Num: 18

Candidate Starts for IndiRoo_13:

(17, 9079), (Start: 18 @9088 has 17 MA's), (21, 9124), (36, 9250), (39, 9277), (41, 9319), (47, 9352), (52, 9397),

Gene: Jera_14 Start: 10142, Stop: 10465, Start Num: 18

Candidate Starts for Jera_14:

(15, 10097), (Start: 18 @10142 has 17 MA's), (21, 10178), (25, 10193), (28, 10229), (34, 10280), (37, 10310), (41, 10373), (52, 10451),

Gene: Johann_14 Start: 11061, Stop: 11384, Start Num: 18

Candidate Starts for Johann_14:

(17, 11052), (Start: 18 @11061 has 17 MA's), (21, 11097), (49, 11334), (52, 11370),

Gene: Keanu_15 Start: 13576, Stop: 13893, Start Num: 19

Candidate Starts for Keanu_15:

(8, 13378), (10, 13393), (11, 13396), (13, 13516), (14, 13525), (Start: 19 @13576 has 26 MA's), (21, 13597), (Start: 22 @13600 has 1 MA's), (24, 13615), (34, 13705), (35, 13708), (41, 13792), (43,

13810), (46, 13822), (48, 13831), (50, 13855), (52, 13879),

Gene: Kokushibo_16 Start: 13542, Stop: 13859, Start Num: 19

Candidate Starts for Kokushibo_16:

(4, 13074), (8, 13344), (10, 13359), (11, 13362), (13, 13482), (Start: 19 @13542 has 26 MA's), (21, 13563), (Start: 22 @13566 has 1 MA's), (34, 13671), (35, 13674), (41, 13758), (46, 13788), (50, 13821), (52, 13845),

Gene: Labella_15 Start: 11030, Stop: 11353, Start Num: 18

Candidate Starts for Labella_15:

(15, 10985), (Start: 18 @11030 has 17 MA's), (21, 11066), (23, 11075), (25, 11081), (28, 11117), (34, 11168), (37, 11198), (41, 11261), (52, 11339),

Gene: Linayshia_13 Start: 11056, Stop: 11379, Start Num: 18

Candidate Starts for Linayshia_13:

(17, 11047), (Start: 18 @11056 has 17 MA's), (21, 11092), (23, 11101), (34, 11194), (41, 11287), (47, 11320), (52, 11365),

Gene: Lishka_10 Start: 7516, Stop: 7836, Start Num: 19

Candidate Starts for Lishka_10:

(6, 7162), (Start: 19 @7516 has 26 MA's), (24, 7555), (29, 7609), (30, 7618), (31, 7627), (33, 7642), (51, 7804), (52, 7822), (53, 7825),

Gene: Milani_14 Start: 9739, Stop: 10062, Start Num: 18

Candidate Starts for Milani_14:

(2, 9241), (17, 9730), (Start: 18 @9739 has 17 MA's), (21, 9775), (36, 9901), (39, 9928), (41, 9970), (47, 10003), (52, 10048), (54, 10054),

Gene: Mojorita_10 Start: 7832, Stop: 8146, Start Num: 19

Candidate Starts for Mojorita_10:

(3, 7376), (6, 7484), (7, 7562), (8, 7637), (12, 7697), (Start: 19 @7832 has 26 MA's), (52, 8132), (53, 8135),

Gene: Olympi_15 Start: 11052, Stop: 11375, Start Num: 18

Candidate Starts for Olympi_15:

(17, 11043), (Start: 18 @11052 has 17 MA's), (21, 11088), (47, 11316), (49, 11325), (52, 11361),

Gene: PapayaSalad_10 Start: 7524, Stop: 7844, Start Num: 19

Candidate Starts for PapayaSalad_10:

(6, 7170), (Start: 19 @7524 has 26 MA's), (24, 7563), (29, 7617), (31, 7635), (33, 7650), (52, 7830), (53, 7833),

Gene: PermaG_14 Start: 11124, Stop: 11447, Start Num: 18

Candidate Starts for PermaG_14:

(16, 11094), (17, 11115), (Start: 18 @11124 has 17 MA's), (21, 11160), (47, 11388), (48, 11391), (49, 11397), (52, 11433),

Gene: Picard_10 Start: 7832, Stop: 8146, Start Num: 19

Candidate Starts for Picard_10:

(3, 7376), (6, 7484), (7, 7562), (8, 7637), (12, 7697), (Start: 19 @7832 has 26 MA's), (52, 8132), (53, 8135),

Gene: Piccadilly_11 Start: 7651, Stop: 7968, Start Num: 19

Candidate Starts for Piccadilly_11:

(8, 7459), (12, 7519), (Start: 19 @7651 has 26 MA's), (Start: 22 @7672 has 1 MA's), (33, 7774), (35, 7783), (44, 7888), (52, 7954),

Gene: Raleigh_10 Start: 7951, Stop: 8271, Start Num: 19

Candidate Starts for Raleigh_10:

(5, 7558), (6, 7603), (9, 7765), (12, 7816), (Start: 19 @7951 has 26 MA's), (30, 8050), (38, 8128), (52, 8257),

Gene: Rasovi_13 Start: 11064, Stop: 11387, Start Num: 18

Candidate Starts for Rasovi_13:

(17, 11055), (Start: 18 @11064 has 17 MA's), (21, 11100), (23, 11109), (26, 11127), (34, 11202), (41, 11295), (47, 11328), (52, 11373), (54, 11379),

Gene: Rootkit7_13 Start: 10895, Stop: 11218, Start Num: 18

Candidate Starts for Rootkit7_13:

(15, 10850), (Start: 18 @10895 has 17 MA's), (21, 10931), (25, 10946), (28, 10982), (34, 11033), (37, 11063), (41, 11126), (52, 11204),

Gene: SBlackberry_13 Start: 10901, Stop: 11224, Start Num: 18

Candidate Starts for SBlackberry_13:

(15, 10856), (Start: 18 @10901 has 17 MA's), (21, 10937), (25, 10952), (28, 10988), (34, 11039), (37, 11069), (41, 11132), (52, 11210),

Gene: SV1_10 Start: 7724, Stop: 8044, Start Num: 19

Candidate Starts for SV1_10:

(1, 7172), (6, 7352), (8, 7505), (Start: 19 @7724 has 26 MA's), (40, 7922), (51, 8012), (52, 8030), (53, 8033),

Gene: Schlegelian_11 Start: 7651, Stop: 7968, Start Num: 19

Candidate Starts for Schlegelian_11:

(8, 7459), (12, 7519), (Start: 19 @7651 has 26 MA's), (Start: 22 @7672 has 1 MA's), (33, 7774), (35, 7783), (44, 7888), (52, 7954),

Gene: SoJo_10 Start: 7746, Stop: 8063, Start Num: 19

Candidate Starts for SoJo_10:

(12, 7611), (Start: 19 @7746 has 26 MA's), (30, 7845), (32, 7857), (38, 7920), (51, 8031), (52, 8049), (53, 8052),

Gene: Spocter_15 Start: 13515, Stop: 13832, Start Num: 19

Candidate Starts for Spocter_15:

(Start: 19 @13515 has 26 MA's), (21, 13536), (Start: 22 @13539 has 1 MA's), (34, 13644), (35, 13647), (41, 13731), (46, 13761), (50, 13794),

Gene: Tubberson_10 Start: 7746, Stop: 8063, Start Num: 19

Candidate Starts for Tubberson_10:

(6, 7398), (7, 7476), (8, 7551), (12, 7611), (Start: 19 @7746 has 26 MA's), (30, 7845), (32, 7857), (38, 7920), (51, 8031), (52, 8049), (53, 8052),

Gene: TurboVicky_13 Start: 10895, Stop: 11218, Start Num: 18

Candidate Starts for TurboVicky_13:

(15, 10850), (Start: 18 @10895 has 17 MA's), (21, 10931), (25, 10946), (28, 10982), (34, 11033), (37, 11063), (41, 11126), (52, 11204),

Gene: Typher_15 Start: 11029, Stop: 11352, Start Num: 18

Candidate Starts for Typher_15:

(15, 10984), (Start: 18 @11029 has 17 MA's), (21, 11065), (23, 11074), (25, 11080), (28, 11116), (34, 11167), (37, 11197), (52, 11338),

Gene: Vondra_11 Start: 7660, Stop: 7977, Start Num: 19

Candidate Starts for Vondra_11:

(6, 7315), (8, 7468), (12, 7528), (Start: 19 @7660 has 26 MA's), (20, 7666), (27, 7726), (30, 7759), (33, 7783), (41, 7876), (42, 7882), (51, 7945), (52, 7963),

Gene: Zanella_13 Start: 10898, Stop: 11221, Start Num: 18

Candidate Starts for Zanella_13:

(Start: 18 @10898 has 17 MA's), (21, 10934), (25, 10949), (28, 10985), (34, 11036), (37, 11066), (41, 11129), (52, 11207),