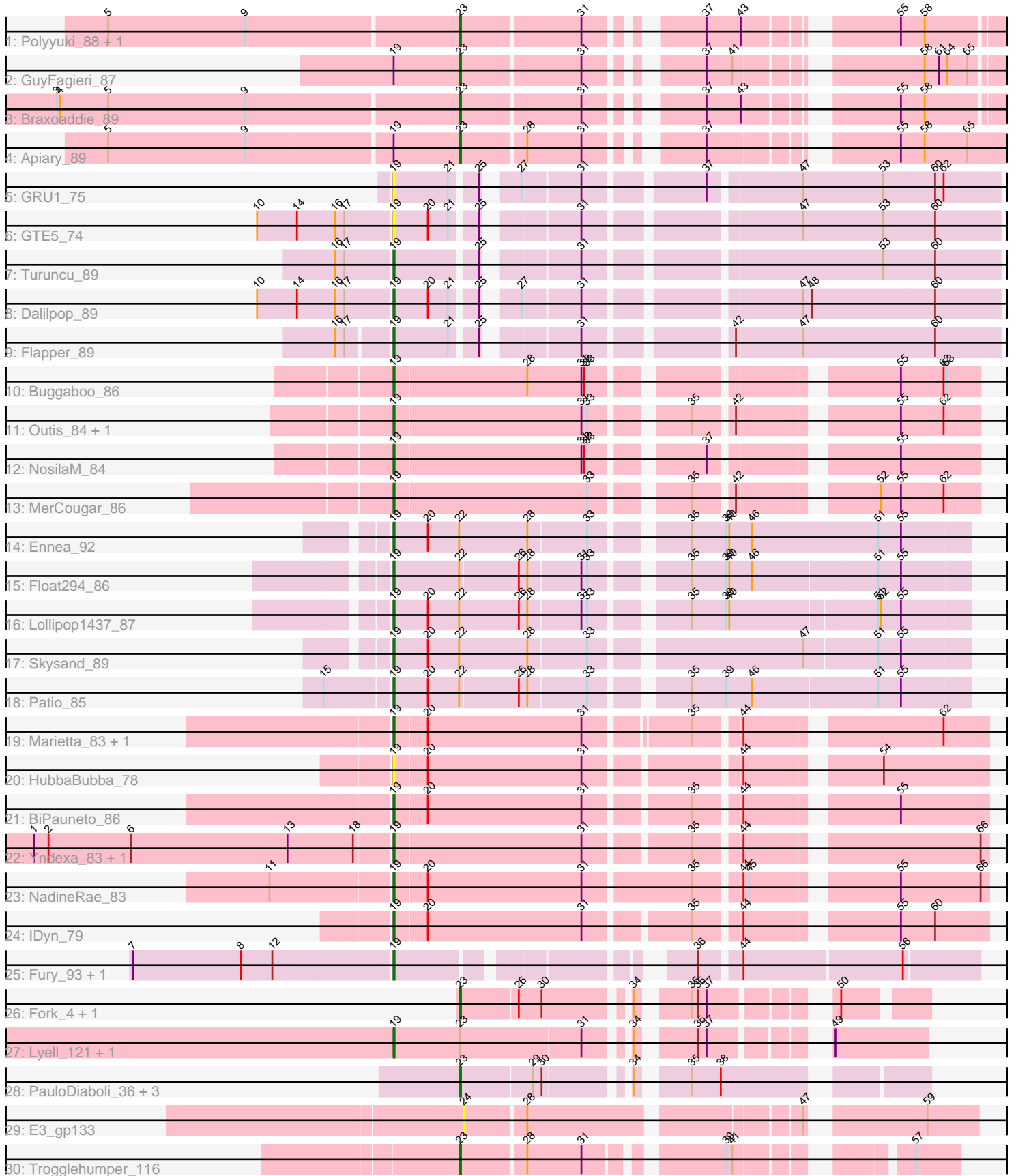


Pham 158010



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 158010 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158010 has 40 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Polyuyuki_88, Maselop_89
- Track 2 : GuyFagieri_87
- Track 3 : Braxoaddie_89
- Track 4 : Apiary_89
- Track 5 : GRU1_75
- Track 6 : GTE5_74
- Track 7 : Turuncu_89
- Track 8 : Dalilpop_89
- Track 9 : Flapper_89
- Track 10 : Buggaboo_86
- Track 11 : Outis_84, StarStruck_84
- Track 12 : NosilaM_84
- Track 13 : MerCougar_86
- Track 14 : Ennea_92
- Track 15 : Float294_86
- Track 16 : Lollipop1437_87
- Track 17 : Skysand_89
- Track 18 : Patio_85
- Track 19 : Marietta_83, WhoseManz_83
- Track 20 : HubbaBubba_78
- Track 21 : BiPauneto_86
- Track 22 : Yndexa_83, Sukkupi_83
- Track 23 : NadineRae_83
- Track 24 : IDyn_79
- Track 25 : Fury_93, Pleakley_93
- Track 26 : Fork_4, Fork_116
- Track 27 : Lyell_121, Lyell_6
- Track 28 : PauloDiaboli_36, A3Wally_36, A3Wally_389, PauloDiaboli_391
- Track 29 : E3_gp133
- Track 30 : Trogglehumper_116

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 24 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BiPauneto_86, Buggaboo_86, Dalilpop_89, Ennea_92, Flapper_89, Float294_86, Fury_93, GRU1_75, GTE5_74, HubbaBubba_78, IDyn_79, Lollipop1437_87, Lyell_121, Lyell_6, Marietta_83, MerCougar_86, NadineRae_83, NosilaM_84, Outis_84, Patio_85, Pleakley_93, Skysand_89, StarStruck_84, Sukkupi_83, Turuncu_89, WhoseManz_83, Yndexa_83,

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

- Apiary_89, GuyFagieri_87,

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

- A3Wally_36, A3Wally_389, Braxoaddie_89, E3_gp133, Fork_116, Fork_4, Maselop_89, PauloDiaboli_36, PauloDiaboli_391, Polyuyuki_88, Trogglehumper_116,

Summary by start number:

Start 19:

- Found in 29 of 40 (72.5%) of genes in pham
- Manual Annotations of this start: 24 of 36
- Called 93.1% of time when present
- Phage (with cluster) where this start called: BiPauneto_86 (CR4), Buggaboo_86 (CR2), Dalilpop_89 (CR1), Ennea_92 (CR3), Flapper_89 (CR1), Float294_86 (CR3), Fury_93 (CR5), GRU1_75 (CR1), GTE5_74 (CR1), HubbaBubba_78 (CR4), IDyn_79 (CR4), Lollipop1437_87 (CR3), Lyell_121 (ED2), Lyell_6 (ED2), Marietta_83 (CR4), MerCougar_86 (CR2), NadineRae_83 (CR4), NosilaM_84 (CR2), Outis_84 (CR2), Patio_85 (CR3), Pleakley_93 (CR5), Skysand_89 (CR3), StarStruck_84 (CR2), Sukkupi_83 (CR4), Turuncu_89 (CR1), WhoseManz_83 (CR4), Yndexa_83 (CR4),

Start 23:

- Found in 14 of 40 (35.0%) of genes in pham
- Manual Annotations of this start: 12 of 36
- Called 85.7% of time when present
- Phage (with cluster) where this start called: A3Wally_36 (GD1), A3Wally_389 (GD1), Apiary_89 (CR), Braxoaddie_89 (CR), Fork_116 (ED2), Fork_4 (ED2), GuyFagieri_87 (CR), Maselop_89 (CR), PauloDiaboli_36 (GD1), PauloDiaboli_391 (GD1), Polyuyuki_88 (CR), Trogglehumper_116 (singleton),

Start 24:

- Found in 1 of 40 (2.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3_gp133 (singleton),

Summary by clusters:

There are 9 clusters represented in this pham: CR2, CR3, singleton, CR1, CR4, GD1, CR5, ED2, CR,

Info for manual annotations of cluster CR:

- Start number 23 was manually annotated 5 times for cluster CR.

Info for manual annotations of cluster CR1:

- Start number 19 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 19 was manually annotated 5 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 19 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 19 was manually annotated 7 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 19 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster ED2:

- Start number 19 was manually annotated 2 times for cluster ED2.

- Start number 23 was manually annotated 2 times for cluster ED2.

Info for manual annotations of cluster GD1:

- Start number 23 was manually annotated 4 times for cluster GD1.

Gene Information:

Gene: A3Wally_36 Start: 12363, Stop: 12773, Start Num: 23

Candidate Starts for A3Wally_36:

(Start: 23 @12363 has 12 MA's), (29, 12435), (30, 12444), (34, 12516), (35, 12558), (38, 12588),

Gene: A3Wally_389 Start: 191584, Stop: 191994, Start Num: 23

Candidate Starts for A3Wally_389:

(Start: 23 @191584 has 12 MA's), (29, 191656), (30, 191665), (34, 191737), (35, 191779), (38, 191809),

Gene: Apiary_89 Start: 62187, Stop: 62666, Start Num: 23

Candidate Starts for Apiary_89:

(5, 61830), (9, 61974), (Start: 19 @62118 has 24 MA's), (Start: 23 @62187 has 12 MA's), (28, 62250), (31, 62307), (37, 62397), (55, 62556), (58, 62580), (65, 62625),

Gene: BiPauneto_86 Start: 61366, Stop: 61935, Start Num: 19

Candidate Starts for BiPauneto_86:

(Start: 19 @61366 has 24 MA's), (20, 61399), (31, 61561), (35, 61660), (44, 61702), (55, 61843),

Gene: Braxoaddie_89 Start: 62185, Stop: 62655, Start Num: 23

Candidate Starts for Braxoaddie_89:

(3, 61774), (4, 61777), (5, 61828), (9, 61972), (Start: 23 @62185 has 12 MA's), (31, 62305), (37, 62395), (43, 62431), (55, 62554), (58, 62578),

Gene: Buggaboo_86 Start: 63771, Stop: 64322, Start Num: 19

Candidate Starts for Buggaboo_86:

(Start: 19 @63771 has 24 MA's), (28, 63909), (31, 63966), (32, 63969), (33, 63972), (55, 64239), (62, 64284), (63, 64287),

Gene: Dalilpop_89 Start: 63669, Stop: 64238, Start Num: 19

Candidate Starts for Dalilpop_89:

(10, 63531), (14, 63573), (16, 63612), (17, 63621), (Start: 19 @63669 has 24 MA's), (20, 63705), (21, 63726), (25, 63750), (27, 63774), (31, 63831), (47, 64032), (48, 64041), (60, 64170),

Gene: E3_gp133 Start: 88048, Stop: 88518, Start Num: 24

Candidate Starts for E3_gp133:

(24, 88048), (28, 88108), (47, 88366), (59, 88465),

Gene: Ennea_92 Start: 63889, Stop: 64464, Start Num: 19

Candidate Starts for Ennea_92:

(Start: 19 @63889 has 24 MA's), (20, 63925), (22, 63958), (28, 64030), (33, 64090), (35, 64174), (39, 64210), (40, 64213), (46, 64237), (51, 64369), (55, 64393),

Gene: Flapper_89 Start: 63538, Stop: 64107, Start Num: 19

Candidate Starts for Flapper_89:

(16, 63490), (17, 63499), (Start: 19 @63538 has 24 MA's), (21, 63595), (25, 63619), (31, 63700), (42, 63832), (47, 63901), (60, 64039),

Gene: Float294_86 Start: 63789, Stop: 64358, Start Num: 19

Candidate Starts for Float294_86:

(Start: 19 @63789 has 24 MA's), (22, 63858), (26, 63918), (28, 63927), (31, 63981), (33, 63987), (35, 64071), (39, 64107), (40, 64110), (46, 64134), (51, 64263), (55, 64287),

Gene: Fork_4 Start: 1906, Stop: 1520, Start Num: 23

Candidate Starts for Fork_4:

(Start: 23 @1906 has 12 MA's), (26, 1849), (30, 1825), (34, 1750), (35, 1708), (36, 1702), (37, 1693), (50, 1597),

Gene: Fork_116 Start: 60897, Stop: 60511, Start Num: 23

Candidate Starts for Fork_116:

(Start: 23 @60897 has 12 MA's), (26, 60840), (30, 60816), (34, 60741), (35, 60699), (36, 60693), (37, 60684), (50, 60588),

Gene: Fury_93 Start: 61531, Stop: 62052, Start Num: 19

Candidate Starts for Fury_93:

(7, 61261), (8, 61375), (12, 61408), (Start: 19 @61531 has 24 MA's), (36, 61783), (44, 61819), (56, 61975),

Gene: GRU1_75 Start: 55116, Stop: 55685, Start Num: 19

Candidate Starts for GRU1_75:

(Start: 19 @55116 has 24 MA's), (21, 55173), (25, 55197), (27, 55221), (31, 55278), (37, 55389), (47, 55479), (53, 55563), (60, 55617), (62, 55626),

Gene: GTE5_74 Start: 56009, Stop: 56578, Start Num: 19

Candidate Starts for GTE5_74:

(10, 55871), (14, 55913), (16, 55952), (17, 55961), (Start: 19 @56009 has 24 MA's), (20, 56045), (21, 56066), (25, 56090), (31, 56171), (47, 56372), (53, 56456), (60, 56510),

Gene: GuyFagieri_87 Start: 61764, Stop: 62234, Start Num: 23

Candidate Starts for GuyFagieri_87:

(Start: 19 @61695 has 24 MA's), (Start: 23 @61764 has 12 MA's), (31, 61884), (37, 61974), (41, 62001), (58, 62157), (61, 62172), (64, 62181), (65, 62202),

Gene: HubbaBubba_78 Start: 57693, Stop: 58262, Start Num: 19

Candidate Starts for HubbaBubba_78:

(Start: 19 @57693 has 24 MA's), (20, 57726), (31, 57888), (44, 58029), (54, 58152),

Gene: IDyn_79 Start: 58347, Stop: 58916, Start Num: 19

Candidate Starts for IDyn_79:

(Start: 19 @58347 has 24 MA's), (20, 58380), (31, 58542), (35, 58641), (44, 58683), (55, 58824), (60, 58860),

Gene: Lollipop1437_87 Start: 63571, Stop: 64140, Start Num: 19

Candidate Starts for Lollipop1437_87:

(Start: 19 @63571 has 24 MA's), (20, 63607), (22, 63640), (26, 63703), (28, 63712), (31, 63766), (33, 63772), (35, 63856), (39, 63892), (40, 63895), (51, 64045), (52, 64048), (55, 64069),

Gene: Lyell_121 Start: 61268, Stop: 60801, Start Num: 19

Candidate Starts for Lyell_121:

(Start: 19 @61268 has 24 MA's), (Start: 23 @61199 has 12 MA's), (31, 61076), (34, 61043), (36, 60995), (37, 60986), (49, 60896),

Gene: Lyell_6 Start: 2101, Stop: 1634, Start Num: 19

Candidate Starts for Lyell_6:

(Start: 19 @2101 has 24 MA's), (Start: 23 @2032 has 12 MA's), (31, 1909), (34, 1876), (36, 1828), (37, 1819), (49, 1729),

Gene: Marietta_83 Start: 59020, Stop: 59589, Start Num: 19

Candidate Starts for Marietta_83:

(Start: 19 @59020 has 24 MA's), (20, 59053), (31, 59215), (35, 59314), (44, 59356), (62, 59542),

Gene: Maselop_89 Start: 62196, Stop: 62666, Start Num: 23

Candidate Starts for Maselop_89:

(5, 61839), (9, 61983), (Start: 23 @62196 has 12 MA's), (31, 62316), (37, 62406), (43, 62442), (55, 62565), (58, 62589),

Gene: MerCougar_86 Start: 63955, Stop: 64506, Start Num: 19

Candidate Starts for MerCougar_86:

(Start: 19 @63955 has 24 MA's), (33, 64156), (35, 64240), (42, 64276), (52, 64402), (55, 64423), (62, 64468),

Gene: NadineRae_83 Start: 58857, Stop: 59435, Start Num: 19

Candidate Starts for NadineRae_83:

(11, 58734), (Start: 19 @58857 has 24 MA's), (20, 58890), (31, 59052), (35, 59160), (44, 59202), (45, 59208), (55, 59343), (66, 59427),

Gene: NosilaM_84 Start: 62812, Stop: 63363, Start Num: 19

Candidate Starts for NosilaM_84:

(Start: 19 @62812 has 24 MA's), (31, 63007), (32, 63010), (33, 63013), (37, 63112), (55, 63280),

Gene: Outis_84 Start: 63228, Stop: 63779, Start Num: 19

Candidate Starts for Outis_84:

(Start: 19 @63228 has 24 MA's), (31, 63423), (33, 63429), (35, 63513), (42, 63549), (55, 63696), (62, 63741),

Gene: Patio_85 Start: 62788, Stop: 63357, Start Num: 19

Candidate Starts for Patio_85:

(15, 62725), (Start: 19 @62788 has 24 MA's), (20, 62824), (22, 62857), (26, 62917), (28, 62926), (33, 62986), (35, 63070), (39, 63106), (46, 63133), (51, 63262), (55, 63286),

Gene: PauloDiaboli_36 Start: 12203, Stop: 12613, Start Num: 23

Candidate Starts for PauloDiaboli_36:

(Start: 23 @12203 has 12 MA's), (29, 12275), (30, 12284), (34, 12356), (35, 12398), (38, 12428),

Gene: PauloDiaboli_391 Start: 188832, Stop: 189242, Start Num: 23

Candidate Starts for PauloDiaboli_391:

(Start: 23 @188832 has 12 MA's), (29, 188904), (30, 188913), (34, 188985), (35, 189027), (38, 189057),

Gene: Pleakley_93 Start: 61532, Stop: 62053, Start Num: 19

Candidate Starts for Pleakley_93:

(7, 61262), (8, 61376), (12, 61409), (Start: 19 @61532 has 24 MA's), (36, 61784), (44, 61820), (56, 61976),

Gene: Polyuyki_88 Start: 62206, Stop: 62676, Start Num: 23

Candidate Starts for Polyuyki_88:

(5, 61849), (9, 61993), (Start: 23 @62206 has 12 MA's), (31, 62326), (37, 62416), (43, 62452), (55, 62575), (58, 62599),

Gene: Skysand_89 Start: 63735, Stop: 64307, Start Num: 19

Candidate Starts for Skysand_89:

(Start: 19 @63735 has 24 MA's), (20, 63771), (22, 63804), (28, 63876), (33, 63936), (47, 64137), (51, 64212), (55, 64236),

Gene: StarStruck_84 Start: 63228, Stop: 63779, Start Num: 19

Candidate Starts for StarStruck_84:

(Start: 19 @63228 has 24 MA's), (31, 63423), (33, 63429), (35, 63513), (42, 63549), (55, 63696), (62, 63741),

Gene: Sukkupi_83 Start: 60734, Stop: 61303, Start Num: 19

Candidate Starts for Sukkupi_83:

(1, 60362), (2, 60377), (6, 60464), (13, 60629), (18, 60698), (Start: 19 @60734 has 24 MA's), (31, 60929), (35, 61028), (44, 61070), (66, 61295),

Gene: Trogglehumper_116 Start: 78341, Stop: 77916, Start Num: 23

Candidate Starts for Trogglehumper_116:

(Start: 23 @78341 has 12 MA's), (28, 78278), (31, 78221), (39, 78104), (41, 78098), (57, 77960),

Gene: Turuncu_89 Start: 63164, Stop: 63733, Start Num: 19

Candidate Starts for Turuncu_89:

(16, 63107), (17, 63116), (Start: 19 @63164 has 24 MA's), (25, 63245), (31, 63326), (53, 63611), (60, 63665),

Gene: WhoseManz_83 Start: 58680, Stop: 59249, Start Num: 19

Candidate Starts for WhoseManz_83:

(Start: 19 @58680 has 24 MA's), (20, 58713), (31, 58875), (35, 58974), (44, 59016), (62, 59202),

Gene: Yndexa_83 Start: 60734, Stop: 61303, Start Num: 19

Candidate Starts for Yndexa_83:

(1, 60362), (2, 60377), (6, 60464), (13, 60629), (18, 60698), (Start: 19 @60734 has 24 MA's), (31, 60929), (35, 61028), (44, 61070), (66, 61295),