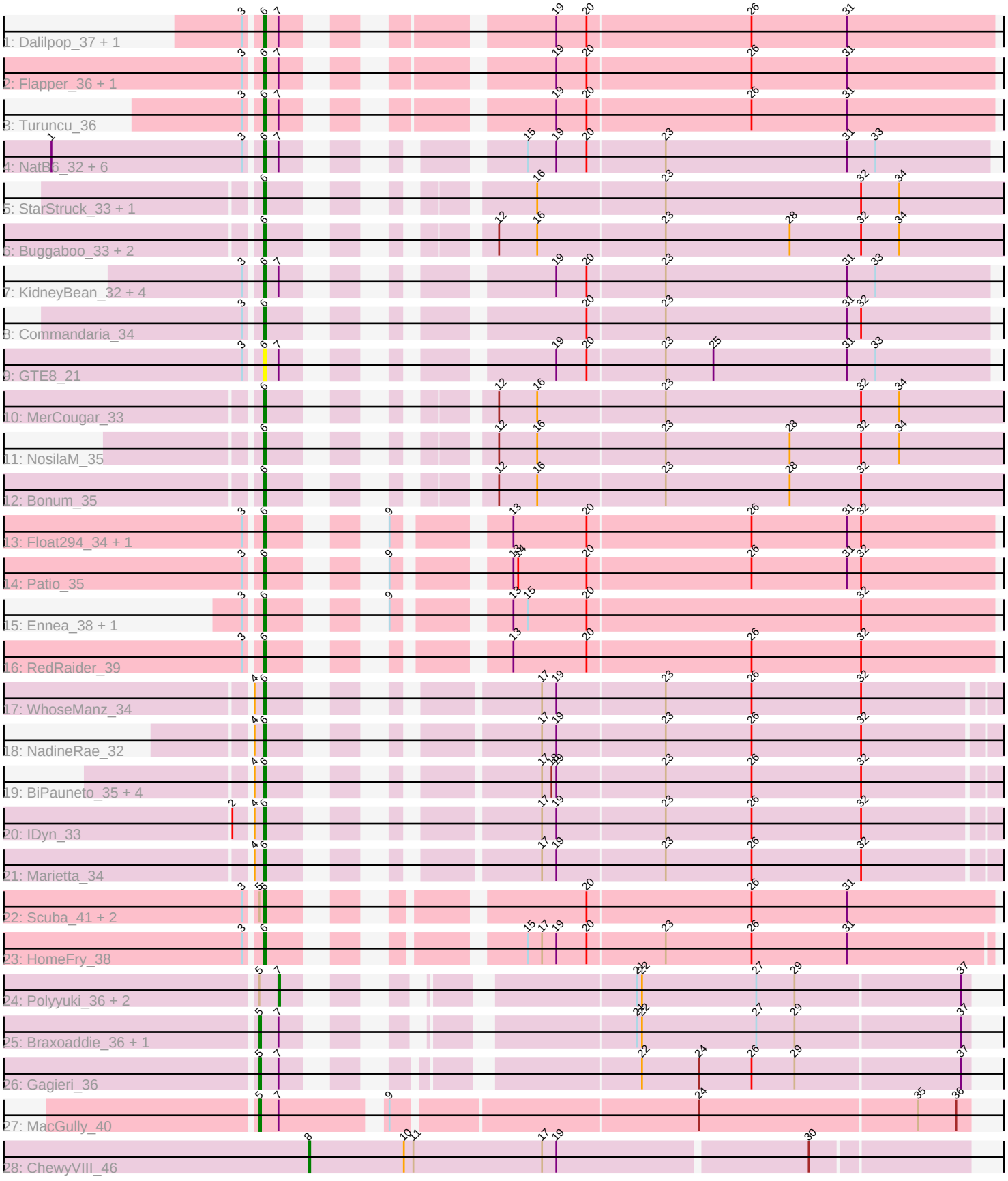
Pham 342225


1: Dalilpop_37 + 1
2: Flapper_36 + 1
3: Turuncu_36
4: NatB6_32 + 6
5: StarStruck_33 + 1
6: Buggaboo_33 + 2
7: KidneyBean_32 + 4
8: Commandaria_34
9: GTE8_21
10: MerCougar_33
11: NosilaM_35
12: Bonum_35
13: Float294_34 + 1
14: Patio_35
15: Ennea_38 + 1
16: RedRaider_39
17: WhoseManz_34
18: NadineRae_32
19: BiPauneto_35 + 4
20: IDyn_33
21: Marietta_34
22: Scuba_41 + 2
23: HomeFry_38
24: Polyyuki_36 + 2
25: Braxoaddie_36 + 1
26: Gagieri_36
27: MacGully_40
28: ChewyVIII_46

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 342225 Report

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

Pham number 342225 has 54 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Dalilpop_37, GRU1_22
• Track 2 : Flapper_36, GTE5_23
• Track 3 : Turuncu_36
• Track 4 : NatB6_32, Foxboro_33, Kurt_32, Jifall16_31, Tracker_32, Phomeo_31, Emianna_32
• Track 5 : StarStruck_33, Outis_33
• Track 6 : Buggaboo_33, Kabluna_35, SuperSulley_33
• Track 7 : KidneyBean_32, Wheezy_32, NovumRegina_32, Arti_32, GrootJr_34
• Track 8 : Commandaria_34
• Track 9 : GTE8_21
• Track 10 : MerCougar_33
• Track 11 : NosilaM_35
• Track 12 : Bonum_35
• Track 13 : Float294_34, Skysand_34
• Track 14 : Patio_35
• Track 15 : Ennea_38, Lollipop1437_37
• Track 16 : RedRaider_39
• Track 17 : WhoseManz_34
• Track 18 : NadineRae_32
• Track 19 : BiPauneto_35, Pemberton_35, Sukkupi_34, HubbaBubba_30, Yndexa_34
• Track 20 : IDyn_33
• Track 21 : Marietta_34
• Track 22 : Scuba_41, Fury_41, Pleakley_41
• Track 23 : HomeFry_38
• Track 24 : Polyyuki_36, Maselop_36, Apiary_36
• Track 25 : Braxoaddie_36, CoffeeBean_36
• Track 26 : Gagieri_36
• Track 27 : MacGully_40
• Track 28 : ChewyVIII_46

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

The start number called the most often in the published annotations is 6, it was called in 43 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_32, BiPauneto_35, Bonum_35, Buggaboo_33, Commandaria_34, Dalilpop_37, Emianna_32, Ennea_38, Flapper_36, Float294_34, Foxboro_33, Fury_41, GRU1_22, GTE5_23, GTE8_21, GrootJr_34, HomeFry_38, HubbaBubba_30, IDyn_33, Jifall16_31, Kabluna_35, KidneyBean_32, Kurt_32, Lollipop1437_37, Marietta_34, MerCougar_33, NadineRae_32, NatB6_32, NosilaM_35, NovumRegina_32, Outis_33, Patio_35, Pemberton_35, Phomeo_31, Pleakley_41, RedRaider_39, Scuba_41, Skysand_34, StarStruck_33, Sukkupi_34, SuperSulley_33, Tracker_32, Turuncu_36, Wheezy_32, WhoseManz_34, Yndexa_34,

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

Genes that do not have the "Most Annotated" start:
• Apiary_36, Braxoaddie_36, ChewyVIII_46, CoffeeBean_36, Gagieri_36, MacGully_40, Maselop_36, Polyyuki_36,

Summary by start number:

Start 5:
• Found in 10 of 54 (18.5%) of genes in pham
• Manual Annotations of this start: 4 of 51
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Braxoaddie_36 (CR6), CoffeeBean_36 (CR6), Gagieri_36 (CR6), MacGully_40 (CR7),

Start 6:
• Found in 46 of 54 (85.2%) of genes in pham
• Manual Annotations of this start: 43 of 51
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arti_32 (CR2), BiPauneto_35 (CR4), Bonum_35 (CR2), Buggaboo_33 (CR2), Commandaria_34 (CR2), Dalilpop_37 (CR1), Emianna_32 (CR2), Ennea_38 (CR3), Flapper_36 (CR1), Float294_34 (CR3), Foxboro_33 (CR2), Fury_41 (CR5), GRU1_22 (CR1), GTE5_23 (CR1), GTE8_21 (CR2), GrootJr_34 (CR2), HomeFry_38 (CR5), HubbaBubba_30 (CR4), IDyn_33 (CR4), Jifall16_31 (CR2), Kabluna_35 (CR2), KidneyBean_32 (CR2), Kurt_32 (CR2), Lollipop1437_37 (CR3), Marietta_34 (CR4), MerCougar_33 (CR2), NadineRae_32 (CR4), NatB6_32 (CR2), NosilaM_35 (CR2), NovumRegina_32 (CR2), Outis_33 (CR2), Patio_35 (CR3), Pemberton_35 (CR4), Phomeo_31 (CR2), Pleakley_41 (CR5), RedRaider_39 (CR3), Scuba_41 (CR5), Skysand_34 (CR3), StarStruck_33 (CR2), Sukkupi_34 (CR4), SuperSulley_33 (CR2), Tracker_32 (CR2), Turuncu_36 (CR1), Wheezy_32 (CR2), WhoseManz_34 (CR4), Yndexa_34 (CR4),

Start 7:
• Found in 25 of 54 (46.3%) of genes in pham
• Manual Annotations of this start: 3 of 51
• Called 12.0% of time when present
• Phage (with cluster) where this start called: Apiary_36 (CR6), Maselop_36 (CR6), Polyyuki_36 (CR6),

Start 8:
• Found in 1 of 54 (1.9%) 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: ChewyVIII_46 (singleton),

Summary by clusters:

There are 8 clusters represented in this pham: CR2, CR3, singleton, CR1, CR6, CR7, CR4, CR5,

Info for manual annotations of cluster CR1:
•Start number 6 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 6 was manually annotated 21 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 6 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 6 was manually annotated 9 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 6 was manually annotated 4 times for cluster CR5.

Info for manual annotations of cluster CR6:
•Start number 5 was manually annotated 3 times for cluster CR6.
•Start number 7 was manually annotated 3 times for cluster CR6.

Info for manual annotations of cluster CR7:
•Start number 5 was manually annotated 1 time for cluster CR7.

Gene Information:

Gene: Apiary_36 Start: 21985, Stop: 22347, Start Num: 7
Candidate Starts for Apiary_36:
(Start: 5 @21973 has 4 MA's), (Start: 7 @21985 has 3 MA's), (21, 22141), (22, 22144), (27, 22216), (29, 22240), (37, 22342),

Gene: Arti_32 Start: 20091, Stop: 20483, Start Num: 6
Candidate Starts for Arti_32:
(3, 20082), (Start: 6 @20091 has 43 MA's), (Start: 7 @20100 has 3 MA's), (19, 20214), (20, 20232), (23, 20280), (31, 20394), (33, 20412),

Gene: BiPauneto_35 Start: 19943, Stop: 20344, Start Num: 6
Candidate Starts for BiPauneto_35:
(4, 19937), (Start: 6 @19943 has 43 MA's), (17, 20063), (18, 20069), (19, 20072), (23, 20138), (26, 20192), (32, 20261),

Gene: Bonum_35 Start: 20419, Stop: 20820, Start Num: 6

Candidate Starts for Bonum_35:
(Start: 6 @20419 has 43 MA's), (12, 20506), (16, 20530), (23, 20608), (28, 20686), (32, 20731),

Gene: Braxoaddie_36 Start: 21962, Stop: 22336, Start Num: 5
Candidate Starts for Braxoaddie_36:
(Start: 5 @21962 has 4 MA's), (Start: 7 @21974 has 3 MA's), (21, 22130), (22, 22133), (27, 22205), (29, 22229), (37, 22331),

Gene: Buggaboo_33 Start: 20904, Stop: 21305, Start Num: 6
Candidate Starts for Buggaboo_33:
(Start: 6 @20904 has 43 MA's), (12, 20991), (16, 21015), (23, 21093), (28, 21171), (32, 21216), (34, 21240),

Gene: ChewyVIII_46 Start: 27590, Stop: 27994, Start Num: 8
Candidate Starts for ChewyVIII_46:
(Start: 8 @27590 has 1 MA's), (10, 27650), (11, 27656), (17, 27737), (19, 27746), (30, 27899),

Gene: CoffeeBean_36 Start: 21917, Stop: 22291, Start Num: 5
Candidate Starts for CoffeeBean_36:
(Start: 5 @21917 has 4 MA's), (Start: 7 @21929 has 3 MA's), (21, 22085), (22, 22088), (27, 22160), (29, 22184), (37, 22286),

Gene: Commandaria_34 Start: 21412, Stop: 21804, Start Num: 6
Candidate Starts for Commandaria_34:
(3, 21403), (Start: 6 @21412 has 43 MA's), (20, 21553), (23, 21601), (31, 21715), (32, 21724),

Gene: Dalilpop_37 Start: 22406, Stop: 22810, Start Num: 6
Candidate Starts for Dalilpop_37:
(3, 22397), (Start: 6 @22406 has 43 MA's), (Start: 7 @22415 has 3 MA's), (19, 22538), (20, 22556), (26, 22658), (31, 22718),

Gene: Emianna_32 Start: 21128, Stop: 21520, Start Num: 6
Candidate Starts for Emianna_32:
(1, 20999), (3, 21119), (Start: 6 @21128 has 43 MA's), (Start: 7 @21137 has 3 MA's), (15, 21233), (19, 21251), (20, 21269), (23, 21317), (31, 21431), (33, 21449),

Gene: Ennea_38 Start: 21739, Stop: 22137, Start Num: 6
Candidate Starts for Ennea_38:
(3, 21730), (Start: 6 @21739 has 43 MA's), (9, 21781), (13, 21838), (15, 21847), (20, 21883), (32, 22054),

Gene: Flapper_36 Start: 21488, Stop: 21892, Start Num: 6
Candidate Starts for Flapper_36:
(3, 21479), (Start: 6 @21488 has 43 MA's), (Start: 7 @21497 has 3 MA's), (19, 21620), (20, 21638), (26, 21740), (31, 21800),

Gene: Float294_34 Start: 21178, Stop: 21576, Start Num: 6
Candidate Starts for Float294_34:
(3, 21169), (Start: 6 @21178 has 43 MA's), (9, 21220), (13, 21277), (20, 21322), (26, 21424), (31, 21484), (32, 21493),

Gene: Foxboro_33 Start: 21634, Stop: 22026, Start Num: 6
Candidate Starts for Foxboro_33:

(1, 21505), (3, 21625), (Start: 6 @21634 has 43 MA's), (Start: 7 @21643 has 3 MA's), (15, 21739), (19, 21757), (20, 21775), (23, 21823), (31, 21937), (33, 21955),

Gene: Fury_41 Start: 20785, Stop: 21186, Start Num: 6
Candidate Starts for Fury_41:
(3, 20776), (Start: 5 @20782 has 4 MA's), (Start: 6 @20785 has 43 MA's), (20, 20932), (26, 21034), (31, 21094),

Gene: GRU1_22 Start: 13373, Stop: 13777, Start Num: 6
Candidate Starts for GRU1_22:
(3, 13364), (Start: 6 @13373 has 43 MA's), (Start: 7 @13382 has 3 MA's), (19, 13505), (20, 13523), (26, 13625), (31, 13685),

Gene: GTE5_23 Start: 14376, Stop: 14780, Start Num: 6
Candidate Starts for GTE5_23:
(3, 14367), (Start: 6 @14376 has 43 MA's), (Start: 7 @14385 has 3 MA's), (19, 14508), (20, 14526), (26, 14628), (31, 14688),

Gene: GTE8_21 Start: 14387, Stop: 14779, Start Num: 6
Candidate Starts for GTE8_21:
(3, 14378), (Start: 6 @14387 has 43 MA's), (Start: 7 @14396 has 3 MA's), (19, 14510), (20, 14528), (23, 14576), (25, 14606), (31, 14690), (33, 14708),

Gene: Gagieri_36 Start: 21792, Stop: 22172, Start Num: 5
Candidate Starts for Gagieri_36:
(Start: 5 @21792 has 4 MA's), (Start: 7 @21804 has 3 MA's), (22, 21969), (24, 22005), (26, 22038), (29, 22065), (37, 22167),

Gene: GrootJr_34 Start: 20486, Stop: 20878, Start Num: 6
Candidate Starts for GrootJr_34:
(3, 20477), (Start: 6 @20486 has 43 MA's), (Start: 7 @20495 has 3 MA's), (19, 20609), (20, 20627), (23, 20675), (31, 20789), (33, 20807),

Gene: HomeFry_38 Start: 19442, Stop: 19840, Start Num: 6
Candidate Starts for HomeFry_38:
(3, 19433), (Start: 6 @19442 has 43 MA's), (15, 19553), (17, 19562), (19, 19571), (20, 19589), (23, 19637), (26, 19691), (31, 19751),

Gene: HubbaBubba_30 Start: 16961, Stop: 17362, Start Num: 6
Candidate Starts for HubbaBubba_30:
(4, 16955), (Start: 6 @16961 has 43 MA's), (17, 17081), (18, 17087), (19, 17090), (23, 17156), (26, 17210), (32, 17279),

Gene: IDyn_33 Start: 18357, Stop: 18758, Start Num: 6
Candidate Starts for IDyn_33:
(2, 18342), (4, 18351), (Start: 6 @18357 has 43 MA's), (17, 18477), (19, 18486), (23, 18552), (26, 18606), (32, 18675),

Gene: Jifall16_31 Start: 20755, Stop: 21147, Start Num: 6
Candidate Starts for Jifall16_31:
(1, 20626), (3, 20746), (Start: 6 @20755 has 43 MA's), (Start: 7 @20764 has 3 MA's), (15, 20860), (19, 20878), (20, 20896), (23, 20944), (31, 21058), (33, 21076),

Gene: Kabluna_35 Start: 19819, Stop: 20220, Start Num: 6
Candidate Starts for Kabluna_35:
(Start: 6 @19819 has 43 MA's), (12, 19906), (16, 19930), (23, 20008), (28, 20086), (32, 20131), (34, 20155),

Gene: KidneyBean_32 Start: 20903, Stop: 21295, Start Num: 6
Candidate Starts for KidneyBean_32:
(3, 20894), (Start: 6 @20903 has 43 MA's), (Start: 7 @20912 has 3 MA's), (19, 21026), (20, 21044), (23, 21092), (31, 21206), (33, 21224),

Gene: Kurt_32 Start: 21143, Stop: 21535, Start Num: 6
Candidate Starts for Kurt_32:
(1, 21014), (3, 21134), (Start: 6 @21143 has 43 MA's), (Start: 7 @21152 has 3 MA's), (15, 21248), (19, 21266), (20, 21284), (23, 21332), (31, 21446), (33, 21464),

Gene: Lollipop1437_37 Start: 21727, Stop: 22125, Start Num: 6
Candidate Starts for Lollipop1437_37:
(3, 21718), (Start: 6 @21727 has 43 MA's), (9, 21769), (13, 21826), (15, 21835), (20, 21871), (32, 22042),

Gene: MacGully_40 Start: 21936, Stop: 22355, Start Num: 5
Candidate Starts for MacGully_40:
(Start: 5 @21936 has 4 MA's), (Start: 7 @21948 has 3 MA's), (9, 22005), (24, 22188), (35, 22323), (36, 22347),

Gene: Marietta_34 Start: 18274, Stop: 18675, Start Num: 6
Candidate Starts for Marietta_34:
(4, 18268), (Start: 6 @18274 has 43 MA's), (17, 18394), (19, 18403), (23, 18469), (26, 18523), (32, 18592),

Gene: Maselop_36 Start: 22005, Stop: 22367, Start Num: 7
Candidate Starts for Maselop_36:
(Start: 5 @21993 has 4 MA's), (Start: 7 @22005 has 3 MA's), (21, 22161), (22, 22164), (27, 22236), (29, 22260), (37, 22362),

Gene: MerCougar_33 Start: 21026, Stop: 21427, Start Num: 6
Candidate Starts for MerCougar_33:
(Start: 6 @21026 has 43 MA's), (12, 21113), (16, 21137), (23, 21215), (32, 21338), (34, 21362),

Gene: NadineRae_32 Start: 17520, Stop: 17921, Start Num: 6
Candidate Starts for NadineRae_32:
(4, 17514), (Start: 6 @17520 has 43 MA's), (17, 17640), (19, 17649), (23, 17715), (26, 17769), (32, 17838),

Gene: NatB6_32 Start: 20152, Stop: 20544, Start Num: 6
Candidate Starts for NatB6_32:
(1, 20023), (3, 20143), (Start: 6 @20152 has 43 MA's), (Start: 7 @20161 has 3 MA's), (15, 20257), (19, 20275), (20, 20293), (23, 20341), (31, 20455), (33, 20473),

Gene: NosilaM_35 Start: 20716, Stop: 21117, Start Num: 6
Candidate Starts for NosilaM_35:
(Start: 6 @20716 has 43 MA's), (12, 20803), (16, 20827), (23, 20905), (28, 20983), (32, 21028), (34, 21052),

Gene: NovumRegina_32 Start: 20485, Stop: 20877, Start Num: 6
Candidate Starts for NovumRegina_32:
(3, 20476), (Start: 6 @20485 has 43 MA's), (Start: 7 @20494 has 3 MA's), (19, 20608), (20, 20626), (23, 20674), (31, 20788), (33, 20806),

Gene: Outis_33 Start: 20720, Stop: 21121, Start Num: 6
Candidate Starts for Outis_33:
(Start: 6 @20720 has 43 MA's), (16, 20831), (23, 20909), (32, 21032), (34, 21056),

Gene: Patio_35 Start: 20963, Stop: 21361, Start Num: 6
Candidate Starts for Patio_35:
(3, 20954), (Start: 6 @20963 has 43 MA's), (9, 21005), (13, 21062), (14, 21065), (20, 21107), (26, 21209), (31, 21269), (32, 21278),

Gene: Pemberton_35 Start: 18260, Stop: 18661, Start Num: 6
Candidate Starts for Pemberton_35:
(4, 18254), (Start: 6 @18260 has 43 MA's), (17, 18380), (18, 18386), (19, 18389), (23, 18455), (26, 18509), (32, 18578),

Gene: Phomeo_31 Start: 20778, Stop: 21170, Start Num: 6
Candidate Starts for Phomeo_31:
(1, 20649), (3, 20769), (Start: 6 @20778 has 43 MA's), (Start: 7 @20787 has 3 MA's), (15, 20883), (19, 20901), (20, 20919), (23, 20967), (31, 21081), (33, 21099),

Gene: Pleakley_41 Start: 20786, Stop: 21187, Start Num: 6
Candidate Starts for Pleakley_41:
(3, 20777), (Start: 5 @20783 has 4 MA's), (Start: 6 @20786 has 43 MA's), (20, 20933), (26, 21035), (31, 21095),

Gene: Polyyuki_36 Start: 21997, Stop: 22359, Start Num: 7
Candidate Starts for Polyyuki_36:
(Start: 5 @21985 has 4 MA's), (Start: 7 @21997 has 3 MA's), (21, 22153), (22, 22156), (27, 22228), (29, 22252), (37, 22354),

Gene: RedRaider_39 Start: 22967, Stop: 23365, Start Num: 6
Candidate Starts for RedRaider_39:
(3, 22958), (Start: 6 @22967 has 43 MA's), (13, 23066), (20, 23111), (26, 23213), (32, 23282),

Gene: Scuba_41 Start: 20879, Stop: 21280, Start Num: 6
Candidate Starts for Scuba_41:
(3, 20870), (Start: 5 @20876 has 4 MA's), (Start: 6 @20879 has 43 MA's), (20, 21026), (26, 21128), (31, 21188),

Gene: Skysand_34 Start: 21180, Stop: 21578, Start Num: 6
Candidate Starts for Skysand_34:
(3, 21171), (Start: 6 @21180 has 43 MA's), (9, 21222), (13, 21279), (20, 21324), (26, 21426), (31, 21486), (32, 21495),

Gene: StarStruck_33 Start: 20720, Stop: 21121, Start Num: 6
Candidate Starts for StarStruck_33:
(Start: 6 @20720 has 43 MA's), (16, 20831), (23, 20909), (32, 21032), (34, 21056),

Gene: Sukkupi_34 Start: 19834, Stop: 20235, Start Num: 6
Candidate Starts for Sukkupi_34:
(4, 19828), (Start: 6 @19834 has 43 MA's), (17, 19954), (18, 19960), (19, 19963), (23, 20029), (26, 20083), (32, 20152),

Gene: SuperSulley_33 Start: 20904, Stop: 21305, Start Num: 6
Candidate Starts for SuperSulley_33:
(Start: 6 @20904 has 43 MA's), (12, 20991), (16, 21015), (23, 21093), (28, 21171), (32, 21216), (34, 21240),

Gene: Tracker_32 Start: 19906, Stop: 20298, Start Num: 6
Candidate Starts for Tracker_32:
(1, 19777), (3, 19897), (Start: 6 @19906 has 43 MA's), (Start: 7 @19915 has 3 MA's), (15, 20011), (19, 20029), (20, 20047), (23, 20095), (31, 20209), (33, 20227),

Gene: Turuncu_36 Start: 21181, Stop: 21585, Start Num: 6
Candidate Starts for Turuncu_36:
(3, 21172), (Start: 6 @21181 has 43 MA's), (Start: 7 @21190 has 3 MA's), (19, 21313), (20, 21331), (26, 21433), (31, 21493),

Gene: Wheezy_32 Start: 20111, Stop: 20503, Start Num: 6
Candidate Starts for Wheezy_32:
(3, 20102), (Start: 6 @20111 has 43 MA's), (Start: 7 @20120 has 3 MA's), (19, 20234), (20, 20252), (23, 20300), (31, 20414), (33, 20432),

Gene: WhoseManz_34 Start: 17886, Stop: 18287, Start Num: 6
Candidate Starts for WhoseManz_34:
(4, 17880), (Start: 6 @17886 has 43 MA's), (17, 18006), (19, 18015), (23, 18081), (26, 18135), (32, 18204),

Gene: Yndexa_34 Start: 19834, Stop: 20235, Start Num: 6
Candidate Starts for Yndexa_34:
(4, 19828), (Start: 6 @19834 has 43 MA's), (17, 19954), (18, 19960), (19, 19963), (23, 20029), (26, 20083), (32, 20152),