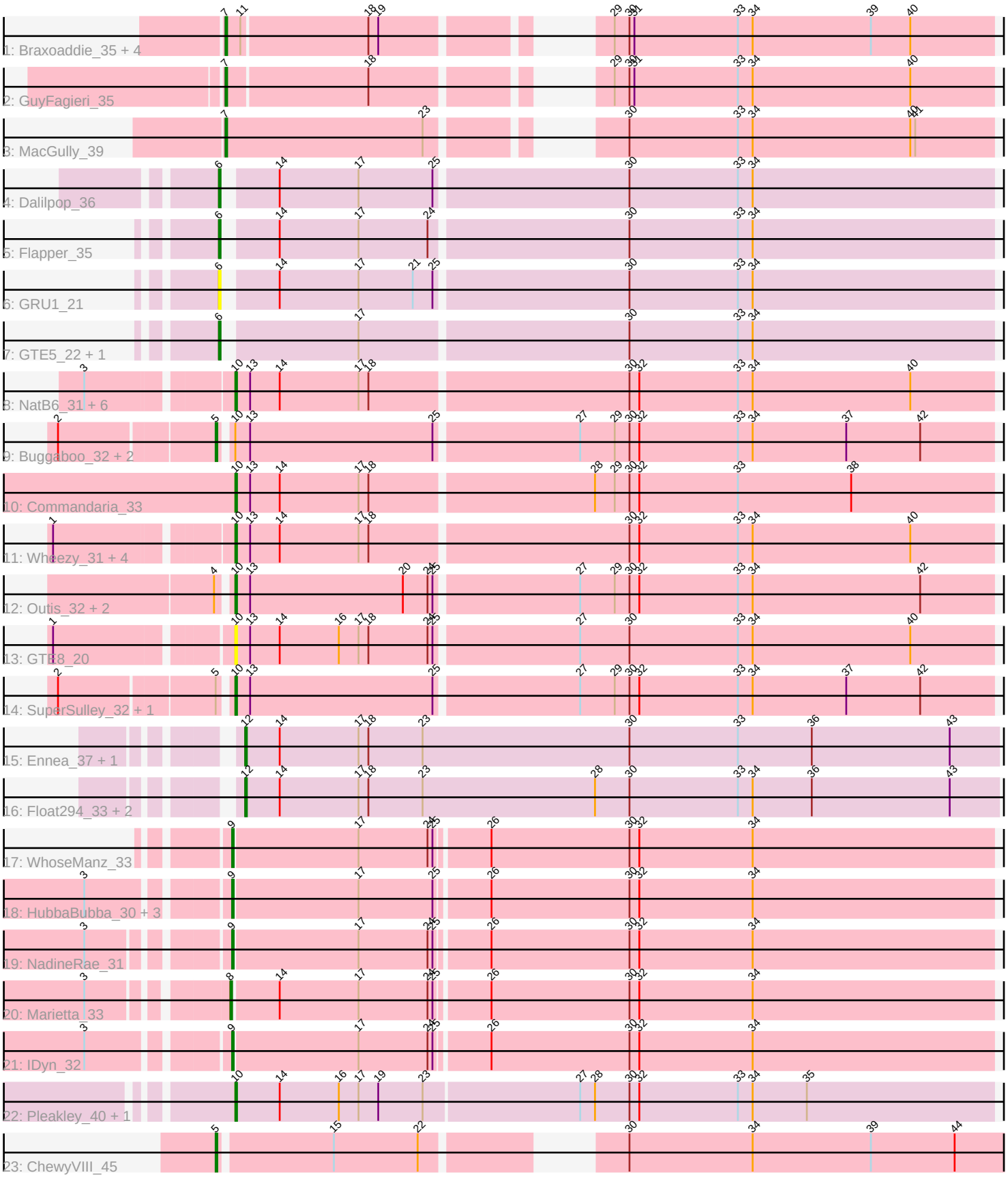
Pham 85760


1: Braxoaddie_35 + 4
2: GuyFagieri_35
3: MacGully_39
4: Dalilpop_36
5: Flapper_35
6: GRU1_21
7: GTE5_22 + 1
8: NatB6_31 + 6
9: Buggaboo_32 + 2
10: Commandaria_33
11: Whaezy_31 + 4
12: Outis_32 + 2
13: GT88_20
14: SuperSulley_32 + 1
15: Ennea_37 + 1
16: Float294_33 + 2
17: WhoseManz_33
18: HubbaBubba_30 + 3
19: NadineRae_31
20: Marietta_33
21: IDyn_32
22: Pleakley_40 + 1
23: ChewyVIII_45

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 85760 Report

This analysis was run 04/28/24 on database version 559.

Pham number 85760 has 50 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Braxoaddie_35, Polyyuki_35, Apiary_35, Maselop_35, CoffeeBean_35
• Track 2 : GuyFagieri_35
• Track 3 : MacGully_39
• Track 4 : Dalilpop_36
• Track 5 : Flapper_35
• Track 6 : GRU1_21
• Track 7 : GTE5_22, Turuncu_35
• Track 8 : NatB6_31, Kurt_31, Jifall16_30, Tracker_31, Phomeo_30, Foxboro_32, Emianna_31
• Track 9 : Buggaboo_32, Kabluna_34, NosilaM_34
• Track 10 : Commandaria_33
• Track 11 : Wheezy_31, KidneyBean_31, NovumRegina_31, GrootJr_33, Arti_31
• Track 12 : Outis_32, MerCougar_32, StarStruck_32
• Track 13 : GTE8_20
• Track 14 : SuperSulley_32, Bonum_34
• Track 15 : Ennea_37, Lollipop1437_36
• Track 16 : Float294_33, Patio_34, Skysand_33
• Track 17 : WhoseManz_33
• Track 18 : HubbaBubba_30, BiPauneto_34, Sukkupi_33, Yndexa_33
• Track 19 : NadineRae_31
• Track 20 : Marietta_33
• Track 21 : IDyn_32
• Track 22 : Pleakley_40, Fury_40
• Track 23 : ChewyVIII_45

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

The start number called the most often in the published annotations is 10, it was called in 19 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_31, Bonum_34, Commandaria_33, Emianna_31, Foxboro_32, Fury_40, GTE8_20, GrootJr_33, Jifall16_30, KidneyBean_31, Kurt_31, MerCougar_32, NatB6_31, NovumRegina_31, Outis_32, Phomeo_30, Pleakley_40, StarStruck_32,

SuperSulley_32, Tracker_31, Wheezy_31,

Genes that have the "Most Annotated" start but do not call it:
• Buggaboo_32, Kabluna_34, NosilaM_34,

Genes that do not have the "Most Annotated" start:
• Apiary_35, BiPauneto_34, Braxoaddie_35, ChewyVIII_45, CoffeeBean_35, Dalilpop_36, Ennea_37, Flapper_35, Float294_33, GRU1_21, GTE5_22, GuyFagieri_35, HubbaBubba_30, IDyn_32, Lollipop1437_36, MacGully_39, Marietta_33, Maselop_35, NadineRae_31, Patio_34, Polyyuki_35, Skysand_33, Sukkupi_33, Turuncu_35, WhoseManz_33, Yndexa_33,

Summary by start number:

Start 5:
• Found in 6 of 50 (12.0%) of genes in pham
• Manual Annotations of this start: 4 of 44
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Buggaboo_32 (CR2), ChewyVIII_45 (singleton), Kabluna_34 (CR2), NosilaM_34 (CR2),

Start 6:
• Found in 5 of 50 (10.0%) of genes in pham
• Manual Annotations of this start: 3 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dalilpop_36 (CR1), Flapper_35 (CR1), GRU1_21 (CR1), GTE5_22 (CR1), Turuncu_35 (CR1),

Start 7:
• Found in 7 of 50 (14.0%) of genes in pham
• Manual Annotations of this start: 6 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apiary_35 (CR), Braxoaddie_35 (CR), CoffeeBean_35 (CR), GuyFagieri_35 (CR), MacGully_39 (CR), Maselop_35 (CR), Polyyuki_35 (CR),

Start 8:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Marietta_33 (CR4),

Start 9:
• Found in 7 of 50 (14.0%) of genes in pham
• Manual Annotations of this start: 6 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BiPauneto_34 (CR4), HubbaBubba_30 (CR4), IDyn_32 (CR4), NadineRae_31 (CR4), Sukkupi_33 (CR4), WhoseManz_33 (CR4), Yndexa_33 (CR4),

Start 10:
• Found in 24 of 50 (48.0%) of genes in pham
• Manual Annotations of this start: 19 of 44

• Called 87.5% of time when present
• Phage (with cluster) where this start called: Arti_31 (CR2), Bonum_34 (CR2), Commandaria_33 (CR2), Emianna_31 (CR2), Foxboro_32 (CR2), Fury_40 (CR5), GTE8_20 (CR2), GrootJr_33 (CR2), Jifall16_30 (CR2), KidneyBean_31 (CR2), Kurt_31 (CR2), MerCougar_32 (CR2), NatB6_31 (CR2), NovumRegina_31 (CR2), Outis_32 (CR2), Phomeo_30 (CR2), Pleakley_40 (CR5), StarStruck_32 (CR2), SuperSulley_32 (CR2), Tracker_31 (CR2), Wheezy_31 (CR2),

Start 12:
• Found in 5 of 50 (10.0%) of genes in pham
• Manual Annotations of this start: 5 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ennea_37 (CR3), Float294_33 (CR3), Lollipop1437_36 (CR3), Patio_34 (CR3), Skysand_33 (CR3),

Summary by clusters:

There are 7 clusters represented in this pham: CR2, CR3, singleton, CR1, CR4, CR5, CR,

Info for manual annotations of cluster CR:
•Start number 7 was manually annotated 6 times for cluster CR.

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 5 was manually annotated 3 times for cluster CR2.
•Start number 10 was manually annotated 17 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 12 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 8 was manually annotated 1 time for cluster CR4.
•Start number 9 was manually annotated 6 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 10 was manually annotated 2 times for cluster CR5.

Gene Information:

Gene: Apiary_35 Start: 21563, Stop: 21976, Start Num: 7
Candidate Starts for Apiary_35:
(Start: 7 @21563 has 6 MA's), (11, 21572), (18, 21647), (19, 21653), (29, 21746), (30, 21755), (31, 21758), (33, 21821), (34, 21830), (39, 21902), (40, 21926),

Gene: Arti_31 Start: 19636, Stop: 20091, Start Num: 10
Candidate Starts for Arti_31:
(1, 19537), (Start: 10 @19636 has 19 MA's), (13, 19645), (14, 19663), (17, 19711), (18, 19717), (30, 19870), (32, 19876), (33, 19936), (34, 19945), (40, 20041),

Gene: BiPauneto_34 Start: 19491, Stop: 19946, Start Num: 9
Candidate Starts for BiPauneto_34:
(3, 19416), (Start: 9 @19491 has 6 MA's), (17, 19566), (25, 19611), (26, 19641), (30, 19725), (32, 19731), (34, 19800),

Gene: Bonum_34 Start: 19967, Stop: 20422, Start Num: 10
Candidate Starts for Bonum_34:
(2, 19871), (Start: 5 @19961 has 4 MA's), (Start: 10 @19967 has 19 MA's), (13, 19976), (25, 20087), (27, 20171), (29, 20192), (30, 20201), (32, 20207), (33, 20267), (34, 20276), (37, 20333), (42, 20378),

Gene: Braxoaddie_35 Start: 21552, Stop: 21965, Start Num: 7
Candidate Starts for Braxoaddie_35:
(Start: 7 @21552 has 6 MA's), (11, 21561), (18, 21636), (19, 21642), (29, 21735), (30, 21744), (31, 21747), (33, 21810), (34, 21819), (39, 21891), (40, 21915),

Gene: Buggaboo_32 Start: 20446, Stop: 20907, Start Num: 5
Candidate Starts for Buggaboo_32:
(2, 20356), (Start: 5 @20446 has 4 MA's), (Start: 10 @20452 has 19 MA's), (13, 20461), (25, 20572), (27, 20656), (29, 20677), (30, 20686), (32, 20692), (33, 20752), (34, 20761), (37, 20818), (42, 20863),

Gene: ChewyVIII_45 Start: 27135, Stop: 27593, Start Num: 5
Candidate Starts for ChewyVIII_45:
(Start: 5 @27135 has 4 MA's), (15, 27201), (22, 27252), (30, 27336), (34, 27411), (39, 27483), (44, 27534),

Gene: CoffeeBean_35 Start: 21507, Stop: 21920, Start Num: 7
Candidate Starts for CoffeeBean_35:
(Start: 7 @21507 has 6 MA's), (11, 21516), (18, 21591), (19, 21597), (29, 21690), (30, 21699), (31, 21702), (33, 21765), (34, 21774), (39, 21846), (40, 21870),

Gene: Commandaria_33 Start: 20957, Stop: 21412, Start Num: 10
Candidate Starts for Commandaria_33:
(Start: 10 @20957 has 19 MA's), (13, 20966), (14, 20984), (17, 21032), (18, 21038), (28, 21170), (29, 21182), (30, 21191), (32, 21197), (33, 21257), (38, 21326),

Gene: Dalilpop_36 Start: 21951, Stop: 22406, Start Num: 6
Candidate Starts for Dalilpop_36:
(Start: 6 @21951 has 3 MA's), (14, 21978), (17, 22026), (25, 22071), (30, 22185), (33, 22251), (34, 22260),

Gene: Emianna_31 Start: 20673, Stop: 21128, Start Num: 10
Candidate Starts for Emianna_31:
(3, 20592), (Start: 10 @20673 has 19 MA's), (13, 20682), (14, 20700), (17, 20748), (18, 20754), (30, 20907), (32, 20913), (33, 20973), (34, 20982), (40, 21078),

Gene: Ennea_37 Start: 21284, Stop: 21742, Start Num: 12
Candidate Starts for Ennea_37:
(Start: 12 @21284 has 5 MA's), (14, 21305), (17, 21353), (18, 21359), (23, 21392), (30, 21518), (33, 21584), (36, 21629), (43, 21713),

Gene: Flapper_35 Start: 21033, Stop: 21488, Start Num: 6
Candidate Starts for Flapper_35:

(Start: 6 @21033 has 3 MA's), (14, 21060), (17, 21108), (24, 21150), (30, 21267), (33, 21333), (34, 21342),

Gene: Float294_33 Start: 20723, Stop: 21181, Start Num: 12
Candidate Starts for Float294_33:
(Start: 12 @20723 has 5 MA's), (14, 20744), (17, 20792), (18, 20798), (23, 20831), (28, 20936), (30, 20957), (33, 21023), (34, 21032), (36, 21068), (43, 21152),

Gene: Foxboro_32 Start: 21179, Stop: 21634, Start Num: 10
Candidate Starts for Foxboro_32:
(3, 21098), (Start: 10 @21179 has 19 MA's), (13, 21188), (14, 21206), (17, 21254), (18, 21260), (30, 21413), (32, 21419), (33, 21479), (34, 21488), (40, 21584),

Gene: Fury_40 Start: 20327, Stop: 20785, Start Num: 10
Candidate Starts for Fury_40:
(Start: 10 @20327 has 19 MA's), (14, 20354), (16, 20390), (17, 20402), (19, 20414), (23, 20441), (27, 20534), (28, 20543), (30, 20564), (32, 20570), (33, 20630), (34, 20639), (35, 20672),

Gene: GRU1_21 Start: 12918, Stop: 13373, Start Num: 6
Candidate Starts for GRU1_21:
(Start: 6 @12918 has 3 MA's), (14, 12945), (17, 12993), (21, 13026), (25, 13038), (30, 13152), (33, 13218), (34, 13227),

Gene: GTE5_22 Start: 13921, Stop: 14376, Start Num: 6
Candidate Starts for GTE5_22:
(Start: 6 @13921 has 3 MA's), (17, 13996), (30, 14155), (33, 14221), (34, 14230),

Gene: GTE8_20 Start: 13932, Stop: 14387, Start Num: 10
Candidate Starts for GTE8_20:
(1, 13833), (Start: 10 @13932 has 19 MA's), (13, 13941), (14, 13959), (16, 13995), (17, 14007), (18, 14013), (24, 14049), (25, 14052), (27, 14136), (30, 14166), (33, 14232), (34, 14241), (40, 14337),

Gene: GrootJr_33 Start: 20031, Stop: 20486, Start Num: 10
Candidate Starts for GrootJr_33:
(1, 19932), (Start: 10 @20031 has 19 MA's), (13, 20040), (14, 20058), (17, 20106), (18, 20112), (30, 20265), (32, 20271), (33, 20331), (34, 20340), (40, 20436),

Gene: GuyFagieri_35 Start: 21382, Stop: 21795, Start Num: 7
Candidate Starts for GuyFagieri_35:
(Start: 7 @21382 has 6 MA's), (18, 21466), (29, 21565), (30, 21574), (31, 21577), (33, 21640), (34, 21649), (40, 21745),

Gene: HubbaBubba_30 Start: 16509, Stop: 16964, Start Num: 9
Candidate Starts for HubbaBubba_30:
(3, 16434), (Start: 9 @16509 has 6 MA's), (17, 16584), (25, 16629), (26, 16659), (30, 16743), (32, 16749), (34, 16818),

Gene: IDyn_32 Start: 17905, Stop: 18360, Start Num: 9
Candidate Starts for IDyn_32:
(3, 17830), (Start: 9 @17905 has 6 MA's), (17, 17980), (24, 18022), (25, 18025), (26, 18055), (30, 18139), (32, 18145), (34, 18214),

Gene: Jifall16_30 Start: 20300, Stop: 20755, Start Num: 10

Candidate Starts for Jifall16_30:
(3, 20219), (Start: 10 @20300 has 19 MA's), (13, 20309), (14, 20327), (17, 20375), (18, 20381), (30, 20534), (32, 20540), (33, 20600), (34, 20609), (40, 20705),

Gene: Kabluna_34 Start: 19361, Stop: 19822, Start Num: 5
Candidate Starts for Kabluna_34:
(2, 19271), (Start: 5 @19361 has 4 MA's), (Start: 10 @19367 has 19 MA's), (13, 19376), (25, 19487), (27, 19571), (29, 19592), (30, 19601), (32, 19607), (33, 19667), (34, 19676), (37, 19733), (42, 19778),

Gene: KidneyBean_31 Start: 20448, Stop: 20903, Start Num: 10
Candidate Starts for KidneyBean_31:
(1, 20349), (Start: 10 @20448 has 19 MA's), (13, 20457), (14, 20475), (17, 20523), (18, 20529), (30, 20682), (32, 20688), (33, 20748), (34, 20757), (40, 20853),

Gene: Kurt_31 Start: 20688, Stop: 21143, Start Num: 10
Candidate Starts for Kurt_31:
(3, 20607), (Start: 10 @20688 has 19 MA's), (13, 20697), (14, 20715), (17, 20763), (18, 20769), (30, 20922), (32, 20928), (33, 20988), (34, 20997), (40, 21093),

Gene: Lollipop1437_36 Start: 21272, Stop: 21730, Start Num: 12
Candidate Starts for Lollipop1437_36:
(Start: 12 @21272 has 5 MA's), (14, 21293), (17, 21341), (18, 21347), (23, 21380), (30, 21506), (33, 21572), (36, 21617), (43, 21701),

Gene: MacGully_39 Start: 21523, Stop: 21939, Start Num: 7
Candidate Starts for MacGully_39:
(Start: 7 @21523 has 6 MA's), (23, 21643), (30, 21718), (33, 21784), (34, 21793), (40, 21889), (41, 21892),

Gene: Marietta_33 Start: 17822, Stop: 18277, Start Num: 8
Candidate Starts for Marietta_33:
(3, 17750), (Start: 8 @17822 has 1 MA's), (14, 17849), (17, 17897), (24, 17939), (25, 17942), (26, 17972), (30, 18056), (32, 18062), (34, 18131),

Gene: Maselop_35 Start: 21583, Stop: 21996, Start Num: 7
Candidate Starts for Maselop_35:
(Start: 7 @21583 has 6 MA's), (11, 21592), (18, 21667), (19, 21673), (29, 21766), (30, 21775), (31, 21778), (33, 21841), (34, 21850), (39, 21922), (40, 21946),

Gene: MerCougar_32 Start: 20574, Stop: 21029, Start Num: 10
Candidate Starts for MerCougar_32:
(4, 20568), (Start: 10 @20574 has 19 MA's), (13, 20583), (20, 20676), (24, 20691), (25, 20694), (27, 20778), (29, 20799), (30, 20808), (32, 20814), (33, 20874), (34, 20883), (42, 20985),

Gene: NadineRae_31 Start: 17068, Stop: 17523, Start Num: 9
Candidate Starts for NadineRae_31:
(3, 16996), (Start: 9 @17068 has 6 MA's), (17, 17143), (24, 17185), (25, 17188), (26, 17218), (30, 17302), (32, 17308), (34, 17377),

Gene: NatB6_31 Start: 19697, Stop: 20152, Start Num: 10
Candidate Starts for NatB6_31:
(3, 19616), (Start: 10 @19697 has 19 MA's), (13, 19706), (14, 19724), (17, 19772), (18, 19778), (30, 19931), (32, 19937), (33, 19997), (34, 20006), (40, 20102),

Gene: NosilaM_34 Start: 20258, Stop: 20719, Start Num: 5
Candidate Starts for NosilaM_34:
(2, 20168), (Start: 5 @20258 has 4 MA's), (Start: 10 @20264 has 19 MA's), (13, 20273), (25, 20384), (27, 20468), (29, 20489), (30, 20498), (32, 20504), (33, 20564), (34, 20573), (37, 20630), (42, 20675),

Gene: NovumRegina_31 Start: 20030, Stop: 20485, Start Num: 10
Candidate Starts for NovumRegina_31:
(1, 19931), (Start: 10 @20030 has 19 MA's), (13, 20039), (14, 20057), (17, 20105), (18, 20111), (30, 20264), (32, 20270), (33, 20330), (34, 20339), (40, 20435),

Gene: Outis_32 Start: 20268, Stop: 20723, Start Num: 10
Candidate Starts for Outis_32:
(4, 20262), (Start: 10 @20268 has 19 MA's), (13, 20277), (20, 20370), (24, 20385), (25, 20388), (27, 20472), (29, 20493), (30, 20502), (32, 20508), (33, 20568), (34, 20577), (42, 20679),

Gene: Patio_34 Start: 20508, Stop: 20966, Start Num: 12
Candidate Starts for Patio_34:
(Start: 12 @20508 has 5 MA's), (14, 20529), (17, 20577), (18, 20583), (23, 20616), (28, 20721), (30, 20742), (33, 20808), (34, 20817), (36, 20853), (43, 20937),

Gene: Phomeo_30 Start: 20323, Stop: 20778, Start Num: 10
Candidate Starts for Phomeo_30:
(3, 20242), (Start: 10 @20323 has 19 MA's), (13, 20332), (14, 20350), (17, 20398), (18, 20404), (30, 20557), (32, 20563), (33, 20623), (34, 20632), (40, 20728),

Gene: Pleakley_40 Start: 20328, Stop: 20786, Start Num: 10
Candidate Starts for Pleakley_40:
(Start: 10 @20328 has 19 MA's), (14, 20355), (16, 20391), (17, 20403), (19, 20415), (23, 20442), (27, 20535), (28, 20544), (30, 20565), (32, 20571), (33, 20631), (34, 20640), (35, 20673),

Gene: Polyyuki_35 Start: 21575, Stop: 21988, Start Num: 7
Candidate Starts for Polyyuki_35:
(Start: 7 @21575 has 6 MA's), (11, 21584), (18, 21659), (19, 21665), (29, 21758), (30, 21767), (31, 21770), (33, 21833), (34, 21842), (39, 21914), (40, 21938),

Gene: Skysand_33 Start: 20725, Stop: 21183, Start Num: 12
Candidate Starts for Skysand_33:
(Start: 12 @20725 has 5 MA's), (14, 20746), (17, 20794), (18, 20800), (23, 20833), (28, 20938), (30, 20959), (33, 21025), (34, 21034), (36, 21070), (43, 21154),

Gene: StarStruck_32 Start: 20268, Stop: 20723, Start Num: 10
Candidate Starts for StarStruck_32:
(4, 20262), (Start: 10 @20268 has 19 MA's), (13, 20277), (20, 20370), (24, 20385), (25, 20388), (27, 20472), (29, 20493), (30, 20502), (32, 20508), (33, 20568), (34, 20577), (42, 20679),

Gene: Sukkupi_33 Start: 19382, Stop: 19837, Start Num: 9
Candidate Starts for Sukkupi_33:
(3, 19307), (Start: 9 @19382 has 6 MA's), (17, 19457), (25, 19502), (26, 19532), (30, 19616), (32, 19622), (34, 19691),

Gene: SuperSulley_32 Start: 20452, Stop: 20907, Start Num: 10
Candidate Starts for SuperSulley_32:

(2, 20356), (Start: 5 @20446 has 4 MA's), (Start: 10 @20452 has 19 MA's), (13, 20461), (25, 20572), (27, 20656), (29, 20677), (30, 20686), (32, 20692), (33, 20752), (34, 20761), (37, 20818), (42, 20863),

Gene: Tracker_31 Start: 19451, Stop: 19906, Start Num: 10
Candidate Starts for Tracker_31:
(3, 19370), (Start: 10 @19451 has 19 MA's), (13, 19460), (14, 19478), (17, 19526), (18, 19532), (30, 19685), (32, 19691), (33, 19751), (34, 19760), (40, 19856),

Gene: Turuncu_35 Start: 20726, Stop: 21181, Start Num: 6
Candidate Starts for Turuncu_35:
(Start: 6 @20726 has 3 MA's), (17, 20801), (30, 20960), (33, 21026), (34, 21035),

Gene: Wheezy_31 Start: 19656, Stop: 20111, Start Num: 10
Candidate Starts for Wheezy_31:
(1, 19557), (Start: 10 @19656 has 19 MA's), (13, 19665), (14, 19683), (17, 19731), (18, 19737), (30, 19890), (32, 19896), (33, 19956), (34, 19965), (40, 20061),

Gene: WhoseManz_33 Start: 17434, Stop: 17889, Start Num: 9
Candidate Starts for WhoseManz_33:
(Start: 9 @17434 has 6 MA's), (17, 17509), (24, 17551), (25, 17554), (26, 17584), (30, 17668), (32, 17674), (34, 17743),

Gene: Yndexa_33 Start: 19382, Stop: 19837, Start Num: 9
Candidate Starts for Yndexa_33:
(3, 19307), (Start: 9 @19382 has 6 MA's), (17, 19457), (25, 19502), (26, 19532), (30, 19616), (32, 19622), (34, 19691),