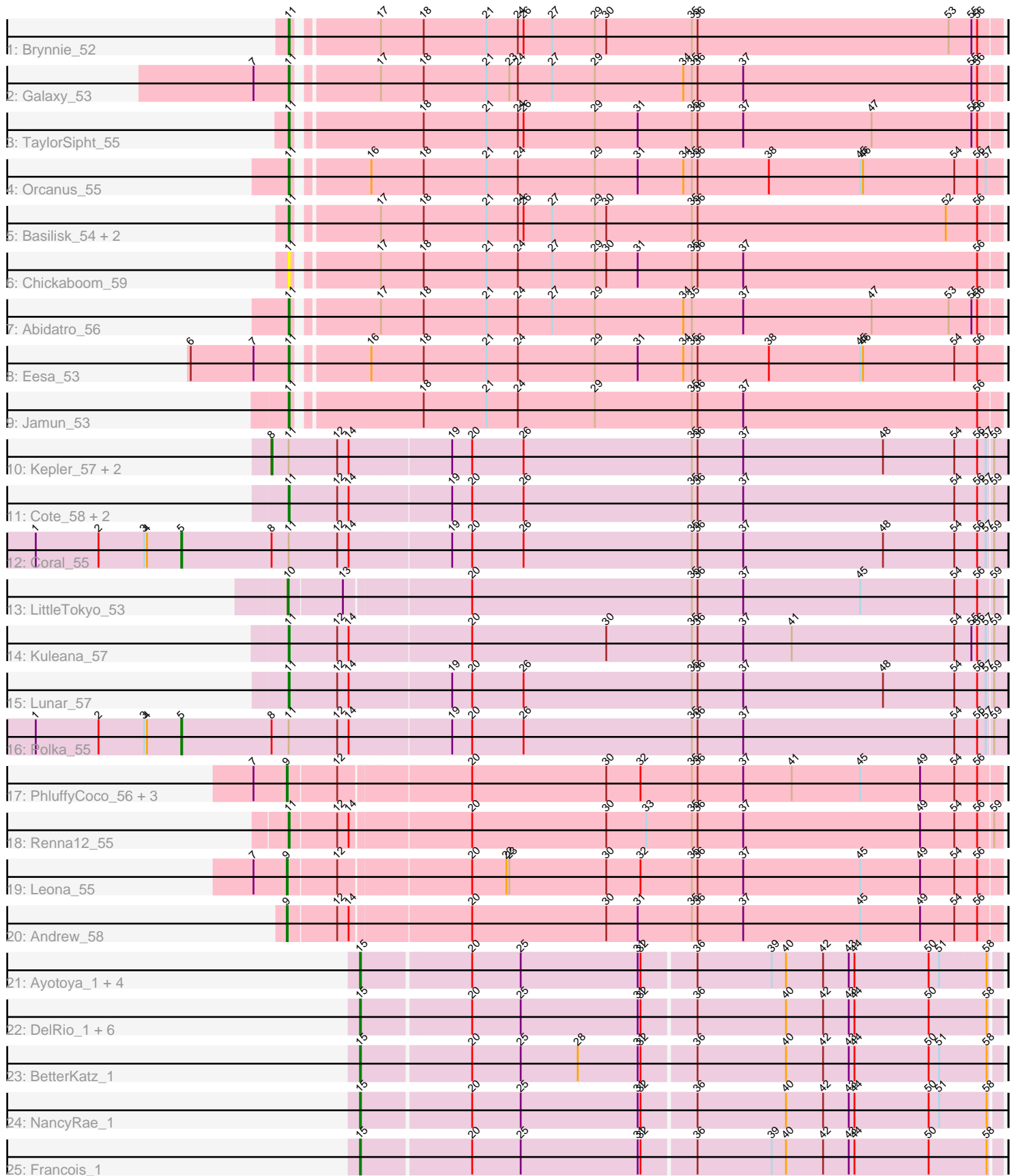


Pham 152060



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 152060 Report

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

Pham number 152060 has 44 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Brynnie_52
- Track 2 : Galaxy_53
- Track 3 : TaylorSipht_55
- Track 4 : Orcanus_55
- Track 5 : Basilisk_54, Vulpecula_53, Ruchi_53
- Track 6 : Chickaboom_59
- Track 7 : Abidatro_56
- Track 8 : Eesa_53
- Track 9 : Jamun_53
- Track 10 : Kepler_57, Melons_57, Daob_57
- Track 11 : Cote_58, Amelia_55, HannahPhantana_63
- Track 12 : Coral_55
- Track 13 : LittleTokyo_53
- Track 14 : Kuleana_57
- Track 15 : Lunar_57
- Track 16 : Polka_55
- Track 17 : PhluffyCoco_56, Juno112_56, KHumphrey_55, RedFox_56
- Track 18 : Renna12_55
- Track 19 : Leona_55
- Track 20 : Andrew_58
- Track 21 : Ayotoya_1, GrandSlam_1, Bock_1, Chop_1, Hamood_1
- Track 22 : DelRio_1, Brylie_1, Parada_1, Nadeem_1, Pimento_1, Mulch_1, WheatThin_1
- Track 23 : BetterKatz_1
- Track 24 : NancyRae_1
- Track 25 : Francois_1

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

The start number called the most often in the published annotations is 11, it was called in 15 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro_56, Amelia_55, Basilisk_54, Brynnie_52, Chickaboom_59, Cote_58, Eesa_53, Galaxy_53, HannahPhantana_63, Jamun_53, Kuleana_57, Lunar_57, Orcanus_55, Renna12_55, Ruchi_53, TaylorSipht_55, Vulpecula_53,

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

- Coral_55, Daob_57, Kepler_57, Melons_57, Polka_55,

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

- Andrew_58, Ayotoya_1, BetterKatz_1, Bock_1, Brylie_1, Chop_1, DelRio_1, Francois_1, GrandSlam_1, Hamood_1, Juno112_56, KHumphrey_55, Leona_55, LittleTokyo_53, Mulch_1, Nadeem_1, NancyRae_1, Parada_1, PhluffyCoco_56, Pimento_1, RedFox_56, WheatThin_1,

Summary by start number:

Start 5:

- Found in 2 of 44 (4.5%) of genes in pham
- Manual Annotations of this start: 2 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Coral_55 (AS2), Polka_55 (AS2),

Start 8:

- Found in 5 of 44 (11.4%) of genes in pham
- Manual Annotations of this start: 3 of 37
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Daob_57 (AS2), Kepler_57 (AS2), Melons_57 (AS2),

Start 9:

- Found in 6 of 44 (13.6%) of genes in pham
- Manual Annotations of this start: 3 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andrew_58 (AS3), Juno112_56 (AS3), KHumphrey_55 (AS3), Leona_55 (AS3), PhluffyCoco_56 (AS3), RedFox_56 (AS3),

Start 10:

- Found in 1 of 44 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LittleTokyo_53 (AS2),

Start 11:

- Found in 22 of 44 (50.0%) of genes in pham
- Manual Annotations of this start: 15 of 37
- Called 77.3% of time when present
- Phage (with cluster) where this start called: Abidatro_56 (AS1), Amelia_55 (AS2), Basilisk_54 (AS1), Brynnie_52 (AS1), Chickaboom_59 (AS1), Cote_58 (AS2), Eesa_53 (AS1), Galaxy_53 (AS1), HannahPhantana_63 (AS2), Jamun_53 (AS1), Kuleana_57 (AS2), Lunar_57 (AS2), Orcanus_55 (AS1), Renna12_55 (AS3), Ruchi_53 (AS1), TaylorSipht_55 (AS1), Vulpecula_53 (AS1),

Start 15:

- Found in 15 of 44 (34.1%) of genes in pham

- Manual Annotations of this start: 13 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya_1 (DI), BetterKatz_1 (DI), Bock_1 (DI), Brylie_1 (DI), Chop_1 (DI), DelRio_1 (DI), Francois_1 (DI), GrandSlam_1 (DI), Hamood_1 (DI), Mulch_1 (DI), Nadeem_1 (DI), NancyRae_1 (DI), Parada_1 (DI), Pimento_1 (DI), WheatThin_1 (DI),

Summary by clusters:

There are 4 clusters represented in this pham: AS3, AS2, AS1, DI,

Info for manual annotations of cluster AS1:

- Start number 11 was manually annotated 10 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 5 was manually annotated 2 times for cluster AS2.
- Start number 8 was manually annotated 3 times for cluster AS2.
- Start number 10 was manually annotated 1 time for cluster AS2.
- Start number 11 was manually annotated 4 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 9 was manually annotated 3 times for cluster AS3.
- Start number 11 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster DI:

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

Gene Information:

Gene: Abidatro_56 Start: 35238, Stop: 35966, Start Num: 11

Candidate Starts for Abidatro_56:

(Start: 11 @35238 has 15 MA's), (17, 35316), (18, 35361), (21, 35427), (24, 35460), (27, 35496), (29, 35541), (34, 35634), (35, 35643), (37, 35697), (47, 35832), (53, 35913), (55, 35937), (56, 35943),

Gene: Amelia_55 Start: 33239, Stop: 33988, Start Num: 11

Candidate Starts for Amelia_55:

(Start: 11 @33239 has 15 MA's), (12, 33290), (14, 33302), (19, 33407), (20, 33428), (26, 33482), (35, 33659), (36, 33665), (37, 33713), (54, 33935), (56, 33959), (57, 33968), (59, 33974),

Gene: Andrew_58 Start: 34468, Stop: 35202, Start Num: 9

Candidate Starts for Andrew_58:

(Start: 9 @34468 has 3 MA's), (12, 34516), (14, 34528), (20, 34648), (30, 34789), (31, 34822), (35, 34879), (36, 34885), (37, 34933), (45, 35056), (49, 35119), (54, 35155), (56, 35179),

Gene: Ayotoya_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for Ayotoya_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (39, 559), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (51, 733), (58, 781),

Gene: Basilisk_54 Start: 34461, Stop: 35189, Start Num: 11

Candidate Starts for Basilisk_54:

(Start: 11 @34461 has 15 MA's), (17, 34539), (18, 34584), (21, 34650), (24, 34683), (26, 34689), (27, 34719), (29, 34764), (30, 34776), (35, 34866), (36, 34872), (52, 35133), (56, 35166),

Gene: BetterKatz_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for BetterKatz_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (28, 361), (31, 424), (32, 427), (36, 481), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (51, 733), (58, 781),

Gene: Bock_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for Bock_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (39, 559), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (51, 733), (58, 781),

Gene: Brylie_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for Brylie_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (58, 781),

Gene: Brynnie_52 Start: 34086, Stop: 34814, Start Num: 11

Candidate Starts for Brynnie_52:

(Start: 11 @34086 has 15 MA's), (17, 34164), (18, 34209), (21, 34275), (24, 34308), (26, 34314), (27, 34344), (29, 34389), (30, 34401), (35, 34491), (36, 34497), (53, 34761), (55, 34785), (56, 34791),

Gene: Chickaboom_59 Start: 34797, Stop: 35525, Start Num: 11

Candidate Starts for Chickaboom_59:

(Start: 11 @34797 has 15 MA's), (17, 34875), (18, 34920), (21, 34986), (24, 35019), (27, 35055), (29, 35100), (30, 35112), (31, 35145), (35, 35202), (36, 35208), (37, 35256), (56, 35502),

Gene: Chop_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for Chop_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (39, 559), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (51, 733), (58, 781),

Gene: Coral_55 Start: 33033, Stop: 33893, Start Num: 5

Candidate Starts for Coral_55:

(1, 32880), (2, 32946), (3, 32994), (4, 32997), (Start: 5 @33033 has 2 MA's), (Start: 8 @33126 has 3 MA's), (Start: 11 @33144 has 15 MA's), (12, 33195), (14, 33207), (19, 33312), (20, 33333), (26, 33387), (35, 33564), (36, 33570), (37, 33618), (48, 33765), (54, 33840), (56, 33864), (57, 33873), (59, 33879),

Gene: Cote_58 Start: 33577, Stop: 34326, Start Num: 11

Candidate Starts for Cote_58:

(Start: 11 @33577 has 15 MA's), (12, 33628), (14, 33640), (19, 33745), (20, 33766), (26, 33820), (35, 33997), (36, 34003), (37, 34051), (54, 34273), (56, 34297), (57, 34306), (59, 34312),

Gene: Daob_57 Start: 33570, Stop: 34337, Start Num: 8

Candidate Starts for Daob_57:

(Start: 8 @33570 has 3 MA's), (Start: 11 @33588 has 15 MA's), (12, 33639), (14, 33651), (19, 33756), (20, 33777), (26, 33831), (35, 34008), (36, 34014), (37, 34062), (48, 34209), (54, 34284), (56, 34308), (57, 34317), (59, 34323),

Gene: DelRio_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for DelRio_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (58, 781),

Gene: Eesa_53 Start: 35312, Stop: 36043, Start Num: 11

Candidate Starts for Eesa_53:

(6, 35210), (7, 35276), (Start: 11 @35312 has 15 MA's), (16, 35381), (18, 35435), (21, 35501), (24, 35534), (29, 35615), (31, 35660), (34, 35708), (35, 35717), (36, 35723), (38, 35798), (45, 35894), (46, 35897), (54, 35993), (56, 36017),

Gene: Francois_1 Start: 138, Stop: 791, Start Num: 15

Candidate Starts for Francois_1:

(Start: 15 @138 has 13 MA's), (20, 249), (25, 300), (31, 423), (32, 426), (36, 480), (39, 558), (40, 573), (42, 612), (43, 639), (44, 645), (50, 723), (58, 780),

Gene: Galaxy_53 Start: 33655, Stop: 34383, Start Num: 11

Candidate Starts for Galaxy_53:

(7, 33619), (Start: 11 @33655 has 15 MA's), (17, 33733), (18, 33778), (21, 33844), (23, 33868), (24, 33877), (27, 33913), (29, 33958), (34, 34051), (35, 34060), (36, 34066), (37, 34114), (55, 34354), (56, 34360),

Gene: GrandSlam_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for GrandSlam_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (39, 559), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (51, 733), (58, 781),

Gene: Hamood_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for Hamood_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (39, 559), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (51, 733), (58, 781),

Gene: HannahPhantana_63 Start: 33234, Stop: 33983, Start Num: 11

Candidate Starts for HannahPhantana_63:

(Start: 11 @33234 has 15 MA's), (12, 33285), (14, 33297), (19, 33402), (20, 33423), (26, 33477), (35, 33654), (36, 33660), (37, 33708), (54, 33930), (56, 33954), (57, 33963), (59, 33969),

Gene: Jamun_53 Start: 34887, Stop: 35615, Start Num: 11

Candidate Starts for Jamun_53:

(Start: 11 @34887 has 15 MA's), (18, 35010), (21, 35076), (24, 35109), (29, 35190), (35, 35292), (36, 35298), (37, 35346), (56, 35592),

Gene: Juno112_56 Start: 34172, Stop: 34906, Start Num: 9

Candidate Starts for Juno112_56:

(7, 34139), (Start: 9 @34172 has 3 MA's), (12, 34220), (20, 34352), (30, 34493), (32, 34529), (35, 34583), (36, 34589), (37, 34637), (41, 34688), (45, 34760), (49, 34823), (54, 34859), (56, 34883),

Gene: KHumphrey_55 Start: 34060, Stop: 34794, Start Num: 9

Candidate Starts for KHumphrey_55:

(7, 34027), (Start: 9 @34060 has 3 MA's), (12, 34108), (20, 34240), (30, 34381), (32, 34417), (35, 34471), (36, 34477), (37, 34525), (41, 34576), (45, 34648), (49, 34711), (54, 34747), (56, 34771),

Gene: Kepler_57 Start: 33337, Stop: 34104, Start Num: 8

Candidate Starts for Kepler_57:

(Start: 8 @33337 has 3 MA's), (Start: 11 @33355 has 15 MA's), (12, 33406), (14, 33418), (19, 33523), (20, 33544), (26, 33598), (35, 33775), (36, 33781), (37, 33829), (48, 33976), (54, 34051), (56, 34075), (57, 34084), (59, 34090),

Gene: Kuleana_57 Start: 33673, Stop: 34422, Start Num: 11

Candidate Starts for Kuleana_57:

(Start: 11 @33673 has 15 MA's), (12, 33724), (14, 33736), (20, 33862), (30, 34003), (35, 34093), (36, 34099), (37, 34147), (41, 34198), (54, 34369), (55, 34387), (56, 34393), (57, 34402), (59, 34408),

Gene: Leona_55 Start: 34255, Stop: 34989, Start Num: 9

Candidate Starts for Leona_55:

(7, 34222), (Start: 9 @34255 has 3 MA's), (12, 34303), (20, 34435), (22, 34471), (23, 34474), (30, 34576), (32, 34612), (35, 34666), (36, 34672), (37, 34720), (45, 34843), (49, 34906), (54, 34942), (56, 34966),

Gene: LittleTokyo_53 Start: 32621, Stop: 33355, Start Num: 10

Candidate Starts for LittleTokyo_53:

(Start: 10 @32621 has 1 MA's), (13, 32675), (20, 32801), (35, 33032), (36, 33038), (37, 33086), (45, 33209), (54, 33308), (56, 33332), (59, 33347),

Gene: Lunar_57 Start: 33267, Stop: 34016, Start Num: 11

Candidate Starts for Lunar_57:

(Start: 11 @33267 has 15 MA's), (12, 33318), (14, 33330), (19, 33435), (20, 33456), (26, 33510), (35, 33687), (36, 33693), (37, 33741), (48, 33888), (54, 33963), (56, 33987), (57, 33996), (59, 34002),

Gene: Melons_57 Start: 33063, Stop: 33830, Start Num: 8

Candidate Starts for Melons_57:

(Start: 8 @33063 has 3 MA's), (Start: 11 @33081 has 15 MA's), (12, 33132), (14, 33144), (19, 33249), (20, 33270), (26, 33324), (35, 33501), (36, 33507), (37, 33555), (48, 33702), (54, 33777), (56, 33801), (57, 33810), (59, 33816),

Gene: Mulch_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for Mulch_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (58, 781),

Gene: Nadeem_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for Nadeem_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (58, 781),

Gene: NancyRae_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for NancyRae_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (51, 733), (58, 781),

Gene: Orcanus_55 Start: 35170, Stop: 35901, Start Num: 11

Candidate Starts for Orcanus_55:

(Start: 11 @35170 has 15 MA's), (16, 35239), (18, 35293), (21, 35359), (24, 35392), (29, 35473), (31, 35518), (34, 35566), (35, 35575), (36, 35581), (38, 35656), (45, 35752), (46, 35755), (54, 35851), (56, 35875), (57, 35884),

Gene: Parada_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for Parada_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (58, 781),

Gene: PhluffyCoco_56 Start: 34271, Stop: 35005, Start Num: 9

Candidate Starts for PhluffyCoco_56:

(7, 34238), (Start: 9 @34271 has 3 MA's), (12, 34319), (20, 34451), (30, 34592), (32, 34628), (35, 34682), (36, 34688), (37, 34736), (41, 34787), (45, 34859), (49, 34922), (54, 34958), (56, 34982),

Gene: Pimento_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for Pimento_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (58, 781),

Gene: Polka_55 Start: 32978, Stop: 33838, Start Num: 5

Candidate Starts for Polka_55:

(1, 32825), (2, 32891), (3, 32939), (4, 32942), (Start: 5 @32978 has 2 MA's), (Start: 8 @33071 has 3 MA's), (Start: 11 @33089 has 15 MA's), (12, 33140), (14, 33152), (19, 33257), (20, 33278), (26, 33332), (35, 33509), (36, 33515), (37, 33563), (54, 33785), (56, 33809), (57, 33818), (59, 33824),

Gene: RedFox_56 Start: 34269, Stop: 35003, Start Num: 9

Candidate Starts for RedFox_56:

(7, 34236), (Start: 9 @34269 has 3 MA's), (12, 34317), (20, 34449), (30, 34590), (32, 34626), (35, 34680), (36, 34686), (37, 34734), (41, 34785), (45, 34857), (49, 34920), (54, 34956), (56, 34980),

Gene: Renna12_55 Start: 34125, Stop: 34859, Start Num: 11

Candidate Starts for Renna12_55:

(Start: 11 @34125 has 15 MA's), (12, 34173), (14, 34185), (20, 34305), (30, 34446), (33, 34488), (35, 34536), (36, 34542), (37, 34590), (49, 34776), (54, 34812), (56, 34836), (59, 34851),

Gene: Ruchi_53 Start: 34383, Stop: 35111, Start Num: 11

Candidate Starts for Ruchi_53:

(Start: 11 @34383 has 15 MA's), (17, 34461), (18, 34506), (21, 34572), (24, 34605), (26, 34611), (27, 34641), (29, 34686), (30, 34698), (35, 34788), (36, 34794), (52, 35055), (56, 35088),

Gene: TaylorSipht_55 Start: 34807, Stop: 35535, Start Num: 11

Candidate Starts for TaylorSipht_55:

(Start: 11 @34807 has 15 MA's), (18, 34930), (21, 34996), (24, 35029), (26, 35035), (29, 35110), (31, 35155), (35, 35212), (36, 35218), (37, 35266), (47, 35401), (55, 35506), (56, 35512),

Gene: Vulpecula_53 Start: 34043, Stop: 34771, Start Num: 11

Candidate Starts for Vulpecula_53:

(Start: 11 @34043 has 15 MA's), (17, 34121), (18, 34166), (21, 34232), (24, 34265), (26, 34271), (27, 34301), (29, 34346), (30, 34358), (35, 34448), (36, 34454), (52, 34715), (56, 34748),

Gene: WheatThin_1 Start: 139, Stop: 792, Start Num: 15

Candidate Starts for WheatThin_1:

(Start: 15 @139 has 13 MA's), (20, 250), (25, 301), (31, 424), (32, 427), (36, 481), (40, 574), (42, 613), (43, 640), (44, 646), (50, 724), (58, 781),