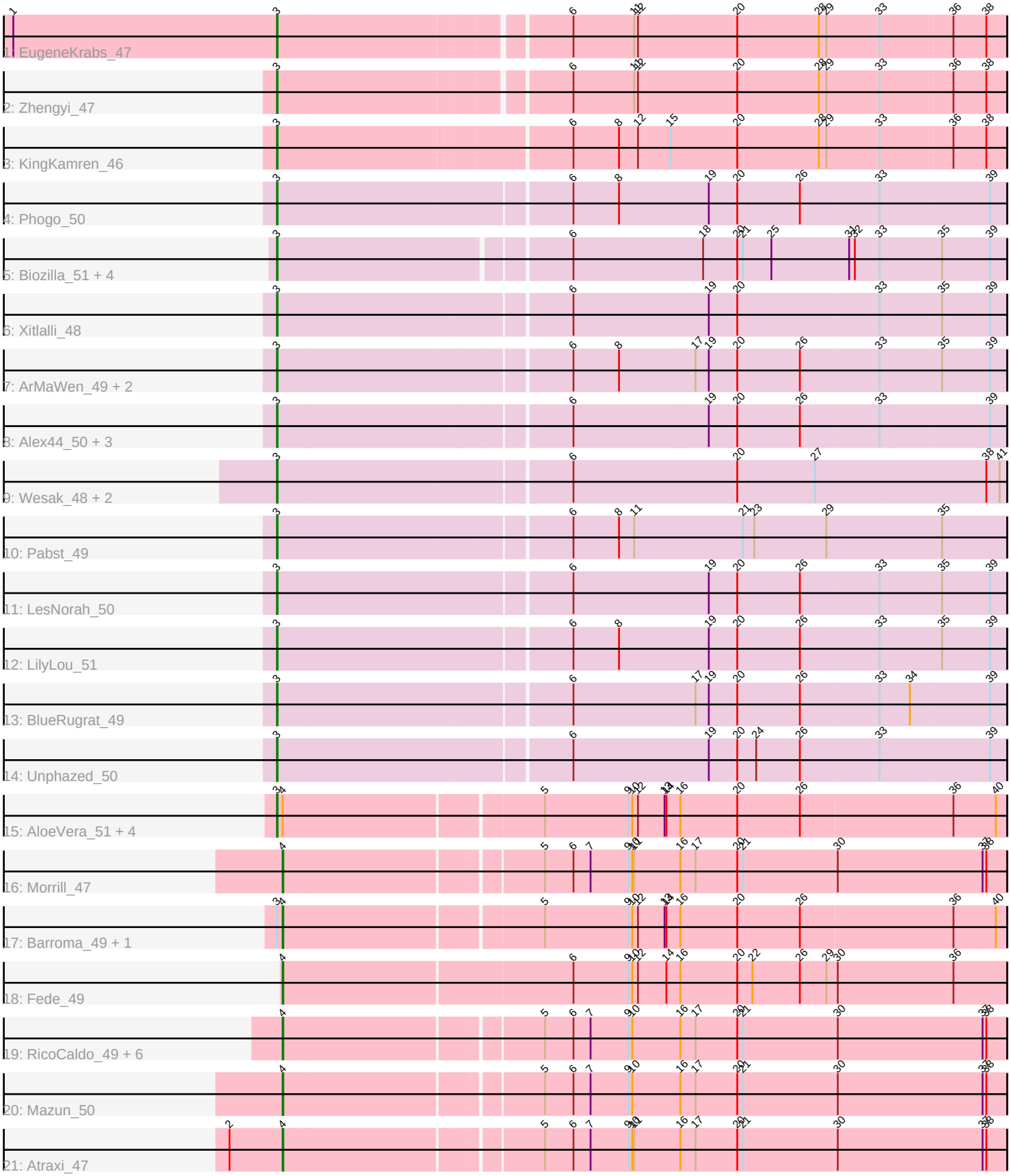
Pham 194137


1: EugeneKrabs_47
2: Zhengyi_47
3: KingKamren_46
4: Phogo_50
5: Biozilla_51 + 4
6: Xitlalli_48
7: ArMaWen_49 + 2
8: Alex44_50 + 3
9: Wesak_48 + 2
10: Pabst_49
11: LesNorah_50
12: LilyLou_51
13: BlueRugrat_49
14: Unphazed_50
15: AloeVera_51 + 4
16: Morrill_47
17: Barroma_49 + 1
18: Fede_49
19: RicoCaldo_49 + 6
20: Mazun_50
21: Atraxi_47

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 194137 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194137 has 43 members, 3 are drafts.

Phages represented in each track:
• Track 1 : EugeneKrabs_47
• Track 2 : Zhengyi_47
• Track 3 : KingKamren_46
• Track 4 : Phogo_50
• Track 5 : Biozilla_51, PineapplePluto_52, Oatly_51, HitchHiker_52, CrunchyBoi_52
• Track 6 : Xitlalli_48
• Track 7 : ArMaWen_49, Dashyla_49, Corn21_49
• Track 8 : Alex44_50, DumpQuist_49, Stormbreaker_50, Birdfeeder_48
• Track 9 : Wesak_48, YellowPanda_50, TinyTimothy_47
• Track 10 : Pabst_49
• Track 11 : LesNorah_50
• Track 12 : LilyLou_51
• Track 13 : BlueRugrat_49
• Track 14 : Unphazed_50
• Track 15 : AloeVera_51, Akoni_50, JordanFarm_52, Truong_50, Ashton_51
• Track 16 : Morrill_47
• Track 17 : Barroma_49, Waterlily_53
• Track 18 : Fede_49
• Track 19 : RicoCaldo_49, Phractured_49, Pharky_49, Fullmetal_49, Phedro_49, StagePhright_49, PhriedRice_50
• Track 20 : Mazun_50
• Track 21 : Atraxi_47

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

The start number called the most often in the published annotations is 3, it was called in 28 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akoni_50, Alex44_50, AloeVera_51, ArMaWen_49, Ashton_51, Biozilla_51, Birdfeeder_48, BlueRugrat_49, Corn21_49, CrunchyBoi_52, Dashyla_49, DumpQuist_49, EugeneKrabs_47, HitchHiker_52, JordanFarm_52, KingKamren_46, LesNorah_50, LilyLou_51, Oatly_51, Pabst_49, Phogo_50, PineapplePluto_52, Stormbreaker_50, TinyTimothy_47, Truong_50, Unphazed_50, Wesak_48, Xitlalli_48,

YellowPanda_50, Zhengyi_47,

Genes that have the "Most Annotated" start but do not call it:
• Barroma_49, Waterlily_53,

Genes that do not have the "Most Annotated" start:
• Atraxi_47, Fede_49, Fullmetal_49, Mazun_50, Morrill_47, Pharky_49, Phedro_49, Phractured_49, PhriedRice_50, RicoCaldo_49, StagePhright_49,

Summary by start number:

Start 3:
• Found in 32 of 43 (74.4%) of genes in pham
• Manual Annotations of this start: 28 of 40
• Called 93.8% of time when present
• Phage (with cluster) where this start called: Akoni_50 (EK2), Alex44_50 (EK1), AloeVera_51 (EK2), ArMaWen_49 (EK1), Ashton_51 (EK2), Biozilla_51 (EK1), Birdfeeder_48 (EK1), BlueRugrat_49 (EK1), Corn21_49 (EK1), CrunchyBoi_52 (EK1), Dashyla_49 (EK1), DumpQuist_49 (EK1), EugeneKrabs_47 (EK), HitchHiker_52 (EK1), JordanFarm_52 (EK2), KingKamren_46 (EK), LesNorah_50 (EK1), LilyLou_51 (EK1), Oatly_51 (EK1), Pabst_49 (EK1), Phogo_50 (EK1), PineapplePluto_52 (EK1), Stormbreaker_50 (EK1), TinyTimothy_47 (EK1), Truong_50 (EK2), Unphazed_50 (EK1), Wesak_48 (EK1), Xitlalli_48 (EK1), YellowPanda_50 (EK1), Zhengyi_47 (EK),

Start 4:
• Found in 18 of 43 (41.9%) of genes in pham
• Manual Annotations of this start: 12 of 40
• Called 72.2% of time when present
• Phage (with cluster) where this start called: Atraxi_47 (EK2), Barroma_49 (EK2), Fede_49 (EK2), Fullmetal_49 (EK2), Mazun_50 (EK2), Morrill_47 (EK2), Pharky_49 (EK2), Phedro_49 (EK2), Phractured_49 (EK2), PhriedRice_50 (EK2), RicoCaldo_49 (EK2), StagePhright_49 (EK2), Waterlily_53 (EK2),

Summary by clusters:

There are 3 clusters represented in this pham: EK, EK2, EK1,

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

Info for manual annotations of cluster EK1:
•Start number 3 was manually annotated 20 times for cluster EK1.

Info for manual annotations of cluster EK2:
•Start number 3 was manually annotated 5 times for cluster EK2.
•Start number 4 was manually annotated 12 times for cluster EK2.

Gene Information:

Gene: Akoni_50 Start: 50074, Stop: 51201, Start Num: 3

Candidate Starts for Akoni_50:
(Start: 3 @50074 has 28 MA's), (Start: 4 @50083 has 12 MA's), (5, 50476), (9, 50608), (10, 50614), (12, 50623), (13, 50665), (14, 50668), (16, 50689), (20, 50779), (26, 50878), (36, 51118), (40, 51184),

Gene: Alex44_50 Start: 50187, Stop: 51302, Start Num: 3
Candidate Starts for Alex44_50:
(Start: 3 @50187 has 28 MA's), (6, 50631), (19, 50844), (20, 50889), (26, 50988), (33, 51111), (39, 51279),

Gene: AloeVera_51 Start: 50287, Stop: 51414, Start Num: 3
Candidate Starts for AloeVera_51:
(Start: 3 @50287 has 28 MA's), (Start: 4 @50296 has 12 MA's), (5, 50689), (9, 50821), (10, 50827), (12, 50836), (13, 50878), (14, 50881), (16, 50902), (20, 50992), (26, 51091), (36, 51331), (40, 51397),

Gene: ArMaWen_49 Start: 49730, Stop: 50842, Start Num: 3
Candidate Starts for ArMaWen_49:
(Start: 3 @49730 has 28 MA's), (6, 50171), (8, 50243), (17, 50363), (19, 50384), (20, 50429), (26, 50528), (33, 50651), (35, 50744), (39, 50819),

Gene: Ashton_51 Start: 50286, Stop: 51413, Start Num: 3
Candidate Starts for Ashton_51:
(Start: 3 @50286 has 28 MA's), (Start: 4 @50295 has 12 MA's), (5, 50688), (9, 50820), (10, 50826), (12, 50835), (13, 50877), (14, 50880), (16, 50901), (20, 50991), (26, 51090), (36, 51330), (40, 51396),

Gene: Atraxi_47 Start: 49413, Stop: 50522, Start Num: 4
Candidate Starts for Atraxi_47:
(2, 49329), (Start: 4 @49413 has 12 MA's), (5, 49797), (6, 49842), (7, 49869), (9, 49929), (10, 49935), (11, 49938), (16, 50010), (17, 50034), (20, 50100), (21, 50109), (30, 50256), (37, 50484), (38, 50490),

Gene: Barroma_49 Start: 50085, Stop: 51203, Start Num: 4
Candidate Starts for Barroma_49:
(Start: 3 @50076 has 28 MA's), (Start: 4 @50085 has 12 MA's), (5, 50478), (9, 50610), (10, 50616), (12, 50625), (13, 50667), (14, 50670), (16, 50691), (20, 50781), (26, 50880), (36, 51120), (40, 51186),

Gene: Biozilla_51 Start: 49633, Stop: 50739, Start Num: 3
Candidate Starts for Biozilla_51:
(Start: 3 @49633 has 28 MA's), (6, 50062), (18, 50266), (20, 50320), (21, 50329), (25, 50374), (31, 50497), (32, 50506), (33, 50545), (35, 50641), (39, 50716),

Gene: Birdfeeder_48 Start: 49936, Stop: 51051, Start Num: 3
Candidate Starts for Birdfeeder_48:
(Start: 3 @49936 has 28 MA's), (6, 50380), (19, 50593), (20, 50638), (26, 50737), (33, 50860), (39, 51028),

Gene: BlueRugrat_49 Start: 50169, Stop: 51284, Start Num: 3
Candidate Starts for BlueRugrat_49:
(Start: 3 @50169 has 28 MA's), (6, 50613), (17, 50805), (19, 50826), (20, 50871), (26, 50970), (33, 51093), (34, 51138), (39, 51261),

Gene: Corn21_49 Start: 50250, Stop: 51365, Start Num: 3
Candidate Starts for Corn21_49:
(Start: 3 @50250 has 28 MA's), (6, 50694), (8, 50766), (17, 50886), (19, 50907), (20, 50952), (26, 51051), (33, 51174), (35, 51267), (39, 51342),

Gene: CrunchyBoi_52 Start: 49487, Stop: 50593, Start Num: 3
Candidate Starts for CrunchyBoi_52:
(Start: 3 @49487 has 28 MA's), (6, 49916), (18, 50120), (20, 50174), (21, 50183), (25, 50228), (31, 50351), (32, 50360), (33, 50399), (35, 50495), (39, 50570),

Gene: Dashyla_49 Start: 49861, Stop: 50976, Start Num: 3
Candidate Starts for Dashyla_49:
(Start: 3 @49861 has 28 MA's), (6, 50305), (8, 50377), (17, 50497), (19, 50518), (20, 50563), (26, 50662), (33, 50785), (35, 50878), (39, 50953),

Gene: DumpQuist_49 Start: 49715, Stop: 50830, Start Num: 3
Candidate Starts for DumpQuist_49:
(Start: 3 @49715 has 28 MA's), (6, 50159), (19, 50372), (20, 50417), (26, 50516), (33, 50639), (39, 50807),

Gene: EugeneKrabs_47 Start: 50698, Stop: 51804, Start Num: 3
Candidate Starts for EugeneKrabs_47:
(1, 50281), (Start: 3 @50698 has 28 MA's), (6, 51130), (11, 51226), (12, 51232), (20, 51388), (28, 51517), (29, 51529), (33, 51613), (36, 51724), (38, 51775),

Gene: Fede_49 Start: 50536, Stop: 51663, Start Num: 4
Candidate Starts for Fede_49:
(Start: 4 @50536 has 12 MA's), (6, 50983), (9, 51070), (10, 51076), (12, 51085), (14, 51130), (16, 51151), (20, 51241), (22, 51265), (26, 51340), (29, 51382), (30, 51397), (36, 51580),

Gene: Fullmetal_49 Start: 49956, Stop: 51065, Start Num: 4
Candidate Starts for Fullmetal_49:
(Start: 4 @49956 has 12 MA's), (5, 50340), (6, 50385), (7, 50412), (9, 50472), (10, 50478), (16, 50553), (17, 50577), (20, 50643), (21, 50652), (30, 50799), (37, 51027), (38, 51033),

Gene: HitchHiker_52 Start: 49633, Stop: 50739, Start Num: 3
Candidate Starts for HitchHiker_52:
(Start: 3 @49633 has 28 MA's), (6, 50062), (18, 50266), (20, 50320), (21, 50329), (25, 50374), (31, 50497), (32, 50506), (33, 50545), (35, 50641), (39, 50716),

Gene: JordanFarm_52 Start: 50287, Stop: 51414, Start Num: 3
Candidate Starts for JordanFarm_52:
(Start: 3 @50287 has 28 MA's), (Start: 4 @50296 has 12 MA's), (5, 50689), (9, 50821), (10, 50827), (12, 50836), (13, 50878), (14, 50881), (16, 50902), (20, 50992), (26, 51091), (36, 51331), (40, 51397),

Gene: KingKamren_46 Start: 50655, Stop: 51770, Start Num: 3
Candidate Starts for KingKamren_46:
(Start: 3 @50655 has 28 MA's), (6, 51096), (8, 51168), (12, 51198), (15, 51249), (20, 51354), (28, 51483), (29, 51495), (33, 51579), (36, 51690), (38, 51741),

Gene: LesNorah_50 Start: 50566, Stop: 51681, Start Num: 3
Candidate Starts for LesNorah_50:
(Start: 3 @50566 has 28 MA's), (6, 51010), (19, 51223), (20, 51268), (26, 51367), (33, 51490), (35, 51583), (39, 51658),

Gene: LilyLou_51 Start: 50179, Stop: 51294, Start Num: 3
Candidate Starts for LilyLou_51:

(Start: 3 @50179 has 28 MA's), (6, 50623), (8, 50695), (19, 50836), (20, 50881), (26, 50980), (33, 51103), (35, 51196), (39, 51271),

Gene: Mazun_50 Start: 50359, Stop: 51468, Start Num: 4
Candidate Starts for Mazun_50:
(Start: 4 @50359 has 12 MA's), (5, 50743), (6, 50788), (7, 50815), (9, 50875), (10, 50881), (16, 50956), (17, 50980), (20, 51046), (21, 51055), (30, 51202), (37, 51430), (38, 51436),

Gene: Morrill_47 Start: 49394, Stop: 50503, Start Num: 4
Candidate Starts for Morrill_47:
(Start: 4 @49394 has 12 MA's), (5, 49778), (6, 49823), (7, 49850), (9, 49910), (10, 49916), (11, 49919), (16, 49991), (17, 50015), (20, 50081), (21, 50090), (30, 50237), (37, 50465), (38, 50471),

Gene: Oatly_51 Start: 49193, Stop: 50299, Start Num: 3
Candidate Starts for Oatly_51:
(Start: 3 @49193 has 28 MA's), (6, 49622), (18, 49826), (20, 49880), (21, 49889), (25, 49934), (31, 50057), (32, 50066), (33, 50105), (35, 50201), (39, 50276),

Gene: Pabst_49 Start: 49259, Stop: 50374, Start Num: 3
Candidate Starts for Pabst_49:
(Start: 3 @49259 has 28 MA's), (6, 49697), (8, 49769), (11, 49793), (21, 49964), (23, 49982), (29, 50096), (35, 50276),

Gene: Pharky_49 Start: 49959, Stop: 51068, Start Num: 4
Candidate Starts for Pharky_49:
(Start: 4 @49959 has 12 MA's), (5, 50343), (6, 50388), (7, 50415), (9, 50475), (10, 50481), (16, 50556), (17, 50580), (20, 50646), (21, 50655), (30, 50802), (37, 51030), (38, 51036),

Gene: Phedro_49 Start: 49959, Stop: 51068, Start Num: 4
Candidate Starts for Phedro_49:
(Start: 4 @49959 has 12 MA's), (5, 50343), (6, 50388), (7, 50415), (9, 50475), (10, 50481), (16, 50556), (17, 50580), (20, 50646), (21, 50655), (30, 50802), (37, 51030), (38, 51036),

Gene: Phogo_50 Start: 50007, Stop: 51119, Start Num: 3
Candidate Starts for Phogo_50:
(Start: 3 @50007 has 28 MA's), (6, 50448), (8, 50520), (19, 50661), (20, 50706), (26, 50805), (33, 50928), (39, 51096),

Gene: Phractured_49 Start: 49959, Stop: 51068, Start Num: 4
Candidate Starts for Phractured_49:
(Start: 4 @49959 has 12 MA's), (5, 50343), (6, 50388), (7, 50415), (9, 50475), (10, 50481), (16, 50556), (17, 50580), (20, 50646), (21, 50655), (30, 50802), (37, 51030), (38, 51036),

Gene: PhriedRice_50 Start: 50063, Stop: 51172, Start Num: 4
Candidate Starts for PhriedRice_50:
(Start: 4 @50063 has 12 MA's), (5, 50447), (6, 50492), (7, 50519), (9, 50579), (10, 50585), (16, 50660), (17, 50684), (20, 50750), (21, 50759), (30, 50906), (37, 51134), (38, 51140),

Gene: PineapplePluto_52 Start: 49555, Stop: 50661, Start Num: 3
Candidate Starts for PineapplePluto_52:
(Start: 3 @49555 has 28 MA's), (6, 49984), (18, 50188), (20, 50242), (21, 50251), (25, 50296), (31, 50419), (32, 50428), (33, 50467), (35, 50563), (39, 50638),

Gene: RicoCaldo_49 Start: 50041, Stop: 51150, Start Num: 4
Candidate Starts for RicoCaldo_49:
(Start: 4 @50041 has 12 MA's), (5, 50425), (6, 50470), (7, 50497), (9, 50557), (10, 50563), (16, 50638), (17, 50662), (20, 50728), (21, 50737), (30, 50884), (37, 51112), (38, 51118),

Gene: StagePhright_49 Start: 49959, Stop: 51068, Start Num: 4
Candidate Starts for StagePhright_49:
(Start: 4 @49959 has 12 MA's), (5, 50343), (6, 50388), (7, 50415), (9, 50475), (10, 50481), (16, 50556), (17, 50580), (20, 50646), (21, 50655), (30, 50802), (37, 51030), (38, 51036),

Gene: Stormbreaker_50 Start: 50095, Stop: 51210, Start Num: 3
Candidate Starts for Stormbreaker_50:
(Start: 3 @50095 has 28 MA's), (6, 50539), (19, 50752), (20, 50797), (26, 50896), (33, 51019), (39, 51187),

Gene: TinyTimothy_47 Start: 49702, Stop: 50820, Start Num: 3
Candidate Starts for TinyTimothy_47:
(Start: 3 @49702 has 28 MA's), (6, 50143), (20, 50401), (27, 50524), (38, 50791), (41, 50809),

Gene: Truong_50 Start: 50076, Stop: 51203, Start Num: 3
Candidate Starts for Truong_50:
(Start: 3 @50076 has 28 MA's), (Start: 4 @50085 has 12 MA's), (5, 50478), (9, 50610), (10, 50616), (12, 50625), (13, 50667), (14, 50670), (16, 50691), (20, 50781), (26, 50880), (36, 51120), (40, 51186),

Gene: Unphazed_50 Start: 49964, Stop: 51079, Start Num: 3
Candidate Starts for Unphazed_50:
(Start: 3 @49964 has 28 MA's), (6, 50408), (19, 50621), (20, 50666), (24, 50696), (26, 50765), (33, 50888), (39, 51056),

Gene: Waterlily_53 Start: 50336, Stop: 51454, Start Num: 4
Candidate Starts for Waterlily_53:
(Start: 3 @50327 has 28 MA's), (Start: 4 @50336 has 12 MA's), (5, 50729), (9, 50861), (10, 50867), (12, 50876), (13, 50918), (14, 50921), (16, 50942), (20, 51032), (26, 51131), (36, 51371), (40, 51437),

Gene: Wesak_48 Start: 49547, Stop: 50665, Start Num: 3
Candidate Starts for Wesak_48:
(Start: 3 @49547 has 28 MA's), (6, 49988), (20, 50246), (27, 50369), (38, 50636), (41, 50654),

Gene: Xitlalli_48 Start: 49974, Stop: 51089, Start Num: 3
Candidate Starts for Xitlalli_48:
(Start: 3 @49974 has 28 MA's), (6, 50418), (19, 50631), (20, 50676), (33, 50898), (35, 50991), (39, 51066),

Gene: YellowPanda_50 Start: 49428, Stop: 50546, Start Num: 3
Candidate Starts for YellowPanda_50:
(Start: 3 @49428 has 28 MA's), (6, 49869), (20, 50127), (27, 50250), (38, 50517), (41, 50535),

Gene: Zhengyi_47 Start: 50747, Stop: 51853, Start Num: 3
Candidate Starts for Zhengyi_47:
(Start: 3 @50747 has 28 MA's), (6, 51179), (11, 51275), (12, 51281), (20, 51437), (28, 51566), (29, 51578), (33, 51662), (36, 51773), (38, 51824),