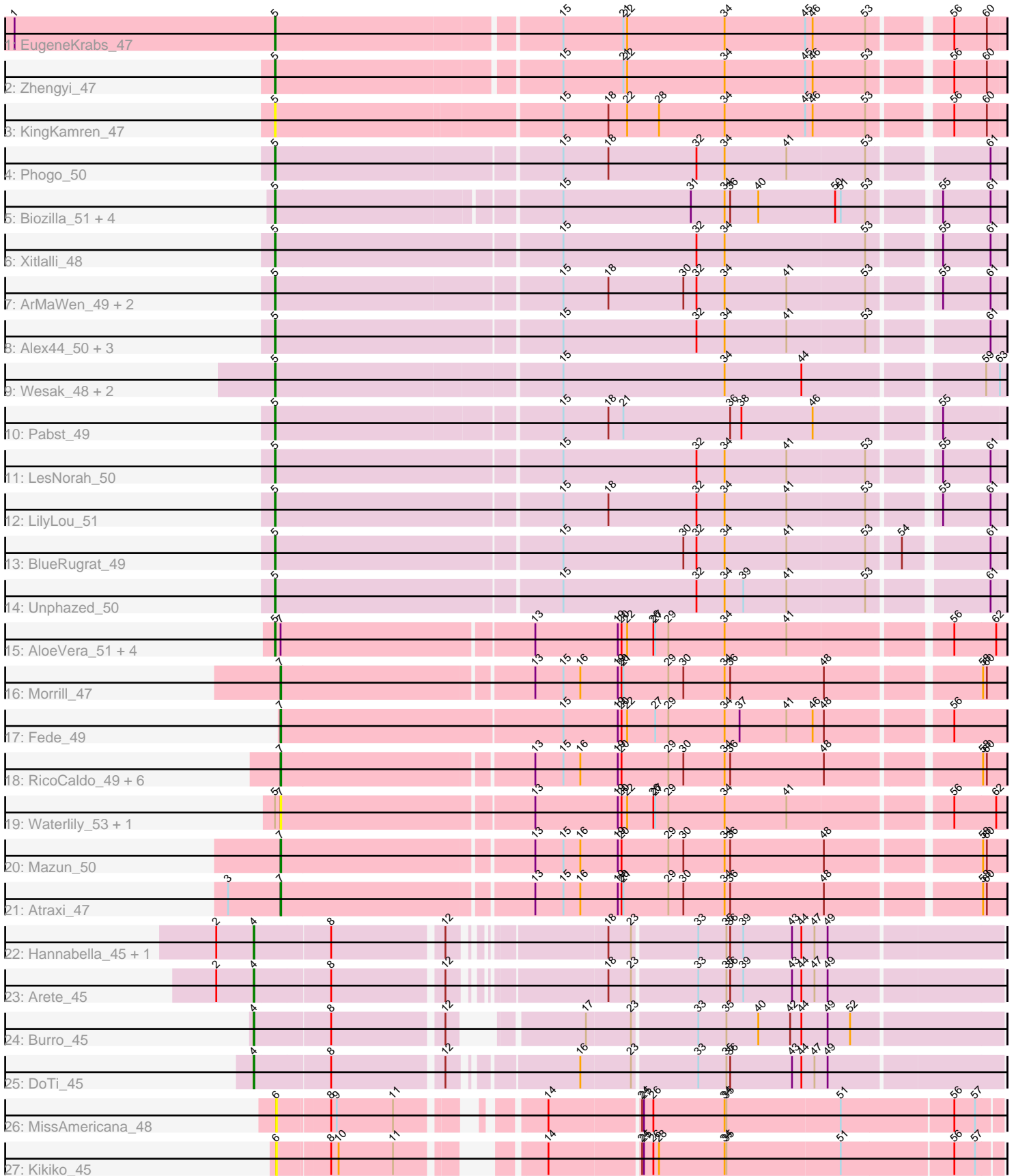


Pham 156432



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 156432 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156432 has 50 members, 9 are drafts.

Phages represented in each track:

- Track 1 : EugeneKrabs_47
- Track 2 : Zhengyi_47
- Track 3 : KingKamren_47
- Track 4 : Phogo_50
- Track 5 : Biozilla_51, PineapplePluto_52, Oatly_51, HitchHiker_52, CrunchyBoi_52
- Track 6 : Xitlalli_48
- Track 7 : ArMaWen_49, Corn21_49, Dashyla_51
- 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 : Fede_49
- Track 18 : RicoCaldo_49, Phractured_49, Pharky_49, Fullmetal_49, Phedro_49, StagePhright_49, PhriedRice_50
- Track 19 : Waterlily_53, Barroma_52
- Track 20 : Mazun_50
- Track 21 : Atraxi_47
- Track 22 : Hannabella_45, Gshelby23_43
- Track 23 : Arete_45
- Track 24 : Burro_45
- Track 25 : DoTi_45
- Track 26 : MissAmericana_48
- Track 27 : Kikiko_45

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

The start number called the most often in the published annotations is 5, it was called in 26 of the 41 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_51, DumpQuist_49, EugeneKrabs_47, HitchHiker_52, JordanFarm_52, KingKamren_47, 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_52, Waterlily_53,

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

- Arete_45, Atraxi_47, Burro_45, DoTi_45, Fede_49, Fullmetal_49, Gshelby23_43, Hannabella_45, Kikiko_45, Mazun_50, MissAmericana_48, Morrill_47, Pharky_49, Phedro_49, Phracted_49, PhriedRice_50, RicoCaldo_49, StagePhright_49,

Summary by start number:

Start 4:

- Found in 5 of 50 (10.0%) of genes in pham
- Manual Annotations of this start: 5 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arete_45 (EM1), Burro_45 (EM1), DoTi_45 (EM1), Gshelby23_43 (EM1), Hannabella_45 (EM1),

Start 5:

- Found in 32 of 50 (64.0%) of genes in pham
- Manual Annotations of this start: 26 of 41
- 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_51 (EK1), DumpQuist_49 (EK1), EugeneKrabs_47 (EK), HitchHiker_52 (EK1), JordanFarm_52 (EK2), KingKamren_47 (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 6:

- Found in 2 of 50 (4.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kikiko_45 (EM2), MissAmericana_48 (EM2),

Start 7:

- Found in 18 of 50 (36.0%) of genes in pham
- Manual Annotations of this start: 10 of 41
- Called 72.2% of time when present
- Phage (with cluster) where this start called: Atraxi_47 (EK2), Barroma_52 (EK2), Fede_49 (EK2), Fullmetal_49 (EK2), Mazun_50 (EK2), Morrill_47 (EK2), Pharky_49 (EK2), Phedro_49 (EK2), Phracted_49 (EK2), PhriedRice_50 (EK2), RicoCaldo_49

(EK2), StagePhright_49 (EK2), Waterlily_53 (EK2),

Summary by clusters:

There are 5 clusters represented in this pham: EK, EM1, EK2, EK1, EM2,

Info for manual annotations of cluster EK:

- Start number 5 was manually annotated 2 times for cluster EK.

Info for manual annotations of cluster EK1:

- Start number 5 was manually annotated 19 times for cluster EK1.

Info for manual annotations of cluster EK2:

- Start number 5 was manually annotated 5 times for cluster EK2.
- Start number 7 was manually annotated 10 times for cluster EK2.

Info for manual annotations of cluster EM1:

- Start number 4 was manually annotated 5 times for cluster EM1.

Gene Information:

Gene: Akoni_50 Start: 50074, Stop: 51201, Start Num: 5

Candidate Starts for Akoni_50:

(Start: 5 @50074 has 26 MA's), (Start: 7 @50083 has 10 MA's), (13, 50476), (19, 50608), (20, 50614), (22, 50623), (26, 50665), (27, 50668), (29, 50689), (34, 50779), (41, 50878), (56, 51118), (62, 51184),

Gene: Alex44_50 Start: 50187, Stop: 51302, Start Num: 5

Candidate Starts for Alex44_50:

(Start: 5 @50187 has 26 MA's), (15, 50631), (32, 50844), (34, 50889), (41, 50988), (53, 51111), (61, 51279),

Gene: AloeVera_51 Start: 50287, Stop: 51414, Start Num: 5

Candidate Starts for AloeVera_51:

(Start: 5 @50287 has 26 MA's), (Start: 7 @50296 has 10 MA's), (13, 50689), (19, 50821), (20, 50827), (22, 50836), (26, 50878), (27, 50881), (29, 50902), (34, 50992), (41, 51091), (56, 51331), (62, 51397),

Gene: ArMaWen_49 Start: 49730, Stop: 50842, Start Num: 5

Candidate Starts for ArMaWen_49:

(Start: 5 @49730 has 26 MA's), (15, 50171), (18, 50243), (30, 50363), (32, 50384), (34, 50429), (41, 50528), (53, 50651), (55, 50744), (61, 50819),

Gene: Arete_45 Start: 50281, Stop: 51378, Start Num: 4

Candidate Starts for Arete_45:

(2, 50221), (Start: 4 @50281 has 5 MA's), (8, 50398), (12, 50566), (18, 50770), (23, 50806), (33, 50905), (35, 50950), (36, 50956), (39, 50977), (43, 51055), (44, 51070), (47, 51091), (49, 51112),

Gene: Ashton_51 Start: 50286, Stop: 51413, Start Num: 5

Candidate Starts for Ashton_51:

(Start: 5 @50286 has 26 MA's), (Start: 7 @50295 has 10 MA's), (13, 50688), (19, 50820), (20, 50826), (22, 50835), (26, 50877), (27, 50880), (29, 50901), (34, 50991), (41, 51090), (56, 51330), (62, 51396),

Gene: Atraxi_47 Start: 49413, Stop: 50522, Start Num: 7

Candidate Starts for Atraxi_47:

(3, 49329), (Start: 7 @49413 has 10 MA's), (13, 49797), (15, 49842), (16, 49869), (19, 49929), (20, 49935), (21, 49938), (29, 50010), (30, 50034), (34, 50100), (36, 50109), (48, 50256), (58, 50484), (60, 50490),

Gene: Barroma_52 Start: 50085, Stop: 51203, Start Num: 7

Candidate Starts for Barroma_52:

(Start: 5 @50076 has 26 MA's), (Start: 7 @50085 has 10 MA's), (13, 50478), (19, 50610), (20, 50616), (22, 50625), (26, 50667), (27, 50670), (29, 50691), (34, 50781), (41, 50880), (56, 51120), (62, 51186),

Gene: Biozilla_51 Start: 49633, Stop: 50739, Start Num: 5

Candidate Starts for Biozilla_51:

(Start: 5 @49633 has 26 MA's), (15, 50062), (31, 50266), (34, 50320), (36, 50329), (40, 50374), (50, 50497), (51, 50506), (53, 50545), (55, 50641), (61, 50716),

Gene: Birdfeeder_48 Start: 49936, Stop: 51051, Start Num: 5

Candidate Starts for Birdfeeder_48:

(Start: 5 @49936 has 26 MA's), (15, 50380), (32, 50593), (34, 50638), (41, 50737), (53, 50860), (61, 51028),

Gene: BlueRugrat_49 Start: 50169, Stop: 51284, Start Num: 5

Candidate Starts for BlueRugrat_49:

(Start: 5 @50169 has 26 MA's), (15, 50613), (30, 50805), (32, 50826), (34, 50871), (41, 50970), (53, 51093), (54, 51138), (61, 51261),

Gene: Burro_45 Start: 51075, Stop: 52154, Start Num: 4

Candidate Starts for Burro_45:

(Start: 4 @51075 has 5 MA's), (8, 51195), (12, 51363), (17, 51510), (23, 51579), (33, 51678), (35, 51723), (40, 51774), (42, 51825), (44, 51843), (49, 51885), (52, 51921),

Gene: Corn21_49 Start: 50250, Stop: 51365, Start Num: 5

Candidate Starts for Corn21_49:

(Start: 5 @50250 has 26 MA's), (15, 50694), (18, 50766), (30, 50886), (32, 50907), (34, 50952), (41, 51051), (53, 51174), (55, 51267), (61, 51342),

Gene: CrunchyBoi_52 Start: 49487, Stop: 50593, Start Num: 5

Candidate Starts for CrunchyBoi_52:

(Start: 5 @49487 has 26 MA's), (15, 49916), (31, 50120), (34, 50174), (36, 50183), (40, 50228), (50, 50351), (51, 50360), (53, 50399), (55, 50495), (61, 50570),

Gene: Dashyla_51 Start: 49861, Stop: 50976, Start Num: 5

Candidate Starts for Dashyla_51:

(Start: 5 @49861 has 26 MA's), (15, 50305), (18, 50377), (30, 50497), (32, 50518), (34, 50563), (41, 50662), (53, 50785), (55, 50878), (61, 50953),

Gene: DoTi_45 Start: 50660, Stop: 51769, Start Num: 4

Candidate Starts for DoTi_45:

(Start: 4 @50660 has 5 MA's), (8, 50777), (12, 50945), (16, 51119), (23, 51197), (33, 51296), (35, 51341), (36, 51347), (43, 51446), (44, 51461), (47, 51482), (49, 51503),

Gene: DumpQuist_49 Start: 49715, Stop: 50830, Start Num: 5

Candidate Starts for DumpQuist_49:

(Start: 5 @49715 has 26 MA's), (15, 50159), (32, 50372), (34, 50417), (41, 50516), (53, 50639), (61, 50807),

Gene: EugeneKrabs_47 Start: 50698, Stop: 51804, Start Num: 5

Candidate Starts for EugeneKrabs_47:

(1, 50281), (Start: 5 @50698 has 26 MA's), (15, 51130), (21, 51226), (22, 51232), (34, 51388), (45, 51517), (46, 51529), (53, 51613), (56, 51724), (60, 51775),

Gene: Fede_49 Start: 50536, Stop: 51663, Start Num: 7

Candidate Starts for Fede_49:

(Start: 7 @50536 has 10 MA's), (15, 50983), (19, 51070), (20, 51076), (22, 51085), (27, 51130), (29, 51151), (34, 51241), (37, 51265), (41, 51340), (46, 51382), (48, 51397), (56, 51580),

Gene: Fullmetal_49 Start: 49956, Stop: 51065, Start Num: 7

Candidate Starts for Fullmetal_49:

(Start: 7 @49956 has 10 MA's), (13, 50340), (15, 50385), (16, 50412), (19, 50472), (20, 50478), (29, 50553), (30, 50577), (34, 50643), (36, 50652), (48, 50799), (58, 51027), (60, 51033),

Gene: Gshelby23_43 Start: 50192, Stop: 51289, Start Num: 4

Candidate Starts for Gshelby23_43:

(2, 50132), (Start: 4 @50192 has 5 MA's), (8, 50309), (12, 50477), (18, 50681), (23, 50717), (33, 50816), (35, 50861), (36, 50867), (39, 50888), (43, 50966), (44, 50981), (47, 51002), (49, 51023),

Gene: Hannabella_45 Start: 50232, Stop: 51329, Start Num: 4

Candidate Starts for Hannabella_45:

(2, 50172), (Start: 4 @50232 has 5 MA's), (8, 50349), (12, 50517), (18, 50721), (23, 50757), (33, 50856), (35, 50901), (36, 50907), (39, 50928), (43, 51006), (44, 51021), (47, 51042), (49, 51063),

Gene: HitchHiker_52 Start: 49633, Stop: 50739, Start Num: 5

Candidate Starts for HitchHiker_52:

(Start: 5 @49633 has 26 MA's), (15, 50062), (31, 50266), (34, 50320), (36, 50329), (40, 50374), (50, 50497), (51, 50506), (53, 50545), (55, 50641), (61, 50716),

Gene: JordanFarm_52 Start: 50287, Stop: 51414, Start Num: 5

Candidate Starts for JordanFarm_52:

(Start: 5 @50287 has 26 MA's), (Start: 7 @50296 has 10 MA's), (13, 50689), (19, 50821), (20, 50827), (22, 50836), (26, 50878), (27, 50881), (29, 50902), (34, 50992), (41, 51091), (56, 51331), (62, 51397),

Gene: Kikiko_45 Start: 50581, Stop: 51609, Start Num: 6

Candidate Starts for Kikiko_45:

(6, 50581), (8, 50659), (10, 50671), (11, 50758), (14, 50914), (24, 51052), (25, 51055), (26, 51067), (28, 51076), (34, 51181), (35, 51184), (51, 51364), (56, 51538), (57, 51571),

Gene: KingKamren_47 Start: 50655, Stop: 51770, Start Num: 5

Candidate Starts for KingKamren_47:

(Start: 5 @50655 has 26 MA's), (15, 51096), (18, 51168), (22, 51198), (28, 51249), (34, 51354), (45, 51483), (46, 51495), (53, 51579), (56, 51690), (60, 51741),

Gene: LesNorah_50 Start: 50566, Stop: 51681, Start Num: 5

Candidate Starts for LesNorah_50:

(Start: 5 @50566 has 26 MA's), (15, 51010), (32, 51223), (34, 51268), (41, 51367), (53, 51490), (55, 51583), (61, 51658),

Gene: LilyLou_51 Start: 50179, Stop: 51294, Start Num: 5

Candidate Starts for LilyLou_51:

(Start: 5 @50179 has 26 MA's), (15, 50623), (18, 50695), (32, 50836), (34, 50881), (41, 50980), (53, 51103), (55, 51196), (61, 51271),

Gene: Mazun_50 Start: 50359, Stop: 51468, Start Num: 7

Candidate Starts for Mazun_50:

(Start: 7 @50359 has 10 MA's), (13, 50743), (15, 50788), (16, 50815), (19, 50875), (20, 50881), (29, 50956), (30, 50980), (34, 51046), (36, 51055), (48, 51202), (58, 51430), (60, 51436),

Gene: MissAmericana_48 Start: 50516, Stop: 51553, Start Num: 6

Candidate Starts for MissAmericana_48:

(6, 50516), (8, 50594), (9, 50603), (11, 50693), (14, 50858), (24, 50996), (25, 50999), (26, 51011), (34, 51125), (35, 51128), (51, 51308), (56, 51482), (57, 51515),

Gene: Morrill_47 Start: 49394, Stop: 50503, Start Num: 7

Candidate Starts for Morrill_47:

(Start: 7 @49394 has 10 MA's), (13, 49778), (15, 49823), (16, 49850), (19, 49910), (20, 49916), (21, 49919), (29, 49991), (30, 50015), (34, 50081), (36, 50090), (48, 50237), (58, 50465), (60, 50471),

Gene: Oatly_51 Start: 49193, Stop: 50299, Start Num: 5

Candidate Starts for Oatly_51:

(Start: 5 @49193 has 26 MA's), (15, 49622), (31, 49826), (34, 49880), (36, 49889), (40, 49934), (50, 50057), (51, 50066), (53, 50105), (55, 50201), (61, 50276),

Gene: Pabst_49 Start: 49259, Stop: 50374, Start Num: 5

Candidate Starts for Pabst_49:

(Start: 5 @49259 has 26 MA's), (15, 49697), (18, 49769), (21, 49793), (36, 49964), (38, 49982), (46, 50096), (55, 50276),

Gene: Pharky_49 Start: 49959, Stop: 51068, Start Num: 7

Candidate Starts for Pharky_49:

(Start: 7 @49959 has 10 MA's), (13, 50343), (15, 50388), (16, 50415), (19, 50475), (20, 50481), (29, 50556), (30, 50580), (34, 50646), (36, 50655), (48, 50802), (58, 51030), (60, 51036),

Gene: Phedro_49 Start: 49959, Stop: 51068, Start Num: 7

Candidate Starts for Phedro_49:

(Start: 7 @49959 has 10 MA's), (13, 50343), (15, 50388), (16, 50415), (19, 50475), (20, 50481), (29, 50556), (30, 50580), (34, 50646), (36, 50655), (48, 50802), (58, 51030), (60, 51036),

Gene: Phogo_50 Start: 50007, Stop: 51119, Start Num: 5

Candidate Starts for Phogo_50:

(Start: 5 @50007 has 26 MA's), (15, 50448), (18, 50520), (32, 50661), (34, 50706), (41, 50805), (53, 50928), (61, 51096),

Gene: Phracted_49 Start: 49959, Stop: 51068, Start Num: 7

Candidate Starts for Phracted_49:

(Start: 7 @49959 has 10 MA's), (13, 50343), (15, 50388), (16, 50415), (19, 50475), (20, 50481), (29, 50556), (30, 50580), (34, 50646), (36, 50655), (48, 50802), (58, 51030), (60, 51036),

Gene: PhriedRice_50 Start: 50063, Stop: 51172, Start Num: 7

Candidate Starts for PhriedRice_50:

(Start: 7 @50063 has 10 MA's), (13, 50447), (15, 50492), (16, 50519), (19, 50579), (20, 50585), (29, 50660), (30, 50684), (34, 50750), (36, 50759), (48, 50906), (58, 51134), (60, 51140),

Gene: PineapplePluto_52 Start: 49555, Stop: 50661, Start Num: 5

Candidate Starts for PineapplePluto_52:

(Start: 5 @49555 has 26 MA's), (15, 49984), (31, 50188), (34, 50242), (36, 50251), (40, 50296), (50, 50419), (51, 50428), (53, 50467), (55, 50563), (61, 50638),

Gene: RicoCaldo_49 Start: 50041, Stop: 51150, Start Num: 7

Candidate Starts for RicoCaldo_49:

(Start: 7 @50041 has 10 MA's), (13, 50425), (15, 50470), (16, 50497), (19, 50557), (20, 50563), (29, 50638), (30, 50662), (34, 50728), (36, 50737), (48, 50884), (58, 51112), (60, 51118),

Gene: StagePhright_49 Start: 49959, Stop: 51068, Start Num: 7

Candidate Starts for StagePhright_49:

(Start: 7 @49959 has 10 MA's), (13, 50343), (15, 50388), (16, 50415), (19, 50475), (20, 50481), (29, 50556), (30, 50580), (34, 50646), (36, 50655), (48, 50802), (58, 51030), (60, 51036),

Gene: Stormbreaker_50 Start: 50095, Stop: 51210, Start Num: 5

Candidate Starts for Stormbreaker_50:

(Start: 5 @50095 has 26 MA's), (15, 50539), (32, 50752), (34, 50797), (41, 50896), (53, 51019), (61, 51187),

Gene: TinyTimothy_47 Start: 49702, Stop: 50820, Start Num: 5

Candidate Starts for TinyTimothy_47:

(Start: 5 @49702 has 26 MA's), (15, 50143), (34, 50401), (44, 50524), (59, 50791), (63, 50809),

Gene: Truong_50 Start: 50076, Stop: 51203, Start Num: 5

Candidate Starts for Truong_50:

(Start: 5 @50076 has 26 MA's), (Start: 7 @50085 has 10 MA's), (13, 50478), (19, 50610), (20, 50616), (22, 50625), (26, 50667), (27, 50670), (29, 50691), (34, 50781), (41, 50880), (56, 51120), (62, 51186),

Gene: Unphazed_50 Start: 49964, Stop: 51079, Start Num: 5

Candidate Starts for Unphazed_50:

(Start: 5 @49964 has 26 MA's), (15, 50408), (32, 50621), (34, 50666), (39, 50696), (41, 50765), (53, 50888), (61, 51056),

Gene: Waterlily_53 Start: 50336, Stop: 51454, Start Num: 7

Candidate Starts for Waterlily_53:

(Start: 5 @50327 has 26 MA's), (Start: 7 @50336 has 10 MA's), (13, 50729), (19, 50861), (20, 50867), (22, 50876), (26, 50918), (27, 50921), (29, 50942), (34, 51032), (41, 51131), (56, 51371), (62, 51437),

Gene: Wesak_48 Start: 49547, Stop: 50665, Start Num: 5

Candidate Starts for Wesak_48:

(Start: 5 @49547 has 26 MA's), (15, 49988), (34, 50246), (44, 50369), (59, 50636), (63, 50654),

Gene: Xitlalli_48 Start: 49974, Stop: 51089, Start Num: 5

Candidate Starts for Xitlalli_48:

(Start: 5 @49974 has 26 MA's), (15, 50418), (32, 50631), (34, 50676), (53, 50898), (55, 50991), (61, 51066),

Gene: YellowPanda_50 Start: 49428, Stop: 50546, Start Num: 5

Candidate Starts for YellowPanda_50:

(Start: 5 @49428 has 26 MA's), (15, 49869), (34, 50127), (44, 50250), (59, 50517), (63, 50535),

Gene: Zhengyi_47 Start: 50747, Stop: 51853, Start Num: 5

Candidate Starts for Zhengyi_47:

(Start: 5 @50747 has 26 MA's), (15, 51179), (21, 51275), (22, 51281), (34, 51437), (45, 51566), (46, 51578), (53, 51662), (56, 51773), (60, 51824),