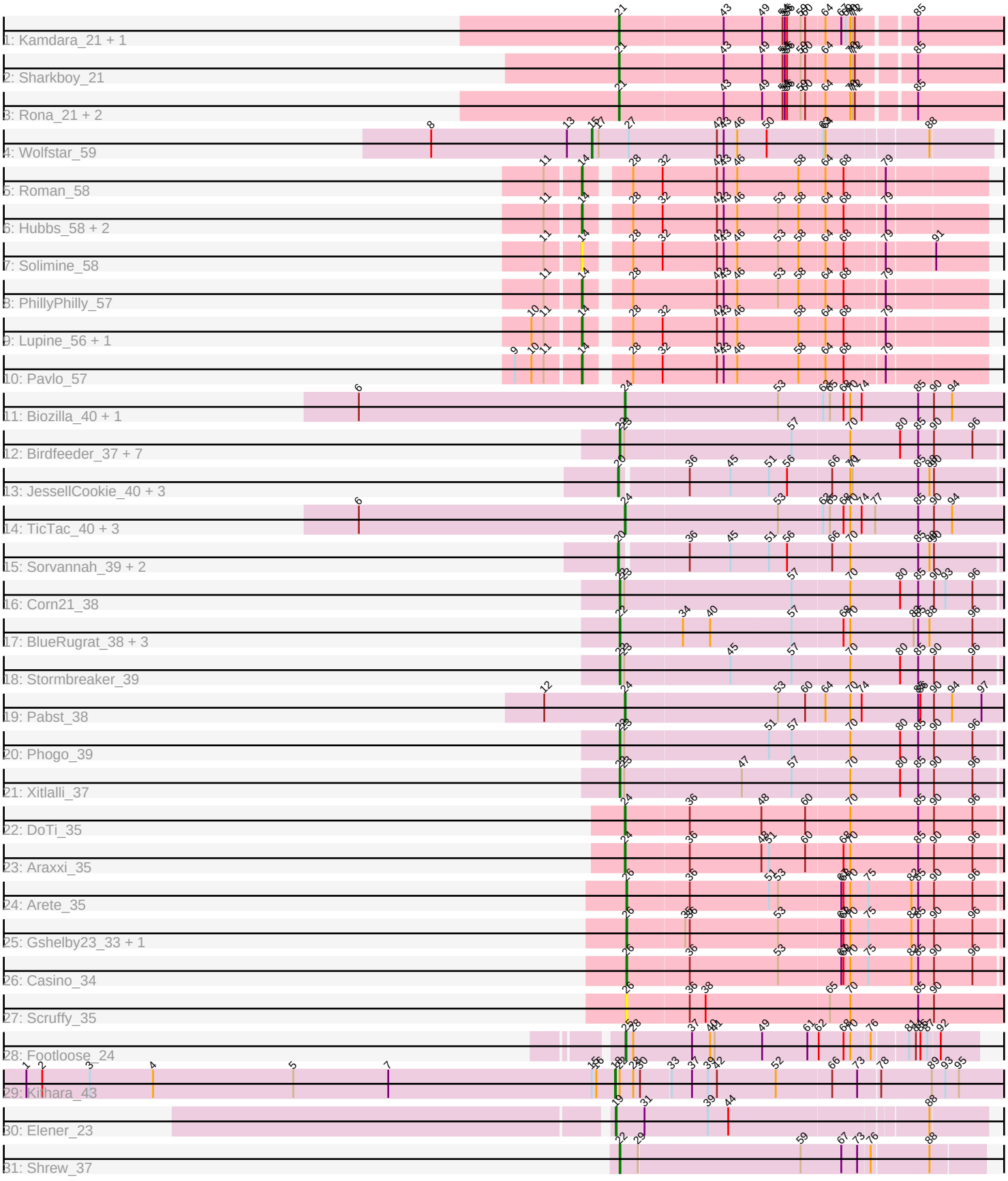
Pham 296606


1: Kamdara_21 + 1
2: Sharkboy_21
3: Rona_21 + 2
4: Wolfstar_59
5: Roman_58
6: Hubbs_58 + 2
7: Solimine_58
8: PhillyPhilly_57
9: Lupine_56 + 1
10: Pavlo_57
11: Biozilla_40 + 1
12: Birdfeeder_37 + 7
13: JessellCookie_40 + 3
14: TicTac_40 + 3
15: Sorvannah_39 + 2
16: Corn21_38
17: BlueRugrat_38 + 3
18: Stormbreaker_39
19: Pabst_38
20: Phogo_39
21: Xitlalli_37
22: DoTi_35
23: Araxxi_35
24: Arete_35
25: Gshelby23_33 + 1
26: Casino_34
27: Scruffy_35
28: Footloose_24
29: Kithara_43
30: Elener_23
31: Shrew_37

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 296606 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296606 has 57 members, 10 are drafts.

Phages represented in each track:
- Track 1 : Kamdara_21, Dismas_21
- Track 2 : Sharkboy_21
- Track 3 : Rona_21, Kieran_21, ChiliPepper_21
- Track 4 : Wolfstar_59
- Track 5 : Roman_58
- Track 6 : Hubbs_58, Saradis_58, DejaVu_59
- Track 7 : Solimine_58
- Track 8 : PhillyPhilly_57
- Track 9 : Lupine_56, Uterion_60
- Track 10 : Pavlo_57
- Track 11 : Biozilla_40, HitchHiker_41
- Track 12 : Birdfeeder_37, LilyLou_40, SwissCheezer_38, Dashyla_38, Unphazed_39, Alex44_39, ArMaWen_38, DumpQuist_38
- Track 13 : JessellCookie_40, YellowPanda_41, MiamiPanther_40, TinyTimothy_38
- Track 14 : TicTac_40, CrunchyBoi_41, PineapplePluto_41, Oatly_40
- Track 15 : Sorvannah_39, Wesak_39, Salvatore2000_39
- Track 16 : Corn21_38
- Track 17 : BlueRugrat_38, LesNorah_39, Conditioner_38, TownLake_37
- Track 18 : Stormbreaker_39
- Track 19 : Pabst_38
- Track 20 : Phogo_39
- Track 21 : Xitlalli_37
- Track 22 : DoTi_35
- Track 23 : Araxxi_35
- Track 24 : Arete_35
- Track 25 : Gshelby23_33, Hannabella_35
- Track 26 : Casino_34
- Track 27 : Scruffy_35
- Track 28 : Footloose_24
- Track 29 : Kithara_43
- Track 30 : Elener_23
- Track 31 : Shrew_37

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

The start number called the most often in the published annotations is 22, it was called in 16 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alex44_39, ArMaWen_38, Birdfeeder_37, BlueRugrat_38, Conditioner_38, Corn21_38, Dashyla_38, DumpQuist_38, LesNorah_39, LilyLou_40, Phogo_39, Shrew_37, Stormbreaker_39, SwissCheezer_38, TownLake_37, Unphazed_39, Xitlalli_37,

Genes that have the "Most Annotated" start but do not call it:
• Kithara_43,

Genes that do not have the "Most Annotated" start:
• Araxxi_35, Arete_35, Biozilla_40, Casino_34, ChiliPepper_21, CrunchyBoi_41, DejaVu_59, Dismas_21, DoTi_35, Elener_23, Footloose_24, Gshelby23_33, Hannabella_35, HitchHiker_41, Hubbs_58, JessellCookie_40, Kamdara_21, Kieran_21, Lupine_56, MiamiPanther_40, Oatly_40, Pabst_38, Pavlo_57, PhillyPhilly_57, PineapplePluto_41, Roman_58, Rona_21, Salvatore2000_39, Saradis_58, Scruffy_35, Sharkboy_21, Solimine_58, Sorvannah_39, TicTac_40, TinyTimothy_38, Uterion_60, Wesak_39, Wolfstar_59, YellowPanda_41,

Summary by start number:

Start 14:
• Found in 9 of 57 (15.8%) of genes in pham
• Manual Annotations of this start: 6 of 47
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DejaVu_59 (ED1), Hubbs_58 (ED1), Lupine_56 (ED1), Pavlo_57 (ED1), PhillyPhilly_57 (ED1), Roman_58 (ED1), Saradis_58 (ED1), Solimine_58 (ED1), Uterion_60 (ED1),

Start 15:
• Found in 2 of 57 (3.5%) of genes in pham
• Manual Annotations of this start: 1 of 47
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Wolfstar_59 (ED),

Start 18:
• Found in 1 of 57 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 47
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kithara_43 (singleton),

Start 19:
• Found in 1 of 57 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 47
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elener_23 (singleton),

Start 20:
• Found in 7 of 57 (12.3%) of genes in pham
• Manual Annotations of this start: 5 of 47

• Called 100.0% of time when present
• Phage (with cluster) where this start called: JessellCookie_40 (EK1), MiamiPanther_40 (EK1), Salvatore2000_39 (EK1), Sorvannah_39 (EK1), TinyTimothy_38 (EK1), Wesak_39 (EK1), YellowPanda_41 (EK1),

Start 21:
• Found in 6 of 57 (10.5%) of genes in pham
• Manual Annotations of this start: 5 of 47
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ChiliPepper_21 (EB), Dismas_21 (EB), Kamdara_21 (EB), Kieran_21 (EB), Rona_21 (EB), Sharkboy_21 (EB),

Start 22:
• Found in 18 of 57 (31.6%) of genes in pham
• Manual Annotations of this start: 16 of 47
• Called 94.4% of time when present
• Phage (with cluster) where this start called: Alex44_39 (EK1), ArMaWen_38 (EK1), Birdfeeder_37 (EK1), BlueRugrat_38 (EK1), Conditioner_38 (EK1), Corn21_38 (EK1), Dashyla_38 (EK1), DumpQuist_38 (EK1), LesNorah_39 (EK1), LilyLou_40 (EK1), Phogo_39 (EK1), Shrew_37 (singleton), Stormbreaker_39 (EK1), SwissCheezer_38 (EK1), TownLake_37 (EK1), Unphazed_39 (EK1), Xitlalli_37 (EK1),

Start 24:
• Found in 9 of 57 (15.8%) of genes in pham
• Manual Annotations of this start: 7 of 47
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Araxxi_35 (EM1), Biozilla_40 (EK1), CrunchyBoi_41 (EK1), DoTi_35 (EM1), HitchHiker_41 (EK1), Oatly_40 (EK1), Pabst_38 (EK1), PineapplePluto_41 (EK1), TicTac_40 (EK1),

Start 25:
• Found in 1 of 57 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 47
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Footloose_24 (singleton),

Start 26:
• Found in 5 of 57 (8.8%) of genes in pham
• Manual Annotations of this start: 4 of 47
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arete_35 (EM1), Casino_34 (EM1), Gshelby23_33 (EM1), Hannabella_35 (EM1), Scruffy_35 (EM1),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, ED, EB, ED1, EM1, EK1,

Info for manual annotations of cluster EB:
•Start number 21 was manually annotated 5 times for cluster EB.

Info for manual annotations of cluster ED:
•Start number 15 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:
•Start number 14 was manually annotated 6 times for cluster ED1.

Info for manual annotations of cluster EK1:
•Start number 20 was manually annotated 5 times for cluster EK1.
•Start number 22 was manually annotated 15 times for cluster EK1.
•Start number 24 was manually annotated 5 times for cluster EK1.

Info for manual annotations of cluster EM1:
•Start number 24 was manually annotated 2 times for cluster EM1.
•Start number 26 was manually annotated 4 times for cluster EM1.

Gene Information:

Gene: Alex44_39 Start: 39220, Stop: 39714, Start Num: 22
Candidate Starts for Alex44_39:
(Start: 22 @39220 has 16 MA's), (23, 39226), (57, 39442), (70, 39517), (80, 39583), (85, 39607), (90, 39628), (96, 39679),

Gene: ArMaWen_38 Start: 38763, Stop: 39257, Start Num: 22
Candidate Starts for ArMaWen_38:
(Start: 22 @38763 has 16 MA's), (23, 38769), (57, 38985), (70, 39060), (80, 39126), (85, 39150), (90, 39171), (96, 39222),

Gene: Araxxi_35 Start: 42091, Stop: 42576, Start Num: 24
Candidate Starts for Araxxi_35:
(Start: 24 @42091 has 7 MA's), (36, 42172), (48, 42265), (51, 42274), (60, 42322), (68, 42370), (70, 42379), (85, 42469), (90, 42490), (96, 42541),

Gene: Arete_35 Start: 41837, Stop: 42322, Start Num: 26
Candidate Starts for Arete_35:
(Start: 26 @41837 has 4 MA's), (36, 41918), (51, 42020), (53, 42032), (67, 42113), (68, 42116), (70, 42125), (75, 42149), (82, 42206), (85, 42215), (90, 42236), (96, 42287),

Gene: Biozilla_40 Start: 39149, Stop: 39640, Start Num: 24
Candidate Starts for Biozilla_40:
(6, 38798), (Start: 24 @39149 has 7 MA's), (53, 39344), (63, 39401), (65, 39410), (68, 39428), (70, 39437), (74, 39452), (85, 39527), (90, 39548), (94, 39572),

Gene: Birdfeeder_37 Start: 38976, Stop: 39470, Start Num: 22
Candidate Starts for Birdfeeder_37:
(Start: 22 @38976 has 16 MA's), (23, 38982), (57, 39198), (70, 39273), (80, 39339), (85, 39363), (90, 39384), (96, 39435),

Gene: BlueRugrat_38 Start: 39221, Stop: 39718, Start Num: 22
Candidate Starts for BlueRugrat_38:
(Start: 22 @39221 has 16 MA's), (34, 39302), (40, 39338), (57, 39443), (68, 39509), (70, 39518), (83, 39602), (85, 39608), (88, 39623), (96, 39680),

Gene: Casino_34 Start: 41809, Stop: 42294, Start Num: 26
Candidate Starts for Casino_34:

(Start: 26 @41809 has 4 MA's), (36, 41890), (53, 42004), (67, 42085), (68, 42088), (70, 42097), (75, 42121), (82, 42178), (85, 42187), (90, 42208), (96, 42259),

Gene: ChiliPepper_21 Start: 19073, Stop: 19561, Start Num: 21
Candidate Starts for ChiliPepper_21:
(Start: 21 @19073 has 5 MA's), (43, 19208), (49, 19259), (54, 19286), (55, 19289), (56, 19292), (59, 19310), (60, 19316), (64, 19340), (70, 19373), (71, 19376), (72, 19379), (85, 19448),

Gene: Conditioner_38 Start: 39294, Stop: 39791, Start Num: 22
Candidate Starts for Conditioner_38:
(Start: 22 @39294 has 16 MA's), (34, 39375), (40, 39411), (57, 39516), (68, 39582), (70, 39591), (83, 39675), (85, 39681), (88, 39696), (96, 39753),

Gene: Corn21_38 Start: 39299, Stop: 39793, Start Num: 22
Candidate Starts for Corn21_38:
(Start: 22 @39299 has 16 MA's), (23, 39305), (57, 39521), (70, 39596), (80, 39662), (85, 39686), (90, 39707), (93, 39722), (96, 39758),

Gene: CrunchyBoi_41 Start: 39004, Stop: 39495, Start Num: 24
Candidate Starts for CrunchyBoi_41:
(6, 38653), (Start: 24 @39004 has 7 MA's), (53, 39199), (63, 39256), (65, 39265), (68, 39283), (70, 39292), (74, 39307), (77, 39325), (85, 39382), (90, 39403), (94, 39427),

Gene: Dashyla_38 Start: 38894, Stop: 39388, Start Num: 22
Candidate Starts for Dashyla_38:
(Start: 22 @38894 has 16 MA's), (23, 38900), (57, 39116), (70, 39191), (80, 39257), (85, 39281), (90, 39302), (96, 39353),

Gene: DejaVu_59 Start: 34858, Stop: 35358, Start Num: 14
Candidate Starts for DejaVu_59:
(11, 34816), (Start: 14 @34858 has 6 MA's), (28, 34906), (32, 34945), (42, 35017), (43, 35026), (46, 35044), (53, 35098), (58, 35125), (64, 35158), (68, 35182), (79, 35230),

Gene: Dismas_21 Start: 19073, Stop: 19561, Start Num: 21
Candidate Starts for Dismas_21:
(Start: 21 @19073 has 5 MA's), (43, 19208), (49, 19259), (54, 19286), (55, 19289), (56, 19292), (59, 19310), (60, 19316), (64, 19340), (67, 19361), (69, 19367), (70, 19373), (71, 19376), (72, 19379), (85, 19448),

Gene: DoTi_35 Start: 42195, Stop: 42680, Start Num: 24
Candidate Starts for DoTi_35:
(Start: 24 @42195 has 7 MA's), (36, 42276), (48, 42369), (60, 42426), (70, 42483), (85, 42573), (90, 42594), (96, 42645),

Gene: DumpQuist_38 Start: 38748, Stop: 39242, Start Num: 22
Candidate Starts for DumpQuist_38:
(Start: 22 @38748 has 16 MA's), (23, 38754), (57, 38970), (70, 39045), (80, 39111), (85, 39135), (90, 39156), (96, 39207),

Gene: Elener_23 Start: 19989, Stop: 20459, Start Num: 19
Candidate Starts for Elener_23:
(Start: 19 @19989 has 1 MA's), (31, 20025), (39, 20109), (44, 20136), (88, 20385),

Gene: Footloose_24 Start: 17237, Stop: 17686, Start Num: 25
Candidate Starts for Footloose_24:
(Start: 25 @17237 has 1 MA's), (28, 17246), (37, 17324), (40, 17348), (41, 17354), (49, 17417), (61, 17477), (62, 17489), (68, 17522), (70, 17531), (76, 17555), (81, 17597), (84, 17606), (86, 17612), (87, 17621), (92, 17636),

Gene: Gshelby23_33 Start: 41744, Stop: 42229, Start Num: 26
Candidate Starts for Gshelby23_33:
(Start: 26 @41744 has 4 MA's), (35, 41819), (36, 41825), (53, 41939), (67, 42020), (68, 42023), (70, 42032), (75, 42056), (82, 42113), (85, 42122), (90, 42143), (96, 42194),

Gene: Hannabella_35 Start: 41785, Stop: 42270, Start Num: 26
Candidate Starts for Hannabella_35:
(Start: 26 @41785 has 4 MA's), (35, 41860), (36, 41866), (53, 41980), (67, 42061), (68, 42064), (70, 42073), (75, 42097), (82, 42154), (85, 42163), (90, 42184), (96, 42235),

Gene: HitchHiker_41 Start: 39149, Stop: 39640, Start Num: 24
Candidate Starts for HitchHiker_41:
(6, 38798), (Start: 24 @39149 has 7 MA's), (53, 39344), (63, 39401), (65, 39410), (68, 39428), (70, 39437), (74, 39452), (85, 39527), (90, 39548), (94, 39572),

Gene: Hubbs_58 Start: 35070, Stop: 35570, Start Num: 14
Candidate Starts for Hubbs_58:
(11, 35028), (Start: 14 @35070 has 6 MA's), (28, 35118), (32, 35157), (42, 35229), (43, 35238), (46, 35256), (53, 35310), (58, 35337), (64, 35370), (68, 35394), (79, 35442),

Gene: JessellCookie_40 Start: 40626, Stop: 41111, Start Num: 20
Candidate Starts for JessellCookie_40:
(Start: 20 @40626 has 5 MA's), (36, 40707), (45, 40761), (51, 40809), (56, 40833), (66, 40890), (70, 40914), (71, 40917), (85, 41004), (88, 41019), (90, 41025),

Gene: Kamdara_21 Start: 19072, Stop: 19560, Start Num: 21
Candidate Starts for Kamdara_21:
(Start: 21 @19072 has 5 MA's), (43, 19207), (49, 19258), (54, 19285), (55, 19288), (56, 19291), (59, 19309), (60, 19315), (64, 19339), (67, 19360), (69, 19366), (70, 19372), (71, 19375), (72, 19378), (85, 19447),

Gene: Kieran_21 Start: 19076, Stop: 19564, Start Num: 21
Candidate Starts for Kieran_21:
(Start: 21 @19076 has 5 MA's), (43, 19211), (49, 19262), (54, 19289), (55, 19292), (56, 19295), (59, 19313), (60, 19319), (64, 19343), (70, 19376), (71, 19379), (72, 19382), (85, 19451),

Gene: Kithara_43 Start: 36544, Stop: 37053, Start Num: 18
Candidate Starts for Kithara_43:
(1, 35764), (2, 35785), (3, 35848), (4, 35932), (5, 36118), (7, 36244), (Start: 15 @36514 has 1 MA's), (16, 36520), (Start: 18 @36544 has 1 MA's), (Start: 22 @36550 has 16 MA's), (28, 36568), (30, 36577), (33, 36616), (37, 36643), (39, 36664), (42, 36676), (52, 36754), (66, 36826), (73, 36859), (78, 36886), (89, 36952), (93, 36970), (95, 36988),

Gene: LesNorah_39 Start: 39618, Stop: 40115, Start Num: 22
Candidate Starts for LesNorah_39:
(Start: 22 @39618 has 16 MA's), (34, 39699), (40, 39735), (57, 39840), (68, 39906), (70, 39915), (83, 39999), (85, 40005), (88, 40020), (96, 40077),

Gene: LilyLou_40 Start: 39212, Stop: 39706, Start Num: 22
Candidate Starts for LilyLou_40:
(Start: 22 @39212 has 16 MA's), (23, 39218), (57, 39434), (70, 39509), (80, 39575), (85, 39599), (90, 39620), (96, 39671),

Gene: Lupine_56 Start: 34272, Stop: 34772, Start Num: 14
Candidate Starts for Lupine_56:
(10, 34215), (11, 34230), (Start: 14 @34272 has 6 MA's), (28, 34320), (32, 34359), (42, 34431), (43, 34440), (46, 34458), (58, 34539), (64, 34572), (68, 34596), (79, 34644),

Gene: MiamiPanther_40 Start: 40626, Stop: 41111, Start Num: 20
Candidate Starts for MiamiPanther_40:
(Start: 20 @40626 has 5 MA's), (36, 40707), (45, 40761), (51, 40809), (56, 40833), (66, 40890), (70, 40914), (71, 40917), (85, 41004), (88, 41019), (90, 41025),

Gene: Oatly_40 Start: 38709, Stop: 39200, Start Num: 24
Candidate Starts for Oatly_40:
(6, 38358), (Start: 24 @38709 has 7 MA's), (53, 38904), (63, 38961), (65, 38970), (68, 38988), (70, 38997), (74, 39012), (77, 39030), (85, 39087), (90, 39108), (94, 39132),

Gene: Pabst_38 Start: 38773, Stop: 39264, Start Num: 24
Candidate Starts for Pabst_38:
(12, 38668), (Start: 24 @38773 has 7 MA's), (53, 38968), (60, 39004), (64, 39028), (70, 39061), (74, 39076), (85, 39151), (86, 39154), (90, 39172), (94, 39196), (97, 39235),

Gene: Pavlo_57 Start: 34917, Stop: 35417, Start Num: 14
Candidate Starts for Pavlo_57:
(9, 34839), (10, 34860), (11, 34875), (Start: 14 @34917 has 6 MA's), (28, 34965), (32, 35004), (42, 35076), (43, 35085), (46, 35103), (58, 35184), (64, 35217), (68, 35241), (79, 35289),

Gene: PhillyPhilly_57 Start: 34451, Stop: 34951, Start Num: 14
Candidate Starts for PhillyPhilly_57:
(11, 34409), (Start: 14 @34451 has 6 MA's), (28, 34499), (42, 34610), (43, 34619), (46, 34637), (53, 34691), (58, 34718), (64, 34751), (68, 34775), (79, 34823),

Gene: Phogo_39 Start: 39040, Stop: 39534, Start Num: 22
Candidate Starts for Phogo_39:
(Start: 22 @39040 has 16 MA's), (23, 39046), (51, 39232), (57, 39262), (70, 39337), (80, 39403), (85, 39427), (90, 39448), (96, 39499),

Gene: PineapplePluto_41 Start: 39071, Stop: 39562, Start Num: 24
Candidate Starts for PineapplePluto_41:
(6, 38720), (Start: 24 @39071 has 7 MA's), (53, 39266), (63, 39323), (65, 39332), (68, 39350), (70, 39359), (74, 39374), (77, 39392), (85, 39449), (90, 39470), (94, 39494),

Gene: Roman_58 Start: 34918, Stop: 35418, Start Num: 14
Candidate Starts for Roman_58:
(11, 34876), (Start: 14 @34918 has 6 MA's), (28, 34966), (32, 35005), (42, 35077), (43, 35086), (46, 35104), (58, 35185), (64, 35218), (68, 35242), (79, 35290),

Gene: Rona_21 Start: 19073, Stop: 19561, Start Num: 21
Candidate Starts for Rona_21:

(Start: 21 @19073 has 5 MA's), (43, 19208), (49, 19259), (54, 19286), (55, 19289), (56, 19292), (59, 19310), (60, 19316), (64, 19340), (70, 19373), (71, 19376), (72, 19379), (85, 19448),

Gene: Salvatore2000_39 Start: 40626, Stop: 41111, Start Num: 20
Candidate Starts for Salvatore2000_39:
(Start: 20 @40626 has 5 MA's), (36, 40707), (45, 40761), (51, 40809), (56, 40833), (66, 40890), (70, 40914), (85, 41004), (88, 41019), (90, 41025),

Gene: Saradis_58 Start: 34510, Stop: 35010, Start Num: 14
Candidate Starts for Saradis_58:
(11, 34468), (Start: 14 @34510 has 6 MA's), (28, 34558), (32, 34597), (42, 34669), (43, 34678), (46, 34696), (53, 34750), (58, 34777), (64, 34810), (68, 34834), (79, 34882),

Gene: Scruffy_35 Start: 42070, Stop: 42561, Start Num: 26
Candidate Starts for Scruffy_35:
(Start: 26 @42070 has 4 MA's), (36, 42151), (38, 42172), (65, 42331), (70, 42358), (85, 42448), (90, 42469),

Gene: Sharkboy_21 Start: 19060, Stop: 19548, Start Num: 21
Candidate Starts for Sharkboy_21:
(Start: 21 @19060 has 5 MA's), (43, 19195), (49, 19246), (54, 19273), (55, 19276), (56, 19279), (59, 19297), (60, 19303), (64, 19327), (70, 19360), (71, 19363), (72, 19366), (85, 19435),

Gene: Shrew_37 Start: 13878, Stop: 14339, Start Num: 22
Candidate Starts for Shrew_37:
(Start: 22 @13878 has 16 MA's), (29, 13902), (59, 14112), (67, 14166), (73, 14187), (76, 14202), (88, 14271),

Gene: Solimine_58 Start: 34924, Stop: 35424, Start Num: 14
Candidate Starts for Solimine_58:
(11, 34882), (Start: 14 @34924 has 6 MA's), (28, 34972), (32, 35011), (42, 35083), (43, 35092), (46, 35110), (53, 35164), (58, 35191), (64, 35224), (68, 35248), (79, 35296), (91, 35356),

Gene: Sorvannah_39 Start: 40626, Stop: 41111, Start Num: 20
Candidate Starts for Sorvannah_39:
(Start: 20 @40626 has 5 MA's), (36, 40707), (45, 40761), (51, 40809), (56, 40833), (66, 40890), (70, 40914), (85, 41004), (88, 41019), (90, 41025),

Gene: Stormbreaker_39 Start: 39128, Stop: 39622, Start Num: 22
Candidate Starts for Stormbreaker_39:
(Start: 22 @39128 has 16 MA's), (23, 39134), (45, 39272), (57, 39350), (70, 39425), (80, 39491), (85, 39515), (90, 39536), (96, 39587),

Gene: SwissCheezer_38 Start: 38780, Stop: 39274, Start Num: 22
Candidate Starts for SwissCheezer_38:
(Start: 22 @38780 has 16 MA's), (23, 38786), (57, 39002), (70, 39077), (80, 39143), (85, 39167), (90, 39188), (96, 39239),

Gene: TicTac_40 Start: 39070, Stop: 39561, Start Num: 24
Candidate Starts for TicTac_40:
(6, 38719), (Start: 24 @39070 has 7 MA's), (53, 39265), (63, 39322), (65, 39331), (68, 39349), (70, 39358), (74, 39373), (77, 39391), (85, 39448), (90, 39469), (94, 39493),

Gene: TinyTimothy_38 Start: 40626, Stop: 41111, Start Num: 20
Candidate Starts for TinyTimothy_38:
(Start: 20 @40626 has 5 MA's), (36, 40707), (45, 40761), (51, 40809), (56, 40833), (66, 40890), (70, 40914), (71, 40917), (85, 41004), (88, 41019), (90, 41025),

Gene: TownLake_37 Start: 38908, Stop: 39405, Start Num: 22
Candidate Starts for TownLake_37:
(Start: 22 @38908 has 16 MA's), (34, 38989), (40, 39025), (57, 39130), (68, 39196), (70, 39205), (83, 39289), (85, 39295), (88, 39310), (96, 39367),

Gene: Unphazed_39 Start: 39004, Stop: 39498, Start Num: 22
Candidate Starts for Unphazed_39:
(Start: 22 @39004 has 16 MA's), (23, 39010), (57, 39226), (70, 39301), (80, 39367), (85, 39391), (90, 39412), (96, 39463),

Gene: Uterion_60 Start: 35019, Stop: 35519, Start Num: 14
Candidate Starts for Uterion_60:
(10, 34962), (11, 34977), (Start: 14 @35019 has 6 MA's), (28, 35067), (32, 35106), (42, 35178), (43, 35187), (46, 35205), (58, 35286), (64, 35319), (68, 35343), (79, 35391),

Gene: Wesak_39 Start: 40468, Stop: 40953, Start Num: 20
Candidate Starts for Wesak_39:
(Start: 20 @40468 has 5 MA's), (36, 40549), (45, 40603), (51, 40651), (56, 40675), (66, 40732), (70, 40756), (85, 40846), (88, 40861), (90, 40867),

Gene: Wolfstar_59 Start: 35948, Stop: 36460, Start Num: 15
Candidate Starts for Wolfstar_59:
(8, 35735), (13, 35915), (Start: 15 @35948 has 1 MA's), (17, 35957), (27, 35996), (42, 36113), (43, 36122), (46, 36140), (50, 36179), (63, 36251), (64, 36254), (88, 36380),

Gene: Xitlalli_37 Start: 39005, Stop: 39499, Start Num: 22
Candidate Starts for Xitlalli_37:
(Start: 22 @39005 has 16 MA's), (23, 39011), (47, 39164), (57, 39227), (70, 39302), (80, 39368), (85, 39392), (90, 39413), (96, 39464),

Gene: YellowPanda_41 Start: 40349, Stop: 40834, Start Num: 20
Candidate Starts for YellowPanda_41:
(Start: 20 @40349 has 5 MA's), (36, 40430), (45, 40484), (51, 40532), (56, 40556), (66, 40613), (70, 40637), (71, 40640), (85, 40727), (88, 40742), (90, 40748),