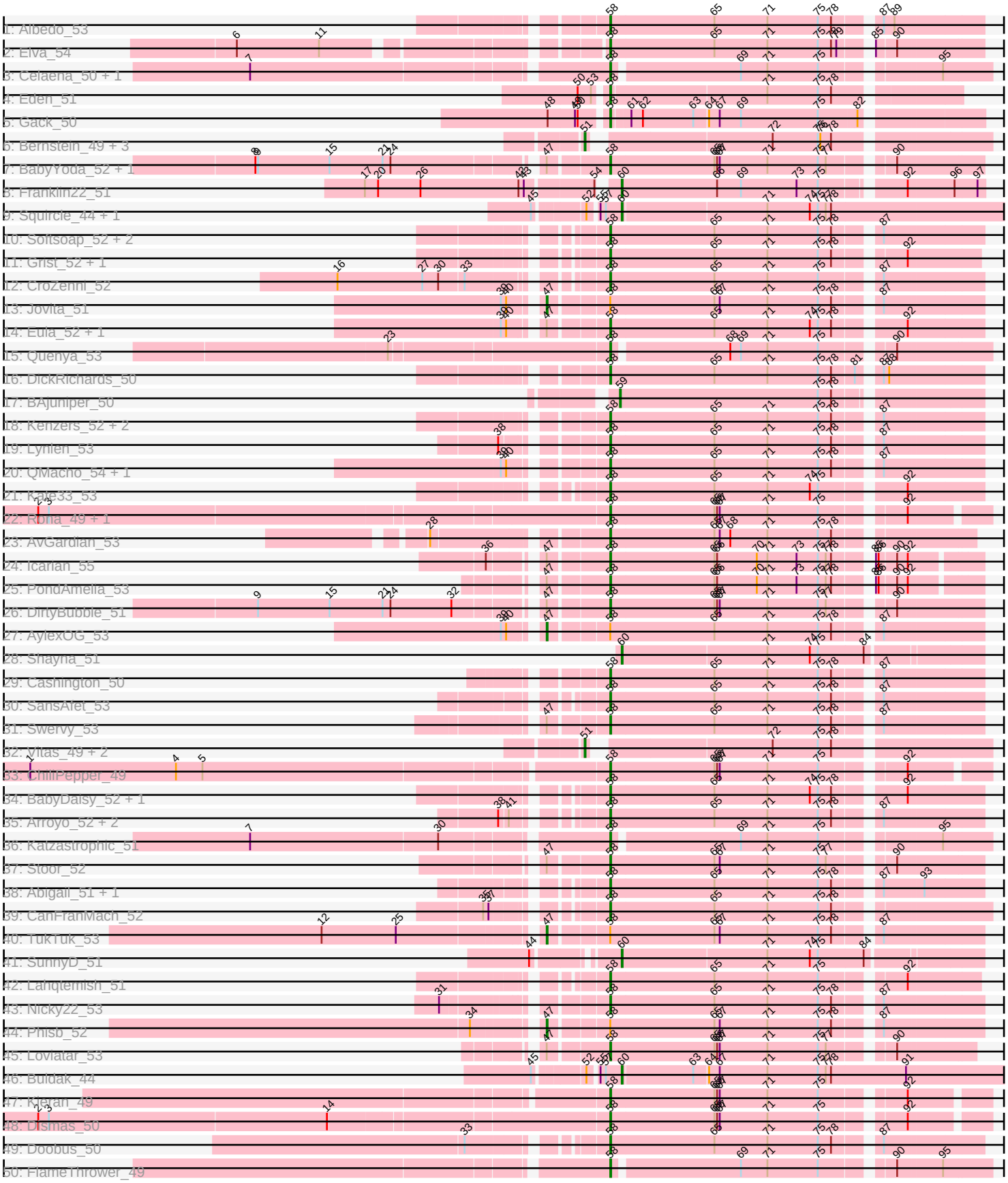
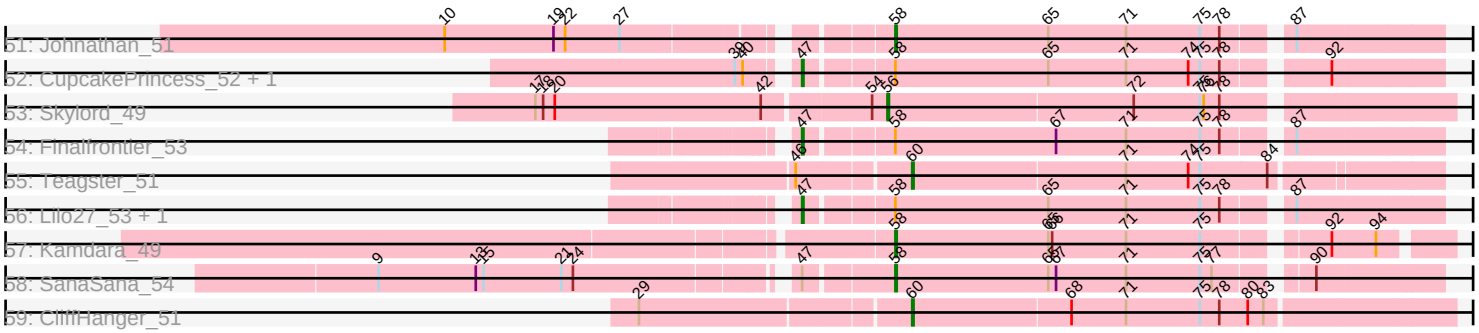
# Pham 339606


1: Albedo_53
2: Elva_54
3: Celaena_50 + 1
4: Eden_51
5: Gack_50
6: Bernstein_49 + 3
7: BabyYoda_52 + 1
8: Franklin22_51
9: Squircle_44 + 1
10: Softsoap_52 + 2
11: Grist_52 + 1
12: CroZenni_52
13: Jovita_51
14: Eula_52 + 1
15: Quenya_53
16: DickRichards_50
17: BAjuniper_50
18: Kenzers_52 + 2
19: Lynlen_53
20: QMacho_54 + 1
21: Kale33_53
22: Rona_49 + 1
23: AvGardian_53
24: Icarian_55
25: PondAmelia_53
26: DirtyBubble_51
27: AylexOG_53
28: Shayna_51
29: Cashington_50
30: SansAlet_53
31: Swervy_53
32: Vitas_49 + 2
33: ChiliPepper_49
34: BabyDaisy_52 + 1
35: Arroyo_52 + 2
36: Katzastrophic_51
37: Stoor_52
38: Abigail_51 + 1
39: CanFranMach_52
40: TukTuk_53
41: SunnyD_51
42: Lanqtemish_51
43: Nicky22_53
44: Phisb_52
45: Loviatar_53
46: Buldak_44
47: Kitaran_49
48: Dismas_50
49: Doobus_50
50: FlameThrower_49

# Pham 339606


51: Johnathan_51
52: CupcakePrincess_52 + 1
53: Skylord_49
54: Finalfrontier_53
55: Teagster_51
56: Lilo27_53 + 1
57: Kamdara_49
58: SanaSana_54
59: CliffHanger_51

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 339606 Report

This analysis was run 11/14/26 on database version 672.

Pham number 339606 has 81 members, 1 are drafts.

Phages represented in each track:
- Track 1 : Albedo_53
- Track 2 : Elva_54
- Track 3 : Celaena_50, Bachaco_50
- Track 4 : Eden_51
- Track 5 : Gack_50
- Track 6 : Bernstein_49, Rollins_49, Coltrane_49, Brahms_49
- Track 7 : BabyYoda_52, Stromboli_52
- Track 8 : Franklin22_51
- Track 9 : Squircle_44, Olliecat_44
- Track 10 : Softsoap_52, BubbaBear_51, Avocadoman_50
- Track 11 : Grist_52, Didgeridoo_55
- Track 12 : CroZenni_52
- Track 13 : Jovita_51
- Track 14 : Eula_52, MsUbiquitous_52
- Track 15 : Quenya_53
- Track 16 : DickRichards_50
- Track 17 : BAjuniper_50
- Track 18 : Kenzers_52, Albright_49, Burritobowl_52
- Track 19 : Lynlen_53
- Track 20 : QMacho_54, Pecas_53
- Track 21 : Kate33_53
- Track 22 : Rona_49, Sharkboy_50
- Track 23 : AvGardian_53
- Track 24 : Icarian_55
- Track 25 : PondAmelia_53
- Track 26 : DirtyBubble_51
- Track 27 : AylexOG_53
- Track 28 : Shayna_51
- Track 29 : Cashington_50
- Track 30 : SansAfet_53
- Track 31 : Swervy_53
- Track 32 : Vitas_49, Clayda5_51, Armstrong_49
- Track 33 : ChiliPepper_49
- Track 34 : BabyDaisy_52, IndyLu_52
- Track 35 : Arroyo_52, BelmontSKP_52, AnnaLie_52
- Track 36 : Katzastrophic_51
- Track 37 : Stoor_52

• Track 38 : Abigail_51, LimaBean_52
• Track 39 : CanFranMach_52
• Track 40 : TukTuk_53
• Track 41 : SunnyD_51
• Track 42 : Lahqtemish_51
• Track 43 : Nicky22_53
• Track 44 : Phisb_52
• Track 45 : Loviatar_53
• Track 46 : Buldak_44
• Track 47 : Kieran_49
• Track 48 : Dismas_50
• Track 49 : Doobus_50
• Track 50 : FlameThrower_49
• Track 51 : Johnathan_51
• Track 52 : CupcakePrincess_52, Jabb_52
• Track 53 : Skylord_49
• Track 54 : Finalfrontier_53
• Track 55 : Teagster_51
• Track 56 : Lilo27_53, SarBear_52
• Track 57 : Kamdara_49
• Track 58 : SanaSana_54
• Track 59 : CliffHanger_51

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

The start number called the most often in the published annotations is 58, it was called in 54 of the 80 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abigail_51, Albedo_53, Albright_49, AnnaLie_52, Arroyo_52, AvGardian_53, Avocadoman_50, BabyDaisy_52, BabyYoda_52, Bachaco_50, BelmontSKP_52, BubbaBear_51, Burritobowl_52, CanFranMach_52, Cashington_50, Celaena_50, ChiliPepper_49, CroZenni_52, DickRichards_50, Didgeridoo_55, DirtyBubble_51, Dismas_50, Doobus_50, Eden_51, Elva_54, Eula_52, FlameThrower_49, Gack_50, Grist_52, Icarian_55, IndyLu_52, Johnathan_51, Kamdara_49, Kate33_53, Katzastrophic_51, Kenzers_52, Kieran_49, Lahqtemish_51, LimaBean_52, Loviatar_53, Lynlen_53, MsUbiquitous_52, Nicky22_53, Pecas_53, PondAmelia_53, QMacho_54, Quenya_53, Rona_49, SanaSana_54, SansAfet_53, Sharkboy_50, Softsoap_52, Stoor_52, Stromboli_52, Swervy_53,

Genes that have the "Most Annotated" start but do not call it:
• AylexOG_53, CupcakePrincess_52, Finalfrontier_53, Jabb_52, Jovita_51, Lilo27_53, Phisb_52, SarBear_52, TukTuk_53,

Genes that do not have the "Most Annotated" start:
• Armstrong_49, BAjuniper_50, Bernstein_49, Brahms_49, Buldak_44, Clayda5_51, CliffHanger_51, Coltrane_49, Franklin22_51, Olliecat_44, Rollins_49, Shayna_51, Skylord_49, Squircle_44, SunnyD_51, Teagster_51, Vitas_49,

**Summary by start number:**

Start 47:
• Found in 20 of 81 ( 24.7% ) of genes in pham
• Manual Annotations of this start: 9 of 80
• Called 45.0% of time when present
• Phage (with cluster) where this start called: AylexOG_53 (EB), CupcakePrincess_52 (EB), Finalfrontier_53 (EB), Jabb_52 (EB), Jovita_51 (EB), Lilo27_53 (EB), Phisb_52 (EB), SarBear_52 (EB), TukTuk_53 (EB),

Start 51:
• Found in 7 of 81 ( 8.6% ) of genes in pham
• Manual Annotations of this start: 7 of 80
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Armstrong_49 (EB), Bernstein_49 (EB), Brahms_49 (EB), Clayda5_51 (EB), Coltrane_49 (EB), Rollins_49 (EB), Vitas_49 (EB),

Start 56:
• Found in 1 of 81 ( 1.2% ) of genes in pham
• Manual Annotations of this start: 1 of 80
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Skylord_49 (EB),

Start 58:
• Found in 64 of 81 ( 79.0% ) of genes in pham
• Manual Annotations of this start: 54 of 80
• Called 85.9% of time when present
• Phage (with cluster) where this start called: Abigail_51 (EB), Albedo_53 (EB), Albright_49 (EB), AnnaLie_52 (EB), Arroyo_52 (EB), AvGardian_53 (EB), Avocadoman_50 (EB), BabyDaisy_52 (EB), BabyYoda_52 (EB), Bachaco_50 (EB), BelmontSKP_52 (EB), BubbaBear_51 (EB), Burritobowl_52 (EB), CanFranMach_52 (EB), Cashington_50 (EB), Celaena_50 (EB), ChiliPepper_49 (EB), CroZenni_52 (EB), DickRichards_50 (EB), Didgeridoo_55 (EB), DirtyBubble_51 (EB), Dismas_50 (EB), Doobus_50 (EB), Eden_51 (EB), Elva_54 (EB), Eula_52 (EB), FlameThrower_49 (EB), Gack_50 (EB), Grist_52 (EB), Icarian_55 (EB), IndyLu_52 (EB), Johnathan_51 (EB), Kamdara_49 (EB), Kate33_53 (EB), Katzastrophic_51 (EB), Kenzers_52 (EB), Kieran_49 (EB), Lahqtemish_51 (EB), LimaBean_52 (EB), Loviatar_53 (EB), Lynlen_53 (EB), MsUbiquitous_52 (EB), Nicky22_53 (EB), Pecas_53 (EB), PondAmelia_53 (EB), QMacho_54 (EB), Quenya_53 (EB), Rona_49 (EB), SanaSana_54 (EB), SansAfet_53 (EB), Sharkboy_50 (EB), Softsoap_52 (EB), Stoor_52 (EB), Stromboli_52 (EB), Swervy_53 (EB),

Start 59:
• Found in 1 of 81 ( 1.2% ) of genes in pham
• Manual Annotations of this start: 1 of 80
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BAjuniper_50 (EB),

Start 60:
• Found in 8 of 81 ( 9.9% ) of genes in pham
• Manual Annotations of this start: 8 of 80
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Buldak_44 (EB), CliffHanger_51 (EB), Franklin22_51 (EB), Olliecat_44 (EB), Shayna_51 (EB), Squircle_44 (EB), SunnyD_51 (EB), Teagster_51 (EB),

**Summary by clusters:**

There is one cluster represented in this pham: EB

Info for manual annotations of cluster EB:
•Start number 47 was manually annotated 9 times for cluster EB.
•Start number 51 was manually annotated 7 times for cluster EB.
•Start number 56 was manually annotated 1 time for cluster EB.
•Start number 58 was manually annotated 54 times for cluster EB.
•Start number 59 was manually annotated 1 time for cluster EB.
•Start number 60 was manually annotated 8 times for cluster EB.

***Gene Information:***

Gene: Abigail_51 Start: 34257, Stop: 34655, Start Num: 58
Candidate Starts for Abigail_51:
(Start: 58 @34257 has 54 MA's), (65, 34374), (71, 34434), (75, 34491), (78, 34506), (87, 34548), (93, 34590),

Gene: Albedo_53 Start: 34982, Stop: 35380, Start Num: 58
Candidate Starts for Albedo_53:
(Start: 58 @34982 has 54 MA's), (65, 35099), (71, 35159), (75, 35216), (78, 35231), (87, 35273), (89, 35285),

Gene: Albright_49 Start: 33688, Stop: 34086, Start Num: 58
Candidate Starts for Albright_49:
(Start: 58 @33688 has 54 MA's), (65, 33805), (71, 33865), (75, 33922), (78, 33937), (87, 33979),

Gene: AnnaLie_52 Start: 34917, Stop: 35315, Start Num: 58
Candidate Starts for AnnaLie_52:
(38, 34830), (41, 34839), (Start: 58 @34917 has 54 MA's), (65, 35034), (71, 35094), (75, 35151), (78, 35166), (87, 35208),

Gene: Armstrong_49 Start: 32812, Stop: 33222, Start Num: 51
Candidate Starts for Armstrong_49:
(Start: 51 @32812 has 7 MA's), (72, 32998), (75, 33049), (78, 33064),

Gene: Arroyo_52 Start: 35025, Stop: 35423, Start Num: 58
Candidate Starts for Arroyo_52:
(38, 34938), (41, 34947), (Start: 58 @35025 has 54 MA's), (65, 35142), (71, 35202), (75, 35259), (78, 35274), (87, 35316),

Gene: AvGardian_53 Start: 35215, Stop: 35601, Start Num: 58
Candidate Starts for AvGardian_53:
(28, 35041), (Start: 58 @35215 has 54 MA's), (65, 35332), (67, 35338), (68, 35350), (71, 35392), (75, 35449), (78, 35464),

Gene: Avocadoman_50 Start: 33889, Stop: 34287, Start Num: 58
Candidate Starts for Avocadoman_50:
(Start: 58 @33889 has 54 MA's), (65, 34006), (71, 34066), (75, 34123), (78, 34138), (87, 34180),

Gene: AylexOG_53 Start: 34863, Stop: 35321, Start Num: 47
Candidate Starts for AylexOG_53:
(39, 34830), (40, 34836), (Start: 47 @34863 has 9 MA's), (Start: 58 @34923 has 54 MA's), (65, 35040), (71, 35100), (75, 35157), (78, 35172), (87, 35214),

Gene: BAjuniper_50 Start: 35580, Stop: 35963, Start Num: 59
Candidate Starts for BAjuniper_50:
(Start: 59 @35580 has 1 MA's), (75, 35802), (78, 35817),

Gene: BabyDaisy_52 Start: 35047, Stop: 35445, Start Num: 58
Candidate Starts for BabyDaisy_52:
(Start: 58 @35047 has 54 MA's), (65, 35164), (71, 35224), (74, 35272), (75, 35281), (78, 35296), (92, 35365),

Gene: BabyYoda_52 Start: 35636, Stop: 36031, Start Num: 58
Candidate Starts for BabyYoda_52:
(8, 35270), (9, 35273), (15, 35354), (21, 35414), (24, 35423), (Start: 47 @35573 has 9 MA's), (Start: 58 @35636 has 54 MA's), (65, 35753), (66, 35756), (67, 35759), (71, 35813), (75, 35870), (77, 35879), (90, 35939),

Gene: Bachaco_50 Start: 36378, Stop: 36770, Start Num: 58
Candidate Starts for Bachaco_50:
(7, 35997), (Start: 58 @36378 has 54 MA's), (69, 36513), (71, 36543), (75, 36600), (95, 36717),

Gene: BelmontSKP_52 Start: 34917, Stop: 35315, Start Num: 58
Candidate Starts for BelmontSKP_52:
(38, 34830), (41, 34839), (Start: 58 @34917 has 54 MA's), (65, 35034), (71, 35094), (75, 35151), (78, 35166), (87, 35208),

Gene: Bernstein_49 Start: 32810, Stop: 33220, Start Num: 51
Candidate Starts for Bernstein_49:
(Start: 51 @32810 has 7 MA's), (72, 32996), (75, 33047), (76, 33050), (78, 33062),

Gene: Brahms_49 Start: 32730, Stop: 33140, Start Num: 51
Candidate Starts for Brahms_49:
(Start: 51 @32730 has 7 MA's), (72, 32916), (75, 32967), (76, 32970), (78, 32982),

Gene: BubbaBear_51 Start: 34666, Stop: 35064, Start Num: 58
Candidate Starts for BubbaBear_51:
(Start: 58 @34666 has 54 MA's), (65, 34783), (71, 34843), (75, 34900), (78, 34915), (87, 34957),

Gene: Buldak_44 Start: 31273, Stop: 31743, Start Num: 60
Candidate Starts for Buldak_44:
(45, 31192), (52, 31240), (55, 31249), (57, 31255), (Start: 60 @31273 has 8 MA's), (63, 31351), (64, 31366), (67, 31378), (71, 31432), (75, 31489), (77, 31498), (78, 31504), (91, 31588),

Gene: Burritobowl_52 Start: 34596, Stop: 34994, Start Num: 58
Candidate Starts for Burritobowl_52:
(Start: 58 @34596 has 54 MA's), (65, 34713), (71, 34773), (75, 34830), (78, 34845), (87, 34887),

Gene: CanFranMach_52 Start: 34848, Stop: 35252, Start Num: 58
Candidate Starts for CanFranMach_52:
(35, 34746), (37, 34752), (Start: 58 @34848 has 54 MA's), (65, 34965), (71, 35025), (75, 35082), (78, 35097),

Gene: Cashington_50 Start: 34009, Stop: 34407, Start Num: 58
Candidate Starts for Cashington_50:
(Start: 58 @34009 has 54 MA's), (65, 34126), (71, 34186), (75, 34243), (78, 34258), (87, 34300),

Gene: Celaena_50 Start: 36140, Stop: 36532, Start Num: 58
Candidate Starts for Celaena_50:
(7, 35759), (Start: 58 @36140 has 54 MA's), (69, 36275), (71, 36305), (75, 36362), (95, 36479),

Gene: ChiliPepper_49 Start: 35441, Stop: 35836, Start Num: 58
Candidate Starts for ChiliPepper_49:
(1, 34808), (4, 34973), (5, 35003), (Start: 58 @35441 has 54 MA's), (65, 35558), (66, 35561), (67, 35564), (71, 35618), (75, 35675), (92, 35756),

Gene: Clayda5_51 Start: 32795, Stop: 33205, Start Num: 51
Candidate Starts for Clayda5_51:
(Start: 51 @32795 has 7 MA's), (72, 32981), (75, 33032), (78, 33047),

Gene: CliffHanger_51 Start: 32791, Stop: 33195, Start Num: 60
Candidate Starts for CliffHanger_51:
(29, 32593), (Start: 60 @32791 has 8 MA's), (68, 32911), (71, 32953), (75, 33010), (78, 33025), (80, 33046), (83, 33058),

Gene: Coltrane_49 Start: 32730, Stop: 33140, Start Num: 51
Candidate Starts for Coltrane_49:
(Start: 51 @32730 has 7 MA's), (72, 32916), (75, 32967), (76, 32970), (78, 32982),

Gene: CroZenni_52 Start: 34533, Stop: 34931, Start Num: 58
Candidate Starts for CroZenni_52:
(16, 34269), (27, 34365), (30, 34383), (33, 34410), (Start: 58 @34533 has 54 MA's), (65, 34650), (71, 34710), (75, 34767), (87, 34824),

Gene: CupcakePrincess_52 Start: 34334, Stop: 34792, Start Num: 47
Candidate Starts for CupcakePrincess_52:
(39, 34301), (40, 34307), (Start: 47 @34334 has 9 MA's), (Start: 58 @34394 has 54 MA's), (65, 34511), (71, 34571), (74, 34619), (75, 34628), (78, 34643), (92, 34712),

Gene: DickRichards_50 Start: 34708, Stop: 35106, Start Num: 58
Candidate Starts for DickRichards_50:
(Start: 58 @34708 has 54 MA's), (65, 34825), (71, 34885), (75, 34942), (78, 34957), (81, 34981), (87, 34999), (88, 35005),

Gene: Didgeridoo_55 Start: 35393, Stop: 35785, Start Num: 58
Candidate Starts for Didgeridoo_55:
(Start: 58 @35393 has 54 MA's), (65, 35510), (71, 35570), (75, 35627), (78, 35642), (92, 35708),

Gene: DirtyBubble_51 Start: 35304, Stop: 35699, Start Num: 58
Candidate Starts for DirtyBubble_51:

(9, 34941), (15, 35022), (21, 35082), (24, 35091), (32, 35160), (Start: 47 @35241 has 9 MA's), (Start: 58 @35304 has 54 MA's), (65, 35421), (66, 35424), (67, 35427), (71, 35481), (75, 35538), (77, 35547), (90, 35607),

Gene: Dismas_50 Start: 35363, Stop: 35758, Start Num: 58
Candidate Starts for Dismas_50:
(2, 34739), (3, 34751), (14, 35063), (Start: 58 @35363 has 54 MA's), (65, 35480), (66, 35483), (67, 35486), (71, 35540), (75, 35597), (92, 35678),

Gene: Doobus_50 Start: 34197, Stop: 34595, Start Num: 58
Candidate Starts for Doobus_50:
(33, 34071), (Start: 58 @34197 has 54 MA's), (65, 34314), (71, 34374), (75, 34431), (78, 34446), (87, 34488),

Gene: Eden_51 Start: 34095, Stop: 34463, Start Num: 58
Candidate Starts for Eden_51:
(50, 34068), (53, 34083), (Start: 58 @34095 has 54 MA's), (71, 34266), (75, 34323), (78, 34338),

Gene: Elva_54 Start: 35701, Stop: 36096, Start Num: 58
Candidate Starts for Elva_54:
(6, 35338), (11, 35431), (Start: 58 @35701 has 54 MA's), (65, 35818), (71, 35878), (75, 35935), (78, 35950), (79, 35956), (85, 35983), (90, 36004),

Gene: Eula_52 Start: 34380, Stop: 34778, Start Num: 58
Candidate Starts for Eula_52:
(39, 34287), (40, 34293), (Start: 47 @34320 has 9 MA's), (Start: 58 @34380 has 54 MA's), (65, 34497), (71, 34557), (74, 34605), (75, 34614), (78, 34629), (92, 34698),

Gene: Finalfrontier_53 Start: 35430, Stop: 35888, Start Num: 47
Candidate Starts for Finalfrontier_53:
(Start: 47 @35430 has 9 MA's), (Start: 58 @35490 has 54 MA's), (67, 35613), (71, 35667), (75, 35724), (78, 35739), (87, 35781),

Gene: FlameThrower_49 Start: 35177, Stop: 35569, Start Num: 58
Candidate Starts for FlameThrower_49:
(Start: 58 @35177 has 54 MA's), (69, 35312), (71, 35342), (75, 35399), (90, 35468), (95, 35516),

Gene: Franklin22_51 Start: 33389, Stop: 33772, Start Num: 60
Candidate Starts for Franklin22_51:
(17, 33122), (20, 33137), (26, 33185), (42, 33296), (43, 33302), (54, 33374), (Start: 60 @33389 has 8 MA's), (66, 33497), (69, 33524), (73, 33587), (75, 33611), (92, 33692), (96, 33740), (97, 33764),

Gene: Gack_50 Start: 33692, Stop: 34081, Start Num: 58
Candidate Starts for Gack_50:
(48, 33632), (49, 33662), (50, 33665), (Start: 58 @33692 has 54 MA's), (61, 33710), (62, 33722), (63, 33779), (64, 33794), (67, 33806), (69, 33830), (75, 33917), (82, 33959),

Gene: Grist_52 Start: 34827, Stop: 35219, Start Num: 58
Candidate Starts for Grist_52:
(Start: 58 @34827 has 54 MA's), (65, 34944), (71, 35004), (75, 35061), (78, 35076), (92, 35142),

Gene: Icarian_55 Start: 36309, Stop: 36695, Start Num: 58
Candidate Starts for Icarian_55:

(36, 36201), (Start: 47 @36246 has 9 MA's), (Start: 58 @36309 has 54 MA's), (65, 36426), (66, 36429), (70, 36474), (71, 36486), (73, 36519), (75, 36543), (77, 36552), (78, 36558), (85, 36591), (86, 36594), (90, 36612), (92, 36624),

Gene: IndyLu_52 Start: 34967, Stop: 35365, Start Num: 58
Candidate Starts for IndyLu_52:
(Start: 58 @34967 has 54 MA's), (65, 35084), (71, 35144), (74, 35192), (75, 35201), (78, 35216), (92, 35285),

Gene: Jabb_52 Start: 34334, Stop: 34792, Start Num: 47
Candidate Starts for Jabb_52:
(39, 34301), (40, 34307), (Start: 47 @34334 has 9 MA's), (Start: 58 @34394 has 54 MA's), (65, 34511), (71, 34571), (74, 34619), (75, 34628), (78, 34643), (92, 34712),

Gene: Johnathan_51 Start: 34035, Stop: 34433, Start Num: 58
Candidate Starts for Johnathan_51:
(10, 33726), (19, 33810), (22, 33819), (27, 33861), (Start: 58 @34035 has 54 MA's), (65, 34152), (71, 34212), (75, 34269), (78, 34284), (87, 34326),

Gene: Jovita_51 Start: 34194, Stop: 34652, Start Num: 47
Candidate Starts for Jovita_51:
(39, 34161), (40, 34167), (Start: 47 @34194 has 9 MA's), (Start: 58 @34254 has 54 MA's), (65, 34371), (67, 34377), (71, 34431), (75, 34488), (78, 34503), (87, 34545),

Gene: Kamdara_49 Start: 35401, Stop: 35796, Start Num: 58
Candidate Starts for Kamdara_49:
(Start: 58 @35401 has 54 MA's), (65, 35518), (66, 35521), (71, 35578), (75, 35635), (92, 35716), (94, 35746),

Gene: Kate33_53 Start: 34684, Stop: 35082, Start Num: 58
Candidate Starts for Kate33_53:
(Start: 58 @34684 has 54 MA's), (65, 34801), (71, 34861), (74, 34909), (75, 34918), (92, 35002),

Gene: Katzastrophic_51 Start: 35687, Stop: 36079, Start Num: 58
Candidate Starts for Katzastrophic_51:
(7, 35306), (30, 35516), (Start: 58 @35687 has 54 MA's), (69, 35822), (71, 35852), (75, 35909), (95, 36026),

Gene: Kenzers_52 Start: 34514, Stop: 34912, Start Num: 58
Candidate Starts for Kenzers_52:
(Start: 58 @34514 has 54 MA's), (65, 34631), (71, 34691), (75, 34748), (78, 34763), (87, 34805),

Gene: Kieran_49 Start: 35404, Stop: 35799, Start Num: 58
Candidate Starts for Kieran_49:
(Start: 58 @35404 has 54 MA's), (65, 35521), (66, 35524), (67, 35527), (71, 35581), (75, 35638), (92, 35719),

Gene: Lahqtemish_51 Start: 34966, Stop: 35358, Start Num: 58
Candidate Starts for Lahqtemish_51:
(Start: 58 @34966 has 54 MA's), (65, 35083), (71, 35143), (75, 35200), (92, 35281),

Gene: Lilo27_53 Start: 34479, Stop: 34937, Start Num: 47
Candidate Starts for Lilo27_53:

(Start: 47 @34479 has 9 MA's), (Start: 58 @34539 has 54 MA's), (65, 34656), (71, 34716), (75, 34773), (78, 34788), (87, 34830),

Gene: LimaBean_52 Start: 34135, Stop: 34533, Start Num: 58
Candidate Starts for LimaBean_52:
(Start: 58 @34135 has 54 MA's), (65, 34252), (71, 34312), (75, 34369), (78, 34384), (87, 34426), (93, 34468),

Gene: Loviatar_53 Start: 36712, Stop: 37098, Start Num: 58
Candidate Starts for Loviatar_53:
(Start: 47 @36649 has 9 MA's), (Start: 58 @36712 has 54 MA's), (65, 36829), (66, 36832), (67, 36835), (71, 36889), (75, 36946), (77, 36955), (90, 37015),

Gene: Lynlen_53 Start: 34694, Stop: 35092, Start Num: 58
Candidate Starts for Lynlen_53:
(38, 34601), (Start: 58 @34694 has 54 MA's), (65, 34811), (71, 34871), (75, 34928), (78, 34943), (87, 34985),

Gene: MsUbiquitous_52 Start: 34394, Stop: 34792, Start Num: 58
Candidate Starts for MsUbiquitous_52:
(39, 34301), (40, 34307), (Start: 47 @34334 has 9 MA's), (Start: 58 @34394 has 54 MA's), (65, 34511), (71, 34571), (74, 34619), (75, 34628), (78, 34643), (92, 34712),

Gene: Nicky22_53 Start: 35149, Stop: 35547, Start Num: 58
Candidate Starts for Nicky22_53:
(31, 34996), (Start: 58 @35149 has 54 MA's), (65, 35266), (71, 35326), (75, 35383), (78, 35398), (87, 35440),

Gene: Olliecat_44 Start: 31336, Stop: 31794, Start Num: 60
Candidate Starts for Olliecat_44:
(45, 31255), (52, 31303), (55, 31312), (57, 31318), (Start: 60 @31336 has 8 MA's), (71, 31495), (74, 31543), (75, 31552), (77, 31561), (78, 31567),

Gene: Pecas_53 Start: 34772, Stop: 35170, Start Num: 58
Candidate Starts for Pecas_53:
(39, 34679), (40, 34685), (Start: 58 @34772 has 54 MA's), (65, 34889), (71, 34949), (75, 35006), (78, 35021), (87, 35063),

Gene: Phisb_52 Start: 34558, Stop: 35016, Start Num: 47
Candidate Starts for Phisb_52:
(34, 34495), (Start: 47 @34558 has 9 MA's), (Start: 58 @34618 has 54 MA's), (65, 34735), (67, 34741), (71, 34795), (75, 34852), (78, 34867), (87, 34909),

Gene: PondAmelia_53 Start: 35515, Stop: 35901, Start Num: 58
Candidate Starts for PondAmelia_53:
(Start: 47 @35452 has 9 MA's), (Start: 58 @35515 has 54 MA's), (65, 35632), (66, 35635), (70, 35680), (71, 35692), (73, 35725), (75, 35749), (77, 35758), (78, 35764), (85, 35797), (86, 35800), (90, 35818), (92, 35830),

Gene: QMacho_54 Start: 35034, Stop: 35432, Start Num: 58
Candidate Starts for QMacho_54:
(39, 34941), (40, 34947), (Start: 58 @35034 has 54 MA's), (65, 35151), (71, 35211), (75, 35268), (78, 35283), (87, 35325),

Gene: Quenya_53 Start: 35819, Stop: 36211, Start Num: 58
Candidate Starts for Quenya_53:
(23, 35582), (Start: 58 @35819 has 54 MA's), (68, 35942), (69, 35954), (71, 35984), (75, 36041), (90, 36110),

Gene: Rollins_49 Start: 32810, Stop: 33220, Start Num: 51
Candidate Starts for Rollins_49:
(Start: 51 @32810 has 7 MA's), (72, 32996), (75, 33047), (76, 33050), (78, 33062),

Gene: Rona_49 Start: 35354, Stop: 35749, Start Num: 58
Candidate Starts for Rona_49:
(2, 34730), (3, 34742), (Start: 58 @35354 has 54 MA's), (65, 35471), (66, 35474), (67, 35477), (71, 35531), (75, 35588), (92, 35669),

Gene: SanaSana_54 Start: 36016, Stop: 36411, Start Num: 58
Candidate Starts for SanaSana_54:
(9, 35653), (13, 35728), (15, 35734), (21, 35794), (24, 35803), (Start: 47 @35953 has 9 MA's), (Start: 58 @36016 has 54 MA's), (65, 36133), (67, 36139), (71, 36193), (75, 36250), (77, 36259), (90, 36319),

Gene: SansAfet_53 Start: 34443, Stop: 34841, Start Num: 58
Candidate Starts for SansAfet_53:
(Start: 58 @34443 has 54 MA's), (65, 34560), (71, 34620), (75, 34677), (78, 34692), (87, 34734),

Gene: SarBear_52 Start: 34278, Stop: 34736, Start Num: 47
Candidate Starts for SarBear_52:
(Start: 47 @34278 has 9 MA's), (Start: 58 @34338 has 54 MA's), (65, 34455), (71, 34515), (75, 34572), (78, 34587), (87, 34629),

Gene: Sharkboy_50 Start: 35453, Stop: 35848, Start Num: 58
Candidate Starts for Sharkboy_50:
(2, 34829), (3, 34841), (Start: 58 @35453 has 54 MA's), (65, 35570), (66, 35573), (67, 35576), (71, 35630), (75, 35687), (92, 35768),

Gene: Shayna_51 Start: 33259, Stop: 33651, Start Num: 60
Candidate Starts for Shayna_51:
(Start: 60 @33259 has 8 MA's), (71, 33421), (74, 33469), (75, 33478), (84, 33529),

Gene: Skylord_49 Start: 32769, Stop: 33179, Start Num: 56
Candidate Starts for Skylord_49:
(17, 32505), (18, 32511), (20, 32520), (42, 32679), (54, 32757), (Start: 56 @32769 has 1 MA's), (72, 32955), (75, 33006), (76, 33009), (78, 33021),

Gene: Softsoap_52 Start: 34531, Stop: 34929, Start Num: 58
Candidate Starts for Softsoap_52:
(Start: 58 @34531 has 54 MA's), (65, 34648), (71, 34708), (75, 34765), (78, 34780), (87, 34822),

Gene: Squircle_44 Start: 31335, Stop: 31793, Start Num: 60
Candidate Starts for Squircle_44:
(45, 31254), (52, 31302), (55, 31311), (57, 31317), (Start: 60 @31335 has 8 MA's), (71, 31494), (74, 31542), (75, 31551), (77, 31560), (78, 31566),

Gene: Stoor_52 Start: 35803, Stop: 36198, Start Num: 58

Candidate Starts for Stoor_52:
(Start: 47 @35740 has 9 MA's), (Start: 58 @35803 has 54 MA's), (65, 35920), (67, 35926), (71, 35980), (75, 36037), (77, 36046), (90, 36106),

Gene: Stromboli_52 Start: 35674, Stop: 36069, Start Num: 58
Candidate Starts for Stromboli_52:
(8, 35308), (9, 35311), (15, 35392), (21, 35452), (24, 35461), (Start: 47 @35611 has 9 MA's), (Start: 58 @35674 has 54 MA's), (65, 35791), (66, 35794), (67, 35797), (71, 35851), (75, 35908), (77, 35917), (90, 35977),

Gene: SunnyD_51 Start: 33266, Stop: 33658, Start Num: 60
Candidate Starts for SunnyD_51:
(44, 33185), (Start: 60 @33266 has 8 MA's), (71, 33428), (74, 33476), (75, 33485), (84, 33536),

Gene: Swervy_53 Start: 34610, Stop: 35008, Start Num: 58
Candidate Starts for Swervy_53:
(Start: 47 @34550 has 9 MA's), (Start: 58 @34610 has 54 MA's), (65, 34727), (71, 34787), (75, 34844), (78, 34859), (87, 34901),

Gene: Teagster_51 Start: 33895, Stop: 34287, Start Num: 60
Candidate Starts for Teagster_51:
(46, 33814), (Start: 60 @33895 has 8 MA's), (71, 34057), (74, 34105), (75, 34114), (84, 34165),

Gene: TukTuk_53 Start: 34615, Stop: 35073, Start Num: 47
Candidate Starts for TukTuk_53:
(12, 34387), (25, 34471), (Start: 47 @34615 has 9 MA's), (Start: 58 @34675 has 54 MA's), (65, 34792), (67, 34798), (71, 34852), (75, 34909), (78, 34924), (87, 34966),

Gene: Vitas_49 Start: 32801, Stop: 33211, Start Num: 51
Candidate Starts for Vitas_49:
(Start: 51 @32801 has 7 MA's), (72, 32987), (75, 33038), (78, 33053),