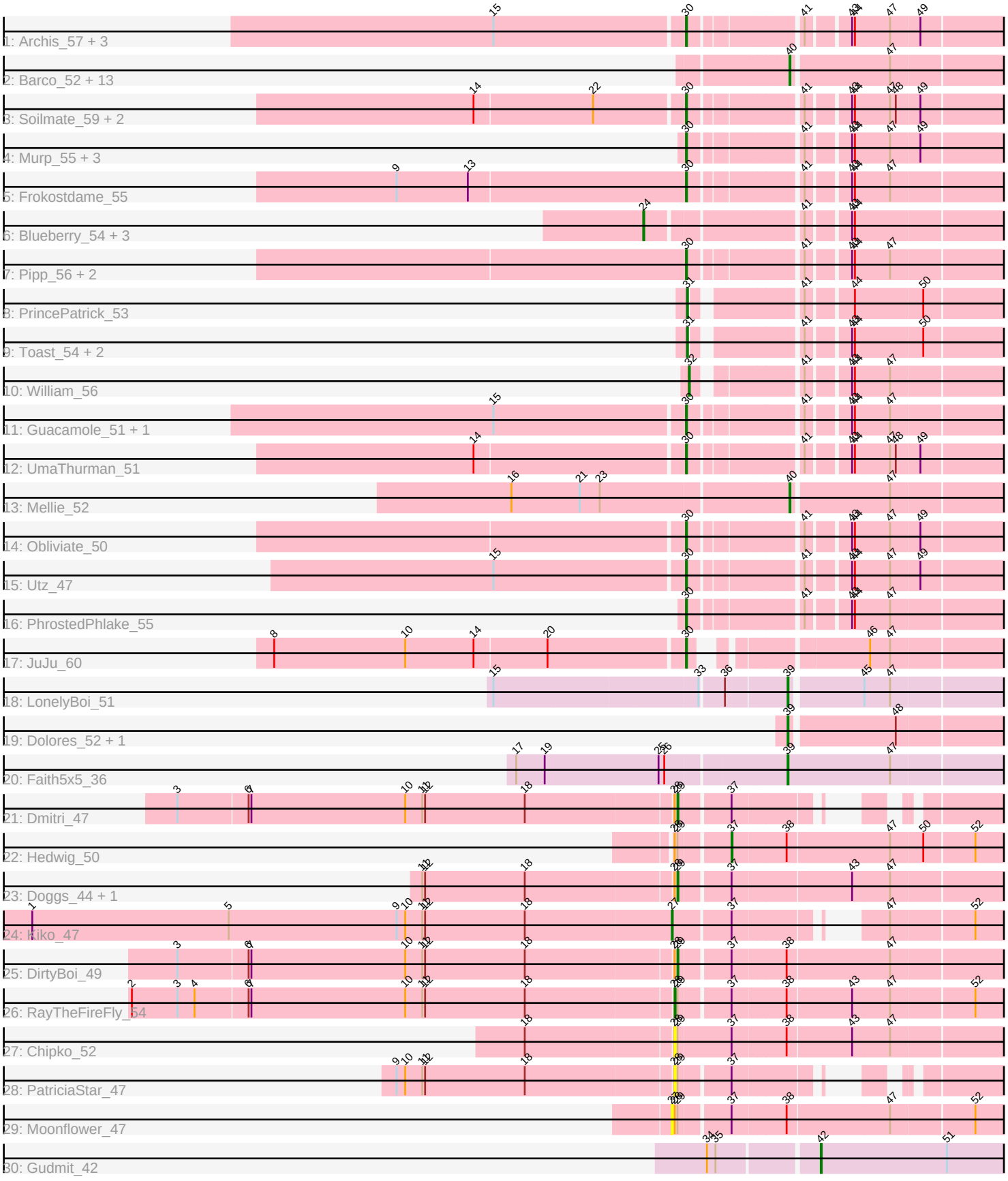
Pham 336761


1: Archis_57 + 3
2: Barco_52 + 13
3: Soilmate_59 + 2
4: Murp_55 + 3
5: Frokostdame_55
6: Blueberry_54 + 3
7: Pipp_56 + 2
8: PrincePatrick_53
9: Toast_54 + 2
10: William_56
11: Guacamole_51 + 1
12: UmaThurman_51
13: Mellie_52
14: Obliviate_50
15: Utz_47
16: PhrostedPhlake_55
17: JuJu_60
18: LonelyBoi_51
19: Dolores_52 + 1
20: Faith5x5_36
21: Dmitri_47
22: Hedwig_50
23: Doggs_44 + 1
24: Kiko_47
25: DirtyBoi_49
26: RayTheFireFly_54
27: Chipko_52
28: PatriciaStar_47
29: Moonflower_47
30: Gudmit_42

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 336761 Report

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

Pham number 336761 has 61 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Archis_57, BlingBling_51, Lysidious_55, Melba_53
• Track 2 : Barco_52, Jalammah_57, Malachai_52, Hitter_54, Begonia_52, MintFen_54, CaptainKirk2_54, Delian_57, Fenry_52, Zilla_52, Samba_53, ZiggyZoo_54, Zarbodnamra_53, Wisp_51
• Track 3 : Soilmate_59, Blino_57, CarolAnn_56
• Track 4 : Murp_55, KappaFarmDelta_55, CheeseSpider_58, Wocket_54
• Track 5 : Frokostdame_55
• Track 6 : Blueberry_54, MissRona_55, Gambino_57, Azula_55
• Track 7 : Pipp_56, Walrus_52, Petra_50
• Track 8 : PrincePatrick_53
• Track 9 : Toast_54, PCoral7_54, Fairfaxidum_55
• Track 10 : William_56
• Track 11 : Guacamole_51, JasperJr_51
• Track 12 : UmaThurman_51
• Track 13 : Mellie_52
• Track 14 : Obliviate_50
• Track 15 : Utz_47
• Track 16 : PhrostedPhlake_55
• Track 17 : JuJu_60
• Track 18 : LonelyBoi_51
• Track 19 : Dolores_52, WinkNick_53
• Track 20 : Faith5x5_36
• Track 21 : Dmitri_47
• Track 22 : Hedwig_50
• Track 23 : Doggs_44, Coriander_47
• Track 24 : Kiko_47
• Track 25 : DirtyBoi_49
• Track 26 : RayTheFireFly_54
• Track 27 : Chipko_52
• Track 28 : PatriciaStar_47
• Track 29 : Moonflower_47
• Track 30 : Gudmit_42

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

The start number called the most often in the published annotations is 30, it was called in 21 of the 57 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Archis_57, BlingBling_51, Blino_57, CarolAnn_56, CheeseSpider_58, Frokostdame_55, Guacamole_51, JasperJr_51, JuJu_60, KappaFarmDelta_55, Lysidious_55, Melba_53, Murp_55, Obliviate_50, Petra_50, PhrostedPhlake_55, Pipp_56, Soilmate_59, UmaThurman_51, Utz_47, Walrus_52, Wocket_54,

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

Genes that do not have the "Most Annotated" start:
• Azula_55, Barco_52, Begonia_52, Blueberry_54, CaptainKirk2_54, Chipko_52, Coriander_47, Delian_57, DirtyBoi_49, Dmitri_47, Doggs_44, Dolores_52, Fairfaxidum_55, Faith5x5_36, Fenry_52, Gambino_57, Gudmit_42, Hedwig_50, Hitter_54, Jalammah_57, Kiko_47, LonelyBoi_51, Malachai_52, Mellie_52, MintFen_54, MissRona_55, Moonflower_47, PCoral7_54, PatriciaStar_47, PrincePatrick_53, RayTheFireFly_54, Samba_53, Toast_54, William_56, WinkNick_53, Wisp_51, Zarbodnamra_53, ZiggyZoo_54, Zilla_52,

Summary by start number:

Start 24:
• Found in 4 of 61 (6.6%) of genes in pham
• Manual Annotations of this start: 4 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Azula_55 (CV), Blueberry_54 (CV), Gambino_57 (CV), MissRona_55 (CV),

Start 27:
• Found in 2 of 61 (3.3%) of genes in pham
• Manual Annotations of this start: 1 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kiko_47 (DB), Moonflower_47 (DB),

Start 28:
• Found in 9 of 61 (14.8%) of genes in pham
• Manual Annotations of this start: 1 of 57
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Chipko_52 (DB), PatriciaStar_47 (DB), RayTheFireFly_54 (DB),

Start 29:
• Found in 9 of 61 (14.8%) of genes in pham
• Manual Annotations of this start: 4 of 57
• Called 44.4% of time when present
• Phage (with cluster) where this start called: Coriander_47 (DB), DirtyBoi_49 (DB), Dmitri_47 (DB), Doggs_44 (DB),

Start 30:
• Found in 22 of 61 (36.1%) of genes in pham

• Manual Annotations of this start: 21 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Archis_57 (CV), BlingBling_51 (CV), Blino_57 (CV), CarolAnn_56 (CV), CheeseSpider_58 (CV), Frokostdame_55 (CV), Guacamole_51 (CV), JasperJr_51 (CV), JuJu_60 (CV), KappaFarmDelta_55 (CV), Lysidious_55 (CV), Melba_53 (CV), Murp_55 (CV), Obliviate_50 (CV), Petra_50 (CV), PhrostedPhlake_55 (CV), Pipp_56 (CV), Soilmate_59 (CV), UmaThurman_51 (CV), Utz_47 (CV), Walrus_52 (CV), Wocket_54 (CV),

Start 31:
• Found in 4 of 61 (6.6%) of genes in pham
• Manual Annotations of this start: 4 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fairfaxidum_55 (CV), PCoral7_54 (CV), PrincePatrick_53 (CV), Toast_54 (CV),

Start 32:
• Found in 1 of 61 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: William_56 (CV),

Start 37:
• Found in 10 of 61 (16.4%) of genes in pham
• Manual Annotations of this start: 1 of 57
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Hedwig_50 (DB),

Start 39:
• Found in 4 of 61 (6.6%) of genes in pham
• Manual Annotations of this start: 4 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dolores_52 (CZ4), Faith5x5_36 (CZ6), LonelyBoi_51 (CY7), WinkNick_53 (CZ4),

Start 40:
• Found in 15 of 61 (24.6%) of genes in pham
• Manual Annotations of this start: 15 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Barco_52 (CV), Begonia_52 (CV), CaptainKirk2_54 (CV), Delian_57 (CV), Fenry_52 (CV), Hitter_54 (CV), Jalammah_57 (CV), Malachai_52 (CV), Mellie_52 (CV), MintFen_54 (CV), Samba_53 (CV), Wisp_51 (CV), Zarbodnamra_53 (CV), ZiggyZoo_54 (CV), Zilla_52 (CV),

Start 42:
• Found in 1 of 61 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gudmit_42 (singleton),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, CY7, DB, CZ6, CZ4, CV,

Info for manual annotations of cluster CV:
•Start number 24 was manually annotated 4 times for cluster CV.
•Start number 30 was manually annotated 21 times for cluster CV.
•Start number 31 was manually annotated 4 times for cluster CV.
•Start number 32 was manually annotated 1 time for cluster CV.
•Start number 40 was manually annotated 15 times for cluster CV.

Info for manual annotations of cluster CY7:
•Start number 39 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ4:
•Start number 39 was manually annotated 2 times for cluster CZ4.

Info for manual annotations of cluster CZ6:
•Start number 39 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DB:
•Start number 27 was manually annotated 1 time for cluster DB.
•Start number 28 was manually annotated 1 time for cluster DB.
•Start number 29 was manually annotated 4 times for cluster DB.
•Start number 37 was manually annotated 1 time for cluster DB.

Gene Information:

Gene: Archis_57 Start: 36449, Stop: 36763, Start Num: 30
Candidate Starts for Archis_57:
(15, 36254), (Start: 30 @36449 has 21 MA's), (41, 36554), (43, 36593), (44, 36596), (47, 36632), (49, 36662),

Gene: Azula_55 Start: 38102, Stop: 38458, Start Num: 24
Candidate Starts for Azula_55:
(Start: 24 @38102 has 4 MA's), (41, 38249), (43, 38288), (44, 38291),

Gene: Barco_52 Start: 35493, Stop: 35723, Start Num: 40
Candidate Starts for Barco_52:
(Start: 40 @35493 has 15 MA's), (47, 35592),

Gene: Begonia_52 Start: 38032, Stop: 38262, Start Num: 40
Candidate Starts for Begonia_52:
(Start: 40 @38032 has 15 MA's), (47, 38131),

Gene: BlingBling_51 Start: 36462, Stop: 36776, Start Num: 30
Candidate Starts for BlingBling_51:
(15, 36267), (Start: 30 @36462 has 21 MA's), (41, 36567), (43, 36606), (44, 36609), (47, 36645), (49, 36675),

Gene: Blino_57 Start: 41408, Stop: 41722, Start Num: 30
Candidate Starts for Blino_57:
(14, 41195), (22, 41318), (Start: 30 @41408 has 21 MA's), (41, 41513), (43, 41552), (44, 41555), (47, 41591), (48, 41597), (49, 41621),

Gene: Blueberry_54 Start: 38102, Stop: 38458, Start Num: 24
Candidate Starts for Blueberry_54:
(Start: 24 @38102 has 4 MA's), (41, 38249), (43, 38288), (44, 38291),

Gene: CaptainKirk2_54 Start: 35741, Stop: 35971, Start Num: 40
Candidate Starts for CaptainKirk2_54:
(Start: 40 @35741 has 15 MA's), (47, 35840),

Gene: CarolAnn_56 Start: 41407, Stop: 41721, Start Num: 30
Candidate Starts for CarolAnn_56:
(14, 41194), (22, 41317), (Start: 30 @41407 has 21 MA's), (41, 41512), (43, 41551), (44, 41554), (47, 41590), (48, 41596), (49, 41620),

Gene: CheeseSpider_58 Start: 37170, Stop: 37481, Start Num: 30
Candidate Starts for CheeseSpider_58:
(Start: 30 @37170 has 21 MA's), (41, 37272), (43, 37311), (44, 37314), (47, 37350), (49, 37380),

Gene: Chipko_52 Start: 36603, Stop: 36950, Start Num: 28
Candidate Starts for Chipko_52:
(18, 36453), (Start: 28 @36603 has 1 MA's), (Start: 29 @36606 has 4 MA's), (Start: 37 @36660 has 1 MA's), (38, 36714), (43, 36780), (47, 36819),

Gene: Coriander_47 Start: 34198, Stop: 34536, Start Num: 29
Candidate Starts for Coriander_47:
(11, 33937), (12, 33940), (18, 34045), (Start: 28 @34195 has 1 MA's), (Start: 29 @34198 has 4 MA's), (Start: 37 @34246 has 1 MA's), (43, 34366), (47, 34405),

Gene: Delian_57 Start: 35739, Stop: 35969, Start Num: 40
Candidate Starts for Delian_57:
(Start: 40 @35739 has 15 MA's), (47, 35838),

Gene: DirtyBoi_49 Start: 34236, Stop: 34574, Start Num: 29
Candidate Starts for DirtyBoi_49:
(3, 33720), (6, 33792), (7, 33795), (10, 33957), (11, 33975), (12, 33978), (18, 34083), (Start: 28 @34233 has 1 MA's), (Start: 29 @34236 has 4 MA's), (Start: 37 @34284 has 1 MA's), (38, 34338), (47, 34443),

Gene: Dmitri_47 Start: 35769, Stop: 36026, Start Num: 29
Candidate Starts for Dmitri_47:
(3, 35253), (6, 35325), (7, 35328), (10, 35490), (11, 35508), (12, 35511), (18, 35616), (Start: 28 @35766 has 1 MA's), (Start: 29 @35769 has 4 MA's), (Start: 37 @35817 has 1 MA's),

Gene: Doggs_44 Start: 34926, Stop: 35264, Start Num: 29
Candidate Starts for Doggs_44:
(11, 34665), (12, 34668), (18, 34773), (Start: 28 @34923 has 1 MA's), (Start: 29 @34926 has 4 MA's), (Start: 37 @34974 has 1 MA's), (43, 35094), (47, 35133),

Gene: Dolores_52 Start: 35935, Stop: 36165, Start Num: 39
Candidate Starts for Dolores_52:
(Start: 39 @35935 has 4 MA's), (48, 36040),

Gene: Fairfaxidum_55 Start: 38250, Stop: 38555, Start Num: 31

Candidate Starts for Fairfaxidum_55:
(Start: 31 @38250 has 4 MA's), (41, 38346), (43, 38385), (44, 38388), (50, 38457),

Gene: Faith5x5_36 Start: 28409, Stop: 28639, Start Num: 39
Candidate Starts for Faith5x5_36:
(17, 28133), (19, 28163), (25, 28283), (26, 28289), (Start: 39 @28409 has 4 MA's), (47, 28517),

Gene: Fenry_52 Start: 37237, Stop: 37467, Start Num: 40
Candidate Starts for Fenry_52:
(Start: 40 @37237 has 15 MA's), (47, 37336),

Gene: Frokostdame_55 Start: 37773, Stop: 38087, Start Num: 30
Candidate Starts for Frokostdame_55:
(9, 37473), (13, 37548), (Start: 30 @37773 has 21 MA's), (41, 37878), (43, 37917), (44, 37920), (47, 37956),

Gene: Gambino_57 Start: 38102, Stop: 38458, Start Num: 24
Candidate Starts for Gambino_57:
(Start: 24 @38102 has 4 MA's), (41, 38249), (43, 38288), (44, 38291),

Gene: Guacamole_51 Start: 35884, Stop: 36198, Start Num: 30
Candidate Starts for Guacamole_51:
(15, 35689), (Start: 30 @35884 has 21 MA's), (41, 35989), (43, 36028), (44, 36031), (47, 36067),

Gene: Gudmit_42 Start: 28762, Stop: 28971, Start Num: 42
Candidate Starts for Gudmit_42:
(34, 28654), (35, 28663), (Start: 42 @28762 has 1 MA's), (51, 28894),

Gene: Hedwig_50 Start: 34705, Stop: 34995, Start Num: 37
Candidate Starts for Hedwig_50:
(Start: 28 @34654 has 1 MA's), (Start: 29 @34657 has 4 MA's), (Start: 37 @34705 has 1 MA's), (38, 34759), (47, 34864), (50, 34897), (52, 34948),

Gene: Hitter_54 Start: 35535, Stop: 35765, Start Num: 40
Candidate Starts for Hitter_54:
(Start: 40 @35535 has 15 MA's), (47, 35634),

Gene: Jalammah_57 Start: 38538, Stop: 38768, Start Num: 40
Candidate Starts for Jalammah_57:
(Start: 40 @38538 has 15 MA's), (47, 38637),

Gene: JasperJr_51 Start: 35884, Stop: 36198, Start Num: 30
Candidate Starts for JasperJr_51:
(15, 35689), (Start: 30 @35884 has 21 MA's), (41, 35989), (43, 36028), (44, 36031), (47, 36067),

Gene: JuJu_60 Start: 39886, Stop: 40185, Start Num: 30
Candidate Starts for JuJu_60:
(8, 39463), (10, 39601), (14, 39673), (20, 39748), (Start: 30 @39886 has 21 MA's), (46, 40033), (47, 40054),

Gene: KappaFarmDelta_55 Start: 36090, Stop: 36404, Start Num: 30
Candidate Starts for KappaFarmDelta_55:
(Start: 30 @36090 has 21 MA's), (41, 36195), (43, 36234), (44, 36237), (47, 36273), (49, 36303),

Gene: Kiko_47 Start: 34593, Stop: 34889, Start Num: 27
Candidate Starts for Kiko_47:
(1, 33921), (5, 34128), (9, 34305), (10, 34314), (11, 34332), (12, 34335), (18, 34440), (Start: 27 @34593 has 1 MA's), (Start: 37 @34650 has 1 MA's), (47, 34758), (52, 34842),

Gene: LonelyBoi_51 Start: 39893, Stop: 40123, Start Num: 39
Candidate Starts for LonelyBoi_51:
(15, 39602), (33, 39812), (36, 39833), (Start: 39 @39893 has 4 MA's), (45, 39965), (47, 39992),

Gene: Lysidious_55 Start: 37815, Stop: 38129, Start Num: 30
Candidate Starts for Lysidious_55:
(15, 37620), (Start: 30 @37815 has 21 MA's), (41, 37920), (43, 37959), (44, 37962), (47, 37998), (49, 38028),

Gene: Malachai_52 Start: 38032, Stop: 38262, Start Num: 40
Candidate Starts for Malachai_52:
(Start: 40 @38032 has 15 MA's), (47, 38131),

Gene: Melba_53 Start: 36287, Stop: 36601, Start Num: 30
Candidate Starts for Melba_53:
(15, 36092), (Start: 30 @36287 has 21 MA's), (41, 36392), (43, 36431), (44, 36434), (47, 36470), (49, 36500),

Gene: Mellie_52 Start: 35921, Stop: 36151, Start Num: 40
Candidate Starts for Mellie_52:
(16, 35639), (21, 35711), (23, 35732), (Start: 40 @35921 has 15 MA's), (47, 36020),

Gene: MintFen_54 Start: 36355, Stop: 36585, Start Num: 40
Candidate Starts for MintFen_54:
(Start: 40 @36355 has 15 MA's), (47, 36454),

Gene: MissRona_55 Start: 38103, Stop: 38459, Start Num: 24
Candidate Starts for MissRona_55:
(Start: 24 @38103 has 4 MA's), (41, 38250), (43, 38289), (44, 38292),

Gene: Moonflower_47 Start: 35624, Stop: 35968, Start Num: 27
Candidate Starts for Moonflower_47:
(Start: 27 @35624 has 1 MA's), (Start: 28 @35627 has 1 MA's), (Start: 29 @35630 has 4 MA's), (Start: 37 @35678 has 1 MA's), (38, 35732), (47, 35837), (52, 35921),

Gene: Murp_55 Start: 39677, Stop: 39991, Start Num: 30
Candidate Starts for Murp_55:
(Start: 30 @39677 has 21 MA's), (41, 39782), (43, 39821), (44, 39824), (47, 39860), (49, 39890),

Gene: Obliviate_50 Start: 34448, Stop: 34762, Start Num: 30
Candidate Starts for Obliviate_50:
(Start: 30 @34448 has 21 MA's), (41, 34553), (43, 34592), (44, 34595), (47, 34631), (49, 34661),

Gene: PCoral7_54 Start: 37667, Stop: 37972, Start Num: 31
Candidate Starts for PCoral7_54:
(Start: 31 @37667 has 4 MA's), (41, 37763), (43, 37802), (44, 37805), (50, 37874),

Gene: PatriciaStar_47 Start: 35406, Stop: 35666, Start Num: 28
Candidate Starts for PatriciaStar_47:
(9, 35121), (10, 35130), (11, 35148), (12, 35151), (18, 35256), (Start: 28 @35406 has 1 MA's), (Start: 29 @35409 has 4 MA's), (Start: 37 @35457 has 1 MA's),

Gene: Petra_50 Start: 34588, Stop: 34902, Start Num: 30
Candidate Starts for Petra_50:
(Start: 30 @34588 has 21 MA's), (41, 34693), (43, 34732), (44, 34735), (47, 34771),

Gene: PhrostedPhlake_55 Start: 35882, Stop: 36196, Start Num: 30
Candidate Starts for PhrostedPhlake_55:
(Start: 30 @35882 has 21 MA's), (41, 35987), (43, 36026), (44, 36029), (47, 36065),

Gene: Pipp_56 Start: 36955, Stop: 37269, Start Num: 30
Candidate Starts for Pipp_56:
(Start: 30 @36955 has 21 MA's), (41, 37060), (43, 37099), (44, 37102), (47, 37138),

Gene: PrincePatrick_53 Start: 36016, Stop: 36321, Start Num: 31
Candidate Starts for PrincePatrick_53:
(Start: 31 @36016 has 4 MA's), (41, 36112), (44, 36154), (50, 36223),

Gene: RayTheFireFly_54 Start: 35821, Stop: 36162, Start Num: 28
Candidate Starts for RayTheFireFly_54:
(2, 35260), (3, 35308), (4, 35326), (6, 35380), (7, 35383), (10, 35545), (11, 35563), (12, 35566), (18, 35671), (Start: 28 @35821 has 1 MA's), (Start: 29 @35824 has 4 MA's), (Start: 37 @35872 has 1 MA's), (38, 35926), (43, 35992), (47, 36031), (52, 36115),

Gene: Samba_53 Start: 38568, Stop: 38798, Start Num: 40
Candidate Starts for Samba_53:
(Start: 40 @38568 has 15 MA's), (47, 38667),

Gene: Soilmate_59 Start: 41407, Stop: 41721, Start Num: 30
Candidate Starts for Soilmate_59:
(14, 41194), (22, 41317), (Start: 30 @41407 has 21 MA's), (41, 41512), (43, 41551), (44, 41554), (47, 41590), (48, 41596), (49, 41620),

Gene: Toast_54 Start: 37667, Stop: 37972, Start Num: 31
Candidate Starts for Toast_54:
(Start: 31 @37667 has 4 MA's), (41, 37763), (43, 37802), (44, 37805), (50, 37874),

Gene: UmaThurman_51 Start: 36685, Stop: 36999, Start Num: 30
Candidate Starts for UmaThurman_51:
(14, 36472), (Start: 30 @36685 has 21 MA's), (41, 36790), (43, 36829), (44, 36832), (47, 36868), (48, 36874), (49, 36898),

Gene: Utz_47 Start: 36827, Stop: 37141, Start Num: 30
Candidate Starts for Utz_47:
(15, 36632), (Start: 30 @36827 has 21 MA's), (41, 36932), (43, 36971), (44, 36974), (47, 37010), (49, 37040),

Gene: Walrus_52 Start: 35763, Stop: 36077, Start Num: 30
Candidate Starts for Walrus_52:
(Start: 30 @35763 has 21 MA's), (41, 35868), (43, 35907), (44, 35910), (47, 35946),

Gene: William_56 Start: 38345, Stop: 38647, Start Num: 32
Candidate Starts for William_56:
(Start: 32 @38345 has 1 MA's), (41, 38438), (43, 38477), (44, 38480), (47, 38516),

Gene: WinkNick_53 Start: 35858, Stop: 36088, Start Num: 39
Candidate Starts for WinkNick_53:
(Start: 39 @35858 has 4 MA's), (48, 35963),

Gene: Wisp_51 Start: 37049, Stop: 37279, Start Num: 40
Candidate Starts for Wisp_51:
(Start: 40 @37049 has 15 MA's), (47, 37148),

Gene: Wocket_54 Start: 36257, Stop: 36571, Start Num: 30
Candidate Starts for Wocket_54:
(Start: 30 @36257 has 21 MA's), (41, 36362), (43, 36401), (44, 36404), (47, 36440), (49, 36470),

Gene: Zarbodnamra_53 Start: 35763, Stop: 35993, Start Num: 40
Candidate Starts for Zarbodnamra_53:
(Start: 40 @35763 has 15 MA's), (47, 35862),

Gene: ZiggyZoo_54 Start: 38096, Stop: 38326, Start Num: 40
Candidate Starts for ZiggyZoo_54:
(Start: 40 @38096 has 15 MA's), (47, 38195),

Gene: Zilla_52 Start: 35510, Stop: 35740, Start Num: 40
Candidate Starts for Zilla_52:
(Start: 40 @35510 has 15 MA's), (47, 35609),