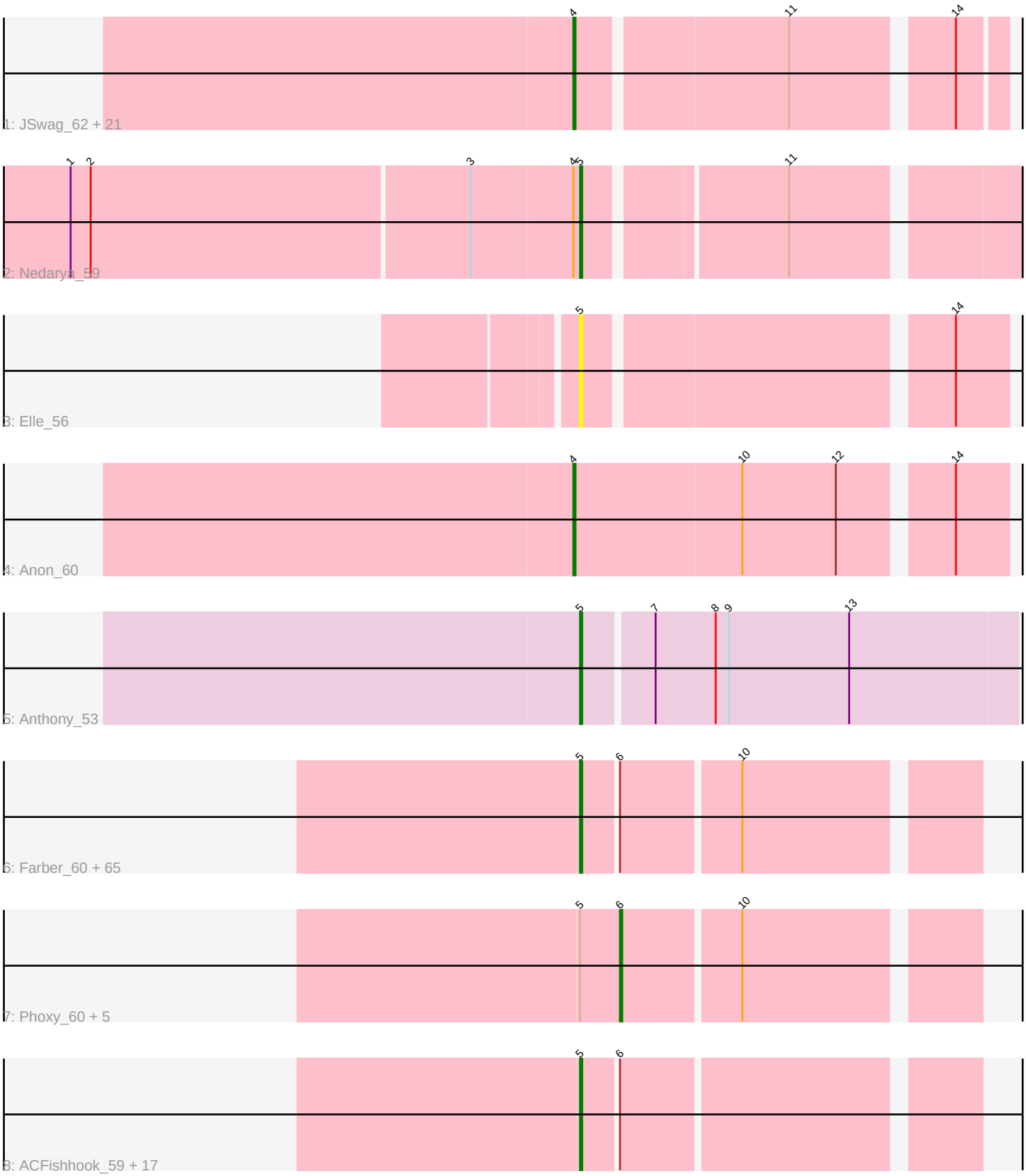
Pham 289222


4
11
14
1: JSwag_62 + 21
1
2
3
4
5
11
2: Nedarya_59
5
14
3: Elle_56
4
10
12
14
4: Anon_60
5
7
8
9
13
5: Anthony_53
5
6
10
6: Farber_60 + 65
5
6
10
7: Phoxy_60 + 5
5
6
8: ACFishhook_59 + 17

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 289222 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289222 has 116 members, 9 are drafts.

Phages represented in each track:
• Track 1 : JSwag_62, LastResort_61, Battleship_65, MinecraftSteve_63, Strosahl_63, DekHockey33_64, ShayRa_63, Oofda_64, Rosalind_61, Waits_63, Nebulosus_61, Soups_63, Epsocamisio_60, Warrior24_65, Looper_62, ReMo_61, Anaysia_63, Ravana_66, Boohoo_63, KatherineG_63, Remus_63, Switzerland_62
• Track 2 : Nedarya_59
• Track 3 : Elle_56
• Track 4 : Anon_60
• Track 5 : Anthony_53
• Track 6 : Farber_60, Bigflo_60, Wooldri_62, Malinsilva_62, Hercules11_60, GingkoMaracino_60, Aglet_61, P28Green_61, SoilDragon_60, GtownJaz_60, Phoebe_61, Fernando_60, Grum1_60, Sabia_60, AgronaGT15_59, Lilith_61, Dieselweasel_61, LugYA_63, SoYo_60, Vix_60, Louie6_59, Taurus_61, Watson_60, DaHudson_60, LBerry_61, TinyPebbles_59, Snickers_60, StepMih_60, MadMarie_60, Grub_60, BreSam8_60, JHC117_60, KADY_60, MoneyMay_60, Penny1_61, Soshari_62, Grif_60, Methuselah_56, Beauxregard13_60, BuzzBuzz_58, Zetzy_59, HashRod_61, Marie_60, MuchMore_63, Colbster_60, Sabinator_59, Rummer_59, Stagni_60, Gwennie_59, EpicPhail_61, JenCasNa_61, LarryKay_60, AugsMagnumOpus_63, Microwolf_60, Misomonster_61, PGHhamlin_62, MarQuardt_60, Montavir_59, Croquant_61, Mainiac_60, Lowa_60, PotatoSplit_62, Daishi_59, Cullens_60, Pembroke_60, Ollie_60
• Track 7 : Phoxy_60, Spike509_60, Jobu08_59, Tiffany_60, Anubis_63, Bxz2_56
• Track 8 : ACFishhook_59, OlanP_59, Manu_60, Heliosoles_59, Reba_60, Marius_61, Gemma_59, Groupthink_61, Phranny_61, Calvinny_60, HaveUMetTed_61, PhishRPhriends_58, Pawn_60, PurpleHaze_60, ClownCar_60, Kalb97_61, Kalnoky_61, JeppNRM_61

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 79 of the 107 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ACFishhook_59, Aglet_61, AgronaGT15_59, Anthony_53, AugsMagnumOpus_63, Beauxregard13_60, Bigflo_60, BreSam8_60, BuzzBuzz_58, Calvinny_60,

ClownCar_60, Colbster_60, Croquant_61, Cullens_60, DaHudson_60, Daishi_59, Dieselweasel_61, Elle_56, EpicPhail_61, Farber_60, Fernando_60, Gemma_59, GingkoMaracino_60, Grif_60, Groupthink_61, Grub_60, Grum1_60, GtownJaz_60, Gwennie_59, HashRod_61, HaveUMetTed_61, Heliosoles_59, Hercules11_60, JHC117_60, JenCasNa_61, JeppNRM_61, KADY_60, Kalb97_61, Kalnoky_61, LBerry_61, LarryKay_60, Lilith_61, Louie6_59, Lowa_60, LugYA_63, MadMarie_60, Mainiac_60, Malinsilva_62, Manu_60, MarQuardt_60, Marie_60, Marius_61, Methuselah_56, Microwolf_60, Misomonster_61, MoneyMay_60, Montavir_59, MuchMore_63, Nedarya_59, OlanP_59, Ollie_60, P28Green_61, PGHhamlin_62, Pawn_60, Pembroke_60, Penny1_61, PhishRPhriends_58, Phoebe_61, Phranny_61, PotatoSplit_62, PurpleHaze_60, Reba_60, Rummer_59, Sabia_60, Sabinator_59, Snickers_60, SoYo_60, SoilDragon_60, Soshari_62, Stagni_60, StepMih_60, Taurus_61, TinyPebbles_59, Vix_60, Watson_60, Wooldri_62, Zetzy_59,

Genes that have the "Most Annotated" start but do not call it:
• Anubis_63, Bxz2_56, Jobu08_59, Phoxy_60, Spike509_60, Tiffany_60,

Genes that do not have the "Most Annotated" start:
• Anaysia_63, Anon_60, Battleship_65, Boohoo_63, DekHockey33_64, Epsocamisio_60, JSwag_62, KatherineG_63, LastResort_61, Looper_62, MinecraftSteve_63, Nebulosus_61, Oofda_64, Ravana_66, ReMo_61, Remus_63, Rosalind_61, ShayRa_63, Soups_63, Strosahl_63, Switzerland_62, Waits_63, Warrior24_65,

Summary by start number:

Start 4:
• Found in 24 of 116 (20.7%) of genes in pham
• Manual Annotations of this start: 22 of 107
• Called 95.8% of time when present
• Phage (with cluster) where this start called: Anaysia_63 (A15), Anon_60 (A15), Battleship_65 (A15), Boohoo_63 (A15), DekHockey33_64 (A15), Epsocamisio_60 (A15), JSwag_62 (A15), KatherineG_63 (A15), LastResort_61 (A15), Looper_62 (A15), MinecraftSteve_63 (A15), Nebulosus_61 (A15), Oofda_64 (A15), Ravana_66 (A15), ReMo_61 (A15), Remus_63 (A15), Rosalind_61 (A15), ShayRa_63 (A15), Soups_63 (A15), Strosahl_63 (A15), Switzerland_62 (A15), Waits_63 (A15), Warrior24_65 (A15),

Start 5:
• Found in 93 of 116 (80.2%) of genes in pham
• Manual Annotations of this start: 79 of 107
• Called 93.5% of time when present
• Phage (with cluster) where this start called: ACFishhook_59 (A3), Aglet_61 (A3), AgronaGT15_59 (A3), Anthony_53 (A20), AugsMagnumOpus_63 (A3), Beauxregard13_60 (A3), Bigflo_60 (A3), BreSam8_60 (A3), BuzzBuzz_58 (A3), Calvinny_60 (A3), ClownCar_60 (A3), Colbster_60 (A3), Croquant_61 (A3), Cullens_60 (A3), DaHudson_60 (A3), Daishi_59 (A3), Dieselweasel_61 (A3), Elle_56 (A15), EpicPhail_61 (A3), Farber_60 (A3), Fernando_60 (A3), Gemma_59 (A3), GingkoMaracino_60 (A3), Grif_60 (A3), Groupthink_61 (A3), Grub_60 (A3), Grum1_60 (A3), GtownJaz_60 (A3), Gwennie_59 (A3), HashRod_61 (A3), HaveUMetTed_61 (A3), Heliosoles_59 (A3), Hercules11_60 (A3), JHC117_60 (A3), JenCasNa_61 (A3), JeppNRM_61 (A3), KADY_60 (A3), Kalb97_61 (A3), Kalnoky_61 (A3), LBerry_61 (A3), LarryKay_60 (A3), Lilith_61 (A3), Louie6_59 (A3), Lowa_60

(A3), LugYA_63 (A3), MadMarie_60 (A3), Mainiac_60 (A3), Malinsilva_62 (A3), Manu_60 (A3), MarQuardt_60 (A3), Marie_60 (A3), Marius_61 (A3), Methuselah_56 (A3), Microwolf_60 (A3), Misomonster_61 (A3), MoneyMay_60 (A3), Montavir_59 (A3), MuchMore_63 (A3), Nedarya_59 (A15), OlanP_59 (A3), Ollie_60 (A3), P28Green_61 (A3), PGHhamlin_62 (A3), Pawn_60 (A3), Pembroke_60 (A3), Penny1_61 (A3), PhishRPhriends_58 (A3), Phoebe_61 (A3), Phranny_61 (A3), PotatoSplit_62 (A3), PurpleHaze_60 (A3), Reba_60 (A3), Rummer_59 (A3), Sabia_60 (A3), Sabinator_59 (A3), Snickers_60 (A3), SoYo_60 (A3), SoilDragon_60 (A3), Soshari_62 (A3), Stagni_60 (A3), StepMih_60 (A3), Taurus_61 (A3), TinyPebbles_59 (A3), Vix_60 (A3), Watson_60 (A3), Wooldri_62 (A3), Zetzy_59 (A3),

Start 6:
• Found in 90 of 116 (77.6%) of genes in pham
• Manual Annotations of this start: 6 of 107
• Called 6.7% of time when present
• Phage (with cluster) where this start called: Anubis_63 (A3), Bxz2_56 (A3), Jobu08_59 (A3), Phoxy_60 (A3), Spike509_60 (A3), Tiffany_60 (A3),

Summary by clusters:

There are 3 clusters represented in this pham: A15, A20, A3,

Info for manual annotations of cluster A15:
•Start number 4 was manually annotated 22 times for cluster A15.
•Start number 5 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A20:
•Start number 5 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A3:
•Start number 5 was manually annotated 77 times for cluster A3.
•Start number 6 was manually annotated 6 times for cluster A3.

Gene Information:

Gene: ACFishhook_59 Start: 38111, Stop: 37947, Start Num: 5
Candidate Starts for ACFishhook_59:
(Start: 5 @38111 has 79 MA's), (Start: 6 @38096 has 6 MA's),

Gene: Aglet_61 Start: 38154, Stop: 37990, Start Num: 5
Candidate Starts for Aglet_61:
(Start: 5 @38154 has 79 MA's), (Start: 6 @38139 has 6 MA's), (10, 38088),

Gene: AgronaGT15_59 Start: 38002, Stop: 37838, Start Num: 5
Candidate Starts for AgronaGT15_59:
(Start: 5 @38002 has 79 MA's), (Start: 6 @37987 has 6 MA's), (10, 37936),

Gene: Anaysia_63 Start: 37401, Stop: 37225, Start Num: 4
Candidate Starts for Anaysia_63:
(Start: 4 @37401 has 22 MA's), (11, 37311), (14, 37245),

Gene: Anon_60 Start: 36950, Stop: 36765, Start Num: 4
Candidate Starts for Anon_60:
(Start: 4 @36950 has 22 MA's), (10, 36875), (12, 36833), (14, 36788),

Gene: Anthony_53 Start: 35961, Stop: 35770, Start Num: 5
Candidate Starts for Anthony_53:
(Start: 5 @35961 has 79 MA's), (7, 35931), (8, 35904), (9, 35898), (13, 35844),

Gene: Anubis_63 Start: 38025, Stop: 37876, Start Num: 6
Candidate Starts for Anubis_63:
(Start: 5 @38040 has 79 MA's), (Start: 6 @38025 has 6 MA's), (10, 37974),

Gene: AugsMagnumOpus_63 Start: 38145, Stop: 37981, Start Num: 5
Candidate Starts for AugsMagnumOpus_63:
(Start: 5 @38145 has 79 MA's), (Start: 6 @38130 has 6 MA's), (10, 38079),

Gene: Battleship_65 Start: 37607, Stop: 37431, Start Num: 4
Candidate Starts for Battleship_65:
(Start: 4 @37607 has 22 MA's), (11, 37517), (14, 37451),

Gene: Beauxregard13_60 Start: 38157, Stop: 37993, Start Num: 5
Candidate Starts for Beauxregard13_60:
(Start: 5 @38157 has 79 MA's), (Start: 6 @38142 has 6 MA's), (10, 38091),

Gene: Bigflo_60 Start: 38153, Stop: 37989, Start Num: 5
Candidate Starts for Bigflo_60:
(Start: 5 @38153 has 79 MA's), (Start: 6 @38138 has 6 MA's), (10, 38087),

Gene: Boohoo_63 Start: 37401, Stop: 37225, Start Num: 4
Candidate Starts for Boohoo_63:
(Start: 4 @37401 has 22 MA's), (11, 37311), (14, 37245),

Gene: BreSam8_60 Start: 38147, Stop: 37983, Start Num: 5
Candidate Starts for BreSam8_60:
(Start: 5 @38147 has 79 MA's), (Start: 6 @38132 has 6 MA's), (10, 38081),

Gene: BuzzBuzz_58 Start: 38181, Stop: 38017, Start Num: 5
Candidate Starts for BuzzBuzz_58:
(Start: 5 @38181 has 79 MA's), (Start: 6 @38166 has 6 MA's), (10, 38115),

Gene: Bxz2_56 Start: 38173, Stop: 38024, Start Num: 6
Candidate Starts for Bxz2_56:
(Start: 5 @38188 has 79 MA's), (Start: 6 @38173 has 6 MA's), (10, 38122),

Gene: Calvinny_60 Start: 38039, Stop: 37875, Start Num: 5
Candidate Starts for Calvinny_60:
(Start: 5 @38039 has 79 MA's), (Start: 6 @38024 has 6 MA's),

Gene: ClownCar_60 Start: 38032, Stop: 37868, Start Num: 5
Candidate Starts for ClownCar_60:
(Start: 5 @38032 has 79 MA's), (Start: 6 @38017 has 6 MA's),

Gene: Colbster_60 Start: 38157, Stop: 37993, Start Num: 5

Candidate Starts for Colbster_60:
(Start: 5 @38157 has 79 MA's), (Start: 6 @38142 has 6 MA's), (10, 38091),

Gene: Croquant_61 Start: 38152, Stop: 37988, Start Num: 5
Candidate Starts for Croquant_61:
(Start: 5 @38152 has 79 MA's), (Start: 6 @38137 has 6 MA's), (10, 38086),

Gene: Cullens_60 Start: 38153, Stop: 37989, Start Num: 5
Candidate Starts for Cullens_60:
(Start: 5 @38153 has 79 MA's), (Start: 6 @38138 has 6 MA's), (10, 38087),

Gene: DaHudson_60 Start: 38146, Stop: 37982, Start Num: 5
Candidate Starts for DaHudson_60:
(Start: 5 @38146 has 79 MA's), (Start: 6 @38131 has 6 MA's), (10, 38080),

Gene: Daishi_59 Start: 37022, Stop: 36858, Start Num: 5
Candidate Starts for Daishi_59:
(Start: 5 @37022 has 79 MA's), (Start: 6 @37007 has 6 MA's), (10, 36956),

Gene: DekHockey33_64 Start: 37693, Stop: 37517, Start Num: 4
Candidate Starts for DekHockey33_64:
(Start: 4 @37693 has 22 MA's), (11, 37603), (14, 37537),

Gene: Dieselweasel_61 Start: 38156, Stop: 37992, Start Num: 5
Candidate Starts for Dieselweasel_61:
(Start: 5 @38156 has 79 MA's), (Start: 6 @38141 has 6 MA's), (10, 38090),

Gene: Elle_56 Start: 35435, Stop: 35259, Start Num: 5
Candidate Starts for Elle_56:
(Start: 5 @35435 has 79 MA's), (14, 35282),

Gene: EpicPhail_61 Start: 38157, Stop: 37993, Start Num: 5
Candidate Starts for EpicPhail_61:
(Start: 5 @38157 has 79 MA's), (Start: 6 @38142 has 6 MA's), (10, 38091),

Gene: Epsocamisio_60 Start: 36936, Stop: 36760, Start Num: 4
Candidate Starts for Epsocamisio_60:
(Start: 4 @36936 has 22 MA's), (11, 36846), (14, 36780),

Gene: Farber_60 Start: 38143, Stop: 37979, Start Num: 5
Candidate Starts for Farber_60:
(Start: 5 @38143 has 79 MA's), (Start: 6 @38128 has 6 MA's), (10, 38077),

Gene: Fernando_60 Start: 38153, Stop: 37989, Start Num: 5
Candidate Starts for Fernando_60:
(Start: 5 @38153 has 79 MA's), (Start: 6 @38138 has 6 MA's), (10, 38087),

Gene: Gemma_59 Start: 38035, Stop: 37871, Start Num: 5
Candidate Starts for Gemma_59:
(Start: 5 @38035 has 79 MA's), (Start: 6 @38020 has 6 MA's),

Gene: GingkoMaracino_60 Start: 38039, Stop: 37875, Start Num: 5
Candidate Starts for GingkoMaracino_60:

(Start: 5 @38039 has 79 MA's), (Start: 6 @38024 has 6 MA's), (10, 37973),

Gene: Grif_60 Start: 38228, Stop: 38064, Start Num: 5
Candidate Starts for Grif_60:
(Start: 5 @38228 has 79 MA's), (Start: 6 @38213 has 6 MA's), (10, 38162),

Gene: Groupthink_61 Start: 38039, Stop: 37875, Start Num: 5
Candidate Starts for Groupthink_61:
(Start: 5 @38039 has 79 MA's), (Start: 6 @38024 has 6 MA's),

Gene: Grub_60 Start: 38145, Stop: 37981, Start Num: 5
Candidate Starts for Grub_60:
(Start: 5 @38145 has 79 MA's), (Start: 6 @38130 has 6 MA's), (10, 38079),

Gene: Grum1_60 Start: 38153, Stop: 37989, Start Num: 5
Candidate Starts for Grum1_60:
(Start: 5 @38153 has 79 MA's), (Start: 6 @38138 has 6 MA's), (10, 38087),

Gene: GtownJaz_60 Start: 38155, Stop: 37991, Start Num: 5
Candidate Starts for GtownJaz_60:
(Start: 5 @38155 has 79 MA's), (Start: 6 @38140 has 6 MA's), (10, 38089),

Gene: Gwennie_59 Start: 38157, Stop: 37993, Start Num: 5
Candidate Starts for Gwennie_59:
(Start: 5 @38157 has 79 MA's), (Start: 6 @38142 has 6 MA's), (10, 38091),

Gene: HashRod_61 Start: 38181, Stop: 38017, Start Num: 5
Candidate Starts for HashRod_61:
(Start: 5 @38181 has 79 MA's), (Start: 6 @38166 has 6 MA's), (10, 38115),

Gene: HaveUMetTed_61 Start: 38024, Stop: 37860, Start Num: 5
Candidate Starts for HaveUMetTed_61:
(Start: 5 @38024 has 79 MA's), (Start: 6 @38009 has 6 MA's),

Gene: Heliosoles_59 Start: 38042, Stop: 37878, Start Num: 5
Candidate Starts for Heliosoles_59:
(Start: 5 @38042 has 79 MA's), (Start: 6 @38027 has 6 MA's),

Gene: Hercules11_60 Start: 38162, Stop: 37998, Start Num: 5
Candidate Starts for Hercules11_60:
(Start: 5 @38162 has 79 MA's), (Start: 6 @38147 has 6 MA's), (10, 38096),

Gene: JHC117_60 Start: 38152, Stop: 37988, Start Num: 5
Candidate Starts for JHC117_60:
(Start: 5 @38152 has 79 MA's), (Start: 6 @38137 has 6 MA's), (10, 38086),

Gene: JSwag_62 Start: 37125, Stop: 36949, Start Num: 4
Candidate Starts for JSwag_62:
(Start: 4 @37125 has 22 MA's), (11, 37035), (14, 36969),

Gene: JenCasNa_61 Start: 38153, Stop: 37989, Start Num: 5
Candidate Starts for JenCasNa_61:
(Start: 5 @38153 has 79 MA's), (Start: 6 @38138 has 6 MA's), (10, 38087),

Gene: JeppNRM_61 Start: 38040, Stop: 37876, Start Num: 5
Candidate Starts for JeppNRM_61:
(Start: 5 @38040 has 79 MA's), (Start: 6 @38025 has 6 MA's),

Gene: Jobu08_59 Start: 37970, Stop: 37821, Start Num: 6
Candidate Starts for Jobu08_59:
(Start: 5 @37985 has 79 MA's), (Start: 6 @37970 has 6 MA's), (10, 37919),

Gene: KADY_60 Start: 38181, Stop: 38017, Start Num: 5
Candidate Starts for KADY_60:
(Start: 5 @38181 has 79 MA's), (Start: 6 @38166 has 6 MA's), (10, 38115),

Gene: Kalb97_61 Start: 38038, Stop: 37874, Start Num: 5
Candidate Starts for Kalb97_61:
(Start: 5 @38038 has 79 MA's), (Start: 6 @38023 has 6 MA's),

Gene: Kalnoky_61 Start: 38036, Stop: 37872, Start Num: 5
Candidate Starts for Kalnoky_61:
(Start: 5 @38036 has 79 MA's), (Start: 6 @38021 has 6 MA's),

Gene: KatherineG_63 Start: 37598, Stop: 37422, Start Num: 4
Candidate Starts for KatherineG_63:
(Start: 4 @37598 has 22 MA's), (11, 37508), (14, 37442),

Gene: LBerry_61 Start: 38157, Stop: 37993, Start Num: 5
Candidate Starts for LBerry_61:
(Start: 5 @38157 has 79 MA's), (Start: 6 @38142 has 6 MA's), (10, 38091),

Gene: LarryKay_60 Start: 38183, Stop: 38019, Start Num: 5
Candidate Starts for LarryKay_60:
(Start: 5 @38183 has 79 MA's), (Start: 6 @38168 has 6 MA's), (10, 38117),

Gene: LastResort_61 Start: 37177, Stop: 37001, Start Num: 4
Candidate Starts for LastResort_61:
(Start: 4 @37177 has 22 MA's), (11, 37087), (14, 37021),

Gene: Lilith_61 Start: 38146, Stop: 37982, Start Num: 5
Candidate Starts for Lilith_61:
(Start: 5 @38146 has 79 MA's), (Start: 6 @38131 has 6 MA's), (10, 38080),

Gene: Looper_62 Start: 37089, Stop: 36913, Start Num: 4
Candidate Starts for Looper_62:
(Start: 4 @37089 has 22 MA's), (11, 36999), (14, 36933),

Gene: Louie6_59 Start: 38182, Stop: 38018, Start Num: 5
Candidate Starts for Louie6_59:
(Start: 5 @38182 has 79 MA's), (Start: 6 @38167 has 6 MA's), (10, 38116),

Gene: Lowa_60 Start: 38145, Stop: 37981, Start Num: 5
Candidate Starts for Lowa_60:
(Start: 5 @38145 has 79 MA's), (Start: 6 @38130 has 6 MA's), (10, 38079),

Gene: LugYA_63 Start: 38154, Stop: 37990, Start Num: 5
Candidate Starts for LugYA_63:
(Start: 5 @38154 has 79 MA's), (Start: 6 @38139 has 6 MA's), (10, 38088),

Gene: MadMarie_60 Start: 38155, Stop: 37991, Start Num: 5
Candidate Starts for MadMarie_60:
(Start: 5 @38155 has 79 MA's), (Start: 6 @38140 has 6 MA's), (10, 38089),

Gene: Mainiac_60 Start: 38147, Stop: 37983, Start Num: 5
Candidate Starts for Mainiac_60:
(Start: 5 @38147 has 79 MA's), (Start: 6 @38132 has 6 MA's), (10, 38081),

Gene: Malinsilva_62 Start: 38145, Stop: 37981, Start Num: 5
Candidate Starts for Malinsilva_62:
(Start: 5 @38145 has 79 MA's), (Start: 6 @38130 has 6 MA's), (10, 38079),

Gene: Manu_60 Start: 38039, Stop: 37875, Start Num: 5
Candidate Starts for Manu_60:
(Start: 5 @38039 has 79 MA's), (Start: 6 @38024 has 6 MA's),

Gene: MarQuardt_60 Start: 38155, Stop: 37991, Start Num: 5
Candidate Starts for MarQuardt_60:
(Start: 5 @38155 has 79 MA's), (Start: 6 @38140 has 6 MA's), (10, 38089),

Gene: Marie_60 Start: 38153, Stop: 37989, Start Num: 5
Candidate Starts for Marie_60:
(Start: 5 @38153 has 79 MA's), (Start: 6 @38138 has 6 MA's), (10, 38087),

Gene: Marius_61 Start: 38036, Stop: 37872, Start Num: 5
Candidate Starts for Marius_61:
(Start: 5 @38036 has 79 MA's), (Start: 6 @38021 has 6 MA's),

Gene: Methuselah_56 Start: 38177, Stop: 38013, Start Num: 5
Candidate Starts for Methuselah_56:
(Start: 5 @38177 has 79 MA's), (Start: 6 @38162 has 6 MA's), (10, 38111),

Gene: Microwolf_60 Start: 38169, Stop: 38005, Start Num: 5
Candidate Starts for Microwolf_60:
(Start: 5 @38169 has 79 MA's), (Start: 6 @38154 has 6 MA's), (10, 38103),

Gene: MinecraftSteve_63 Start: 37413, Stop: 37237, Start Num: 4
Candidate Starts for MinecraftSteve_63:
(Start: 4 @37413 has 22 MA's), (11, 37323), (14, 37257),

Gene: Misomonster_61 Start: 38180, Stop: 38016, Start Num: 5
Candidate Starts for Misomonster_61:
(Start: 5 @38180 has 79 MA's), (Start: 6 @38165 has 6 MA's), (10, 38114),

Gene: MoneyMay_60 Start: 38153, Stop: 37989, Start Num: 5
Candidate Starts for MoneyMay_60:
(Start: 5 @38153 has 79 MA's), (Start: 6 @38138 has 6 MA's), (10, 38087),

Gene: Montavir_59 Start: 38154, Stop: 37990, Start Num: 5

Candidate Starts for Montavir_59:
(Start: 5 @38154 has 79 MA's), (Start: 6 @38139 has 6 MA's), (10, 38088),

Gene: MuchMore_63 Start: 38145, Stop: 37981, Start Num: 5
Candidate Starts for MuchMore_63:
(Start: 5 @38145 has 79 MA's), (Start: 6 @38130 has 6 MA's), (10, 38079),

Gene: Nebulosus_61 Start: 37173, Stop: 36997, Start Num: 4
Candidate Starts for Nebulosus_61:
(Start: 4 @37173 has 22 MA's), (11, 37083), (14, 37017),

Gene: Nedarya_59 Start: 37150, Stop: 36965, Start Num: 5
Candidate Starts for Nedarya_59:
(1, 37375), (2, 37366), (3, 37198), (Start: 4 @37153 has 22 MA's), (Start: 5 @37150 has 79 MA's), (11, 37066),

Gene: OlanP_59 Start: 38212, Stop: 38048, Start Num: 5
Candidate Starts for OlanP_59:
(Start: 5 @38212 has 79 MA's), (Start: 6 @38197 has 6 MA's),

Gene: Ollie_60 Start: 38024, Stop: 37860, Start Num: 5
Candidate Starts for Ollie_60:
(Start: 5 @38024 has 79 MA's), (Start: 6 @38009 has 6 MA's), (10, 37958),

Gene: Oofda_64 Start: 37376, Stop: 37200, Start Num: 4
Candidate Starts for Oofda_64:
(Start: 4 @37376 has 22 MA's), (11, 37286), (14, 37220),

Gene: P28Green_61 Start: 38156, Stop: 37992, Start Num: 5
Candidate Starts for P28Green_61:
(Start: 5 @38156 has 79 MA's), (Start: 6 @38141 has 6 MA's), (10, 38090),

Gene: PGHhamlin_62 Start: 38145, Stop: 37981, Start Num: 5
Candidate Starts for PGHhamlin_62:
(Start: 5 @38145 has 79 MA's), (Start: 6 @38130 has 6 MA's), (10, 38079),

Gene: Pawn_60 Start: 38043, Stop: 37879, Start Num: 5
Candidate Starts for Pawn_60:
(Start: 5 @38043 has 79 MA's), (Start: 6 @38028 has 6 MA's),

Gene: Pembroke_60 Start: 38154, Stop: 37990, Start Num: 5
Candidate Starts for Pembroke_60:
(Start: 5 @38154 has 79 MA's), (Start: 6 @38139 has 6 MA's), (10, 38088),

Gene: Penny1_61 Start: 38157, Stop: 37993, Start Num: 5
Candidate Starts for Penny1_61:
(Start: 5 @38157 has 79 MA's), (Start: 6 @38142 has 6 MA's), (10, 38091),

Gene: PhishRPhriends_58 Start: 37220, Stop: 37056, Start Num: 5
Candidate Starts for PhishRPhriends_58:
(Start: 5 @37220 has 79 MA's), (Start: 6 @37205 has 6 MA's),

Gene: Phoebe_61 Start: 38146, Stop: 37982, Start Num: 5

Candidate Starts for Phoebe_61:
(Start: 5 @38146 has 79 MA's), (Start: 6 @38131 has 6 MA's), (10, 38080),

Gene: Phoxy_60 Start: 38163, Stop: 38014, Start Num: 6
Candidate Starts for Phoxy_60:
(Start: 5 @38178 has 79 MA's), (Start: 6 @38163 has 6 MA's), (10, 38112),

Gene: Phranny_61 Start: 38025, Stop: 37861, Start Num: 5
Candidate Starts for Phranny_61:
(Start: 5 @38025 has 79 MA's), (Start: 6 @38010 has 6 MA's),

Gene: PotatoSplit_62 Start: 38157, Stop: 37993, Start Num: 5
Candidate Starts for PotatoSplit_62:
(Start: 5 @38157 has 79 MA's), (Start: 6 @38142 has 6 MA's), (10, 38091),

Gene: PurpleHaze_60 Start: 38038, Stop: 37874, Start Num: 5
Candidate Starts for PurpleHaze_60:
(Start: 5 @38038 has 79 MA's), (Start: 6 @38023 has 6 MA's),

Gene: Ravana_66 Start: 38501, Stop: 38325, Start Num: 4
Candidate Starts for Ravana_66:
(Start: 4 @38501 has 22 MA's), (11, 38411), (14, 38345),

Gene: ReMo_61 Start: 37174, Stop: 36998, Start Num: 4
Candidate Starts for ReMo_61:
(Start: 4 @37174 has 22 MA's), (11, 37084), (14, 37018),

Gene: Reba_60 Start: 37698, Stop: 37534, Start Num: 5
Candidate Starts for Reba_60:
(Start: 5 @37698 has 79 MA's), (Start: 6 @37683 has 6 MA's),

Gene: Remus_63 Start: 37180, Stop: 37004, Start Num: 4
Candidate Starts for Remus_63:
(Start: 4 @37180 has 22 MA's), (11, 37090), (14, 37024),

Gene: Rosalind_61 Start: 37332, Stop: 37156, Start Num: 4
Candidate Starts for Rosalind_61:
(Start: 4 @37332 has 22 MA's), (11, 37242), (14, 37176),

Gene: Rummer_59 Start: 38181, Stop: 38017, Start Num: 5
Candidate Starts for Rummer_59:
(Start: 5 @38181 has 79 MA's), (Start: 6 @38166 has 6 MA's), (10, 38115),

Gene: Sabia_60 Start: 38162, Stop: 37998, Start Num: 5
Candidate Starts for Sabia_60:
(Start: 5 @38162 has 79 MA's), (Start: 6 @38147 has 6 MA's), (10, 38096),

Gene: Sabinator_59 Start: 38152, Stop: 37988, Start Num: 5
Candidate Starts for Sabinator_59:
(Start: 5 @38152 has 79 MA's), (Start: 6 @38137 has 6 MA's), (10, 38086),

Gene: ShayRa_63 Start: 37361, Stop: 37185, Start Num: 4
Candidate Starts for ShayRa_63:

(Start: 4 @37361 has 22 MA's), (11, 37271), (14, 37205),

Gene: Snickers_60 Start: 38127, Stop: 37963, Start Num: 5
Candidate Starts for Snickers_60:
(Start: 5 @38127 has 79 MA's), (Start: 6 @38112 has 6 MA's), (10, 38061),

Gene: SoYo_60 Start: 38065, Stop: 37901, Start Num: 5
Candidate Starts for SoYo_60:
(Start: 5 @38065 has 79 MA's), (Start: 6 @38050 has 6 MA's), (10, 37999),

Gene: SoilDragon_60 Start: 37601, Stop: 37437, Start Num: 5
Candidate Starts for SoilDragon_60:
(Start: 5 @37601 has 79 MA's), (Start: 6 @37586 has 6 MA's), (10, 37535),

Gene: Soshari_62 Start: 38177, Stop: 38013, Start Num: 5
Candidate Starts for Soshari_62:
(Start: 5 @38177 has 79 MA's), (Start: 6 @38162 has 6 MA's), (10, 38111),

Gene: Soups_63 Start: 37624, Stop: 37448, Start Num: 4
Candidate Starts for Soups_63:
(Start: 4 @37624 has 22 MA's), (11, 37534), (14, 37468),

Gene: Spike509_60 Start: 38163, Stop: 38014, Start Num: 6
Candidate Starts for Spike509_60:
(Start: 5 @38178 has 79 MA's), (Start: 6 @38163 has 6 MA's), (10, 38112),

Gene: Stagni_60 Start: 38156, Stop: 37992, Start Num: 5
Candidate Starts for Stagni_60:
(Start: 5 @38156 has 79 MA's), (Start: 6 @38141 has 6 MA's), (10, 38090),

Gene: StepMih_60 Start: 38147, Stop: 37983, Start Num: 5
Candidate Starts for StepMih_60:
(Start: 5 @38147 has 79 MA's), (Start: 6 @38132 has 6 MA's), (10, 38081),

Gene: Strosahl_63 Start: 37180, Stop: 37004, Start Num: 4
Candidate Starts for Strosahl_63:
(Start: 4 @37180 has 22 MA's), (11, 37090), (14, 37024),

Gene: Switzerland_62 Start: 37500, Stop: 37324, Start Num: 4
Candidate Starts for Switzerland_62:
(Start: 4 @37500 has 22 MA's), (11, 37410), (14, 37344),

Gene: Taurus_61 Start: 38153, Stop: 37989, Start Num: 5
Candidate Starts for Taurus_61:
(Start: 5 @38153 has 79 MA's), (Start: 6 @38138 has 6 MA's), (10, 38087),

Gene: Tiffany_60 Start: 38024, Stop: 37875, Start Num: 6
Candidate Starts for Tiffany_60:
(Start: 5 @38039 has 79 MA's), (Start: 6 @38024 has 6 MA's), (10, 37973),

Gene: TinyPebbles_59 Start: 38183, Stop: 38019, Start Num: 5
Candidate Starts for TinyPebbles_59:
(Start: 5 @38183 has 79 MA's), (Start: 6 @38168 has 6 MA's), (10, 38117),

Gene: Vix_60 Start: 38236, Stop: 38072, Start Num: 5
Candidate Starts for Vix_60:
(Start: 5 @38236 has 79 MA's), (Start: 6 @38221 has 6 MA's), (10, 38170),

Gene: Waits_63 Start: 37397, Stop: 37221, Start Num: 4
Candidate Starts for Waits_63:
(Start: 4 @37397 has 22 MA's), (11, 37307), (14, 37241),

Gene: Warrior24_65 Start: 37831, Stop: 37655, Start Num: 4
Candidate Starts for Warrior24_65:
(Start: 4 @37831 has 22 MA's), (11, 37741), (14, 37675),

Gene: Watson_60 Start: 38145, Stop: 37981, Start Num: 5
Candidate Starts for Watson_60:
(Start: 5 @38145 has 79 MA's), (Start: 6 @38130 has 6 MA's), (10, 38079),

Gene: Wooldri_62 Start: 38065, Stop: 37901, Start Num: 5
Candidate Starts for Wooldri_62:
(Start: 5 @38065 has 79 MA's), (Start: 6 @38050 has 6 MA's), (10, 37999),

Gene: Zetzy_59 Start: 37716, Stop: 37552, Start Num: 5
Candidate Starts for Zetzy_59:
(Start: 5 @37716 has 79 MA's), (Start: 6 @37701 has 6 MA's), (10, 37650),