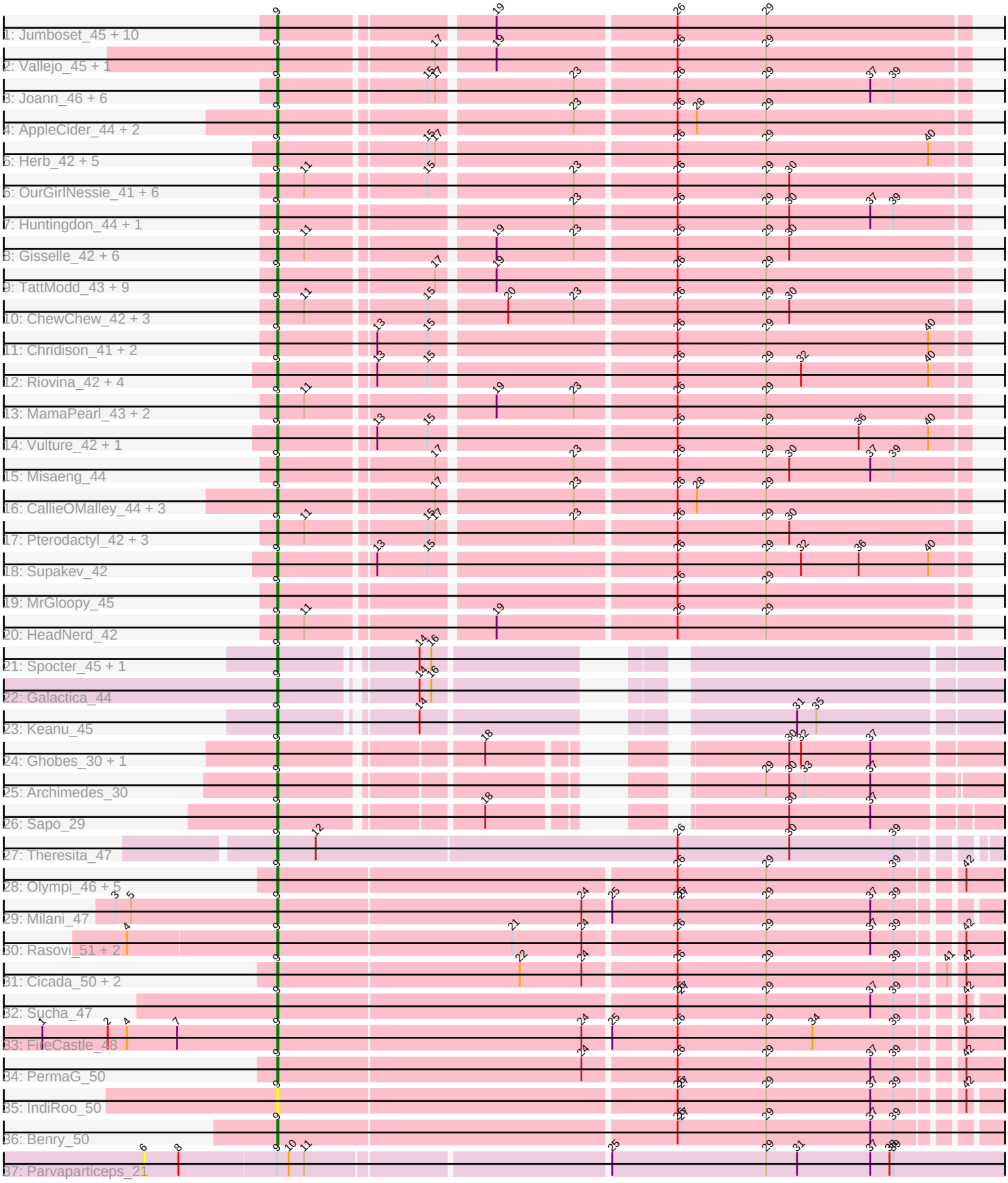
Pham 206698


1: Jumboset_45 + 10
2: Vallejo_45 + 1
3: Joann_46 + 6
4: AppleCider_44 + 2
5: Herb_42 + 5
6: OurGirlNessie_41 + 6
7: Huntingdon_44 + 1
8: Gisselle_42 + 6
9: TattModd_43 + 9
10: ChewChew_42 + 3
11: Chridison_41 + 2
12: Riovina_42 + 4
13: MamaPearl_43 + 2
14: Vulture_42 + 1
15: Misaeng_44
16: CallieOMalley_44 + 3
17: Pterodactyl_42 + 3
18: Supakev_42
19: MrGloopy_45
20: HeadNerd_42
21: Spocter_45 + 1
22: Galactica_44
23: Keanu_45
24: Ghobes_30 + 1
25: Archimedes_30
26: Sapo_29
27: Theresita_47
28: Olympi_46 + 5
29: Milani_47
30: Rasovi_51 + 2
31: Cicada_50 + 2
32: Sucha_47
33: FileCastle_48
34: PermaG_50
35: IndiRoo_50
36: Benry_50
37: Parvaparticeps_21

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 206698 Report

This analysis was run 02/22/25 on database version 588.

Pham number 206698 has 112 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Jumboset_45, MeganNoll_44, Zorro_45, Wawa_44, BigMack_42, Dino_45, RAP15_45, Glenn_45, Savage2526_45, Rozby_44, Korra_44
• Track 2 : Vallejo_45, Riverdale_45
• Track 3 : Joann_46, GreenHearts_46, Lakshmi_45, Nubia_45, Oxynfrius_45, Albanese_45, Greenhouse_46
• Track 4 : AppleCider_44, Litotes_44, PartyCup_47
• Track 5 : Herb_42, Daiboju_42, Maria1952_41, KingBob_42, Sergei_42, Temper16_42
• Track 6 : OurGirlNessie_41, Lennox_42, Christian_42, Lucy_42, WonderBoy_41, Lasagna_41, Bodacious_42
• Track 7 : Huntingdon_44, RcigaStruga_44
• Track 8 : Gisselle_42, Moki_42, Preamble_43, Urla_43, Huckleberry_42, DreamTeam_42, Bennie_42
• Track 9 : TattModd_43, Beethoven_44, Immaculata_44, Scuttle_44, BrotherBLo_44, Kalizoi_44, Carpal_44, Cholula_44, Potatoes_44, Fluke_45
• Track 10 : ChewChew_42, CristinaYang_42, LilStuart_42, Nancia_42
• Track 11 : Chridison_41, PinkFriday_42, Pumancara_42
• Track 12 : Riovina_42, AustinPowers_42, OMalley_42, Eunoia_42, Aledel_42
• Track 13 : MamaPearl_43, EstebanJulior_43, Kittykat_44
• Track 14 : Vulture_42, HunterDalle_42
• Track 15 : Misaeng_44
• Track 16 : CallieOMalley_44, Wayne_44, Suppi_44, Canowicakte_44
• Track 17 : Pterodactyl_42, DrRobert_41, Makoto_42, PitaDog_43
• Track 18 : Supakev_42
• Track 19 : MrGloopy_45
• Track 20 : HeadNerd_42
• Track 21 : Spocter_45, Hiyaa_46
• Track 22 : Galactica_44
• Track 23 : Keanu_45
• Track 24 : Ghobes_30, Frizzle_31
• Track 25 : Archimedes_30
• Track 26 : Sapo_29
• Track 27 : Theresita_47
• Track 28 : Olympi_46, Typher_49, Zanella_48, Jera_49, TurboVicky_49, SBlackberry_47
• Track 29 : Milani_47
• Track 30 : Rasovi_51, Linayshia_48, Htur_51

• Track 31 : Cicada_50, Johann_49, Goodman_49
• Track 32 : Sucha_47
• Track 33 : FireCastle_48
• Track 34 : PermaG_50
• Track 35 : IndiRoo_50
• Track 36 : Benry_50
• Track 37 : Parvaparticeps_21

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

The start number called the most often in the published annotations is 9, it was called in 106 of the 106 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_45, Aledel_42, AppleCider_44, Archimedes_30, AustinPowers_42, Beethoven_44, Bennie_42, Benry_50, BigMack_42, Bodacious_42, BrotherBLo_44, CallieOMalley_44, Canowicakte_44, Carpal_44, ChewChew_42, Cholula_44, Chridison_41, Christian_42, Cicada_50, CristinaYang_42, Daiboju_42, Dino_45, DrRobert_41, DreamTeam_42, EstebanJulior_43, Eunoia_42, FireCastle_48, Fluke_45, Frizzle_31, Galactica_44, Ghobes_30, Gisselle_42, Glenn_45, Goodman_49, GreenHearts_46, Greenhouse_46, HeadNerd_42, Herb_42, Hiyaa_46, Htur_51, Huckleberry_42, HunterDalle_42, Huntingdon_44, Immaculata_44, IndiRoo_50, Jera_49, Joann_46, Johann_49, Jumboset_45, Kalizoi_44, Keanu_45, KingBob_42, Kittykat_44, Korra_44, Lakshmi_45, Lasagna_41, Lennox_42, LilStuart_42, Linayshia_48, Litotes_44, Lucy_42, Makoto_42, MamaPearl_43, Maria1952_41, MeganNoll_44, Milani_47, Misaeng_44, Moki_42, MrGloopy_45, Nancia_42, Nubia_45, OMalley_42, Olympi_46, OurGirlNessie_41, Oxynfrius_45, PartyCup_47, PermaG_50, PinkFriday_42, PitaDog_43, Potatoes_44, Preamble_43, Pterodactyl_42, Pumancara_42, RAP15_45, Rasovi_51, RcigaStruga_44, Riovina_42, Riverdale_45, Rozby_44, SBlackberry_47, Sapo_29, Savage2526_45, Scuttle_44, Sergei_42, Spocter_45, Sucha_47, Supakev_42, Suppi_44, TattModd_43, Temper16_42, Theresita_47, TurboVicky_49, Typher_49, Urla_43, Vallejo_45, Vulture_42, Wawa_44, Wayne_44, WonderBoy_41, Zanella_48, Zorro_45,

Genes that have the "Most Annotated" start but do not call it:
• Parvaparticeps_21,

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

Summary by start number:

Start 6:
• Found in 1 of 112 (0.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Parvaparticeps_21 (UNK),

Start 9:

• Found in 112 of 112 (100.0%) of genes in pham
• Manual Annotations of this start: 106 of 106
• Called 99.1% of time when present
• Phage (with cluster) where this start called: Albanese_45 (AK), Aledel_42 (AK), AppleCider_44 (AK), Archimedes_30 (DA), AustinPowers_42 (AK), Beethoven_44 (AK), Bennie_42 (AK), Benry_50 (EJ), BigMack_42 (AK), Bodacious_42 (AK), BrotherBLo_44 (AK), CallieOMalley_44 (AK), Canowicakte_44 (AK), Carpal_44 (AK), ChewChew_42 (AK), Cholula_44 (AK), Chridison_41 (AK), Christian_42 (AK), Cicada_50 (EJ), CristinaYang_42 (AK), Daiboju_42 (AK), Dino_45 (AK), DrRobert_41 (AK), DreamTeam_42 (AK), EstebanJulior_43 (AK), Eunoia_42 (AK), FireCastle_48 (EJ), Fluke_45 (AK), Frizzle_31 (DA), Galactica_44 (BQ), Ghobes_30 (DA), Gisselle_42 (AK), Glenn_45 (AK), Goodman_49 (EJ), GreenHearts_46 (AK), Greenhouse_46 (AK), HeadNerd_42 (AK), Herb_42 (AK), Hiyaa_46 (BQ), Htur_51 (EJ), Huckleberry_42 (AK), HunterDalle_42 (AK), Huntingdon_44 (AK), Immaculata_44 (AK), IndiRoo_50 (EJ), Jera_49 (EJ), Joann_46 (AK), Johann_49 (EJ), Jumboset_45 (AK), Kalizoi_44 (AK), Keanu_45 (BQ), KingBob_42 (AK), Kittykat_44 (AK), Korra_44 (AK), Lakshmi_45 (AK), Lasagna_41 (AK), Lennox_42 (AK), LilStuart_42 (AK), Linayshia_48 (EJ), Litotes_44 (AK), Lucy_42 (AK), Makoto_42 (AK), MamaPearl_43 (AK), Maria1952_41 (AK), MeganNoll_44 (AK), Milani_47 (EJ), Misaeng_44 (AK), Moki_42 (AK), MrGloopy_45 (AK), Nancia_42 (AK), Nubia_45 (AK), OMalley_42 (AK), Olympi_46 (EJ), OurGirlNessie_41 (AK), Oxynfrius_45 (AK), PartyCup_47 (AK), PermaG_50 (EJ), PinkFriday_42 (AK), PitaDog_43 (AK), Potatoes_44 (AK), Preamble_43 (AK), Pterodactyl_42 (AK), Pumancara_42 (AK), RAP15_45 (AK), Rasovi_51 (EJ), RcigaStruga_44 (AK), Riovina_42 (AK), Riverdale_45 (AK), Rozby_44 (AK), SBlackberry_47 (EJ), Sapo_29 (DA), Savage2526_45 (AK), Scuttle_44 (AK), Sergei_42 (AK), Spocter_45 (BQ), Sucha_47 (EJ), Supakev_42 (AK), Suppi_44 (AK), TattModd_43 (AK), Temper16_42 (AK), Theresita_47 (EA7), TurboVicky_49 (EJ), Typher_49 (EJ), Urla_43 (AK), Vallejo_45 (AK), Vulture_42 (AK), Wawa_44 (AK), Wayne_44 (AK), WonderBoy_41 (AK), Zanella_48 (EJ), Zorro_45 (AK),

Summary by clusters:

There are 6 clusters represented in this pham: EJ, AK, DA, BQ, UNK, EA7,

Info for manual annotations of cluster AK:
•Start number 9 was manually annotated 83 times for cluster AK.

Info for manual annotations of cluster BQ:
•Start number 9 was manually annotated 4 times for cluster BQ.

Info for manual annotations of cluster DA:
•Start number 9 was manually annotated 3 times for cluster DA.

Info for manual annotations of cluster EA7:
•Start number 9 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EJ:
•Start number 9 was manually annotated 15 times for cluster EJ.

Gene Information:

Gene: Albanese_45 Start: 30570, Stop: 31082, Start Num: 9
Candidate Starts for Albanese_45:
(Start: 9 @30570 has 106 MA's), (15, 30678), (17, 30684), (23, 30783), (26, 30858), (29, 30927), (37, 31008), (39, 31026),

Gene: Aledel_42 Start: 29939, Stop: 30451, Start Num: 9
Candidate Starts for Aledel_42:
(Start: 9 @29939 has 106 MA's), (13, 30008), (15, 30047), (26, 30227), (29, 30296), (32, 30323), (40, 30422),

Gene: AppleCider_44 Start: 29981, Stop: 30493, Start Num: 9
Candidate Starts for AppleCider_44:
(Start: 9 @29981 has 106 MA's), (23, 30194), (26, 30269), (28, 30284), (29, 30338),

Gene: Archimedes_30 Start: 28177, Stop: 27710, Start Num: 9
Candidate Starts for Archimedes_30:
(Start: 9 @28177 has 106 MA's), (29, 27886), (30, 27868), (33, 27856), (37, 27805),

Gene: AustinPowers_42 Start: 29937, Stop: 30449, Start Num: 9
Candidate Starts for AustinPowers_42:
(Start: 9 @29937 has 106 MA's), (13, 30006), (15, 30045), (26, 30225), (29, 30294), (32, 30321), (40, 30420),

Gene: Beethoven_44 Start: 29923, Stop: 30435, Start Num: 9
Candidate Starts for Beethoven_44:
(Start: 9 @29923 has 106 MA's), (17, 30037), (19, 30076), (26, 30211), (29, 30280),

Gene: Bennie_42 Start: 28740, Stop: 29252, Start Num: 9
Candidate Starts for Bennie_42:
(Start: 9 @28740 has 106 MA's), (11, 28761), (19, 28893), (23, 28953), (26, 29028), (29, 29097), (30, 29115),

Gene: Benry_50 Start: 30452, Stop: 30991, Start Num: 9
Candidate Starts for Benry_50:
(Start: 9 @30452 has 106 MA's), (26, 30755), (27, 30758), (29, 30824), (37, 30905), (39, 30923),

Gene: BigMack_42 Start: 28834, Stop: 29346, Start Num: 9
Candidate Starts for BigMack_42:
(Start: 9 @28834 has 106 MA's), (19, 28987), (26, 29122), (29, 29191),

Gene: Bodacious_42 Start: 28801, Stop: 29313, Start Num: 9
Candidate Starts for Bodacious_42:
(Start: 9 @28801 has 106 MA's), (11, 28822), (15, 28909), (23, 29014), (26, 29089), (29, 29158), (30, 29176),

Gene: BrotherBLo_44 Start: 29955, Stop: 30467, Start Num: 9
Candidate Starts for BrotherBLo_44:
(Start: 9 @29955 has 106 MA's), (17, 30069), (19, 30108), (26, 30243), (29, 30312),

Gene: CallieOMalley_44 Start: 29981, Stop: 30493, Start Num: 9
Candidate Starts for CallieOMalley_44:

(Start: 9 @29981 has 106 MA's), (17, 30095), (23, 30194), (26, 30269), (28, 30284), (29, 30338),

Gene: Canowicakte_44 Start: 30016, Stop: 30528, Start Num: 9
Candidate Starts for Canowicakte_44:
(Start: 9 @30016 has 106 MA's), (17, 30130), (23, 30229), (26, 30304), (28, 30319), (29, 30373),

Gene: Carpal_44 Start: 29935, Stop: 30447, Start Num: 9
Candidate Starts for Carpal_44:
(Start: 9 @29935 has 106 MA's), (17, 30049), (19, 30088), (26, 30223), (29, 30292),

Gene: ChewChew_42 Start: 28932, Stop: 29444, Start Num: 9
Candidate Starts for ChewChew_42:
(Start: 9 @28932 has 106 MA's), (11, 28953), (15, 29040), (20, 29094), (23, 29145), (26, 29220), (29, 29289), (30, 29307),

Gene: Cholula_44 Start: 29981, Stop: 30493, Start Num: 9
Candidate Starts for Cholula_44:
(Start: 9 @29981 has 106 MA's), (17, 30095), (19, 30134), (26, 30269), (29, 30338),

Gene: Chridison_41 Start: 29870, Stop: 30382, Start Num: 9
Candidate Starts for Chridison_41:
(Start: 9 @29870 has 106 MA's), (13, 29939), (15, 29978), (26, 30158), (29, 30227), (40, 30353),

Gene: Christian_42 Start: 28789, Stop: 29301, Start Num: 9
Candidate Starts for Christian_42:
(Start: 9 @28789 has 106 MA's), (11, 28810), (15, 28897), (23, 29002), (26, 29077), (29, 29146), (30, 29164),

Gene: Cicada_50 Start: 31830, Stop: 32375, Start Num: 9
Candidate Starts for Cicada_50:
(Start: 9 @31830 has 106 MA's), (22, 32016), (24, 32064), (26, 32133), (29, 32202), (39, 32301), (41, 32334), (42, 32343),

Gene: CristinaYang_42 Start: 28928, Stop: 29440, Start Num: 9
Candidate Starts for CristinaYang_42:
(Start: 9 @28928 has 106 MA's), (11, 28949), (15, 29036), (20, 29090), (23, 29141), (26, 29216), (29, 29285), (30, 29303),

Gene: Daiboju_42 Start: 29951, Stop: 30463, Start Num: 9
Candidate Starts for Daiboju_42:
(Start: 9 @29951 has 106 MA's), (15, 30059), (17, 30065), (26, 30239), (29, 30308), (40, 30434),

Gene: Dino_45 Start: 30082, Stop: 30594, Start Num: 9
Candidate Starts for Dino_45:
(Start: 9 @30082 has 106 MA's), (19, 30235), (26, 30370), (29, 30439),

Gene: DrRobert_41 Start: 28569, Stop: 29081, Start Num: 9
Candidate Starts for DrRobert_41:
(Start: 9 @28569 has 106 MA's), (11, 28590), (15, 28677), (17, 28683), (23, 28782), (26, 28857), (29, 28926), (30, 28944),

Gene: DreamTeam_42 Start: 28898, Stop: 29410, Start Num: 9
Candidate Starts for DreamTeam_42:

(Start: 9 @28898 has 106 MA's), (11, 28919), (19, 29051), (23, 29111), (26, 29186), (29, 29255), (30, 29273),

Gene: EstebanJulior_43 Start: 29947, Stop: 30459, Start Num: 9
Candidate Starts for EstebanJulior_43:
(Start: 9 @29947 has 106 MA's), (11, 29968), (19, 30100), (23, 30160), (26, 30235), (29, 30304),

Gene: Eunoia_42 Start: 29939, Stop: 30451, Start Num: 9
Candidate Starts for Eunoia_42:
(Start: 9 @29939 has 106 MA's), (13, 30008), (15, 30047), (26, 30227), (29, 30296), (32, 30323), (40, 30422),

Gene: FireCastle_48 Start: 31729, Stop: 32274, Start Num: 9
Candidate Starts for FireCastle_48:
(1, 31546), (2, 31597), (4, 31612), (7, 31651), (Start: 9 @31729 has 106 MA's), (24, 31963), (25, 31981), (26, 32032), (29, 32101), (34, 32137), (39, 32200), (42, 32242),

Gene: Fluke_45 Start: 30198, Stop: 30710, Start Num: 9
Candidate Starts for Fluke_45:
(Start: 9 @30198 has 106 MA's), (17, 30312), (19, 30351), (26, 30486), (29, 30555),

Gene: Frizzle_31 Start: 28065, Stop: 27595, Start Num: 9
Candidate Starts for Frizzle_31:
(Start: 9 @28065 has 106 MA's), (18, 27924), (30, 27756), (32, 27747), (37, 27693),

Gene: Galactica_44 Start: 32161, Stop: 32637, Start Num: 9
Candidate Starts for Galactica_44:
(Start: 9 @32161 has 106 MA's), (14, 32254), (16, 32263),

Gene: Ghobes_30 Start: 28065, Stop: 27595, Start Num: 9
Candidate Starts for Ghobes_30:
(Start: 9 @28065 has 106 MA's), (18, 27924), (30, 27756), (32, 27747), (37, 27693),

Gene: Gisselle_42 Start: 28898, Stop: 29410, Start Num: 9
Candidate Starts for Gisselle_42:
(Start: 9 @28898 has 106 MA's), (11, 28919), (19, 29051), (23, 29111), (26, 29186), (29, 29255), (30, 29273),

Gene: Glenn_45 Start: 30189, Stop: 30701, Start Num: 9
Candidate Starts for Glenn_45:
(Start: 9 @30189 has 106 MA's), (19, 30342), (26, 30477), (29, 30546),

Gene: Goodman_49 Start: 31598, Stop: 32143, Start Num: 9
Candidate Starts for Goodman_49:
(Start: 9 @31598 has 106 MA's), (22, 31784), (24, 31832), (26, 31901), (29, 31970), (39, 32069), (41, 32102), (42, 32111),

Gene: GreenHearts_46 Start: 30865, Stop: 31377, Start Num: 9
Candidate Starts for GreenHearts_46:
(Start: 9 @30865 has 106 MA's), (15, 30973), (17, 30979), (23, 31078), (26, 31153), (29, 31222), (37, 31303), (39, 31321),

Gene: Greenhouse_46 Start: 30581, Stop: 31093, Start Num: 9

Candidate Starts for Greenhouse_46:
(Start: 9 @30581 has 106 MA's), (15, 30689), (17, 30695), (23, 30794), (26, 30869), (29, 30938), (37, 31019), (39, 31037),

Gene: HeadNerd_42 Start: 28739, Stop: 29251, Start Num: 9
Candidate Starts for HeadNerd_42:
(Start: 9 @28739 has 106 MA's), (11, 28760), (19, 28892), (26, 29027), (29, 29096),

Gene: Herb_42 Start: 29950, Stop: 30462, Start Num: 9
Candidate Starts for Herb_42:
(Start: 9 @29950 has 106 MA's), (15, 30058), (17, 30064), (26, 30238), (29, 30307), (40, 30433),

Gene: Hiyaa_46 Start: 33634, Stop: 34110, Start Num: 9
Candidate Starts for Hiyaa_46:
(Start: 9 @33634 has 106 MA's), (14, 33727), (16, 33736),

Gene: Htur_51 Start: 32095, Stop: 32640, Start Num: 9
Candidate Starts for Htur_51:
(4, 31981), (Start: 9 @32095 has 106 MA's), (21, 32275), (24, 32329), (26, 32398), (29, 32467), (37, 32548), (39, 32566), (42, 32608),

Gene: Huckleberry_42 Start: 28722, Stop: 29234, Start Num: 9
Candidate Starts for Huckleberry_42:
(Start: 9 @28722 has 106 MA's), (11, 28743), (19, 28875), (23, 28935), (26, 29010), (29, 29079), (30, 29097),

Gene: HunterDalle_42 Start: 29870, Stop: 30382, Start Num: 9
Candidate Starts for HunterDalle_42:
(Start: 9 @29870 has 106 MA's), (13, 29939), (15, 29978), (26, 30158), (29, 30227), (36, 30299), (40, 30353),

Gene: Huntingdon_44 Start: 30396, Stop: 30908, Start Num: 9
Candidate Starts for Huntingdon_44:
(Start: 9 @30396 has 106 MA's), (23, 30609), (26, 30684), (29, 30753), (30, 30771), (37, 30834), (39, 30852),

Gene: Immaculata_44 Start: 29981, Stop: 30493, Start Num: 9
Candidate Starts for Immaculata_44:
(Start: 9 @29981 has 106 MA's), (17, 30095), (19, 30134), (26, 30269), (29, 30338),

Gene: IndiRoo_50 Start: 30481, Stop: 31020, Start Num: 9
Candidate Starts for IndiRoo_50:
(Start: 9 @30481 has 106 MA's), (26, 30784), (27, 30787), (29, 30853), (37, 30934), (39, 30952), (42, 30994),

Gene: Jera_49 Start: 30464, Stop: 31009, Start Num: 9
Candidate Starts for Jera_49:
(Start: 9 @30464 has 106 MA's), (26, 30767), (29, 30836), (39, 30935), (42, 30977),

Gene: Joann_46 Start: 30656, Stop: 31168, Start Num: 9
Candidate Starts for Joann_46:
(Start: 9 @30656 has 106 MA's), (15, 30764), (17, 30770), (23, 30869), (26, 30944), (29, 31013), (37, 31094), (39, 31112),

Gene: Johann_49 Start: 31598, Stop: 32143, Start Num: 9
Candidate Starts for Johann_49:
(Start: 9 @31598 has 106 MA's), (22, 31784), (24, 31832), (26, 31901), (29, 31970), (39, 32069), (41, 32102), (42, 32111),

Gene: Jumboset_45 Start: 30097, Stop: 30609, Start Num: 9
Candidate Starts for Jumboset_45:
(Start: 9 @30097 has 106 MA's), (19, 30250), (26, 30385), (29, 30454),

Gene: Kalizoi_44 Start: 29922, Stop: 30434, Start Num: 9
Candidate Starts for Kalizoi_44:
(Start: 9 @29922 has 106 MA's), (17, 30036), (19, 30075), (26, 30210), (29, 30279),

Gene: Keanu_45 Start: 33308, Stop: 33784, Start Num: 9
Candidate Starts for Keanu_45:
(Start: 9 @33308 has 106 MA's), (14, 33401), (31, 33629), (35, 33644),

Gene: KingBob_42 Start: 29951, Stop: 30463, Start Num: 9
Candidate Starts for KingBob_42:
(Start: 9 @29951 has 106 MA's), (15, 30059), (17, 30065), (26, 30239), (29, 30308), (40, 30434),

Gene: Kittykat_44 Start: 29193, Stop: 29705, Start Num: 9
Candidate Starts for Kittykat_44:
(Start: 9 @29193 has 106 MA's), (11, 29214), (19, 29346), (23, 29406), (26, 29481), (29, 29550),

Gene: Korra_44 Start: 29934, Stop: 30446, Start Num: 9
Candidate Starts for Korra_44:
(Start: 9 @29934 has 106 MA's), (19, 30087), (26, 30222), (29, 30291),

Gene: Lakshmi_45 Start: 30544, Stop: 31056, Start Num: 9
Candidate Starts for Lakshmi_45:
(Start: 9 @30544 has 106 MA's), (15, 30652), (17, 30658), (23, 30757), (26, 30832), (29, 30901), (37, 30982), (39, 31000),

Gene: Lasagna_41 Start: 28567, Stop: 29079, Start Num: 9
Candidate Starts for Lasagna_41:
(Start: 9 @28567 has 106 MA's), (11, 28588), (15, 28675), (23, 28780), (26, 28855), (29, 28924), (30, 28942),

Gene: Lennox_42 Start: 28775, Stop: 29287, Start Num: 9
Candidate Starts for Lennox_42:
(Start: 9 @28775 has 106 MA's), (11, 28796), (15, 28883), (23, 28988), (26, 29063), (29, 29132), (30, 29150),

Gene: LilStuart_42 Start: 28916, Stop: 29428, Start Num: 9
Candidate Starts for LilStuart_42:
(Start: 9 @28916 has 106 MA's), (11, 28937), (15, 29024), (20, 29078), (23, 29129), (26, 29204), (29, 29273), (30, 29291),

Gene: Linayshia_48 Start: 32063, Stop: 32608, Start Num: 9
Candidate Starts for Linayshia_48:

(4, 31949), (Start: 9 @32063 has 106 MA's), (21, 32243), (24, 32297), (26, 32366), (29, 32435), (37, 32516), (39, 32534), (42, 32576),

Gene: Litotes_44 Start: 29969, Stop: 30481, Start Num: 9
Candidate Starts for Litotes_44:
(Start: 9 @29969 has 106 MA's), (23, 30182), (26, 30257), (28, 30272), (29, 30326),

Gene: Lucy_42 Start: 28913, Stop: 29425, Start Num: 9
Candidate Starts for Lucy_42:
(Start: 9 @28913 has 106 MA's), (11, 28934), (15, 29021), (23, 29126), (26, 29201), (29, 29270), (30, 29288),

Gene: Makoto_42 Start: 28786, Stop: 29298, Start Num: 9
Candidate Starts for Makoto_42:
(Start: 9 @28786 has 106 MA's), (11, 28807), (15, 28894), (17, 28900), (23, 28999), (26, 29074), (29, 29143), (30, 29161),

Gene: MamaPearl_43 Start: 29947, Stop: 30459, Start Num: 9
Candidate Starts for MamaPearl_43:
(Start: 9 @29947 has 106 MA's), (11, 29968), (19, 30100), (23, 30160), (26, 30235), (29, 30304),

Gene: Maria1952_41 Start: 29950, Stop: 30462, Start Num: 9
Candidate Starts for Maria1952_41:
(Start: 9 @29950 has 106 MA's), (15, 30058), (17, 30064), (26, 30238), (29, 30307), (40, 30433),

Gene: MeganNoll_44 Start: 30154, Stop: 30666, Start Num: 9
Candidate Starts for MeganNoll_44:
(Start: 9 @30154 has 106 MA's), (19, 30307), (26, 30442), (29, 30511),

Gene: Milani_47 Start: 31092, Stop: 31631, Start Num: 9
Candidate Starts for Milani_47:
(3, 30966), (5, 30978), (Start: 9 @31092 has 106 MA's), (24, 31326), (25, 31344), (26, 31395), (27, 31398), (29, 31464), (37, 31545), (39, 31563),

Gene: Misaeng_44 Start: 30521, Stop: 31033, Start Num: 9
Candidate Starts for Misaeng_44:
(Start: 9 @30521 has 106 MA's), (17, 30635), (23, 30734), (26, 30809), (29, 30878), (30, 30896), (37, 30959), (39, 30977),

Gene: Moki_42 Start: 28886, Stop: 29398, Start Num: 9
Candidate Starts for Moki_42:
(Start: 9 @28886 has 106 MA's), (11, 28907), (19, 29039), (23, 29099), (26, 29174), (29, 29243), (30, 29261),

Gene: MrGloopy_45 Start: 30083, Stop: 30595, Start Num: 9
Candidate Starts for MrGloopy_45:
(Start: 9 @30083 has 106 MA's), (26, 30371), (29, 30440),

Gene: Nancia_42 Start: 28801, Stop: 29313, Start Num: 9
Candidate Starts for Nancia_42:
(Start: 9 @28801 has 106 MA's), (11, 28822), (15, 28909), (20, 28963), (23, 29014), (26, 29089), (29, 29158), (30, 29176),

Gene: Nubia_45 Start: 30489, Stop: 31001, Start Num: 9
Candidate Starts for Nubia_45:
(Start: 9 @30489 has 106 MA's), (15, 30597), (17, 30603), (23, 30702), (26, 30777), (29, 30846), (37, 30927), (39, 30945),

Gene: OMalley_42 Start: 29939, Stop: 30451, Start Num: 9
Candidate Starts for OMalley_42:
(Start: 9 @29939 has 106 MA's), (13, 30008), (15, 30047), (26, 30227), (29, 30296), (32, 30323), (40, 30422),

Gene: Olympi_46 Start: 31117, Stop: 31662, Start Num: 9
Candidate Starts for Olympi_46:
(Start: 9 @31117 has 106 MA's), (26, 31420), (29, 31489), (39, 31588), (42, 31630),

Gene: OurGirlNessie_41 Start: 28530, Stop: 29042, Start Num: 9
Candidate Starts for OurGirlNessie_41:
(Start: 9 @28530 has 106 MA's), (11, 28551), (15, 28638), (23, 28743), (26, 28818), (29, 28887), (30, 28905),

Gene: Oxynfrius_45 Start: 30510, Stop: 31022, Start Num: 9
Candidate Starts for Oxynfrius_45:
(Start: 9 @30510 has 106 MA's), (15, 30618), (17, 30624), (23, 30723), (26, 30798), (29, 30867), (37, 30948), (39, 30966),

Gene: PartyCup_47 Start: 30195, Stop: 30707, Start Num: 9
Candidate Starts for PartyCup_47:
(Start: 9 @30195 has 106 MA's), (23, 30408), (26, 30483), (28, 30498), (29, 30552),

Gene: Parvaparticeps_21 Start: 12471, Stop: 13124, Start Num: 6
Candidate Starts for Parvaparticeps_21:
(6, 12471), (8, 12498), (Start: 9 @12573 has 106 MA's), (10, 12582), (11, 12594), (25, 12816), (29, 12936), (31, 12960), (37, 13017), (38, 13032), (39, 13035),

Gene: PermaG_50 Start: 31756, Stop: 32301, Start Num: 9
Candidate Starts for PermaG_50:
(Start: 9 @31756 has 106 MA's), (24, 31990), (26, 32059), (29, 32128), (37, 32209), (39, 32227), (42, 32269),

Gene: PinkFriday_42 Start: 29060, Stop: 29572, Start Num: 9
Candidate Starts for PinkFriday_42:
(Start: 9 @29060 has 106 MA's), (13, 29129), (15, 29168), (26, 29348), (29, 29417), (40, 29543),

Gene: PitaDog_43 Start: 28926, Stop: 29438, Start Num: 9
Candidate Starts for PitaDog_43:
(Start: 9 @28926 has 106 MA's), (11, 28947), (15, 29034), (17, 29040), (23, 29139), (26, 29214), (29, 29283), (30, 29301),

Gene: Potatoes_44 Start: 29981, Stop: 30493, Start Num: 9
Candidate Starts for Potatoes_44:
(Start: 9 @29981 has 106 MA's), (17, 30095), (19, 30134), (26, 30269), (29, 30338),

Gene: Preamble_43 Start: 29058, Stop: 29570, Start Num: 9
Candidate Starts for Preamble_43:

(Start: 9 @29058 has 106 MA's), (11, 29079), (19, 29211), (23, 29271), (26, 29346), (29, 29415), (30, 29433),

Gene: Pterodactyl_42 Start: 28767, Stop: 29279, Start Num: 9
Candidate Starts for Pterodactyl_42:
(Start: 9 @28767 has 106 MA's), (11, 28788), (15, 28875), (17, 28881), (23, 28980), (26, 29055), (29, 29124), (30, 29142),

Gene: Pumancara_42 Start: 28973, Stop: 29485, Start Num: 9
Candidate Starts for Pumancara_42:
(Start: 9 @28973 has 106 MA's), (13, 29042), (15, 29081), (26, 29261), (29, 29330), (40, 29456),

Gene: RAP15_45 Start: 30154, Stop: 30666, Start Num: 9
Candidate Starts for RAP15_45:
(Start: 9 @30154 has 106 MA's), (19, 30307), (26, 30442), (29, 30511),

Gene: Rasovi_51 Start: 32095, Stop: 32640, Start Num: 9
Candidate Starts for Rasovi_51:
(4, 31981), (Start: 9 @32095 has 106 MA's), (21, 32275), (24, 32329), (26, 32398), (29, 32467), (37, 32548), (39, 32566), (42, 32608),

Gene: RcigaStruga_44 Start: 30396, Stop: 30908, Start Num: 9
Candidate Starts for RcigaStruga_44:
(Start: 9 @30396 has 106 MA's), (23, 30609), (26, 30684), (29, 30753), (30, 30771), (37, 30834), (39, 30852),

Gene: Riovina_42 Start: 29939, Stop: 30451, Start Num: 9
Candidate Starts for Riovina_42:
(Start: 9 @29939 has 106 MA's), (13, 30008), (15, 30047), (26, 30227), (29, 30296), (32, 30323), (40, 30422),

Gene: Riverdale_45 Start: 30120, Stop: 30632, Start Num: 9
Candidate Starts for Riverdale_45:
(Start: 9 @30120 has 106 MA's), (17, 30234), (19, 30273), (26, 30408), (29, 30477),

Gene: Rozby_44 Start: 29911, Stop: 30423, Start Num: 9
Candidate Starts for Rozby_44:
(Start: 9 @29911 has 106 MA's), (19, 30064), (26, 30199), (29, 30268),

Gene: SBlackberry_47 Start: 31535, Stop: 32080, Start Num: 9
Candidate Starts for SBlackberry_47:
(Start: 9 @31535 has 106 MA's), (26, 31838), (29, 31907), (39, 32006), (42, 32048),

Gene: Sapo_29 Start: 28026, Stop: 27559, Start Num: 9
Candidate Starts for Sapo_29:
(Start: 9 @28026 has 106 MA's), (18, 27885), (30, 27717), (37, 27654),

Gene: Savage2526_45 Start: 30148, Stop: 30660, Start Num: 9
Candidate Starts for Savage2526_45:
(Start: 9 @30148 has 106 MA's), (19, 30301), (26, 30436), (29, 30505),

Gene: Scuttle_44 Start: 30109, Stop: 30621, Start Num: 9
Candidate Starts for Scuttle_44:

(Start: 9 @30109 has 106 MA's), (17, 30223), (19, 30262), (26, 30397), (29, 30466),

Gene: Sergei_42 Start: 29951, Stop: 30463, Start Num: 9
Candidate Starts for Sergei_42:
(Start: 9 @29951 has 106 MA's), (15, 30059), (17, 30065), (26, 30239), (29, 30308), (40, 30434),

Gene: Spocter_45 Start: 33664, Stop: 34140, Start Num: 9
Candidate Starts for Spocter_45:
(Start: 9 @33664 has 106 MA's), (14, 33757), (16, 33766),

Gene: Sucha_47 Start: 30068, Stop: 30607, Start Num: 9
Candidate Starts for Sucha_47:
(Start: 9 @30068 has 106 MA's), (26, 30371), (27, 30374), (29, 30440), (37, 30521), (39, 30539), (42, 30581),

Gene: Supakev_42 Start: 29940, Stop: 30452, Start Num: 9
Candidate Starts for Supakev_42:
(Start: 9 @29940 has 106 MA's), (13, 30009), (15, 30048), (26, 30228), (29, 30297), (32, 30324), (36, 30369), (40, 30423),

Gene: Suppi_44 Start: 30016, Stop: 30528, Start Num: 9
Candidate Starts for Suppi_44:
(Start: 9 @30016 has 106 MA's), (17, 30130), (23, 30229), (26, 30304), (28, 30319), (29, 30373),

Gene: TattModd_43 Start: 29768, Stop: 30280, Start Num: 9
Candidate Starts for TattModd_43:
(Start: 9 @29768 has 106 MA's), (17, 29882), (19, 29921), (26, 30056), (29, 30125),

Gene: Temper16_42 Start: 29951, Stop: 30463, Start Num: 9
Candidate Starts for Temper16_42:
(Start: 9 @29951 has 106 MA's), (15, 30059), (17, 30065), (26, 30239), (29, 30308), (40, 30434),

Gene: Theresita_47 Start: 29401, Stop: 29943, Start Num: 9
Candidate Starts for Theresita_47:
(Start: 9 @29401 has 106 MA's), (12, 29431), (26, 29710), (30, 29797), (39, 29878),

Gene: TurboVicky_49 Start: 31753, Stop: 32298, Start Num: 9
Candidate Starts for TurboVicky_49:
(Start: 9 @31753 has 106 MA's), (26, 32056), (29, 32125), (39, 32224), (42, 32266),

Gene: Typher_49 Start: 31311, Stop: 31856, Start Num: 9
Candidate Starts for Typher_49:
(Start: 9 @31311 has 106 MA's), (26, 31614), (29, 31683), (39, 31782), (42, 31824),

Gene: Urla_43 Start: 29942, Stop: 30454, Start Num: 9
Candidate Starts for Urla_43:
(Start: 9 @29942 has 106 MA's), (11, 29963), (19, 30095), (23, 30155), (26, 30230), (29, 30299), (30, 30317),

Gene: Vallejo_45 Start: 30123, Stop: 30635, Start Num: 9
Candidate Starts for Vallejo_45:
(Start: 9 @30123 has 106 MA's), (17, 30237), (19, 30276), (26, 30411), (29, 30480),

Gene: Vulture_42 Start: 29870, Stop: 30382, Start Num: 9
Candidate Starts for Vulture_42:
(Start: 9 @29870 has 106 MA's), (13, 29939), (15, 29978), (26, 30158), (29, 30227), (36, 30299), (40, 30353),

Gene: Wawa_44 Start: 29955, Stop: 30467, Start Num: 9
Candidate Starts for Wawa_44:
(Start: 9 @29955 has 106 MA's), (19, 30108), (26, 30243), (29, 30312),

Gene: Wayne_44 Start: 30062, Stop: 30574, Start Num: 9
Candidate Starts for Wayne_44:
(Start: 9 @30062 has 106 MA's), (17, 30176), (23, 30275), (26, 30350), (28, 30365), (29, 30419),

Gene: WonderBoy_41 Start: 28758, Stop: 29270, Start Num: 9
Candidate Starts for WonderBoy_41:
(Start: 9 @28758 has 106 MA's), (11, 28779), (15, 28866), (23, 28971), (26, 29046), (29, 29115), (30, 29133),

Gene: Zanella_48 Start: 31519, Stop: 32064, Start Num: 9
Candidate Starts for Zanella_48:
(Start: 9 @31519 has 106 MA's), (26, 31822), (29, 31891), (39, 31990), (42, 32032),

Gene: Zorro_45 Start: 30082, Stop: 30594, Start Num: 9
Candidate Starts for Zorro_45:
(Start: 9 @30082 has 106 MA's), (19, 30235), (26, 30370), (29, 30439),