Pham 345293


1: Salk_60 + 17
2: Natasha_61
3: RustyBoy_62
4: Onestar_58
5: LilMcDreamy_51
6: Hashim76_56
7: BirdsNest_56
8: Zenteno07_57
9: LittleMinkey_58
10: Phelemich_51 + 1
11: Nehemiah_52 + 3
12: Acadian_53 + 3
13: EastView9101_52 + 5
14: Baee_54 + 1
15: Serendipitous_52
16: KayaCho_46
17: 40BC_046 + 2
18: Jolie1_047
19: Minnow_49
20: ForDig_47
21: BananaFence_29 + 101
22: InigoMontoya_29 + 24
23: Gizmo_30 + 82
24: Caravan_26 + 3
25: Vortrix_34 + 1
26: Demodog_26 + 2
27: Nappy_29 + 1
28: Derek_29
29: Bubble_36 + 12
30: SheckWes_45 + 2
31: Horseradish_39 + 3
32: RSchmailzl_38 + 6
33: Blondies_40 + 3
34: PhrostedPhlake_68 + 1
35: GordTnk2_44
36: GordDuk1_44
37: GMA3_46
38: Ligma_83 + 3
39: BobRoss2024_52
40: Audell_60
41: Ezurina_60
42: Trogglehumper_90
43: DocB7_037

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 345293 Report

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

Pham number 345293 has 319 members, 60 are drafts.

Phages represented in each track:
• Track 1 : Salk_60, Egad_60, Raunak_60, BronxBay_60, Djungelskog_59, MrAaronian_60, Boog_59, Sloopyjoe_60, Linda_60, Michelle_60, Spain_61, DoctorPepper_59, HerbBucket_59, Shiba_59, Stayer_60, StarLord_60, Jeremy4pt0_59, ProfFrink_60
• Track 2 : Natasha_61
• Track 3 : RustyBoy_62
• Track 4 : Onestar_58
• Track 5 : LilMcDreamy_51
• Track 6 : Hashim76_56
• Track 7 : BirdsNest_56
• Track 8 : Zenteno07_57
• Track 9 : LittleMinkey_58
• Track 10 : Phelemich_51, Reprobate_52
• Track 11 : Nehemiah_52, Nangang_53, DigitDog_53, Shenyu_53
• Track 12 : Acadian_53, StinkyVeggy_53, KarasumaRum_53, Mysterious_51
• Track 13 : EastView9101_52, Suigeneris_54, Reccee_53, SirJeffery_52, Rita130_52, Donny_54
• Track 14 : Baee_54, Rich_53
• Track 15 : Serendipitous_52
• Track 16 : KayaCho_46
• Track 17 : 40BC_046, 39HC_046, Hosp_045
• Track 18 : Jolie1_047
• Track 19 : Minnow_49
• Track 20 : ForDig_47
• Track 21 : BananaFence_29, Kboogie_28, McGee_27, Delylah_29, BadAgartude_29, MoMoMixon_29, Asterius_29, Babyland_27, JayJay_31, Gabriel_28, IkeLoa_24, DeejaClivia_24, Grungle_21, Mangeria_31, Littleton_28, LordLeafolot_34, Shnickers_28, Jessibeth14_27, Jezreel_27, Domi_23, Blackbrain_26, Astraea_29, ET08_23, Koguma_24, Drazdys_28, Primadonna_23, FrayBell_34, Montpel_27, Cleatunium_24, LRRHood_25, Khaleesi_27, Lunareta_27, Sprinklers_28, Alice_23, Chargie21_27, Stubby_26, Fongie_28, Halldule_24, Basquiat_27, ScottMcG_28, Trinitium_27, QBert_26, Rabinovish_27, Bezza_22, BobaPhatt_28, EmmaElysia_26, PharkleMinkus_34, Jedediah_28, Phox_27, Shaqnato_24, Cactojaque_25, Sauce_29, StubbySaigey_27, NuevoMundo_31, Blackdragon_23, ErnieJ_29, ChickenPhender_27, Moby_22, Sebata_28, Puhon_33, Cane17_21, Maturis_28, Colt_21, Duckfeet_25, Moiqah_22, JulietS_23, Maguvora_34, RoMag_23, ChaylaJr_27, Chomp_28, GoldenSnow_33, Cali_28,

Flabslab_29, StephanieG_28, Jaygup_28, Spec_28, Darko_27, Yassified_25, HyRo_27, LookingGlass_31, Turret_26, Ablatia_27, Ading_28, Shelob_30, Fixie_24, Bonray_28, Labradorite_29, Tainan_33, Rocha_26, Issimir_28, Lukilu_21, Pinkcreek_20, LinStu_28, Pupusa_35, Essence_27, JPickles_26, McWolfish_27, Fludd_27, Belieber_24, Shifa_25, Dietrick_23, Lethe_27
• Track 22 : InigoMontoya_29, Momo_27, Ghost_28, Adlitam_28, GlutenPhree_29, Amataga_28, Patter_28, ArcherS7_27, Janiyra_28, Latch_28, Pivoine_28, Gamgam_28, Kamryn_28, Dessert_29, Capablanca_30, CindyLou_28, Atlantean_28, ValleyTerrace_28, Audrick_30, YoungMoneyMata_28, Ngannou_26, SilverDipper_29, Quasimodo_28, Jemmno_28, Phlegm_30
• Track 23 : Gizmo_30, Ava3_29, Pio_31, SoilZilla_25, Matsumoto_27, Izajani_29, Lee7_30, SVoro_27, Pleione_30, LifeSavor_29, CharlieB_28, NedWong_29, EmToTheThree_31, InterFolia_35, SrishMeg2525_27, PurduePete_27, Phusco_28, Bangla1971_27, Bread_29, SmallFry_28, Substance289_25, Shrimp_28, Morizzled23_27, Tyke_30, I3_30, SiwenD96_29, Yucca_28, Zalkecks_30, Iota_25, Norm_28, ParkTD_27, Daffodil_30, Burrough_28, Bowman_29, Zeenon_30, JustHall_27, Loanshark_28, EggyFarm_32, Spud_30, ZygoTaiga_28, Bxz1_28, Breeniome_28, Ronan_23, LolaVinca_31, FudgeTart_29, Delilah_28, BigCity_32, Nidhogg_29, Melpomini_27, DrPhinkDaddy_28, DTDevon_29, Willis_28, Teardrop_27, MikeLiesIn_28, DirtMonster_27, Blubba_22, FoxtrotP1_28, TinyTim_28, Naval22_30, YemiJoy2021_29, Erdmann_29, Mikro_26, ShiaLabeouf_28, EasyJones_27, Bipolarisk_27, Megamind_28, Grasshills_32, Guwapp_28, Salacia_30, OrediggerDelux_30, Tortoise16_27, Rizal_26, Maby2021_29, Rahel_28, Roots515_28, Pier_30, BackyardAgain_25, Catera_26, Wally_27, Ewok_28, Specks_33, Naija_28, Napoleon13_27
• Track 24 : Caravan_26, Bigswole_34, NoodleTree_27, BeanWater_24
• Track 25 : Vortrix_34, Tonenili_32
• Track 26 : Demodog_26, Concombre_27, JigglyPuff_28
• Track 27 : Nappy_29, Dandelion_32
• Track 28 : Derek_29
• Track 29 : Bubble_36, Axym_37, RedBaron_41, Starburst_39, Sopespian_37, SweatNTears_39, PsychoKiller_37, Agatha_37, RADical_39, Cozz_36, Eliott_38, Quasar_38, GoldHunter_37
• Track 30 : SheckWes_45, McDazzle_44, ElJefes_43
• Track 31 : Horseradish_39, Buttrmlkdreams_39, MScarn_40, Yummy_39
• Track 32 : RSchmailzl_38, MunkgeeRoachy_36, Burnsey_37, Typhonomachy_36, Nina_37, Socotra_38, Carsonalex_41
• Track 33 : Blondies_40, SketchMex_37, Biskit_39, Troje_39
• Track 34 : PhrostedPhlake_68, UmaThurman_64
• Track 35 : GordTnk2_44
• Track 36 : GordDuk1_44
• Track 37 : GMA3_46
• Track 38 : Ligma_83, Fresco_83, Axumite_83, Shatter_83
• Track 39 : BobRoss2024_52
• Track 40 : Audell_60
• Track 41 : Ezurina_60
• Track 42 : Trogglehumper_90
• Track 43 : DocB7_037

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 192 of the 259 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ablatia_27, Ading_28, Adlitam_28, Alice_23, Amataga_28, ArcherS7_27, Asterius_29, Astraea_29, Atlantean_28, Audrick_30, Ava3_29, Babyland_27, BackyardAgain_25, BadAgartude_29, BananaFence_29, Bangla1971_27, Basquiat_27, BeanWater_24, Belieber_24, Bezza_22, BigCity_32, Bigswole_34, Bipolarisk_27, Blackbrain_26, Blackdragon_23, Blubba_22, BobaPhatt_28, Bonray_28, Bowman_29, Bread_29, Breeniome_28, Burrough_28, Bxz1_28, Cactojaque_25, Cali_28, Cane17_21, Capablanca_30, Caravan_26, Catera_26, Chargie21_27, CharlieB_28, ChaylaJr_27, ChickenPhender_27, Chomp_28, CindyLou_28, Cleatunium_24, Colt_21, Concombre_27, DTDevon_29, Daffodil_30, Dandelion_32, Darko_27, DeejaClivia_24, Delilah_28, Delylah_29, Demodog_26, Derek_29, Dessert_29, Dietrick_23, DirtMonster_27, Domi_23, DrPhinkDaddy_28, Drazdys_28, Duckfeet_25, ET08_23, EasyJones_27, EggyFarm_32, EmToTheThree_31, EmmaElysia_26, Erdmann_29, ErnieJ_29, Essence_27, Ewok_28, Fixie_24, Flabslab_29, Fludd_27, Fongie_28, FoxtrotP1_28, FrayBell_34, FudgeTart_29, Gabriel_28, Gamgam_28, Ghost_28, Gizmo_30, GlutenPhree_29, GoldenSnow_33, Grasshills_32, Grungle_21, Guwapp_28, Halldule_24, HyRo_27, I3_30, IkeLoa_24, InigoMontoya_29, InterFolia_35, Iota_25, Issimir_28, Izajani_29, JPickles_26, Janiyra_28, JayJay_31, Jaygup_28, Jedediah_28, Jemmno_28, Jessibeth14_27, Jezreel_27, JigglyPuff_28, JulietS_23, JustHall_27, Kamryn_28, Kboogie_28, Khaleesi_27, Koguma_24, LRRHood_25, Labradorite_29, Latch_28, Lee7_30, Lethe_27, LifeSavor_29, LinStu_28, Littleton_28, Loanshark_28, LolaVinca_31, LookingGlass_31, LordLeafolot_34, Lukilu_21, Lunareta_27, Maby2021_29, Maguvora_34, Mangeria_31, Matsumoto_27, Maturis_28, McGee_27, McWolfish_27, Megamind_28, Melpomini_27, MikeLiesIn_28, Mikro_26, MoMoMixon_29, Moby_22, Moiqah_22, Momo_27, Montpel_27, Morizzled23_27, Naija_28, Napoleon13_27, Nappy_29, Naval22_30, NedWong_29, Ngannou_26, Nidhogg_29, NoodleTree_27, Norm_28, NuevoMundo_31, OrediggerDelux_30, ParkTD_27, Patter_28, PharkleMinkus_34, Phlegm_30, Phox_27, Phusco_28, Pier_30, Pinkcreek_20, Pio_31, Pivoine_28, Pleione_30, Primadonna_23, Puhon_33, Pupusa_35, PurduePete_27, QBert_26, Quasimodo_28, Rabinovish_27, Rahel_28, Rizal_26, RoMag_23, Rocha_26, Ronan_23, Roots515_28, SVoro_27, Salacia_30, Sauce_29, ScottMcG_28, Sebata_28, Shaqnato_24, Shelob_30, ShiaLabeouf_28, Shifa_25, Shnickers_28, Shrimp_28, SilverDipper_29, SiwenD96_29, SmallFry_28, SoilZilla_25, Spec_28, Specks_33, Sprinklers_28, Spud_30, SrishMeg2525_27, StephanieG_28, StubbySaigey_27, Stubby_26, Substance289_25, Tainan_33, Teardrop_27, TinyTim_28, Tonenili_32, Tortoise16_27, Trinitium_27, Turret_26, Tyke_30, ValleyTerrace_28, Vortrix_34, Wally_27, Willis_28, Yassified_25, YemiJoy2021_29, YoungMoneyMata_28, Yucca_28, Zalkecks_30, Zeenon_30, ZygoTaiga_28,

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

Genes that do not have the "Most Annotated" start:
• 39HC_046, 40BC_046, Acadian_53, Agatha_37, Audell_60, Axumite_83, Axym_37, Baee_54, BirdsNest_56, Biskit_39, Blondies_40, BobRoss2024_52, Boog_59, BronxBay_60, Bubble_36, Burnsey_37, Buttrmlkdreams_39, Carsonalex_41, Cozz_36, DigitDog_53, Djungelskog_59, DocB7_037, DoctorPepper_59, Donny_54,

EastView9101_52, Egad_60, ElJefes_43, Eliott_38, Ezurina_60, ForDig_47, Fresco_83, GMA3_46, GoldHunter_37, GordDuk1_44, GordTnk2_44, Hashim76_56, HerbBucket_59, Horseradish_39, Hosp_045, Jeremy4pt0_59, Jolie1_047, KarasumaRum_53, KayaCho_46, Ligma_83, LilMcDreamy_51, Linda_60, LittleMinkey_58, MScarn_40, McDazzle_44, Michelle_60, Minnow_49, MrAaronian_60, MunkgeeRoachy_36, Mysterious_51, Nangang_53, Natasha_61, Nehemiah_52, Nina_37, Onestar_58, Phelemich_51, PhrostedPhlake_68, ProfFrink_60, PsychoKiller_37, Quasar_38, RADical_39, RSchmailzl_38, Raunak_60, Reccee_53, RedBaron_41, Reprobate_52, Rich_53, Rita130_52, RustyBoy_62, Salk_60, Serendipitous_52, Shatter_83, SheckWes_45, Shenyu_53, Shiba_59, SirJeffery_52, SketchMex_37, Sloopyjoe_60, Socotra_38, Sopespian_37, Spain_61, StarLord_60, Starburst_39, Stayer_60, StinkyVeggy_53, Suigeneris_54, SweatNTears_39, Trogglehumper_90, Troje_39, Typhonomachy_36, UmaThurman_64, Yummy_39, Zenteno07_57,

Summary by start number:

Start 9:
• Found in 222 of 319 (69.6%) of genes in pham
• Manual Annotations of this start: 192 of 259
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ablatia_27 (C1), Ading_28 (C1), Adlitam_28 (C1), Alice_23 (C1), Amataga_28 (C1), ArcherS7_27 (C1), Asterius_29 (C1), Astraea_29 (C1), Atlantean_28 (C1), Audrick_30 (C1), Ava3_29 (C1), Babyland_27 (C1), BackyardAgain_25 (C1), BadAgartude_29 (C1), BananaFence_29 (C1), Bangla1971_27 (C1), Basquiat_27 (C1), BeanWater_24 (C1), Belieber_24 (C1), Bezza_22 (C1), BigCity_32 (C1), Bigswole_34 (C1), Bipolarisk_27 (C1), Blackbrain_26 (C1), Blackdragon_23 (C1), Blubba_22 (C1), BobaPhatt_28 (C1), Bonray_28 (C1), Bowman_29 (C1), Bread_29 (C1), Breeniome_28 (C1), Burrough_28 (C1), Bxz1_28 (C1), Cactojaque_25 (C1), Cali_28 (C1), Cane17_21 (C1), Capablanca_30 (C1), Caravan_26 (C1), Catera_26 (C1), Chargie21_27 (C1), CharlieB_28 (C1), ChaylaJr_27 (C1), ChickenPhender_27 (C1), Chomp_28 (C1), CindyLou_28 (C1), Cleatunium_24 (C1), Colt_21 (C1), Concombre_27 (C1), DTDevon_29 (C1), Daffodil_30 (C1), Dandelion_32 (C1), Darko_27 (C1), DeejaClivia_24 (C1), Delilah_28 (C1), Delylah_29 (C1), Demodog_26 (C1), Derek_29 (C1), Dessert_29 (C1), Dietrick_23 (C1), DirtMonster_27 (C1), Domi_23 (C1), DrPhinkDaddy_28 (C1), Drazdys_28 (C1), Duckfeet_25 (C1), ET08_23 (C1), EasyJones_27 (C1), EggyFarm_32 (C1), EmToTheThree_31 (C1), EmmaElysia_26 (C1), Erdmann_29 (C1), ErnieJ_29 (C1), Essence_27 (C1), Ewok_28 (C1), Fixie_24 (C1), Flabslab_29 (C1), Fludd_27 (C1), Fongie_28 (C1), FoxtrotP1_28 (C1), FrayBell_34 (C1), FudgeTart_29 (C1), Gabriel_28 (C1), Gamgam_28 (C1), Ghost_28 (C1), Gizmo_30 (C1), GlutenPhree_29 (C1), GoldenSnow_33 (C1), Grasshills_32 (C1), Grungle_21 (C1), Guwapp_28 (C1), Halldule_24 (C1), HyRo_27 (C1), I3_30 (C1), IkeLoa_24 (C1), InigoMontoya_29 (C1), InterFolia_35 (C1), Iota_25 (C1), Issimir_28 (C1), Izajani_29 (C1), JPickles_26 (C1), Janiyra_28 (C1), JayJay_31 (C1), Jaygup_28 (C1), Jedediah_28 (C1), Jemmno_28 (C1), Jessibeth14_27 (C1), Jezreel_27 (C1), JigglyPuff_28 (C1), JulietS_23 (C1), JustHall_27 (C1), Kamryn_28 (C1), Kboogie_28 (C1), Khaleesi_27 (C1), Koguma_24 (C1), LRRHood_25 (C1), Labradorite_29 (C1), Latch_28 (C1), Lee7_30 (C1), Lethe_27 (C1), LifeSavor_29 (C1), LinStu_28 (C1), Littleton_28 (C1), Loanshark_28 (C1), LolaVinca_31 (C1), LookingGlass_31 (C1), LordLeafolot_34 (C1), Lukilu_21 (C1), Lunareta_27 (C1), Maby2021_29 (C1), Maguvora_34 (C1), Mangeria_31 (C1), Matsumoto_27 (C1), Maturis_28 (C1), McGee_27 (C1), McWolfish_27 (C1), Megamind_28 (C1),

Melpomini_27 (C1), MikeLiesIn_28 (C1), Mikro_26 (C1), MoMoMixon_29 (C1), Moby_22 (C1), Moiqah_22 (C1), Momo_27 (C1), Montpel_27 (C1), Morizzled23_27 (C1), Naija_28 (C1), Napoleon13_27 (C1), Nappy_29 (C1), Naval22_30 (C1), NedWong_29 (C1), Ngannou_26 (C1), Nidhogg_29 (C1), NoodleTree_27 (C1), Norm_28 (C1), NuevoMundo_31 (C1), OrediggerDelux_30 (C1), ParkTD_27 (C1), Patter_28 (C1), PharkleMinkus_34 (C1), Phlegm_30 (C1), Phox_27 (C1), Phusco_28 (C1), Pier_30 (C1), Pinkcreek_20 (C1), Pio_31 (C1), Pivoine_28 (C1), Pleione_30 (C1), Primadonna_23 (C1), Puhon_33 (C1), Pupusa_35 (C1), PurduePete_27 (C1), QBert_26 (C1), Quasimodo_28 (C1), Rabinovish_27 (C1), Rahel_28 (C1), Rizal_26 (C1), RoMag_23 (C1), Rocha_26 (C1), Ronan_23 (C1), Roots515_28 (C1), SVoro_27 (C1), Salacia_30 (C1), Sauce_29 (C1), ScottMcG_28 (C1), Sebata_28 (C1), Shaqnato_24 (C1), Shelob_30 (C1), ShiaLabeouf_28 (C1), Shifa_25 (C1), Shnickers_28 (C1), Shrimp_28 (C1), SilverDipper_29 (C1), SiwenD96_29 (C1), SmallFry_28 (C1), SoilZilla_25 (C1), Spec_28 (C1), Specks_33 (C1), Sprinklers_28 (C1), Spud_30 (C1), SrishMeg2525_27 (C1), StephanieG_28 (C1), StubbySaigey_27 (C1), Stubby_26 (C1), Substance289_25 (C1), Tainan_33 (C1), Teardrop_27 (C1), TinyTim_28 (C1), Tonenili_32 (C1), Tortoise16_27 (C1), Trinitium_27 (C1), Turret_26 (C1), Tyke_30 (C1), ValleyTerrace_28 (C1), Vortrix_34 (C1), Wally_27 (C1), Willis_28 (C1), Yassified_25 (C1), YemiJoy2021_29 (C1), YoungMoneyMata_28 (C1), Yucca_28 (C1), Zalkecks_30 (C1), Zeenon_30 (C1), ZygoTaiga_28 (C1),

Start 11:
• Found in 13 of 319 (4.1%) of genes in pham
• Manual Annotations of this start: 2 of 259
• Called 46.2% of time when present
• Phage (with cluster) where this start called: Baee_54 (B5), DigitDog_53 (B5), Nangang_53 (B5), Nehemiah_52 (B5), Rich_53 (B5), Shenyu_53 (B5),

Start 12:
• Found in 118 of 319 (37.0%) of genes in pham
• Manual Annotations of this start: 20 of 259
• Called 24.6% of time when present
• Phage (with cluster) where this start called: Boog_59 (AW), BronxBay_60 (AW), Djungelskog_59 (AW), DocB7_037 (singleton), DoctorPepper_59 (AW), Egad_60 (AW), ElJefes_43 (CT), GMA3_46 (DF2), GordDuk1_44 (DF1), GordTnk2_44 (DF1), HerbBucket_59 (AW), Jeremy4pt0_59 (AW), Linda_60 (AW), McDazzle_44 (CT), Michelle_60 (AW), MrAaronian_60 (AW), Natasha_61 (AW), Onestar_58 (AW), ProfFrink_60 (AW), Raunak_60 (AW), RustyBoy_62 (AW), Salk_60 (AW), SheckWes_45 (CT), Shiba_59 (AW), Sloopyjoe_60 (AW), Spain_61 (AW), StarLord_60 (AW), Stayer_60 (AW), Trogglehumper_90 (singleton),

Start 13:
• Found in 5 of 319 (1.6%) of genes in pham
• Manual Annotations of this start: 4 of 259
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BirdsNest_56 (B13), Hashim76_56 (B13), LilMcDreamy_51 (B12), LittleMinkey_58 (B13), Zenteno07_57 (B13),

Start 14:
• Found in 26 of 319 (8.2%) of genes in pham
• Manual Annotations of this start: 11 of 259
• Called 73.1% of time when present

• Phage (with cluster) where this start called: 39HC_046 (B6), 40BC_046 (B6), Acadian_53 (B5), Donny_54 (B5), EastView9101_52 (B5), ForDig_47 (B6), Hosp_045 (B6), Jolie1_047 (B6), KarasumaRum_53 (B5), KayaCho_46 (B6), Mysterious_51 (B5), Phelemich_51 (B5), Reccee_53 (B5), Reprobate_52 (B5), Rita130_52 (B5), Serendipitous_52 (B5), SirJeffery_52 (B5), StinkyVeggy_53 (B5), Suigeneris_54 (B5),

Start 16:
• Found in 139 of 319 (43.6%) of genes in pham
• Manual Annotations of this start: 30 of 259
• Called 26.6% of time when present
• Phage (with cluster) where this start called: Agatha_37 (CT), Audell_60 (FR), Axumite_83 (DR), Axym_37 (CT), Biskit_39 (CT), Blondies_40 (CT), BobRoss2024_52 (DR), Bubble_36 (CT), Burnsey_37 (CT), Buttrmlkdreams_39 (CT), Carsonalex_41 (CT), Cozz_36 (CT), Eliott_38 (CT), Ezurina_60 (FR), Fresco_83 (DR), GoldHunter_37 (CT), Horseradish_39 (CT), Ligma_83 (DR), MScarn_40 (CT), MunkgeeRoachy_36 (CT), Nina_37 (CT), PhrostedPhlake_68 (CV), PsychoKiller_37 (CT), Quasar_38 (CT), RADical_39 (CT), RSchmailzl_38 (CT), RedBaron_41 (CT), Shatter_83 (DR), SketchMex_37 (CT), Socotra_38 (CT), Sopespian_37 (CT), Starburst_39 (CT), SweatNTears_39 (CT), Troje_39 (CT), Typhonomachy_36 (CT), UmaThurman_64 (CV), Yummy_39 (CT),

Start 20:
• Found in 9 of 319 (2.8%) of genes in pham
• No Manual Annotations of this start.
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Minnow_49 (B6),

Summary by clusters:

There are 13 clusters represented in this pham: singleton, DF1, FR, DF2, B5, B6, B12, B13, AW, C1, DR, CV, CT,

Info for manual annotations of cluster AW:
•Start number 12 was manually annotated 18 times for cluster AW.

Info for manual annotations of cluster B12:
•Start number 13 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:
•Start number 13 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B5:
•Start number 11 was manually annotated 2 times for cluster B5.
•Start number 14 was manually annotated 9 times for cluster B5.

Info for manual annotations of cluster B6:
•Start number 14 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster C1:
•Start number 9 was manually annotated 192 times for cluster C1.

Info for manual annotations of cluster CT:
•Start number 12 was manually annotated 1 time for cluster CT.

•Start number 16 was manually annotated 23 times for cluster CT.

Info for manual annotations of cluster CV:
•Start number 16 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster DR:
•Start number 16 was manually annotated 4 times for cluster DR.

Info for manual annotations of cluster FR:
•Start number 16 was manually annotated 1 time for cluster FR.

Gene Information:

Gene: 39HC_046 Start: 45589, Stop: 45425, Start Num: 14
Candidate Starts for 39HC_046:
(Start: 14 @45589 has 11 MA's), (19, 45565), (20, 45550), (26, 45502), (34, 45457),

Gene: 40BC_046 Start: 45589, Stop: 45425, Start Num: 14
Candidate Starts for 40BC_046:
(Start: 14 @45589 has 11 MA's), (19, 45565), (20, 45550), (26, 45502), (34, 45457),

Gene: Ablatia_27 Start: 8347, Stop: 8547, Start Num: 9
Candidate Starts for Ablatia_27:
(Start: 9 @8347 has 192 MA's), (Start: 16 @8383 has 30 MA's), (31, 8485), (34, 8509),

Gene: Acadian_53 Start: 48105, Stop: 47941, Start Num: 14
Candidate Starts for Acadian_53:
(Start: 11 @48117 has 2 MA's), (Start: 14 @48105 has 11 MA's), (29, 48009), (34, 47973),

Gene: Ading_28 Start: 8607, Stop: 8807, Start Num: 9
Candidate Starts for Ading_28:
(Start: 9 @8607 has 192 MA's), (Start: 16 @8643 has 30 MA's), (31, 8745), (34, 8769),

Gene: Adlitam_28 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for Adlitam_28:
(Start: 9 @8624 has 192 MA's), (31, 8762), (34, 8786),

Gene: Agatha_37 Start: 27161, Stop: 27003, Start Num: 16
Candidate Starts for Agatha_37:
(Start: 16 @27161 has 30 MA's), (19, 27143), (24, 27101), (34, 27035), (38, 27020), (39, 27017),

Gene: Alice_23 Start: 7705, Stop: 7905, Start Num: 9
Candidate Starts for Alice_23:
(Start: 9 @7705 has 192 MA's), (Start: 16 @7741 has 30 MA's), (31, 7843), (34, 7867),

Gene: Amataga_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Amataga_28:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: ArcherS7_27 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for ArcherS7_27:
(Start: 9 @8624 has 192 MA's), (31, 8762), (34, 8786),

Gene: Asterius_29 Start: 8896, Stop: 9096, Start Num: 9
Candidate Starts for Asterius_29:
(Start: 9 @8896 has 192 MA's), (Start: 16 @8932 has 30 MA's), (31, 9034), (34, 9058),

Gene: Astraea_29 Start: 8801, Stop: 9001, Start Num: 9
Candidate Starts for Astraea_29:
(Start: 9 @8801 has 192 MA's), (Start: 16 @8837 has 30 MA's), (31, 8939), (34, 8963),

Gene: Atlantean_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Atlantean_28:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Audell_60 Start: 38775, Stop: 38617, Start Num: 16
Candidate Starts for Audell_60:
(8, 38829), (Start: 16 @38775 has 30 MA's), (40, 38628),

Gene: Audrick_30 Start: 8607, Stop: 8807, Start Num: 9
Candidate Starts for Audrick_30:
(Start: 9 @8607 has 192 MA's), (31, 8745), (34, 8769),

Gene: Ava3_29 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Ava3_29:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Axumite_83 Start: 60379, Stop: 60224, Start Num: 16
Candidate Starts for Axumite_83:
(4, 60847), (Start: 16 @60379 has 30 MA's), (30, 60286), (36, 60247), (38, 60241), (39, 60238),

Gene: Axym_37 Start: 27139, Stop: 26981, Start Num: 16
Candidate Starts for Axym_37:
(Start: 16 @27139 has 30 MA's), (19, 27121), (24, 27079), (34, 27013), (38, 26998), (39, 26995),

Gene: Babyland_27 Start: 8069, Stop: 8269, Start Num: 9
Candidate Starts for Babyland_27:
(Start: 9 @8069 has 192 MA's), (Start: 16 @8105 has 30 MA's), (31, 8207), (34, 8231),

Gene: BackyardAgain_25 Start: 8053, Stop: 8253, Start Num: 9
Candidate Starts for BackyardAgain_25:
(Start: 9 @8053 has 192 MA's), (Start: 12 @8074 has 20 MA's), (31, 8191), (34, 8215),

Gene: BadAgartude_29 Start: 9263, Stop: 9463, Start Num: 9
Candidate Starts for BadAgartude_29:
(Start: 9 @9263 has 192 MA's), (Start: 16 @9299 has 30 MA's), (31, 9401), (34, 9425),

Gene: Baee_54 Start: 49393, Stop: 49217, Start Num: 11
Candidate Starts for Baee_54:
(Start: 11 @49393 has 2 MA's), (Start: 14 @49381 has 11 MA's), (24, 49315), (29, 49285), (34, 49249),

Gene: BananaFence_29 Start: 9060, Stop: 9260, Start Num: 9

Candidate Starts for BananaFence_29:
(Start: 9 @9060 has 192 MA's), (Start: 16 @9096 has 30 MA's), (31, 9198), (34, 9222),

Gene: Bangla1971_27 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for Bangla1971_27:
(Start: 9 @8624 has 192 MA's), (Start: 12 @8645 has 20 MA's), (31, 8762), (34, 8786),

Gene: Basquiat_27 Start: 8050, Stop: 8250, Start Num: 9
Candidate Starts for Basquiat_27:
(Start: 9 @8050 has 192 MA's), (Start: 16 @8086 has 30 MA's), (31, 8188), (34, 8212),

Gene: BeanWater_24 Start: 9017, Stop: 9217, Start Num: 9
Candidate Starts for BeanWater_24:
(Start: 9 @9017 has 192 MA's), (31, 9155), (34, 9179),

Gene: Belieber_24 Start: 7817, Stop: 8017, Start Num: 9
Candidate Starts for Belieber_24:
(Start: 9 @7817 has 192 MA's), (Start: 16 @7853 has 30 MA's), (31, 7955), (34, 7979),

Gene: Bezza_22 Start: 7696, Stop: 7896, Start Num: 9
Candidate Starts for Bezza_22:
(Start: 9 @7696 has 192 MA's), (Start: 16 @7732 has 30 MA's), (31, 7834), (34, 7858),

Gene: BigCity_32 Start: 10153, Stop: 10353, Start Num: 9
Candidate Starts for BigCity_32:
(Start: 9 @10153 has 192 MA's), (Start: 12 @10174 has 20 MA's), (31, 10291), (34, 10315),

Gene: Bigswole_34 Start: 10967, Stop: 11167, Start Num: 9
Candidate Starts for Bigswole_34:
(Start: 9 @10967 has 192 MA's), (31, 11105), (34, 11129),

Gene: Bipolarisk_27 Start: 8890, Stop: 9090, Start Num: 9
Candidate Starts for Bipolarisk_27:
(Start: 9 @8890 has 192 MA's), (Start: 12 @8911 has 20 MA's), (31, 9028), (34, 9052),

Gene: BirdsNest_56 Start: 47002, Stop: 46829, Start Num: 13
Candidate Starts for BirdsNest_56:
(6, 47173), (Start: 13 @47002 has 4 MA's), (19, 46978), (31, 46894), (34, 46870), (35, 46864),

Gene: Biskit_39 Start: 27114, Stop: 26956, Start Num: 16
Candidate Starts for Biskit_39:
(Start: 16 @27114 has 30 MA's), (19, 27096), (27, 27030), (29, 27024), (38, 26973), (39, 26970),

Gene: Blackbrain_26 Start: 7866, Stop: 8066, Start Num: 9
Candidate Starts for Blackbrain_26:
(Start: 9 @7866 has 192 MA's), (Start: 16 @7902 has 30 MA's), (31, 8004), (34, 8028),

Gene: Blackdragon_23 Start: 7664, Stop: 7864, Start Num: 9
Candidate Starts for Blackdragon_23:
(Start: 9 @7664 has 192 MA's), (Start: 16 @7700 has 30 MA's), (31, 7802), (34, 7826),

Gene: Blondies_40 Start: 27432, Stop: 27274, Start Num: 16
Candidate Starts for Blondies_40:

(Start: 16 @27432 has 30 MA's), (19, 27414), (27, 27348), (29, 27342), (38, 27291), (39, 27288),

Gene: Blubba_22 Start: 7354, Stop: 7554, Start Num: 9
Candidate Starts for Blubba_22:
(Start: 9 @7354 has 192 MA's), (Start: 12 @7375 has 20 MA's), (31, 7492), (34, 7516),

Gene: BobRoss2024_52 Start: 46394, Stop: 46236, Start Num: 16
Candidate Starts for BobRoss2024_52:
(15, 46397), (Start: 16 @46394 has 30 MA's), (38, 46253),

Gene: BobaPhatt_28 Start: 8061, Stop: 8261, Start Num: 9
Candidate Starts for BobaPhatt_28:
(Start: 9 @8061 has 192 MA's), (Start: 16 @8097 has 30 MA's), (31, 8199), (34, 8223),

Gene: Bonray_28 Start: 9164, Stop: 9364, Start Num: 9
Candidate Starts for Bonray_28:
(Start: 9 @9164 has 192 MA's), (Start: 16 @9200 has 30 MA's), (31, 9302), (34, 9326),

Gene: Boog_59 Start: 40730, Stop: 40891, Start Num: 12
Candidate Starts for Boog_59:
(Start: 12 @40730 has 20 MA's), (25, 40802), (28, 40826), (29, 40829), (30, 40832), (31, 40841),

Gene: Bowman_29 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Bowman_29:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Bread_29 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Bread_29:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Breeniome_28 Start: 8047, Stop: 8247, Start Num: 9
Candidate Starts for Breeniome_28:
(Start: 9 @8047 has 192 MA's), (Start: 12 @8068 has 20 MA's), (31, 8185), (34, 8209),

Gene: BronxBay_60 Start: 40986, Stop: 41147, Start Num: 12
Candidate Starts for BronxBay_60:
(Start: 12 @40986 has 20 MA's), (25, 41058), (28, 41082), (29, 41085), (30, 41088), (31, 41097),

Gene: Bubble_36 Start: 26748, Stop: 26590, Start Num: 16
Candidate Starts for Bubble_36:
(Start: 16 @26748 has 30 MA's), (19, 26730), (24, 26688), (34, 26622), (38, 26607), (39, 26604),

Gene: Burnsey_37 Start: 27152, Stop: 26994, Start Num: 16
Candidate Starts for Burnsey_37:
(Start: 16 @27152 has 30 MA's), (19, 27134), (24, 27092), (38, 27011), (39, 27008),

Gene: Burrough_28 Start: 8890, Stop: 9090, Start Num: 9
Candidate Starts for Burrough_28:
(Start: 9 @8890 has 192 MA's), (Start: 12 @8911 has 20 MA's), (31, 9028), (34, 9052),

Gene: Buttrmlkdreams_39 Start: 27438, Stop: 27280, Start Num: 16
Candidate Starts for Buttrmlkdreams_39:
(Start: 16 @27438 has 30 MA's), (19, 27420), (26, 27357), (39, 27294),

Gene: Bxz1_28 Start: 9633, Stop: 9833, Start Num: 9
Candidate Starts for Bxz1_28:
(Start: 9 @9633 has 192 MA's), (Start: 12 @9654 has 20 MA's), (31, 9771), (34, 9795),

Gene: Cactojaque_25 Start: 7755, Stop: 7955, Start Num: 9
Candidate Starts for Cactojaque_25:
(Start: 9 @7755 has 192 MA's), (Start: 16 @7791 has 30 MA's), (31, 7893), (34, 7917),

Gene: Cali_28 Start: 10197, Stop: 10397, Start Num: 9
Candidate Starts for Cali_28:
(Start: 9 @10197 has 192 MA's), (Start: 16 @10233 has 30 MA's), (31, 10335), (34, 10359),

Gene: Cane17_21 Start: 7226, Stop: 7426, Start Num: 9
Candidate Starts for Cane17_21:
(Start: 9 @7226 has 192 MA's), (Start: 16 @7262 has 30 MA's), (31, 7364), (34, 7388),

Gene: Capablanca_30 Start: 9753, Stop: 9953, Start Num: 9
Candidate Starts for Capablanca_30:
(Start: 9 @9753 has 192 MA's), (31, 9891), (34, 9915),

Gene: Caravan_26 Start: 8443, Stop: 8643, Start Num: 9
Candidate Starts for Caravan_26:
(Start: 9 @8443 has 192 MA's), (31, 8581), (34, 8605),

Gene: Carsonalex_41 Start: 27189, Stop: 27031, Start Num: 16
Candidate Starts for Carsonalex_41:
(Start: 16 @27189 has 30 MA's), (19, 27171), (24, 27129), (38, 27048), (39, 27045),

Gene: Catera_26 Start: 8051, Stop: 8251, Start Num: 9
Candidate Starts for Catera_26:
(Start: 9 @8051 has 192 MA's), (Start: 12 @8072 has 20 MA's), (31, 8189), (34, 8213),

Gene: Chargie21_27 Start: 8050, Stop: 8250, Start Num: 9
Candidate Starts for Chargie21_27:
(Start: 9 @8050 has 192 MA's), (Start: 16 @8086 has 30 MA's), (31, 8188), (34, 8212),

Gene: CharlieB_28 Start: 8204, Stop: 8404, Start Num: 9
Candidate Starts for CharlieB_28:
(Start: 9 @8204 has 192 MA's), (Start: 12 @8225 has 20 MA's), (31, 8342), (34, 8366),

Gene: ChaylaJr_27 Start: 8137, Stop: 8337, Start Num: 9
Candidate Starts for ChaylaJr_27:
(Start: 9 @8137 has 192 MA's), (Start: 16 @8173 has 30 MA's), (31, 8275), (34, 8299),

Gene: ChickenPhender_27 Start: 8095, Stop: 8295, Start Num: 9
Candidate Starts for ChickenPhender_27:
(Start: 9 @8095 has 192 MA's), (Start: 16 @8131 has 30 MA's), (31, 8233), (34, 8257),

Gene: Chomp_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Chomp_28:
(Start: 9 @8628 has 192 MA's), (Start: 16 @8664 has 30 MA's), (31, 8766), (34, 8790),

Gene: CindyLou_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for CindyLou_28:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Cleatunium_24 Start: 8326, Stop: 8526, Start Num: 9
Candidate Starts for Cleatunium_24:
(Start: 9 @8326 has 192 MA's), (Start: 16 @8362 has 30 MA's), (31, 8464), (34, 8488),

Gene: Colt_21 Start: 7232, Stop: 7432, Start Num: 9
Candidate Starts for Colt_21:
(Start: 9 @7232 has 192 MA's), (Start: 16 @7268 has 30 MA's), (31, 7370), (34, 7394),

Gene: Concombre_27 Start: 9399, Stop: 9599, Start Num: 9
Candidate Starts for Concombre_27:
(Start: 9 @9399 has 192 MA's), (Start: 12 @9420 has 20 MA's), (31, 9537), (34, 9561),

Gene: Cozz_36 Start: 26749, Stop: 26591, Start Num: 16
Candidate Starts for Cozz_36:
(Start: 16 @26749 has 30 MA's), (19, 26731), (24, 26689), (34, 26623), (38, 26608), (39, 26605),

Gene: DTDevon_29 Start: 9792, Stop: 9992, Start Num: 9
Candidate Starts for DTDevon_29:
(Start: 9 @9792 has 192 MA's), (Start: 12 @9813 has 20 MA's), (31, 9930), (34, 9954),

Gene: Daffodil_30 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Daffodil_30:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Dandelion_32 Start: 10487, Stop: 10687, Start Num: 9
Candidate Starts for Dandelion_32:
(Start: 9 @10487 has 192 MA's), (Start: 12 @10508 has 20 MA's), (31, 10625), (34, 10649),

Gene: Darko_27 Start: 9029, Stop: 9229, Start Num: 9
Candidate Starts for Darko_27:
(Start: 9 @9029 has 192 MA's), (Start: 16 @9065 has 30 MA's), (31, 9167), (34, 9191),

Gene: DeejaClivia_24 Start: 7714, Stop: 7914, Start Num: 9
Candidate Starts for DeejaClivia_24:
(Start: 9 @7714 has 192 MA's), (Start: 16 @7750 has 30 MA's), (31, 7852), (34, 7876),

Gene: Delilah_28 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Delilah_28:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Delylah_29 Start: 8956, Stop: 9156, Start Num: 9
Candidate Starts for Delylah_29:
(Start: 9 @8956 has 192 MA's), (Start: 16 @8992 has 30 MA's), (31, 9094), (34, 9118),

Gene: Demodog_26 Start: 9399, Stop: 9599, Start Num: 9
Candidate Starts for Demodog_26:
(Start: 9 @9399 has 192 MA's), (Start: 12 @9420 has 20 MA's), (31, 9537), (34, 9561),

Gene: Derek_29 Start: 8585, Stop: 8785, Start Num: 9

Candidate Starts for Derek_29:
(Start: 9 @8585 has 192 MA's), (Start: 12 @8606 has 20 MA's), (34, 8747),

Gene: Dessert_29 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Dessert_29:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Dietrick_23 Start: 7823, Stop: 8023, Start Num: 9
Candidate Starts for Dietrick_23:
(Start: 9 @7823 has 192 MA's), (Start: 16 @7859 has 30 MA's), (31, 7961), (34, 7985),

Gene: DigitDog_53 Start: 48113, Stop: 47937, Start Num: 11
Candidate Starts for DigitDog_53:
(Start: 11 @48113 has 2 MA's), (Start: 14 @48101 has 11 MA's), (29, 48005), (34, 47969),

Gene: DirtMonster_27 Start: 9717, Stop: 9917, Start Num: 9
Candidate Starts for DirtMonster_27:
(Start: 9 @9717 has 192 MA's), (Start: 12 @9738 has 20 MA's), (31, 9855), (34, 9879),

Gene: Djungelskog_59 Start: 40985, Stop: 41146, Start Num: 12
Candidate Starts for Djungelskog_59:
(Start: 12 @40985 has 20 MA's), (25, 41057), (28, 41081), (29, 41084), (30, 41087), (31, 41096),

Gene: DocB7_037 Start: 37679, Stop: 37524, Start Num: 12
Candidate Starts for DocB7_037:
(Start: 12 @37679 has 20 MA's), (17, 37661), (31, 37574),

Gene: DoctorPepper_59 Start: 40690, Stop: 40851, Start Num: 12
Candidate Starts for DoctorPepper_59:
(Start: 12 @40690 has 20 MA's), (25, 40762), (28, 40786), (29, 40789), (30, 40792), (31, 40801),

Gene: Domi_23 Start: 8448, Stop: 8648, Start Num: 9
Candidate Starts for Domi_23:
(Start: 9 @8448 has 192 MA's), (Start: 16 @8484 has 30 MA's), (31, 8586), (34, 8610),

Gene: Donny_54 Start: 48395, Stop: 48231, Start Num: 14
Candidate Starts for Donny_54:
(Start: 14 @48395 has 11 MA's), (29, 48299), (34, 48263),

Gene: DrPhinkDaddy_28 Start: 9170, Stop: 9370, Start Num: 9
Candidate Starts for DrPhinkDaddy_28:
(Start: 9 @9170 has 192 MA's), (Start: 12 @9191 has 20 MA's), (31, 9308), (34, 9332),

Gene: Drazdys_28 Start: 8958, Stop: 9158, Start Num: 9
Candidate Starts for Drazdys_28:
(Start: 9 @8958 has 192 MA's), (Start: 16 @8994 has 30 MA's), (31, 9096), (34, 9120),

Gene: Duckfeet_25 Start: 8367, Stop: 8567, Start Num: 9
Candidate Starts for Duckfeet_25:
(Start: 9 @8367 has 192 MA's), (Start: 16 @8403 has 30 MA's), (31, 8505), (34, 8529),

Gene: ET08_23 Start: 8632, Stop: 8832, Start Num: 9
Candidate Starts for ET08_23:

(Start: 9 @8632 has 192 MA's), (Start: 16 @8668 has 30 MA's), (31, 8770), (34, 8794),

Gene: EastView9101_52 Start: 48042, Stop: 47878, Start Num: 14
Candidate Starts for EastView9101_52:
(Start: 14 @48042 has 11 MA's), (29, 47946), (34, 47910),

Gene: EasyJones_27 Start: 7797, Stop: 7997, Start Num: 9
Candidate Starts for EasyJones_27:
(Start: 9 @7797 has 192 MA's), (Start: 12 @7818 has 20 MA's), (31, 7935), (34, 7959),

Gene: Egad_60 Start: 40987, Stop: 41148, Start Num: 12
Candidate Starts for Egad_60:
(Start: 12 @40987 has 20 MA's), (25, 41059), (28, 41083), (29, 41086), (30, 41089), (31, 41098),

Gene: EggyFarm_32 Start: 10153, Stop: 10353, Start Num: 9
Candidate Starts for EggyFarm_32:
(Start: 9 @10153 has 192 MA's), (Start: 12 @10174 has 20 MA's), (31, 10291), (34, 10315),

Gene: ElJefes_43 Start: 30713, Stop: 30540, Start Num: 12
Candidate Starts for ElJefes_43:
(Start: 12 @30713 has 20 MA's), (21, 30662), (25, 30632), (30, 30602), (31, 30593), (32, 30590),

Gene: Eliott_38 Start: 27160, Stop: 27002, Start Num: 16
Candidate Starts for Eliott_38:
(Start: 16 @27160 has 30 MA's), (19, 27142), (24, 27100), (34, 27034), (38, 27019), (39, 27016),

Gene: EmToTheThree_31 Start: 10587, Stop: 10787, Start Num: 9
Candidate Starts for EmToTheThree_31:
(Start: 9 @10587 has 192 MA's), (Start: 12 @10608 has 20 MA's), (31, 10725), (34, 10749),

Gene: EmmaElysia_26 Start: 7815, Stop: 8015, Start Num: 9
Candidate Starts for EmmaElysia_26:
(Start: 9 @7815 has 192 MA's), (Start: 16 @7851 has 30 MA's), (31, 7953), (34, 7977),

Gene: Erdmann_29 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Erdmann_29:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: ErnieJ_29 Start: 8996, Stop: 9196, Start Num: 9
Candidate Starts for ErnieJ_29:
(Start: 9 @8996 has 192 MA's), (Start: 16 @9032 has 30 MA's), (31, 9134), (34, 9158),

Gene: Essence_27 Start: 8350, Stop: 8550, Start Num: 9
Candidate Starts for Essence_27:
(Start: 9 @8350 has 192 MA's), (Start: 16 @8386 has 30 MA's), (31, 8488), (34, 8512),

Gene: Ewok_28 Start: 9176, Stop: 9376, Start Num: 9
Candidate Starts for Ewok_28:
(Start: 9 @9176 has 192 MA's), (Start: 12 @9197 has 20 MA's), (31, 9314), (34, 9338),

Gene: Ezurina_60 Start: 36586, Stop: 36434, Start Num: 16
Candidate Starts for Ezurina_60:
(8, 36637), (Start: 16 @36586 has 30 MA's), (27, 36508), (40, 36445),

Gene: Fixie_24 Start: 7798, Stop: 7998, Start Num: 9
Candidate Starts for Fixie_24:
(Start: 9 @7798 has 192 MA's), (Start: 16 @7834 has 30 MA's), (31, 7936), (34, 7960),

Gene: Flabslab_29 Start: 9106, Stop: 9306, Start Num: 9
Candidate Starts for Flabslab_29:
(Start: 9 @9106 has 192 MA's), (Start: 16 @9142 has 30 MA's), (31, 9244), (34, 9268),

Gene: Fludd_27 Start: 8051, Stop: 8251, Start Num: 9
Candidate Starts for Fludd_27:
(Start: 9 @8051 has 192 MA's), (Start: 16 @8087 has 30 MA's), (31, 8189), (34, 8213),

Gene: Fongie_28 Start: 9708, Stop: 9908, Start Num: 9
Candidate Starts for Fongie_28:
(Start: 9 @9708 has 192 MA's), (Start: 16 @9744 has 30 MA's), (31, 9846), (34, 9870),

Gene: ForDig_47 Start: 45828, Stop: 45664, Start Num: 14
Candidate Starts for ForDig_47:
(Start: 14 @45828 has 11 MA's), (19, 45804), (20, 45789), (26, 45741), (34, 45696),

Gene: FoxtrotP1_28 Start: 9501, Stop: 9701, Start Num: 9
Candidate Starts for FoxtrotP1_28:
(Start: 9 @9501 has 192 MA's), (Start: 12 @9522 has 20 MA's), (31, 9639), (34, 9663),

Gene: FrayBell_34 Start: 10744, Stop: 10944, Start Num: 9
Candidate Starts for FrayBell_34:
(Start: 9 @10744 has 192 MA's), (Start: 16 @10780 has 30 MA's), (31, 10882), (34, 10906),

Gene: Fresco_83 Start: 60385, Stop: 60230, Start Num: 16
Candidate Starts for Fresco_83:
(4, 60853), (Start: 16 @60385 has 30 MA's), (30, 60292), (36, 60253), (38, 60247), (39, 60244),

Gene: FudgeTart_29 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for FudgeTart_29:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: GMA3_46 Start: 44762, Stop: 44610, Start Num: 12
Candidate Starts for GMA3_46:
(Start: 12 @44762 has 20 MA's),

Gene: Gabriel_28 Start: 8047, Stop: 8247, Start Num: 9
Candidate Starts for Gabriel_28:
(Start: 9 @8047 has 192 MA's), (Start: 16 @8083 has 30 MA's), (31, 8185), (34, 8209),

Gene: Gamgam_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Gamgam_28:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Ghost_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Ghost_28:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Gizmo_30 Start: 9175, Stop: 9375, Start Num: 9
Candidate Starts for Gizmo_30:
(Start: 9 @9175 has 192 MA's), (Start: 12 @9196 has 20 MA's), (31, 9313), (34, 9337),

Gene: GlutenPhree_29 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for GlutenPhree_29:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: GoldHunter_37 Start: 27161, Stop: 27003, Start Num: 16
Candidate Starts for GoldHunter_37:
(Start: 16 @27161 has 30 MA's), (19, 27143), (24, 27101), (34, 27035), (38, 27020), (39, 27017),

Gene: GoldenSnow_33 Start: 10743, Stop: 10943, Start Num: 9
Candidate Starts for GoldenSnow_33:
(Start: 9 @10743 has 192 MA's), (Start: 16 @10779 has 30 MA's), (31, 10881), (34, 10905),

Gene: GordDuk1_44 Start: 42833, Stop: 42663, Start Num: 12
Candidate Starts for GordDuk1_44:
(Start: 12 @42833 has 20 MA's), (33, 42707), (37, 42689), (41, 42671),

Gene: GordTnk2_44 Start: 42811, Stop: 42629, Start Num: 12
Candidate Starts for GordTnk2_44:
(Start: 12 @42811 has 20 MA's), (21, 42760), (22, 42745), (33, 42673), (37, 42655), (41, 42637),

Gene: Grasshills_32 Start: 10153, Stop: 10353, Start Num: 9
Candidate Starts for Grasshills_32:
(Start: 9 @10153 has 192 MA's), (Start: 12 @10174 has 20 MA's), (31, 10291), (34, 10315),

Gene: Grungle_21 Start: 6747, Stop: 6947, Start Num: 9
Candidate Starts for Grungle_21:
(Start: 9 @6747 has 192 MA's), (Start: 16 @6783 has 30 MA's), (31, 6885), (34, 6909),

Gene: Guwapp_28 Start: 8585, Stop: 8785, Start Num: 9
Candidate Starts for Guwapp_28:
(Start: 9 @8585 has 192 MA's), (Start: 12 @8606 has 20 MA's), (31, 8723), (34, 8747),

Gene: Halldule_24 Start: 7417, Stop: 7617, Start Num: 9
Candidate Starts for Halldule_24:
(Start: 9 @7417 has 192 MA's), (Start: 16 @7453 has 30 MA's), (31, 7555), (34, 7579),

Gene: Hashim76_56 Start: 47575, Stop: 47402, Start Num: 13
Candidate Starts for Hashim76_56:
(2, 48184), (5, 47881), (6, 47743), (Start: 13 @47575 has 4 MA's), (20, 47536), (31, 47467), (34, 47443), (35, 47437),

Gene: HerbBucket_59 Start: 40727, Stop: 40888, Start Num: 12
Candidate Starts for HerbBucket_59:
(Start: 12 @40727 has 20 MA's), (25, 40799), (28, 40823), (29, 40826), (30, 40829), (31, 40838),

Gene: Horseradish_39 Start: 26966, Stop: 26808, Start Num: 16
Candidate Starts for Horseradish_39:
(Start: 16 @26966 has 30 MA's), (19, 26948), (26, 26885), (39, 26822),

Gene: Hosp_045 Start: 44019, Stop: 43855, Start Num: 14
Candidate Starts for Hosp_045:
(Start: 14 @44019 has 11 MA's), (19, 43995), (20, 43980), (26, 43932), (34, 43887),

Gene: HyRo_27 Start: 9363, Stop: 9563, Start Num: 9
Candidate Starts for HyRo_27:
(Start: 9 @9363 has 192 MA's), (Start: 16 @9399 has 30 MA's), (31, 9501), (34, 9525),

Gene: I3_30 Start: 9740, Stop: 9940, Start Num: 9
Candidate Starts for I3_30:
(Start: 9 @9740 has 192 MA's), (Start: 12 @9761 has 20 MA's), (31, 9878), (34, 9902),

Gene: IkeLoa_24 Start: 8474, Stop: 8674, Start Num: 9
Candidate Starts for IkeLoa_24:
(Start: 9 @8474 has 192 MA's), (Start: 16 @8510 has 30 MA's), (31, 8612), (34, 8636),

Gene: InigoMontoya_29 Start: 8589, Stop: 8789, Start Num: 9
Candidate Starts for InigoMontoya_29:
(Start: 9 @8589 has 192 MA's), (31, 8727), (34, 8751),

Gene: InterFolia_35 Start: 11279, Stop: 11479, Start Num: 9
Candidate Starts for InterFolia_35:
(Start: 9 @11279 has 192 MA's), (Start: 12 @11300 has 20 MA's), (31, 11417), (34, 11441),

Gene: Iota_25 Start: 8708, Stop: 8908, Start Num: 9
Candidate Starts for Iota_25:
(Start: 9 @8708 has 192 MA's), (Start: 12 @8729 has 20 MA's), (31, 8846), (34, 8870),

Gene: Issimir_28 Start: 9168, Stop: 9368, Start Num: 9
Candidate Starts for Issimir_28:
(Start: 9 @9168 has 192 MA's), (Start: 16 @9204 has 30 MA's), (31, 9306), (34, 9330),

Gene: Izajani_29 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Izajani_29:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: JPickles_26 Start: 7825, Stop: 8025, Start Num: 9
Candidate Starts for JPickles_26:
(Start: 9 @7825 has 192 MA's), (Start: 16 @7861 has 30 MA's), (31, 7963), (34, 7987),

Gene: Janiyra_28 Start: 8607, Stop: 8807, Start Num: 9
Candidate Starts for Janiyra_28:
(Start: 9 @8607 has 192 MA's), (31, 8745), (34, 8769),

Gene: JayJay_31 Start: 9141, Stop: 9341, Start Num: 9
Candidate Starts for JayJay_31:
(Start: 9 @9141 has 192 MA's), (Start: 16 @9177 has 30 MA's), (31, 9279), (34, 9303),

Gene: Jaygup_28 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for Jaygup_28:
(Start: 9 @8624 has 192 MA's), (Start: 16 @8660 has 30 MA's), (31, 8762), (34, 8786),

Gene: Jedediah_28 Start: 8093, Stop: 8293, Start Num: 9

Candidate Starts for Jedediah_28:
(Start: 9 @8093 has 192 MA's), (Start: 16 @8129 has 30 MA's), (31, 8231), (34, 8255),

Gene: Jemmno_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Jemmno_28:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Jeremy4pt0_59 Start: 40685, Stop: 40846, Start Num: 12
Candidate Starts for Jeremy4pt0_59:
(Start: 12 @40685 has 20 MA's), (25, 40757), (28, 40781), (29, 40784), (30, 40787), (31, 40796),

Gene: Jessibeth14_27 Start: 8896, Stop: 9096, Start Num: 9
Candidate Starts for Jessibeth14_27:
(Start: 9 @8896 has 192 MA's), (Start: 16 @8932 has 30 MA's), (31, 9034), (34, 9058),

Gene: Jezreel_27 Start: 8645, Stop: 8845, Start Num: 9
Candidate Starts for Jezreel_27:
(Start: 9 @8645 has 192 MA's), (Start: 16 @8681 has 30 MA's), (31, 8783), (34, 8807),

Gene: JigglyPuff_28 Start: 9449, Stop: 9649, Start Num: 9
Candidate Starts for JigglyPuff_28:
(Start: 9 @9449 has 192 MA's), (Start: 12 @9470 has 20 MA's), (31, 9587), (34, 9611),

Gene: Jolie1_047 Start: 45807, Stop: 45643, Start Num: 14
Candidate Starts for Jolie1_047:
(7, 45969), (Start: 14 @45807 has 11 MA's), (19, 45783), (20, 45768), (26, 45720), (34, 45675),

Gene: JulietS_23 Start: 7050, Stop: 7250, Start Num: 9
Candidate Starts for JulietS_23:
(Start: 9 @7050 has 192 MA's), (Start: 16 @7086 has 30 MA's), (31, 7188), (34, 7212),

Gene: JustHall_27 Start: 9073, Stop: 9273, Start Num: 9
Candidate Starts for JustHall_27:
(Start: 9 @9073 has 192 MA's), (Start: 12 @9094 has 20 MA's), (31, 9211), (34, 9235),

Gene: Kamryn_28 Start: 8952, Stop: 9152, Start Num: 9
Candidate Starts for Kamryn_28:
(Start: 9 @8952 has 192 MA's), (31, 9090), (34, 9114),

Gene: KarasumaRum_53 Start: 48252, Stop: 48088, Start Num: 14
Candidate Starts for KarasumaRum_53:
(Start: 11 @48264 has 2 MA's), (Start: 14 @48252 has 11 MA's), (29, 48156), (34, 48120),

Gene: KayaCho_46 Start: 45592, Stop: 45428, Start Num: 14
Candidate Starts for KayaCho_46:
(Start: 14 @45592 has 11 MA's), (19, 45568), (20, 45553), (26, 45505), (34, 45460),

Gene: Kboogie_28 Start: 8106, Stop: 8306, Start Num: 9
Candidate Starts for Kboogie_28:
(Start: 9 @8106 has 192 MA's), (Start: 16 @8142 has 30 MA's), (31, 8244), (34, 8268),

Gene: Khaleesi_27 Start: 8923, Stop: 9123, Start Num: 9
Candidate Starts for Khaleesi_27:

(Start: 9 @8923 has 192 MA's), (Start: 16 @8959 has 30 MA's), (31, 9061), (34, 9085),

Gene: Koguma_24 Start: 7393, Stop: 7593, Start Num: 9
Candidate Starts for Koguma_24:
(Start: 9 @7393 has 192 MA's), (Start: 16 @7429 has 30 MA's), (31, 7531), (34, 7555),

Gene: LRRHood_25 Start: 9316, Stop: 9516, Start Num: 9
Candidate Starts for LRRHood_25:
(Start: 9 @9316 has 192 MA's), (Start: 16 @9352 has 30 MA's), (31, 9454), (34, 9478),

Gene: Labradorite_29 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for Labradorite_29:
(Start: 9 @8624 has 192 MA's), (Start: 16 @8660 has 30 MA's), (31, 8762), (34, 8786),

Gene: Latch_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Latch_28:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Lee7_30 Start: 9170, Stop: 9370, Start Num: 9
Candidate Starts for Lee7_30:
(Start: 9 @9170 has 192 MA's), (Start: 12 @9191 has 20 MA's), (31, 9308), (34, 9332),

Gene: Lethe_27 Start: 8867, Stop: 9067, Start Num: 9
Candidate Starts for Lethe_27:
(Start: 9 @8867 has 192 MA's), (Start: 16 @8903 has 30 MA's), (31, 9005), (34, 9029),

Gene: LifeSavor_29 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for LifeSavor_29:
(Start: 9 @8624 has 192 MA's), (Start: 12 @8645 has 20 MA's), (31, 8762), (34, 8786),

Gene: Ligma_83 Start: 60379, Stop: 60224, Start Num: 16
Candidate Starts for Ligma_83:
(4, 60847), (Start: 16 @60379 has 30 MA's), (30, 60286), (36, 60247), (38, 60241), (39, 60238),

Gene: LilMcDreamy_51 Start: 47791, Stop: 47630, Start Num: 13
Candidate Starts for LilMcDreamy_51:
(Start: 13 @47791 has 4 MA's), (24, 47722), (30, 47689), (35, 47650), (37, 47644),

Gene: LinStu_28 Start: 9526, Stop: 9726, Start Num: 9
Candidate Starts for LinStu_28:
(Start: 9 @9526 has 192 MA's), (Start: 16 @9562 has 30 MA's), (31, 9664), (34, 9688),

Gene: Linda_60 Start: 40983, Stop: 41144, Start Num: 12
Candidate Starts for Linda_60:
(Start: 12 @40983 has 20 MA's), (25, 41055), (28, 41079), (29, 41082), (30, 41085), (31, 41094),

Gene: LittleMinkey_58 Start: 47214, Stop: 47041, Start Num: 13
Candidate Starts for LittleMinkey_58:
(2, 47823), (6, 47382), (Start: 13 @47214 has 4 MA's), (20, 47175), (31, 47106), (34, 47082), (35, 47076),

Gene: Littleton_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Littleton_28:

(Start: 9 @8628 has 192 MA's), (Start: 16 @8664 has 30 MA's), (31, 8766), (34, 8790),

Gene: Loanshark_28 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Loanshark_28:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: LolaVinca_31 Start: 10385, Stop: 10585, Start Num: 9
Candidate Starts for LolaVinca_31:
(Start: 9 @10385 has 192 MA's), (Start: 12 @10406 has 20 MA's), (31, 10523), (34, 10547),

Gene: LookingGlass_31 Start: 9947, Stop: 10147, Start Num: 9
Candidate Starts for LookingGlass_31:
(Start: 9 @9947 has 192 MA's), (Start: 16 @9983 has 30 MA's), (31, 10085), (34, 10109),

Gene: LordLeafolot_34 Start: 10743, Stop: 10943, Start Num: 9
Candidate Starts for LordLeafolot_34:
(Start: 9 @10743 has 192 MA's), (Start: 16 @10779 has 30 MA's), (31, 10881), (34, 10905),

Gene: Lukilu_21 Start: 7767, Stop: 7967, Start Num: 9
Candidate Starts for Lukilu_21:
(Start: 9 @7767 has 192 MA's), (Start: 16 @7803 has 30 MA's), (31, 7905), (34, 7929),

Gene: Lunareta_27 Start: 8907, Stop: 9107, Start Num: 9
Candidate Starts for Lunareta_27:
(Start: 9 @8907 has 192 MA's), (Start: 16 @8943 has 30 MA's), (31, 9045), (34, 9069),

Gene: MScarn_40 Start: 27106, Stop: 26948, Start Num: 16
Candidate Starts for MScarn_40:
(Start: 16 @27106 has 30 MA's), (19, 27088), (26, 27025), (39, 26962),

Gene: Maby2021_29 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Maby2021_29:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Maguvora_34 Start: 10745, Stop: 10945, Start Num: 9
Candidate Starts for Maguvora_34:
(Start: 9 @10745 has 192 MA's), (Start: 16 @10781 has 30 MA's), (31, 10883), (34, 10907),

Gene: Mangeria_31 Start: 9699, Stop: 9899, Start Num: 9
Candidate Starts for Mangeria_31:
(Start: 9 @9699 has 192 MA's), (Start: 16 @9735 has 30 MA's), (31, 9837), (34, 9861),

Gene: Matsumoto_27 Start: 8589, Stop: 8789, Start Num: 9
Candidate Starts for Matsumoto_27:
(Start: 9 @8589 has 192 MA's), (Start: 12 @8610 has 20 MA's), (31, 8727), (34, 8751),

Gene: Maturis_28 Start: 8946, Stop: 9146, Start Num: 9
Candidate Starts for Maturis_28:
(Start: 9 @8946 has 192 MA's), (Start: 16 @8982 has 30 MA's), (31, 9084), (34, 9108),

Gene: McDazzle_44 Start: 30707, Stop: 30534, Start Num: 12
Candidate Starts for McDazzle_44:
(Start: 12 @30707 has 20 MA's), (21, 30656), (25, 30626), (30, 30596), (31, 30587), (32, 30584),

Gene: McGee_27 Start: 7815, Stop: 8015, Start Num: 9
Candidate Starts for McGee_27:
(Start: 9 @7815 has 192 MA's), (Start: 16 @7851 has 30 MA's), (31, 7953), (34, 7977),

Gene: McWolfish_27 Start: 8923, Stop: 9123, Start Num: 9
Candidate Starts for McWolfish_27:
(Start: 9 @8923 has 192 MA's), (Start: 16 @8959 has 30 MA's), (31, 9061), (34, 9085),

Gene: Megamind_28 Start: 9164, Stop: 9364, Start Num: 9
Candidate Starts for Megamind_28:
(Start: 9 @9164 has 192 MA's), (Start: 12 @9185 has 20 MA's), (31, 9302), (34, 9326),

Gene: Melpomini_27 Start: 8030, Stop: 8230, Start Num: 9
Candidate Starts for Melpomini_27:
(Start: 9 @8030 has 192 MA's), (Start: 12 @8051 has 20 MA's), (31, 8168), (34, 8192),

Gene: Michelle_60 Start: 40985, Stop: 41146, Start Num: 12
Candidate Starts for Michelle_60:
(Start: 12 @40985 has 20 MA's), (25, 41057), (28, 41081), (29, 41084), (30, 41087), (31, 41096),

Gene: MikeLiesIn_28 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for MikeLiesIn_28:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Mikro_26 Start: 9659, Stop: 9859, Start Num: 9
Candidate Starts for Mikro_26:
(Start: 9 @9659 has 192 MA's), (Start: 12 @9680 has 20 MA's), (31, 9797), (34, 9821),

Gene: Minnow_49 Start: 45780, Stop: 45655, Start Num: 20
Candidate Starts for Minnow_49:
(Start: 14 @45819 has 11 MA's), (19, 45795), (20, 45780), (34, 45687),

Gene: MoMoMixon_29 Start: 9490, Stop: 9690, Start Num: 9
Candidate Starts for MoMoMixon_29:
(Start: 9 @9490 has 192 MA's), (Start: 16 @9526 has 30 MA's), (31, 9628), (34, 9652),

Gene: Moby_22 Start: 6171, Stop: 6371, Start Num: 9
Candidate Starts for Moby_22:
(Start: 9 @6171 has 192 MA's), (Start: 16 @6207 has 30 MA's), (31, 6309), (34, 6333),

Gene: Moiqah_22 Start: 6171, Stop: 6371, Start Num: 9
Candidate Starts for Moiqah_22:
(Start: 9 @6171 has 192 MA's), (Start: 16 @6207 has 30 MA's), (31, 6309), (34, 6333),

Gene: Momo_27 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Momo_27:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Montpel_27 Start: 8907, Stop: 9107, Start Num: 9
Candidate Starts for Montpel_27:
(Start: 9 @8907 has 192 MA's), (Start: 16 @8943 has 30 MA's), (31, 9045), (34, 9069),

Gene: Morizzled23_27 Start: 8030, Stop: 8230, Start Num: 9
Candidate Starts for Morizzled23_27:
(Start: 9 @8030 has 192 MA's), (Start: 12 @8051 has 20 MA's), (31, 8168), (34, 8192),

Gene: MrAaronian_60 Start: 40985, Stop: 41146, Start Num: 12
Candidate Starts for MrAaronian_60:
(Start: 12 @40985 has 20 MA's), (25, 41057), (28, 41081), (29, 41084), (30, 41087), (31, 41096),

Gene: MunkgeeRoachy_36 Start: 26623, Stop: 26465, Start Num: 16
Candidate Starts for MunkgeeRoachy_36:
(Start: 16 @26623 has 30 MA's), (19, 26605), (24, 26563), (38, 26482), (39, 26479),

Gene: Mysterious_51 Start: 48234, Stop: 48070, Start Num: 14
Candidate Starts for Mysterious_51:
(Start: 11 @48246 has 2 MA's), (Start: 14 @48234 has 11 MA's), (29, 48138), (34, 48102),

Gene: Naija_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Naija_28:
(Start: 9 @8628 has 192 MA's), (Start: 12 @8649 has 20 MA's), (31, 8766), (34, 8790),

Gene: Nangang_53 Start: 48478, Stop: 48302, Start Num: 11
Candidate Starts for Nangang_53:
(Start: 11 @48478 has 2 MA's), (Start: 14 @48466 has 11 MA's), (29, 48370), (34, 48334),

Gene: Napoleon13_27 Start: 8049, Stop: 8249, Start Num: 9
Candidate Starts for Napoleon13_27:
(Start: 9 @8049 has 192 MA's), (Start: 12 @8070 has 20 MA's), (31, 8187), (34, 8211),

Gene: Nappy_29 Start: 9337, Stop: 9537, Start Num: 9
Candidate Starts for Nappy_29:
(Start: 9 @9337 has 192 MA's), (Start: 12 @9358 has 20 MA's), (31, 9475), (34, 9499),

Gene: Natasha_61 Start: 40720, Stop: 40878, Start Num: 12
Candidate Starts for Natasha_61:
(Start: 12 @40720 has 20 MA's), (17, 40738), (25, 40789), (31, 40828), (35, 40855),

Gene: Naval22_30 Start: 9213, Stop: 9413, Start Num: 9
Candidate Starts for Naval22_30:
(Start: 9 @9213 has 192 MA's), (Start: 12 @9234 has 20 MA's), (31, 9351), (34, 9375),

Gene: NedWong_29 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for NedWong_29:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Nehemiah_52 Start: 48246, Stop: 48070, Start Num: 11
Candidate Starts for Nehemiah_52:
(Start: 11 @48246 has 2 MA's), (Start: 14 @48234 has 11 MA's), (29, 48138), (34, 48102),

Gene: Ngannou_26 Start: 7804, Stop: 8004, Start Num: 9
Candidate Starts for Ngannou_26:
(Start: 9 @7804 has 192 MA's), (31, 7942), (34, 7966),

Gene: Nidhogg_29 Start: 9243, Stop: 9443, Start Num: 9

Candidate Starts for Nidhogg_29:
(Start: 9 @9243 has 192 MA's), (Start: 12 @9264 has 20 MA's), (31, 9381), (34, 9405),

Gene: Nina_37 Start: 27285, Stop: 27127, Start Num: 16
Candidate Starts for Nina_37:
(Start: 16 @27285 has 30 MA's), (19, 27267), (24, 27225), (38, 27144), (39, 27141),

Gene: NoodleTree_27 Start: 8939, Stop: 9139, Start Num: 9
Candidate Starts for NoodleTree_27:
(Start: 9 @8939 has 192 MA's), (31, 9077), (34, 9101),

Gene: Norm_28 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Norm_28:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: NuevoMundo_31 Start: 10230, Stop: 10430, Start Num: 9
Candidate Starts for NuevoMundo_31:
(Start: 9 @10230 has 192 MA's), (Start: 16 @10266 has 30 MA's), (31, 10368), (34, 10392),

Gene: Onestar_58 Start: 40746, Stop: 40907, Start Num: 12
Candidate Starts for Onestar_58:
(Start: 12 @40746 has 20 MA's), (25, 40818), (31, 40857), (37, 40890), (39, 40896),

Gene: OrediggerDelux_30 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for OrediggerDelux_30:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: ParkTD_27 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for ParkTD_27:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Patter_28 Start: 8645, Stop: 8845, Start Num: 9
Candidate Starts for Patter_28:
(Start: 9 @8645 has 192 MA's), (31, 8783), (34, 8807),

Gene: PharkleMinkus_34 Start: 10744, Stop: 10944, Start Num: 9
Candidate Starts for PharkleMinkus_34:
(Start: 9 @10744 has 192 MA's), (Start: 16 @10780 has 30 MA's), (31, 10882), (34, 10906),

Gene: Phelemich_51 Start: 48233, Stop: 48069, Start Num: 14
Candidate Starts for Phelemich_51:
(Start: 11 @48245 has 2 MA's), (Start: 14 @48233 has 11 MA's), (24, 48167), (26, 48146), (29, 48137), (34, 48101),

Gene: Phlegm_30 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Phlegm_30:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Phox_27 Start: 9340, Stop: 9540, Start Num: 9
Candidate Starts for Phox_27:
(Start: 9 @9340 has 192 MA's), (Start: 16 @9376 has 30 MA's), (31, 9478), (34, 9502),

Gene: PhrostedPhlake_68 Start: 41801, Stop: 41962, Start Num: 16

Candidate Starts for PhrostedPhlake_68:
(Start: 16 @41801 has 30 MA's), (19, 41819), (29, 41894), (38, 41945),

Gene: Phusco_28 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for Phusco_28:
(Start: 9 @8624 has 192 MA's), (Start: 12 @8645 has 20 MA's), (31, 8762), (34, 8786),

Gene: Pier_30 Start: 9331, Stop: 9531, Start Num: 9
Candidate Starts for Pier_30:
(Start: 9 @9331 has 192 MA's), (Start: 12 @9352 has 20 MA's), (31, 9469), (34, 9493),

Gene: Pinkcreek_20 Start: 7035, Stop: 7235, Start Num: 9
Candidate Starts for Pinkcreek_20:
(Start: 9 @7035 has 192 MA's), (Start: 16 @7071 has 30 MA's), (31, 7173), (34, 7197),

Gene: Pio_31 Start: 10022, Stop: 10222, Start Num: 9
Candidate Starts for Pio_31:
(Start: 9 @10022 has 192 MA's), (Start: 12 @10043 has 20 MA's), (31, 10160), (34, 10184),

Gene: Pivoine_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for Pivoine_28:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Pleione_30 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Pleione_30:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Primadonna_23 Start: 8280, Stop: 8480, Start Num: 9
Candidate Starts for Primadonna_23:
(Start: 9 @8280 has 192 MA's), (Start: 16 @8316 has 30 MA's), (31, 8418), (34, 8442),

Gene: ProfFrink_60 Start: 40986, Stop: 41147, Start Num: 12
Candidate Starts for ProfFrink_60:
(Start: 12 @40986 has 20 MA's), (25, 41058), (28, 41082), (29, 41085), (30, 41088), (31, 41097),

Gene: PsychoKiller_37 Start: 27161, Stop: 27003, Start Num: 16
Candidate Starts for PsychoKiller_37:
(Start: 16 @27161 has 30 MA's), (19, 27143), (24, 27101), (34, 27035), (38, 27020), (39, 27017),

Gene: Puhon_33 Start: 10758, Stop: 10958, Start Num: 9
Candidate Starts for Puhon_33:
(Start: 9 @10758 has 192 MA's), (Start: 16 @10794 has 30 MA's), (31, 10896), (34, 10920),

Gene: Pupusa_35 Start: 11281, Stop: 11481, Start Num: 9
Candidate Starts for Pupusa_35:
(Start: 9 @11281 has 192 MA's), (Start: 16 @11317 has 30 MA's), (31, 11419), (34, 11443),

Gene: PurduePete_27 Start: 8890, Stop: 9090, Start Num: 9
Candidate Starts for PurduePete_27:
(Start: 9 @8890 has 192 MA's), (Start: 12 @8911 has 20 MA's), (31, 9028), (34, 9052),

Gene: QBert_26 Start: 9340, Stop: 9540, Start Num: 9
Candidate Starts for QBert_26:

(Start: 9 @9340 has 192 MA's), (Start: 16 @9376 has 30 MA's), (31, 9478), (34, 9502),

Gene: Quasar_38 Start: 27709, Stop: 27551, Start Num: 16
Candidate Starts for Quasar_38:
(Start: 16 @27709 has 30 MA's), (19, 27691), (24, 27649), (34, 27583), (38, 27568), (39, 27565),

Gene: Quasimodo_28 Start: 9588, Stop: 9788, Start Num: 9
Candidate Starts for Quasimodo_28:
(Start: 9 @9588 has 192 MA's), (31, 9726), (34, 9750),

Gene: RADical_39 Start: 27155, Stop: 26997, Start Num: 16
Candidate Starts for RADical_39:
(Start: 16 @27155 has 30 MA's), (19, 27137), (24, 27095), (34, 27029), (38, 27014), (39, 27011),

Gene: RSchmailzl_38 Start: 27198, Stop: 27040, Start Num: 16
Candidate Starts for RSchmailzl_38:
(Start: 16 @27198 has 30 MA's), (19, 27180), (24, 27138), (38, 27057), (39, 27054),

Gene: Rabinovish_27 Start: 9628, Stop: 9828, Start Num: 9
Candidate Starts for Rabinovish_27:
(Start: 9 @9628 has 192 MA's), (Start: 16 @9664 has 30 MA's), (31, 9766), (34, 9790),

Gene: Rahel_28 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for Rahel_28:
(Start: 9 @8624 has 192 MA's), (Start: 12 @8645 has 20 MA's), (31, 8762), (34, 8786),

Gene: Raunak_60 Start: 40683, Stop: 40844, Start Num: 12
Candidate Starts for Raunak_60:
(Start: 12 @40683 has 20 MA's), (25, 40755), (28, 40779), (29, 40782), (30, 40785), (31, 40794),

Gene: Reccee_53 Start: 48293, Stop: 48129, Start Num: 14
Candidate Starts for Reccee_53:
(Start: 14 @48293 has 11 MA's), (29, 48197), (34, 48161),

Gene: RedBaron_41 Start: 27398, Stop: 27240, Start Num: 16
Candidate Starts for RedBaron_41:
(Start: 16 @27398 has 30 MA's), (19, 27380), (24, 27338), (34, 27272), (38, 27257), (39, 27254),

Gene: Reprobate_52 Start: 48238, Stop: 48074, Start Num: 14
Candidate Starts for Reprobate_52:
(Start: 11 @48250 has 2 MA's), (Start: 14 @48238 has 11 MA's), (24, 48172), (26, 48151), (29, 48142), (34, 48106),

Gene: Rich_53 Start: 49684, Stop: 49508, Start Num: 11
Candidate Starts for Rich_53:
(Start: 11 @49684 has 2 MA's), (Start: 14 @49672 has 11 MA's), (24, 49606), (29, 49576), (34, 49540),

Gene: Rita130_52 Start: 48113, Stop: 47949, Start Num: 14
Candidate Starts for Rita130_52:
(Start: 14 @48113 has 11 MA's), (29, 48017), (34, 47981),

Gene: Rizal_26 Start: 8090, Stop: 8290, Start Num: 9
Candidate Starts for Rizal_26:

(Start: 9 @8090 has 192 MA's), (Start: 12 @8111 has 20 MA's), (31, 8228), (34, 8252),

Gene: RoMag_23 Start: 8425, Stop: 8625, Start Num: 9
Candidate Starts for RoMag_23:
(Start: 9 @8425 has 192 MA's), (Start: 16 @8461 has 30 MA's), (31, 8563), (34, 8587),

Gene: Rocha_26 Start: 8121, Stop: 8321, Start Num: 9
Candidate Starts for Rocha_26:
(Start: 9 @8121 has 192 MA's), (Start: 16 @8157 has 30 MA's), (31, 8259), (34, 8283),

Gene: Ronan_23 Start: 6736, Stop: 6936, Start Num: 9
Candidate Starts for Ronan_23:
(Start: 9 @6736 has 192 MA's), (Start: 12 @6757 has 20 MA's), (31, 6874), (34, 6898),

Gene: Roots515_28 Start: 9172, Stop: 9372, Start Num: 9
Candidate Starts for Roots515_28:
(Start: 9 @9172 has 192 MA's), (Start: 12 @9193 has 20 MA's), (31, 9310), (34, 9334),

Gene: RustyBoy_62 Start: 40919, Stop: 41077, Start Num: 12
Candidate Starts for RustyBoy_62:
(Start: 12 @40919 has 20 MA's), (18, 40940), (25, 40988), (31, 41027), (35, 41054), (37, 41060),

Gene: SVoro_27 Start: 9167, Stop: 9367, Start Num: 9
Candidate Starts for SVoro_27:
(Start: 9 @9167 has 192 MA's), (Start: 12 @9188 has 20 MA's), (31, 9305), (34, 9329),

Gene: Salacia_30 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for Salacia_30:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Salk_60 Start: 40983, Stop: 41144, Start Num: 12
Candidate Starts for Salk_60:
(Start: 12 @40983 has 20 MA's), (25, 41055), (28, 41079), (29, 41082), (30, 41085), (31, 41094),

Gene: Sauce_29 Start: 9303, Stop: 9503, Start Num: 9
Candidate Starts for Sauce_29:
(Start: 9 @9303 has 192 MA's), (Start: 16 @9339 has 30 MA's), (31, 9441), (34, 9465),

Gene: ScottMcG_28 Start: 9483, Stop: 9683, Start Num: 9
Candidate Starts for ScottMcG_28:
(Start: 9 @9483 has 192 MA's), (Start: 16 @9519 has 30 MA's), (31, 9621), (34, 9645),

Gene: Sebata_28 Start: 9526, Stop: 9726, Start Num: 9
Candidate Starts for Sebata_28:
(Start: 9 @9526 has 192 MA's), (Start: 16 @9562 has 30 MA's), (31, 9664), (34, 9688),

Gene: Serendipitous_52 Start: 47955, Stop: 47791, Start Num: 14
Candidate Starts for Serendipitous_52:
(Start: 11 @47967 has 2 MA's), (Start: 14 @47955 has 11 MA's), (24, 47889), (30, 47856), (34, 47823),

Gene: Shaqnato_24 Start: 7750, Stop: 7950, Start Num: 9
Candidate Starts for Shaqnato_24:
(Start: 9 @7750 has 192 MA's), (Start: 16 @7786 has 30 MA's), (31, 7888), (34, 7912),

Gene: Shatter_83 Start: 60379, Stop: 60224, Start Num: 16
Candidate Starts for Shatter_83:
(4, 60847), (Start: 16 @60379 has 30 MA's), (30, 60286), (36, 60247), (38, 60241), (39, 60238),

Gene: SheckWes_45 Start: 30252, Stop: 30079, Start Num: 12
Candidate Starts for SheckWes_45:
(Start: 12 @30252 has 20 MA's), (21, 30201), (25, 30171), (30, 30141), (31, 30132), (32, 30129),

Gene: Shelob_30 Start: 10058, Stop: 10258, Start Num: 9
Candidate Starts for Shelob_30:
(Start: 9 @10058 has 192 MA's), (Start: 16 @10094 has 30 MA's), (31, 10196), (34, 10220),

Gene: Shenyu_53 Start: 48478, Stop: 48302, Start Num: 11
Candidate Starts for Shenyu_53:
(Start: 11 @48478 has 2 MA's), (Start: 14 @48466 has 11 MA's), (29, 48370), (34, 48334),

Gene: ShiaLabeouf_28 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for ShiaLabeouf_28:
(Start: 9 @8624 has 192 MA's), (Start: 12 @8645 has 20 MA's), (31, 8762), (34, 8786),

Gene: Shiba_59 Start: 40683, Stop: 40844, Start Num: 12
Candidate Starts for Shiba_59:
(Start: 12 @40683 has 20 MA's), (25, 40755), (28, 40779), (29, 40782), (30, 40785), (31, 40794),

Gene: Shifa_25 Start: 8809, Stop: 9009, Start Num: 9
Candidate Starts for Shifa_25:
(Start: 9 @8809 has 192 MA's), (Start: 16 @8845 has 30 MA's), (31, 8947), (34, 8971),

Gene: Shnickers_28 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for Shnickers_28:
(Start: 9 @8624 has 192 MA's), (Start: 16 @8660 has 30 MA's), (31, 8762), (34, 8786),

Gene: Shrimp_28 Start: 9177, Stop: 9377, Start Num: 9
Candidate Starts for Shrimp_28:
(Start: 9 @9177 has 192 MA's), (Start: 12 @9198 has 20 MA's), (31, 9315), (34, 9339),

Gene: SilverDipper_29 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for SilverDipper_29:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: SirJeffery_52 Start: 48115, Stop: 47951, Start Num: 14
Candidate Starts for SirJeffery_52:
(Start: 14 @48115 has 11 MA's), (29, 48019), (34, 47983),

Gene: SiwenD96_29 Start: 10059, Stop: 10259, Start Num: 9
Candidate Starts for SiwenD96_29:
(Start: 9 @10059 has 192 MA's), (Start: 12 @10080 has 20 MA's), (31, 10197), (34, 10221),

Gene: SketchMex_37 Start: 27114, Stop: 26956, Start Num: 16
Candidate Starts for SketchMex_37:
(Start: 16 @27114 has 30 MA's), (19, 27096), (27, 27030), (29, 27024), (38, 26973), (39, 26970),

Gene: Sloopyjoe_60 Start: 40987, Stop: 41148, Start Num: 12
Candidate Starts for Sloopyjoe_60:
(Start: 12 @40987 has 20 MA's), (25, 41059), (28, 41083), (29, 41086), (30, 41089), (31, 41098),

Gene: SmallFry_28 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for SmallFry_28:
(Start: 9 @8624 has 192 MA's), (Start: 12 @8645 has 20 MA's), (31, 8762), (34, 8786),

Gene: Socotra_38 Start: 27160, Stop: 27002, Start Num: 16
Candidate Starts for Socotra_38:
(Start: 16 @27160 has 30 MA's), (19, 27142), (24, 27100), (38, 27019), (39, 27016),

Gene: SoilZilla_25 Start: 8878, Stop: 9078, Start Num: 9
Candidate Starts for SoilZilla_25:
(Start: 9 @8878 has 192 MA's), (Start: 12 @8899 has 20 MA's), (31, 9016), (34, 9040),

Gene: Sopespian_37 Start: 27162, Stop: 27004, Start Num: 16
Candidate Starts for Sopespian_37:
(Start: 16 @27162 has 30 MA's), (19, 27144), (24, 27102), (34, 27036), (38, 27021), (39, 27018),

Gene: Spain_61 Start: 40985, Stop: 41146, Start Num: 12
Candidate Starts for Spain_61:
(Start: 12 @40985 has 20 MA's), (25, 41057), (28, 41081), (29, 41084), (30, 41087), (31, 41096),

Gene: Spec_28 Start: 8630, Stop: 8830, Start Num: 9
Candidate Starts for Spec_28:
(Start: 9 @8630 has 192 MA's), (Start: 16 @8666 has 30 MA's), (31, 8768), (34, 8792),

Gene: Specks_33 Start: 10462, Stop: 10662, Start Num: 9
Candidate Starts for Specks_33:
(Start: 9 @10462 has 192 MA's), (Start: 12 @10483 has 20 MA's), (31, 10600), (34, 10624),

Gene: Sprinklers_28 Start: 8665, Stop: 8865, Start Num: 9
Candidate Starts for Sprinklers_28:
(Start: 9 @8665 has 192 MA's), (Start: 16 @8701 has 30 MA's), (31, 8803), (34, 8827),

Gene: Spud_30 Start: 10022, Stop: 10222, Start Num: 9
Candidate Starts for Spud_30:
(Start: 9 @10022 has 192 MA's), (Start: 12 @10043 has 20 MA's), (31, 10160), (34, 10184),

Gene: SrishMeg2525_27 Start: 8890, Stop: 9090, Start Num: 9
Candidate Starts for SrishMeg2525_27:
(Start: 9 @8890 has 192 MA's), (Start: 12 @8911 has 20 MA's), (31, 9028), (34, 9052),

Gene: StarLord_60 Start: 40986, Stop: 41147, Start Num: 12
Candidate Starts for StarLord_60:
(Start: 12 @40986 has 20 MA's), (25, 41058), (28, 41082), (29, 41085), (30, 41088), (31, 41097),

Gene: Starburst_39 Start: 27155, Stop: 26997, Start Num: 16
Candidate Starts for Starburst_39:
(Start: 16 @27155 has 30 MA's), (19, 27137), (24, 27095), (34, 27029), (38, 27014), (39, 27011),

Gene: Stayer_60 Start: 40983, Stop: 41144, Start Num: 12

Candidate Starts for Stayer_60:
(Start: 12 @40983 has 20 MA's), (25, 41055), (28, 41079), (29, 41082), (30, 41085), (31, 41094),

Gene: StephanieG_28 Start: 9356, Stop: 9556, Start Num: 9
Candidate Starts for StephanieG_28:
(Start: 9 @9356 has 192 MA's), (Start: 16 @9392 has 30 MA's), (31, 9494), (34, 9518),

Gene: StinkyVeggy_53 Start: 48252, Stop: 48088, Start Num: 14
Candidate Starts for StinkyVeggy_53:
(Start: 11 @48264 has 2 MA's), (Start: 14 @48252 has 11 MA's), (29, 48156), (34, 48120),

Gene: Stubby_26 Start: 8436, Stop: 8636, Start Num: 9
Candidate Starts for Stubby_26:
(Start: 9 @8436 has 192 MA's), (Start: 16 @8472 has 30 MA's), (31, 8574), (34, 8598),

Gene: StubbySaigey_27 Start: 7816, Stop: 8016, Start Num: 9
Candidate Starts for StubbySaigey_27:
(Start: 9 @7816 has 192 MA's), (Start: 16 @7852 has 30 MA's), (31, 7954), (34, 7978),

Gene: Substance289_25 Start: 8104, Stop: 8304, Start Num: 9
Candidate Starts for Substance289_25:
(Start: 9 @8104 has 192 MA's), (Start: 12 @8125 has 20 MA's), (31, 8242), (34, 8266),

Gene: Suigeneris_54 Start: 48395, Stop: 48231, Start Num: 14
Candidate Starts for Suigeneris_54:
(Start: 14 @48395 has 11 MA's), (29, 48299), (34, 48263),

Gene: SweatNTears_39 Start: 27058, Stop: 26900, Start Num: 16
Candidate Starts for SweatNTears_39:
(Start: 16 @27058 has 30 MA's), (19, 27040), (24, 26998), (34, 26932), (38, 26917), (39, 26914),

Gene: Tainan_33 Start: 10743, Stop: 10943, Start Num: 9
Candidate Starts for Tainan_33:
(Start: 9 @10743 has 192 MA's), (Start: 16 @10779 has 30 MA's), (31, 10881), (34, 10905),

Gene: Teardrop_27 Start: 8089, Stop: 8289, Start Num: 9
Candidate Starts for Teardrop_27:
(Start: 9 @8089 has 192 MA's), (Start: 12 @8110 has 20 MA's), (31, 8227), (34, 8251),

Gene: TinyTim_28 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for TinyTim_28:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: Tonenili_32 Start: 10275, Stop: 10475, Start Num: 9
Candidate Starts for Tonenili_32:
(Start: 9 @10275 has 192 MA's), (31, 10413), (34, 10437),

Gene: Tortoise16_27 Start: 8624, Stop: 8824, Start Num: 9
Candidate Starts for Tortoise16_27:
(Start: 9 @8624 has 192 MA's), (Start: 12 @8645 has 20 MA's), (31, 8762), (34, 8786),

Gene: Trinitium_27 Start: 8065, Stop: 8265, Start Num: 9
Candidate Starts for Trinitium_27:

(Start: 9 @8065 has 192 MA's), (Start: 16 @8101 has 30 MA's), (31, 8203), (34, 8227),

Gene: Trogglehumper_90 Start: 66999, Stop: 66847, Start Num: 12
Candidate Starts for Trogglehumper_90:
(10, 67017), (Start: 12 @66999 has 20 MA's), (23, 66942), (31, 66897), (35, 66867),

Gene: Troje_39 Start: 27463, Stop: 27305, Start Num: 16
Candidate Starts for Troje_39:
(Start: 16 @27463 has 30 MA's), (19, 27445), (27, 27379), (29, 27373), (38, 27322), (39, 27319),

Gene: Turret_26 Start: 7804, Stop: 8004, Start Num: 9
Candidate Starts for Turret_26:
(Start: 9 @7804 has 192 MA's), (Start: 16 @7840 has 30 MA's), (31, 7942), (34, 7966),

Gene: Tyke_30 Start: 10036, Stop: 10236, Start Num: 9
Candidate Starts for Tyke_30:
(Start: 9 @10036 has 192 MA's), (Start: 12 @10057 has 20 MA's), (31, 10174), (34, 10198),

Gene: Typhonomachy_36 Start: 26780, Stop: 26622, Start Num: 16
Candidate Starts for Typhonomachy_36:
(Start: 16 @26780 has 30 MA's), (19, 26762), (24, 26720), (38, 26639), (39, 26636),

Gene: UmaThurman_64 Start: 41829, Stop: 41990, Start Num: 16
Candidate Starts for UmaThurman_64:
(Start: 16 @41829 has 30 MA's), (19, 41847), (29, 41922), (38, 41973),

Gene: ValleyTerrace_28 Start: 8628, Stop: 8828, Start Num: 9
Candidate Starts for ValleyTerrace_28:
(Start: 9 @8628 has 192 MA's), (31, 8766), (34, 8790),

Gene: Vortrix_34 Start: 10736, Stop: 10936, Start Num: 9
Candidate Starts for Vortrix_34:
(Start: 9 @10736 has 192 MA's), (31, 10874), (34, 10898),

Gene: Wally_27 Start: 8051, Stop: 8251, Start Num: 9
Candidate Starts for Wally_27:
(Start: 9 @8051 has 192 MA's), (Start: 12 @8072 has 20 MA's), (31, 8189), (34, 8213),

Gene: Willis_28 Start: 9068, Stop: 9268, Start Num: 9
Candidate Starts for Willis_28:
(Start: 9 @9068 has 192 MA's), (Start: 12 @9089 has 20 MA's), (31, 9206), (34, 9230),

Gene: Yassified_25 Start: 7828, Stop: 8028, Start Num: 9
Candidate Starts for Yassified_25:
(Start: 9 @7828 has 192 MA's), (Start: 16 @7864 has 30 MA's), (31, 7966), (34, 7990),

Gene: YemiJoy2021_29 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for YemiJoy2021_29:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),

Gene: YoungMoneyMata_28 Start: 8379, Stop: 8579, Start Num: 9
Candidate Starts for YoungMoneyMata_28:
(Start: 9 @8379 has 192 MA's), (31, 8517), (34, 8541),

Gene: Yucca_28 Start: 9095, Stop: 9295, Start Num: 9
Candidate Starts for Yucca_28:
(Start: 9 @9095 has 192 MA's), (Start: 12 @9116 has 20 MA's), (31, 9233), (34, 9257),

Gene: Yummy_39 Start: 27080, Stop: 26922, Start Num: 16
Candidate Starts for Yummy_39:
(Start: 16 @27080 has 30 MA's), (19, 27062), (26, 26999), (39, 26936),

Gene: Zalkecks_30 Start: 9177, Stop: 9377, Start Num: 9
Candidate Starts for Zalkecks_30:
(Start: 9 @9177 has 192 MA's), (Start: 12 @9198 has 20 MA's), (31, 9315), (34, 9339),

Gene: Zeenon_30 Start: 9165, Stop: 9365, Start Num: 9
Candidate Starts for Zeenon_30:
(Start: 9 @9165 has 192 MA's), (Start: 12 @9186 has 20 MA's), (31, 9303), (34, 9327),

Gene: Zenteno07_57 Start: 47237, Stop: 47064, Start Num: 13
Candidate Starts for Zenteno07_57:
(1, 47972), (2, 47846), (3, 47804), (6, 47405), (Start: 13 @47237 has 4 MA's), (19, 47213), (31, 47129), (34, 47105), (35, 47099),

Gene: ZygoTaiga_28 Start: 9173, Stop: 9373, Start Num: 9
Candidate Starts for ZygoTaiga_28:
(Start: 9 @9173 has 192 MA's), (Start: 12 @9194 has 20 MA's), (31, 9311), (34, 9335),