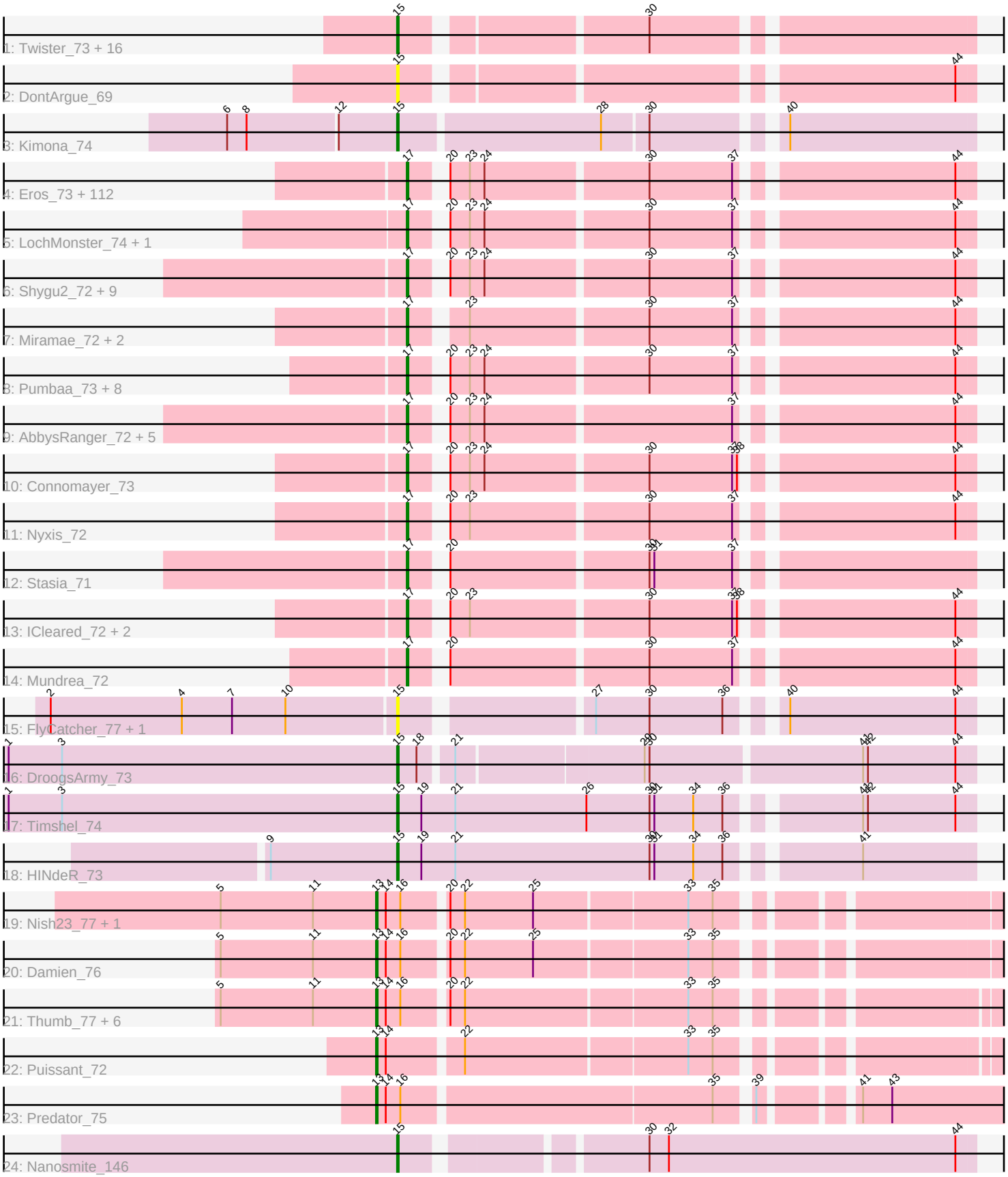
Pham 343663


1: Twister_73 + 16
2: DontArgue_69
3: Kimona_74
4: Eros_73 + 112
5: LochMonster_74 + 1
6: Shygu2_72 + 9
7: Miramae_72 + 2
8: Pumbaa_73 + 8
9: AbbysRanger_72 + 5
10: Connomayer_73
11: Nyxis_72
12: Stasia_71
13: ICleared_72 + 2
14: Mundrea_72
15: FlyCatcher_77 + 1
16: DroogsArmy_73
17: Timshel_74
18: HINdeR_73
19: Nish23_77 + 1
20: Damien_76
21: Thumb_77 + 6
22: Puissant_72
23: Predator_75
24: Nanosmite_146

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 343663 Report

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

Pham number 343663 has 187 members, 14 are drafts.

Phages represented in each track:
• Track 1 : Twister_73, Rebeuca_74, Kristoff_71, Severus_71, WalterMcMickey_72, Edison31_69, Eaglepride_76, OKCentral2016_72, Shapes_75, Chupacabra_70, Poompha_70, KittenMittens_69, DustyMartin_75, Goose_74, Drake94_70, Rowdy_75, PeaceMeal1_70
• Track 2 : DontArgue_69
• Track 3 : Kimona_74
• Track 4 : Eros_73, Millski_72, Buckaroo_69, Kratark_72, Sabertooth_73, Holli_72, TiroTheta9_72, Lemur_73, DirtyDunning_72, MeeZee_72, OKaNui_72, Caelakin_72, Skipitt_72, Rocksand_70, Obama12_74, Kingmustik0402_73, Maverick_72, KekoraPapaka_70, Jaykayelowell_70, Kampy_72, Iceman_72, Eagle_72, JoongJeon_72, Mazhar510_73, Melvin_75, Happiness_72, Koan_70, Burger_71, Polymorphads_74, Peaches_71, Blackmoor_72, NorthStar_71, Sparxx_74, Commander_71, Romney_72, Iracema64_73, Northrop_70, Houdini22_72, Clarenza_72, Deano_70, BubbleTrouble_72, Eapen_73, PeterPeter_73, Ruin_73, Mayonnaise_70, Spino_72, Phacado_73, Avle17_73, HamSlice_69, Eurydice_74, SenorClean_74, Roosevelt_71, Ohfah_74, Phelipe_74, LHTSCC_75, KFPoly_72, Palestino_72, JetBlade_74, Bartimeaus_73, Cocoaberry_73, LeoAvram_72, TroyPia_74, Florean_73, YoSam321_73, Alberto7_74, Taquarus_72, Bruiser_72, Dhanush_73, Wilbur_73, Skadoosh_71, Pipcraft_70, Relief_72, TinaFeyge_71, Kyee_73, ChampagnePapi_76, Arturo_70, Phighter1804_73, CentreCat_73, Wander_73, LittleGuy_73, TygerBlood_73, Albee_73, Koreni_72, Thanksgivukkah_72, Citius_73, Scamp_73, Maxo_75, Flux_74, Junimo_69, Baby16_73, Nemo27_72, RockieBear_73, Lorenzo_73, Tinybot_72, Gadost_73, Lunsford_73, LittleB_73, Bombshell_73, SteMason_73, BellusTerra_74, Broseidon_73, NotAPhaseMom_72, Nebs_74, Medusa_73, Morrow_75, Eris_72, Druantia_72, Annyong_72, Sultana_73, Chaph_73, Abdiel_73, Funston_72, Shaka_71
• Track 5 : LochMonster_74, LappelDuVide_73
• Track 6 : Shygu2_72, Noelle_73, Bumblebee11_71, Morpher26_72, Cici_72, Katalie136_72, Wile_71, Badger_71, Wizard007_72, Achebe_71
• Track 7 : Miramae_72, AvatarAhPeg_72, Stink_72
• Track 8 : Pumbaa_73, Cintron_74, SheldonCooper_73, BangNhom_71, Rosa24_70, Camperdownii_71, Ulysses_72, Kremtemulon_72, Cerulean_75
• Track 9 : AbbysRanger_72, Perplexer_72, Datway_72, PetiteSangsue_72, Backyardigan_70, Xena_71
• Track 10 : Connomayer_73
• Track 11 : Nyxis_72

• Track 12 : Stasia_71
• Track 13 : ICleared_72, Phontbonne_73, Cindaradix_69
• Track 14 : Mundrea_72
• Track 15 : FlyCatcher_77, Toro_75
• Track 16 : DroogsArmy_73
• Track 17 : Timshel_74
• Track 18 : HINdeR_73
• Track 19 : Nish23_77, Cborch11_77
• Track 20 : Damien_76
• Track 21 : Thumb_77, BobtimousPrime_79, Konstantine_79, Oaker_76, Megatron06_77, Phreeze_75, Beckerton_75
• Track 22 : Puissant_72
• Track 23 : Predator_75
• Track 24 : Nanosmite_146

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

The start number called the most often in the published annotations is 17, it was called in 143 of the 173 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AbbysRanger_72, Abdiel_73, Achebe_71, Albee_73, Alberto7_74, Annyong_72, Arturo_70, AvatarAhPeg_72, Avle17_73, Baby16_73, Backyardigan_70, Badger_71, BangNhom_71, Bartimeaus_73, BellusTerra_74, Blackmoor_72, Bombshell_73, Broseidon_73, Bruiser_72, BubbleTrouble_72, Buckaroo_69, Bumblebee11_71, Burger_71, Caelakin_72, Camperdownii_71, CentreCat_73, Cerulean_75, ChampagnePapi_76, Chaph_73, Cici_72, Cindaradix_69, Cintron_74, Citius_73, Clarenza_72, Cocoaberry_73, Commander_71, Connomayer_73, Datway_72, Deano_70, Dhanush_73, DirtyDunning_72, Druantia_72, Eagle_72, Eapen_73, Eris_72, Eros_73, Eurydice_74, Florean_73, Flux_74, Funston_72, Gadost_73, HamSlice_69, Happiness_72, Holli_72, Houdini22_72, ICleared_72, Iceman_72, Iracema64_73, Jaykayelowell_70, JetBlade_74, JoongJeon_72, Junimo_69, KFPoly_72, Kampy_72, Katalie136_72, KekoraPapaka_70, Kingmustik0402_73, Koan_70, Koreni_72, Kratark_72, Kremtemulon_72, Kyee_73, LHTSCC_75, LappelDuVide_73, Lemur_73, LeoAvram_72, LittleB_73, LittleGuy_73, LochMonster_74, Lorenzo_73, Lunsford_73, Maverick_72, Maxo_75, Mayonnaise_70, Mazhar510_73, Medusa_73, MeeZee_72, Melvin_75, Millski_72, Miramae_72, Morpher26_72, Morrow_75, Mundrea_72, Nebs_74, Nemo27_72, Noelle_73, NorthStar_71, Northrop_70, NotAPhaseMom_72, Nyxis_72, OKaNui_72, Obama12_74, Ohfah_74, Palestino_72, Peaches_71, Perplexer_72, PeterPeter_73, PetiteSangsue_72, Phacado_73, Phelipe_74, Phighter1804_73, Phontbonne_73, Pipcraft_70, Polymorphads_74, Pumbaa_73, Relief_72, RockieBear_73, Rocksand_70, Romney_72, Roosevelt_71, Rosa24_70, Ruin_73, Sabertooth_73, Scamp_73, SenorClean_74, Shaka_71, SheldonCooper_73, Shygu2_72, Skadoosh_71, Skipitt_72, Sparxx_74, Spino_72, Stasia_71, SteMason_73, Stink_72, Sultana_73, Taquarus_72, Thanksgivukkah_72, TinaFeyge_71, Tinybot_72, TiroTheta9_72, TroyPia_74, TygerBlood_73, Ulysses_72, Wander_73, Wilbur_73, Wile_71, Wizard007_72, Xena_71, YoSam321_73,

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

•

Genes that do not have the "Most Annotated" start:
• Beckerton_75, BobtimousPrime_79, Cborch11_77, Chupacabra_70, Damien_76, DontArgue_69, Drake94_70, DroogsArmy_73, DustyMartin_75, Eaglepride_76, Edison31_69, FlyCatcher_77, Goose_74, HINdeR_73, Kimona_74, KittenMittens_69, Konstantine_79, Kristoff_71, Megatron06_77, Nanosmite_146, Nish23_77, OKCentral2016_72, Oaker_76, PeaceMeal1_70, Phreeze_75, Poompha_70, Predator_75, Puissant_72, Rebeuca_74, Rowdy_75, Severus_71, Shapes_75, Thumb_77, Timshel_74, Toro_75, Twister_73, WalterMcMickey_72,

Summary by start number:

Start 13:
• Found in 12 of 187 (6.4%) of genes in pham
• Manual Annotations of this start: 11 of 173
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beckerton_75 (H1), BobtimousPrime_79 (H1), Cborch11_77 (H1), Damien_76 (H1), Konstantine_79 (H1), Megatron06_77 (H1), Nish23_77 (H1), Oaker_76 (H1), Phreeze_75 (H1), Predator_75 (H1), Puissant_72 (H1), Thumb_77 (H1),

Start 15:
• Found in 25 of 187 (13.4%) of genes in pham
• Manual Annotations of this start: 19 of 173
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chupacabra_70 (A10), DontArgue_69 (A10), Drake94_70 (A10), DroogsArmy_73 (A7), DustyMartin_75 (A10), Eaglepride_76 (A10), Edison31_69 (A10), FlyCatcher_77 (A7), Goose_74 (A10), HINdeR_73 (A7), Kimona_74 (A19), KittenMittens_69 (A10), Kristoff_71 (A10), Nanosmite_146 (M3), OKCentral2016_72 (A10), PeaceMeal1_70 (A10), Poompha_70 (A10), Rebeuca_74 (A10), Rowdy_75 (A10), Severus_71 (A10), Shapes_75 (A10), Timshel_74 (A7), Toro_75 (A7), Twister_73 (A10), WalterMcMickey_72 (A10),

Start 17:
• Found in 150 of 187 (80.2%) of genes in pham
• Manual Annotations of this start: 143 of 173
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AbbysRanger_72 (A4), Abdiel_73 (A4), Achebe_71 (A4), Albee_73 (A4), Alberto7_74 (A4), Annyong_72 (A4), Arturo_70 (A4), AvatarAhPeg_72 (A4), Avle17_73 (A4), Baby16_73 (A4), Backyardigan_70 (A4), Badger_71 (A4), BangNhom_71 (A4), Bartimeaus_73 (A4), BellusTerra_74 (A4), Blackmoor_72 (A4), Bombshell_73 (A4), Broseidon_73 (A4), Bruiser_72 (A4), BubbleTrouble_72 (A4), Buckaroo_69 (A4), Bumblebee11_71 (A4), Burger_71 (A4), Caelakin_72 (A4), Camperdownii_71 (A4), CentreCat_73 (A4), Cerulean_75 (A4), ChampagnePapi_76 (A4), Chaph_73 (A4), Cici_72 (A4), Cindaradix_69 (A4), Cintron_74 (A4), Citius_73 (A4), Clarenza_72 (A4), Cocoaberry_73 (A4), Commander_71 (A4), Connomayer_73 (A4), Datway_72 (A4), Deano_70 (A4), Dhanush_73 (A4), DirtyDunning_72 (A4), Druantia_72 (A4), Eagle_72 (A4), Eapen_73 (A4), Eris_72 (A4), Eros_73 (A4), Eurydice_74 (A4), Florean_73 (A4), Flux_74 (A4), Funston_72 (A4), Gadost_73 (A4), HamSlice_69 (A4), Happiness_72 (A4), Holli_72 (A4), Houdini22_72 (A4), ICleared_72 (A4), Iceman_72 (A4),

Iracema64_73 (A4), Jaykayelowell_70 (A4), JetBlade_74 (A4), JoongJeon_72 (A4), Junimo_69 (A4), KFPoly_72 (A4), Kampy_72 (A4), Katalie136_72 (A4), KekoraPapaka_70 (A4), Kingmustik0402_73 (A4), Koan_70 (A4), Koreni_72 (A4), Kratark_72 (A4), Kremtemulon_72 (A4), Kyee_73 (A4), LHTSCC_75 (A4), LappelDuVide_73 (A4), Lemur_73 (A4), LeoAvram_72 (A4), LittleB_73 (A4), LittleGuy_73 (A4), LochMonster_74 (A4), Lorenzo_73 (A4), Lunsford_73 (A4), Maverick_72 (A4), Maxo_75 (A4), Mayonnaise_70 (A4), Mazhar510_73 (A4), Medusa_73 (A4), MeeZee_72 (A4), Melvin_75 (A4), Millski_72 (A4), Miramae_72 (A4), Morpher26_72 (A4), Morrow_75 (A4), Mundrea_72 (A4), Nebs_74 (A4), Nemo27_72 (A4), Noelle_73 (A4), NorthStar_71 (A4), Northrop_70 (A4), NotAPhaseMom_72 (A4), Nyxis_72 (A4), OKaNui_72 (A4), Obama12_74 (A4), Ohfah_74 (A4), Palestino_72 (A4), Peaches_71 (A4), Perplexer_72 (A4), PeterPeter_73 (A4), PetiteSangsue_72 (A4), Phacado_73 (A4), Phelipe_74 (A4), Phighter1804_73 (A4), Phontbonne_73 (A4), Pipcraft_70 (A4), Polymorphads_74 (A4), Pumbaa_73 (A4), Relief_72 (A4), RockieBear_73 (A4), Rocksand_70 (A4), Romney_72 (A4), Roosevelt_71 (A4), Rosa24_70 (A4), Ruin_73 (A4), Sabertooth_73 (A4), Scamp_73 (A4), SenorClean_74 (A4), Shaka_71 (A4), SheldonCooper_73 (A4), Shygu2_72 (A4), Skadoosh_71 (A4), Skipitt_72 (A4), Sparxx_74 (A4), Spino_72 (A4), Stasia_71 (A4), SteMason_73 (A4), Stink_72 (A4), Sultana_73 (A4), Taquarus_72 (A4), Thanksgivukkah_72 (A4), TinaFeyge_71 (A4), Tinybot_72 (A4), TiroTheta9_72 (A4), TroyPia_74 (A4), TygerBlood_73 (A4), Ulysses_72 (A4), Wander_73 (A4), Wilbur_73 (A4), Wile_71 (A4), Wizard007_72 (A4), Xena_71 (A4), YoSam321_73 (A4),

Summary by clusters:

There are 6 clusters represented in this pham: A10, H1, A19, A4, M3, A7,

Info for manual annotations of cluster A10:
•Start number 15 was manually annotated 14 times for cluster A10.

Info for manual annotations of cluster A19:
•Start number 15 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A4:
•Start number 17 was manually annotated 143 times for cluster A4.

Info for manual annotations of cluster A7:
•Start number 15 was manually annotated 3 times for cluster A7.

Info for manual annotations of cluster H1:
•Start number 13 was manually annotated 11 times for cluster H1.

Info for manual annotations of cluster M3:
•Start number 15 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: AbbysRanger_72 Start: 45254, Stop: 44940, Start Num: 17
Candidate Starts for AbbysRanger_72:
(Start: 17 @45254 has 143 MA's), (20, 45239), (23, 45227), (24, 45218), (37, 45071), (44, 44951),

Gene: Abdiel_73 Start: 45203, Stop: 44889, Start Num: 17
Candidate Starts for Abdiel_73:
(Start: 17 @45203 has 143 MA's), (20, 45188), (23, 45176), (24, 45167), (30, 45071), (37, 45020), (44, 44900),

Gene: Achebe_71 Start: 45237, Stop: 44923, Start Num: 17
Candidate Starts for Achebe_71:
(Start: 17 @45237 has 143 MA's), (20, 45222), (23, 45210), (24, 45201), (30, 45105), (37, 45054), (44, 44934),

Gene: Albee_73 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for Albee_73:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: Alberto7_74 Start: 45528, Stop: 45214, Start Num: 17
Candidate Starts for Alberto7_74:
(Start: 17 @45528 has 143 MA's), (20, 45513), (23, 45501), (24, 45492), (30, 45396), (37, 45345), (44, 45225),

Gene: Annyong_72 Start: 45236, Stop: 44922, Start Num: 17
Candidate Starts for Annyong_72:
(Start: 17 @45236 has 143 MA's), (20, 45221), (23, 45209), (24, 45200), (30, 45104), (37, 45053), (44, 44933),

Gene: Arturo_70 Start: 45319, Stop: 45005, Start Num: 17
Candidate Starts for Arturo_70:
(Start: 17 @45319 has 143 MA's), (20, 45304), (23, 45292), (24, 45283), (30, 45187), (37, 45136), (44, 45016),

Gene: AvatarAhPeg_72 Start: 45127, Stop: 44813, Start Num: 17
Candidate Starts for AvatarAhPeg_72:
(Start: 17 @45127 has 143 MA's), (23, 45100), (30, 44995), (37, 44944), (44, 44824),

Gene: Avle17_73 Start: 45185, Stop: 44871, Start Num: 17
Candidate Starts for Avle17_73:
(Start: 17 @45185 has 143 MA's), (20, 45170), (23, 45158), (24, 45149), (30, 45053), (37, 45002), (44, 44882),

Gene: Baby16_73 Start: 45202, Stop: 44888, Start Num: 17
Candidate Starts for Baby16_73:
(Start: 17 @45202 has 143 MA's), (20, 45187), (23, 45175), (24, 45166), (30, 45070), (37, 45019), (44, 44899),

Gene: Backyardigan_70 Start: 45270, Stop: 44956, Start Num: 17
Candidate Starts for Backyardigan_70:
(Start: 17 @45270 has 143 MA's), (20, 45255), (23, 45243), (24, 45234), (37, 45087), (44, 44967),

Gene: Badger_71 Start: 45238, Stop: 44924, Start Num: 17
Candidate Starts for Badger_71:
(Start: 17 @45238 has 143 MA's), (20, 45223), (23, 45211), (24, 45202), (30, 45106), (37, 45055), (44, 44935),

Gene: BangNhom_71 Start: 45628, Stop: 45314, Start Num: 17
Candidate Starts for BangNhom_71:
(Start: 17 @45628 has 143 MA's), (20, 45613), (23, 45601), (24, 45592), (30, 45496), (37, 45445), (44, 45325),

Gene: Bartimeaus_73 Start: 45193, Stop: 44879, Start Num: 17
Candidate Starts for Bartimeaus_73:
(Start: 17 @45193 has 143 MA's), (20, 45178), (23, 45166), (24, 45157), (30, 45061), (37, 45010), (44, 44890),

Gene: Beckerton_75 Start: 55576, Stop: 55977, Start Num: 13
Candidate Starts for Beckerton_75:
(5, 55480), (11, 55537), (Start: 13 @55576 has 11 MA's), (14, 55582), (16, 55591), (20, 55615), (22, 55624), (33, 55756), (35, 55771),

Gene: BellusTerra_74 Start: 45232, Stop: 44918, Start Num: 17
Candidate Starts for BellusTerra_74:
(Start: 17 @45232 has 143 MA's), (20, 45217), (23, 45205), (24, 45196), (30, 45100), (37, 45049), (44, 44929),

Gene: Blackmoor_72 Start: 45193, Stop: 44879, Start Num: 17
Candidate Starts for Blackmoor_72:
(Start: 17 @45193 has 143 MA's), (20, 45178), (23, 45166), (24, 45157), (30, 45061), (37, 45010), (44, 44890),

Gene: BobtimousPrime_79 Start: 55877, Stop: 56278, Start Num: 13
Candidate Starts for BobtimousPrime_79:
(5, 55781), (11, 55838), (Start: 13 @55877 has 11 MA's), (14, 55883), (16, 55892), (20, 55916), (22, 55925), (33, 56057), (35, 56072),

Gene: Bombshell_73 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Bombshell_73:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Broseidon_73 Start: 45194, Stop: 44880, Start Num: 17
Candidate Starts for Broseidon_73:
(Start: 17 @45194 has 143 MA's), (20, 45179), (23, 45167), (24, 45158), (30, 45062), (37, 45011), (44, 44891),

Gene: Bruiser_72 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for Bruiser_72:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: BubbleTrouble_72 Start: 45218, Stop: 44904, Start Num: 17
Candidate Starts for BubbleTrouble_72:
(Start: 17 @45218 has 143 MA's), (20, 45203), (23, 45191), (24, 45182), (30, 45086), (37, 45035), (44, 44915),

Gene: Buckaroo_69 Start: 45195, Stop: 44881, Start Num: 17
Candidate Starts for Buckaroo_69:

(Start: 17 @45195 has 143 MA's), (20, 45180), (23, 45168), (24, 45159), (30, 45063), (37, 45012), (44, 44892),

Gene: Bumblebee11_71 Start: 45240, Stop: 44926, Start Num: 17
Candidate Starts for Bumblebee11_71:
(Start: 17 @45240 has 143 MA's), (20, 45225), (23, 45213), (24, 45204), (30, 45108), (37, 45057), (44, 44937),

Gene: Burger_71 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for Burger_71:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: Caelakin_72 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for Caelakin_72:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: Camperdownii_71 Start: 44863, Stop: 44549, Start Num: 17
Candidate Starts for Camperdownii_71:
(Start: 17 @44863 has 143 MA's), (20, 44848), (23, 44836), (24, 44827), (30, 44731), (37, 44680), (44, 44560),

Gene: Cborch11_77 Start: 54773, Stop: 55162, Start Num: 13
Candidate Starts for Cborch11_77:
(5, 54677), (11, 54734), (Start: 13 @54773 has 11 MA's), (14, 54779), (16, 54788), (20, 54812), (22, 54821), (25, 54863), (33, 54953), (35, 54968),

Gene: CentreCat_73 Start: 45231, Stop: 44917, Start Num: 17
Candidate Starts for CentreCat_73:
(Start: 17 @45231 has 143 MA's), (20, 45216), (23, 45204), (24, 45195), (30, 45099), (37, 45048), (44, 44928),

Gene: Cerulean_75 Start: 45629, Stop: 45315, Start Num: 17
Candidate Starts for Cerulean_75:
(Start: 17 @45629 has 143 MA's), (20, 45614), (23, 45602), (24, 45593), (30, 45497), (37, 45446), (44, 45326),

Gene: ChampagnePapi_76 Start: 45628, Stop: 45314, Start Num: 17
Candidate Starts for ChampagnePapi_76:
(Start: 17 @45628 has 143 MA's), (20, 45613), (23, 45601), (24, 45592), (30, 45496), (37, 45445), (44, 45325),

Gene: Chaph_73 Start: 45202, Stop: 44888, Start Num: 17
Candidate Starts for Chaph_73:
(Start: 17 @45202 has 143 MA's), (20, 45187), (23, 45175), (24, 45166), (30, 45070), (37, 45019), (44, 44899),

Gene: Chupacabra_70 Start: 44895, Stop: 44578, Start Num: 15
Candidate Starts for Chupacabra_70:
(Start: 15 @44895 has 19 MA's), (30, 44760),

Gene: Cici_72 Start: 45255, Stop: 44941, Start Num: 17

Candidate Starts for Cici_72:
(Start: 17 @45255 has 143 MA's), (20, 45240), (23, 45228), (24, 45219), (30, 45123), (37, 45072), (44, 44952),

Gene: Cindaradix_69 Start: 45089, Stop: 44775, Start Num: 17
Candidate Starts for Cindaradix_69:
(Start: 17 @45089 has 143 MA's), (20, 45074), (23, 45062), (30, 44957), (37, 44906), (38, 44903), (44, 44786),

Gene: Cintron_74 Start: 45342, Stop: 45028, Start Num: 17
Candidate Starts for Cintron_74:
(Start: 17 @45342 has 143 MA's), (20, 45327), (23, 45315), (24, 45306), (30, 45210), (37, 45159), (44, 45039),

Gene: Citius_73 Start: 45212, Stop: 44898, Start Num: 17
Candidate Starts for Citius_73:
(Start: 17 @45212 has 143 MA's), (20, 45197), (23, 45185), (24, 45176), (30, 45080), (37, 45029), (44, 44909),

Gene: Clarenza_72 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Clarenza_72:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Cocoaberry_73 Start: 45192, Stop: 44878, Start Num: 17
Candidate Starts for Cocoaberry_73:
(Start: 17 @45192 has 143 MA's), (20, 45177), (23, 45165), (24, 45156), (30, 45060), (37, 45009), (44, 44889),

Gene: Commander_71 Start: 45189, Stop: 44875, Start Num: 17
Candidate Starts for Commander_71:
(Start: 17 @45189 has 143 MA's), (20, 45174), (23, 45162), (24, 45153), (30, 45057), (37, 45006), (44, 44886),

Gene: Connomayer_73 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for Connomayer_73:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (38, 45005), (44, 44888),

Gene: Damien_76 Start: 55083, Stop: 55472, Start Num: 13
Candidate Starts for Damien_76:
(5, 54987), (11, 55044), (Start: 13 @55083 has 11 MA's), (14, 55089), (16, 55098), (20, 55122), (22, 55131), (25, 55173), (33, 55263), (35, 55278),

Gene: Datway_72 Start: 45253, Stop: 44939, Start Num: 17
Candidate Starts for Datway_72:
(Start: 17 @45253 has 143 MA's), (20, 45238), (23, 45226), (24, 45217), (37, 45070), (44, 44950),

Gene: Deano_70 Start: 45199, Stop: 44885, Start Num: 17
Candidate Starts for Deano_70:
(Start: 17 @45199 has 143 MA's), (20, 45184), (23, 45172), (24, 45163), (30, 45067), (37, 45016), (44, 44896),

Gene: Dhanush_73 Start: 45194, Stop: 44880, Start Num: 17
Candidate Starts for Dhanush_73:
(Start: 17 @45194 has 143 MA's), (20, 45179), (23, 45167), (24, 45158), (30, 45062), (37, 45011), (44, 44891),

Gene: DirtyDunning_72 Start: 45203, Stop: 44889, Start Num: 17
Candidate Starts for DirtyDunning_72:
(Start: 17 @45203 has 143 MA's), (20, 45188), (23, 45176), (24, 45167), (30, 45071), (37, 45020), (44, 44900),

Gene: DontArgue_69 Start: 43915, Stop: 43598, Start Num: 15
Candidate Starts for DontArgue_69:
(Start: 15 @43915 has 19 MA's), (44, 43609),

Gene: Drake94_70 Start: 44044, Stop: 43709, Start Num: 15
Candidate Starts for Drake94_70:
(Start: 15 @44044 has 19 MA's), (30, 43891),

Gene: DroogsArmy_73 Start: 48396, Stop: 48058, Start Num: 15
Candidate Starts for DroogsArmy_73:
(1, 48636), (3, 48603), (Start: 15 @48396 has 19 MA's), (18, 48384), (21, 48366), (29, 48255), (30, 48252), (41, 48126), (42, 48123), (44, 48069),

Gene: Druantia_72 Start: 45194, Stop: 44880, Start Num: 17
Candidate Starts for Druantia_72:
(Start: 17 @45194 has 143 MA's), (20, 45179), (23, 45167), (24, 45158), (30, 45062), (37, 45011), (44, 44891),

Gene: DustyMartin_75 Start: 45046, Stop: 44729, Start Num: 15
Candidate Starts for DustyMartin_75:
(Start: 15 @45046 has 19 MA's), (30, 44911),

Gene: Eagle_72 Start: 45253, Stop: 44939, Start Num: 17
Candidate Starts for Eagle_72:
(Start: 17 @45253 has 143 MA's), (20, 45238), (23, 45226), (24, 45217), (30, 45121), (37, 45070), (44, 44950),

Gene: Eaglepride_76 Start: 44987, Stop: 44670, Start Num: 15
Candidate Starts for Eaglepride_76:
(Start: 15 @44987 has 19 MA's), (30, 44852),

Gene: Eapen_73 Start: 45186, Stop: 44872, Start Num: 17
Candidate Starts for Eapen_73:
(Start: 17 @45186 has 143 MA's), (20, 45171), (23, 45159), (24, 45150), (30, 45054), (37, 45003), (44, 44883),

Gene: Edison31_69 Start: 44762, Stop: 44445, Start Num: 15
Candidate Starts for Edison31_69:
(Start: 15 @44762 has 19 MA's), (30, 44627),

Gene: Eris_72 Start: 45203, Stop: 44889, Start Num: 17
Candidate Starts for Eris_72:

(Start: 17 @45203 has 143 MA's), (20, 45188), (23, 45176), (24, 45167), (30, 45071), (37, 45020), (44, 44900),

Gene: Eros_73 Start: 45193, Stop: 44879, Start Num: 17
Candidate Starts for Eros_73:
(Start: 17 @45193 has 143 MA's), (20, 45178), (23, 45166), (24, 45157), (30, 45061), (37, 45010), (44, 44890),

Gene: Eurydice_74 Start: 45228, Stop: 44914, Start Num: 17
Candidate Starts for Eurydice_74:
(Start: 17 @45228 has 143 MA's), (20, 45213), (23, 45201), (24, 45192), (30, 45096), (37, 45045), (44, 44925),

Gene: Florean_73 Start: 45190, Stop: 44876, Start Num: 17
Candidate Starts for Florean_73:
(Start: 17 @45190 has 143 MA's), (20, 45175), (23, 45163), (24, 45154), (30, 45058), (37, 45007), (44, 44887),

Gene: Flux_74 Start: 45189, Stop: 44875, Start Num: 17
Candidate Starts for Flux_74:
(Start: 17 @45189 has 143 MA's), (20, 45174), (23, 45162), (24, 45153), (30, 45057), (37, 45006), (44, 44886),

Gene: FlyCatcher_77 Start: 48937, Stop: 48617, Start Num: 15
Candidate Starts for FlyCatcher_77:
(2, 49147), (4, 49066), (7, 49036), (10, 49003), (Start: 15 @48937 has 19 MA's), (27, 48832), (30, 48799), (36, 48754), (40, 48730), (44, 48628),

Gene: Funston_72 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Funston_72:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Gadost_73 Start: 45192, Stop: 44878, Start Num: 17
Candidate Starts for Gadost_73:
(Start: 17 @45192 has 143 MA's), (20, 45177), (23, 45165), (24, 45156), (30, 45060), (37, 45009), (44, 44889),

Gene: Goose_74 Start: 44706, Stop: 44389, Start Num: 15
Candidate Starts for Goose_74:
(Start: 15 @44706 has 19 MA's), (30, 44571),

Gene: HINdeR_73 Start: 47777, Stop: 47439, Start Num: 15
Candidate Starts for HINdeR_73:
(9, 47855), (Start: 15 @47777 has 19 MA's), (19, 47762), (21, 47741), (30, 47621), (31, 47618), (34, 47594), (36, 47576), (41, 47507),

Gene: HamSlice_69 Start: 45190, Stop: 44876, Start Num: 17
Candidate Starts for HamSlice_69:
(Start: 17 @45190 has 143 MA's), (20, 45175), (23, 45163), (24, 45154), (30, 45058), (37, 45007), (44, 44887),

Gene: Happiness_72 Start: 45211, Stop: 44897, Start Num: 17

Candidate Starts for Happiness_72:
(Start: 17 @45211 has 143 MA's), (20, 45196), (23, 45184), (24, 45175), (30, 45079), (37, 45028), (44, 44908),

Gene: Holli_72 Start: 44981, Stop: 44667, Start Num: 17
Candidate Starts for Holli_72:
(Start: 17 @44981 has 143 MA's), (20, 44966), (23, 44954), (24, 44945), (30, 44849), (37, 44798), (44, 44678),

Gene: Houdini22_72 Start: 45192, Stop: 44878, Start Num: 17
Candidate Starts for Houdini22_72:
(Start: 17 @45192 has 143 MA's), (20, 45177), (23, 45165), (24, 45156), (30, 45060), (37, 45009), (44, 44889),

Gene: ICleared_72 Start: 45259, Stop: 44945, Start Num: 17
Candidate Starts for ICleared_72:
(Start: 17 @45259 has 143 MA's), (20, 45244), (23, 45232), (30, 45127), (37, 45076), (38, 45073), (44, 44956),

Gene: Iceman_72 Start: 45481, Stop: 45167, Start Num: 17
Candidate Starts for Iceman_72:
(Start: 17 @45481 has 143 MA's), (20, 45466), (23, 45454), (24, 45445), (30, 45349), (37, 45298), (44, 45178),

Gene: Iracema64_73 Start: 45455, Stop: 45141, Start Num: 17
Candidate Starts for Iracema64_73:
(Start: 17 @45455 has 143 MA's), (20, 45440), (23, 45428), (24, 45419), (30, 45323), (37, 45272), (44, 45152),

Gene: Jaykayelowell_70 Start: 45184, Stop: 44870, Start Num: 17
Candidate Starts for Jaykayelowell_70:
(Start: 17 @45184 has 143 MA's), (20, 45169), (23, 45157), (24, 45148), (30, 45052), (37, 45001), (44, 44881),

Gene: JetBlade_74 Start: 45219, Stop: 44905, Start Num: 17
Candidate Starts for JetBlade_74:
(Start: 17 @45219 has 143 MA's), (20, 45204), (23, 45192), (24, 45183), (30, 45087), (37, 45036), (44, 44916),

Gene: JoongJeon_72 Start: 45185, Stop: 44871, Start Num: 17
Candidate Starts for JoongJeon_72:
(Start: 17 @45185 has 143 MA's), (20, 45170), (23, 45158), (24, 45149), (30, 45053), (37, 45002), (44, 44882),

Gene: Junimo_69 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for Junimo_69:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: KFPoly_72 Start: 45185, Stop: 44871, Start Num: 17
Candidate Starts for KFPoly_72:
(Start: 17 @45185 has 143 MA's), (20, 45170), (23, 45158), (24, 45149), (30, 45053), (37, 45002), (44, 44882),

Gene: Kampy_72 Start: 45194, Stop: 44880, Start Num: 17
Candidate Starts for Kampy_72:
(Start: 17 @45194 has 143 MA's), (20, 45179), (23, 45167), (24, 45158), (30, 45062), (37, 45011), (44, 44891),

Gene: Katalie136_72 Start: 45240, Stop: 44926, Start Num: 17
Candidate Starts for Katalie136_72:
(Start: 17 @45240 has 143 MA's), (20, 45225), (23, 45213), (24, 45204), (30, 45108), (37, 45057), (44, 44937),

Gene: KekoraPapaka_70 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for KekoraPapaka_70:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: Kimona_74 Start: 44271, Stop: 43942, Start Num: 15
Candidate Starts for Kimona_74:
(6, 44373), (8, 44361), (12, 44307), (Start: 15 @44271 has 19 MA's), (28, 44151), (30, 44124), (40, 44055),

Gene: Kingmustik0402_73 Start: 45180, Stop: 44866, Start Num: 17
Candidate Starts for Kingmustik0402_73:
(Start: 17 @45180 has 143 MA's), (20, 45165), (23, 45153), (24, 45144), (30, 45048), (37, 44997), (44, 44877),

Gene: KittenMittens_69 Start: 44054, Stop: 43719, Start Num: 15
Candidate Starts for KittenMittens_69:
(Start: 15 @44054 has 19 MA's), (30, 43901),

Gene: Koan_70 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for Koan_70:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: Konstantine_79 Start: 55566, Stop: 55967, Start Num: 13
Candidate Starts for Konstantine_79:
(5, 55470), (11, 55527), (Start: 13 @55566 has 11 MA's), (14, 55572), (16, 55581), (20, 55605), (22, 55614), (33, 55746), (35, 55761),

Gene: Koreni_72 Start: 44872, Stop: 44558, Start Num: 17
Candidate Starts for Koreni_72:
(Start: 17 @44872 has 143 MA's), (20, 44857), (23, 44845), (24, 44836), (30, 44740), (37, 44689), (44, 44569),

Gene: Kratark_72 Start: 45225, Stop: 44911, Start Num: 17
Candidate Starts for Kratark_72:
(Start: 17 @45225 has 143 MA's), (20, 45210), (23, 45198), (24, 45189), (30, 45093), (37, 45042), (44, 44922),

Gene: Kremtemulon_72 Start: 45324, Stop: 45010, Start Num: 17
Candidate Starts for Kremtemulon_72:

(Start: 17 @45324 has 143 MA's), (20, 45309), (23, 45297), (24, 45288), (30, 45192), (37, 45141), (44, 45021),

Gene: Kristoff_71 Start: 45340, Stop: 45023, Start Num: 15
Candidate Starts for Kristoff_71:
(Start: 15 @45340 has 19 MA's), (30, 45205),

Gene: Kyee_73 Start: 45186, Stop: 44872, Start Num: 17
Candidate Starts for Kyee_73:
(Start: 17 @45186 has 143 MA's), (20, 45171), (23, 45159), (24, 45150), (30, 45054), (37, 45003), (44, 44883),

Gene: LHTSCC_75 Start: 45628, Stop: 45314, Start Num: 17
Candidate Starts for LHTSCC_75:
(Start: 17 @45628 has 143 MA's), (20, 45613), (23, 45601), (24, 45592), (30, 45496), (37, 45445), (44, 45325),

Gene: LappelDuVide_73 Start: 45190, Stop: 44876, Start Num: 17
Candidate Starts for LappelDuVide_73:
(Start: 17 @45190 has 143 MA's), (20, 45175), (23, 45163), (24, 45154), (30, 45058), (37, 45007), (44, 44887),

Gene: Lemur_73 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Lemur_73:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: LeoAvram_72 Start: 45222, Stop: 44908, Start Num: 17
Candidate Starts for LeoAvram_72:
(Start: 17 @45222 has 143 MA's), (20, 45207), (23, 45195), (24, 45186), (30, 45090), (37, 45039), (44, 44919),

Gene: LittleB_73 Start: 45192, Stop: 44878, Start Num: 17
Candidate Starts for LittleB_73:
(Start: 17 @45192 has 143 MA's), (20, 45177), (23, 45165), (24, 45156), (30, 45060), (37, 45009), (44, 44889),

Gene: LittleGuy_73 Start: 45076, Stop: 44762, Start Num: 17
Candidate Starts for LittleGuy_73:
(Start: 17 @45076 has 143 MA's), (20, 45061), (23, 45049), (24, 45040), (30, 44944), (37, 44893), (44, 44773),

Gene: LochMonster_74 Start: 45427, Stop: 45113, Start Num: 17
Candidate Starts for LochMonster_74:
(Start: 17 @45427 has 143 MA's), (20, 45412), (23, 45400), (24, 45391), (30, 45295), (37, 45244), (44, 45124),

Gene: Lorenzo_73 Start: 45189, Stop: 44875, Start Num: 17
Candidate Starts for Lorenzo_73:
(Start: 17 @45189 has 143 MA's), (20, 45174), (23, 45162), (24, 45153), (30, 45057), (37, 45006), (44, 44886),

Gene: Lunsford_73 Start: 45184, Stop: 44870, Start Num: 17

Candidate Starts for Lunsford_73:
(Start: 17 @45184 has 143 MA's), (20, 45169), (23, 45157), (24, 45148), (30, 45052), (37, 45001), (44, 44881),

Gene: Maverick_72 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Maverick_72:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Maxo_75 Start: 45194, Stop: 44880, Start Num: 17
Candidate Starts for Maxo_75:
(Start: 17 @45194 has 143 MA's), (20, 45179), (23, 45167), (24, 45158), (30, 45062), (37, 45011), (44, 44891),

Gene: Mayonnaise_70 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Mayonnaise_70:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Mazhar510_73 Start: 45189, Stop: 44875, Start Num: 17
Candidate Starts for Mazhar510_73:
(Start: 17 @45189 has 143 MA's), (20, 45174), (23, 45162), (24, 45153), (30, 45057), (37, 45006), (44, 44886),

Gene: Medusa_73 Start: 45204, Stop: 44890, Start Num: 17
Candidate Starts for Medusa_73:
(Start: 17 @45204 has 143 MA's), (20, 45189), (23, 45177), (24, 45168), (30, 45072), (37, 45021), (44, 44901),

Gene: MeeZee_72 Start: 45185, Stop: 44871, Start Num: 17
Candidate Starts for MeeZee_72:
(Start: 17 @45185 has 143 MA's), (20, 45170), (23, 45158), (24, 45149), (30, 45053), (37, 45002), (44, 44882),

Gene: Megatron06_77 Start: 55657, Stop: 56058, Start Num: 13
Candidate Starts for Megatron06_77:
(5, 55561), (11, 55618), (Start: 13 @55657 has 11 MA's), (14, 55663), (16, 55672), (20, 55696), (22, 55705), (33, 55837), (35, 55852),

Gene: Melvin_75 Start: 45186, Stop: 44872, Start Num: 17
Candidate Starts for Melvin_75:
(Start: 17 @45186 has 143 MA's), (20, 45171), (23, 45159), (24, 45150), (30, 45054), (37, 45003), (44, 44883),

Gene: Millski_72 Start: 45192, Stop: 44878, Start Num: 17
Candidate Starts for Millski_72:
(Start: 17 @45192 has 143 MA's), (20, 45177), (23, 45165), (24, 45156), (30, 45060), (37, 45009), (44, 44889),

Gene: Miramae_72 Start: 44789, Stop: 44475, Start Num: 17
Candidate Starts for Miramae_72:
(Start: 17 @44789 has 143 MA's), (23, 44762), (30, 44657), (37, 44606), (44, 44486),

Gene: Morpher26_72 Start: 45261, Stop: 44947, Start Num: 17
Candidate Starts for Morpher26_72:
(Start: 17 @45261 has 143 MA's), (20, 45246), (23, 45234), (24, 45225), (30, 45129), (37, 45078), (44, 44958),

Gene: Morrow_75 Start: 45231, Stop: 44917, Start Num: 17
Candidate Starts for Morrow_75:
(Start: 17 @45231 has 143 MA's), (20, 45216), (23, 45204), (24, 45195), (30, 45099), (37, 45048), (44, 44928),

Gene: Mundrea_72 Start: 45260, Stop: 44946, Start Num: 17
Candidate Starts for Mundrea_72:
(Start: 17 @45260 has 143 MA's), (20, 45245), (30, 45128), (37, 45077), (44, 44957),

Gene: Nanosmite_146 Start: 72535, Stop: 72203, Start Num: 15
Candidate Starts for Nanosmite_146:
(Start: 15 @72535 has 19 MA's), (30, 72403), (32, 72391), (44, 72214),

Gene: Nebs_74 Start: 45231, Stop: 44917, Start Num: 17
Candidate Starts for Nebs_74:
(Start: 17 @45231 has 143 MA's), (20, 45216), (23, 45204), (24, 45195), (30, 45099), (37, 45048), (44, 44928),

Gene: Nemo27_72 Start: 45187, Stop: 44873, Start Num: 17
Candidate Starts for Nemo27_72:
(Start: 17 @45187 has 143 MA's), (20, 45172), (23, 45160), (24, 45151), (30, 45055), (37, 45004), (44, 44884),

Gene: Nish23_77 Start: 54773, Stop: 55162, Start Num: 13
Candidate Starts for Nish23_77:
(5, 54677), (11, 54734), (Start: 13 @54773 has 11 MA's), (14, 54779), (16, 54788), (20, 54812), (22, 54821), (25, 54863), (33, 54953), (35, 54968),

Gene: Noelle_73 Start: 45582, Stop: 45268, Start Num: 17
Candidate Starts for Noelle_73:
(Start: 17 @45582 has 143 MA's), (20, 45567), (23, 45555), (24, 45546), (30, 45450), (37, 45399), (44, 45279),

Gene: NorthStar_71 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for NorthStar_71:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: Northrop_70 Start: 45187, Stop: 44873, Start Num: 17
Candidate Starts for Northrop_70:
(Start: 17 @45187 has 143 MA's), (20, 45172), (23, 45160), (24, 45151), (30, 45055), (37, 45004), (44, 44884),

Gene: NotAPhaseMom_72 Start: 45192, Stop: 44878, Start Num: 17
Candidate Starts for NotAPhaseMom_72:
(Start: 17 @45192 has 143 MA's), (20, 45177), (23, 45165), (24, 45156), (30, 45060), (37, 45009), (44, 44889),

Gene: Nyxis_72 Start: 45070, Stop: 44756, Start Num: 17
Candidate Starts for Nyxis_72:
(Start: 17 @45070 has 143 MA's), (20, 45055), (23, 45043), (30, 44938), (37, 44887), (44, 44767),

Gene: OKCentral2016_72 Start: 44133, Stop: 43816, Start Num: 15
Candidate Starts for OKCentral2016_72:
(Start: 15 @44133 has 19 MA's), (30, 43998),

Gene: OKaNui_72 Start: 45241, Stop: 44927, Start Num: 17
Candidate Starts for OKaNui_72:
(Start: 17 @45241 has 143 MA's), (20, 45226), (23, 45214), (24, 45205), (30, 45109), (37, 45058), (44, 44938),

Gene: Oaker_76 Start: 55686, Stop: 56087, Start Num: 13
Candidate Starts for Oaker_76:
(5, 55590), (11, 55647), (Start: 13 @55686 has 11 MA's), (14, 55692), (16, 55701), (20, 55725), (22, 55734), (33, 55866), (35, 55881),

Gene: Obama12_74 Start: 45612, Stop: 45298, Start Num: 17
Candidate Starts for Obama12_74:
(Start: 17 @45612 has 143 MA's), (20, 45597), (23, 45585), (24, 45576), (30, 45480), (37, 45429), (44, 45309),

Gene: Ohfah_74 Start: 45231, Stop: 44917, Start Num: 17
Candidate Starts for Ohfah_74:
(Start: 17 @45231 has 143 MA's), (20, 45216), (23, 45204), (24, 45195), (30, 45099), (37, 45048), (44, 44928),

Gene: Palestino_72 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Palestino_72:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: PeaceMeal1_70 Start: 44055, Stop: 43720, Start Num: 15
Candidate Starts for PeaceMeal1_70:
(Start: 15 @44055 has 19 MA's), (30, 43902),

Gene: Peaches_71 Start: 45190, Stop: 44876, Start Num: 17
Candidate Starts for Peaches_71:
(Start: 17 @45190 has 143 MA's), (20, 45175), (23, 45163), (24, 45154), (30, 45058), (37, 45007), (44, 44887),

Gene: Perplexer_72 Start: 45237, Stop: 44923, Start Num: 17
Candidate Starts for Perplexer_72:
(Start: 17 @45237 has 143 MA's), (20, 45222), (23, 45210), (24, 45201), (37, 45054), (44, 44934),

Gene: PeterPeter_73 Start: 45185, Stop: 44871, Start Num: 17
Candidate Starts for PeterPeter_73:
(Start: 17 @45185 has 143 MA's), (20, 45170), (23, 45158), (24, 45149), (30, 45053), (37, 45002), (44, 44882),

Gene: PetiteSangsue_72 Start: 45240, Stop: 44926, Start Num: 17
Candidate Starts for PetiteSangsue_72:

(Start: 17 @45240 has 143 MA's), (20, 45225), (23, 45213), (24, 45204), (37, 45057), (44, 44937),

Gene: Phacado_73 Start: 45187, Stop: 44873, Start Num: 17
Candidate Starts for Phacado_73:
(Start: 17 @45187 has 143 MA's), (20, 45172), (23, 45160), (24, 45151), (30, 45055), (37, 45004), (44, 44884),

Gene: Phelipe_74 Start: 45231, Stop: 44917, Start Num: 17
Candidate Starts for Phelipe_74:
(Start: 17 @45231 has 143 MA's), (20, 45216), (23, 45204), (24, 45195), (30, 45099), (37, 45048), (44, 44928),

Gene: Phighter1804_73 Start: 45252, Stop: 44938, Start Num: 17
Candidate Starts for Phighter1804_73:
(Start: 17 @45252 has 143 MA's), (20, 45237), (23, 45225), (24, 45216), (30, 45120), (37, 45069), (44, 44949),

Gene: Phontbonne_73 Start: 45086, Stop: 44772, Start Num: 17
Candidate Starts for Phontbonne_73:
(Start: 17 @45086 has 143 MA's), (20, 45071), (23, 45059), (30, 44954), (37, 44903), (38, 44900), (44, 44783),

Gene: Phreeze_75 Start: 54656, Stop: 55057, Start Num: 13
Candidate Starts for Phreeze_75:
(5, 54560), (11, 54617), (Start: 13 @54656 has 11 MA's), (14, 54662), (16, 54671), (20, 54695), (22, 54704), (33, 54836), (35, 54851),

Gene: Pipcraft_70 Start: 45192, Stop: 44878, Start Num: 17
Candidate Starts for Pipcraft_70:
(Start: 17 @45192 has 143 MA's), (20, 45177), (23, 45165), (24, 45156), (30, 45060), (37, 45009), (44, 44889),

Gene: Polymorphads_74 Start: 45212, Stop: 44898, Start Num: 17
Candidate Starts for Polymorphads_74:
(Start: 17 @45212 has 143 MA's), (20, 45197), (23, 45185), (24, 45176), (30, 45080), (37, 45029), (44, 44909),

Gene: Poompha_70 Start: 44053, Stop: 43718, Start Num: 15
Candidate Starts for Poompha_70:
(Start: 15 @44053 has 19 MA's), (30, 43900),

Gene: Predator_75 Start: 54337, Stop: 54759, Start Num: 13
Candidate Starts for Predator_75:
(Start: 13 @54337 has 11 MA's), (14, 54343), (16, 54352), (35, 54535), (39, 54553), (41, 54601), (43, 54619),

Gene: Puissant_72 Start: 54821, Stop: 55210, Start Num: 13
Candidate Starts for Puissant_72:
(Start: 13 @54821 has 11 MA's), (14, 54827), (22, 54869), (33, 55001), (35, 55016),

Gene: Pumbaa_73 Start: 45136, Stop: 44822, Start Num: 17
Candidate Starts for Pumbaa_73:

(Start: 17 @45136 has 143 MA's), (20, 45121), (23, 45109), (24, 45100), (30, 45004), (37, 44953), (44, 44833),

Gene: Rebeuca_74 Start: 45341, Stop: 45024, Start Num: 15
Candidate Starts for Rebeuca_74:
(Start: 15 @45341 has 19 MA's), (30, 45206),

Gene: Relief_72 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Relief_72:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: RockieBear_73 Start: 45190, Stop: 44876, Start Num: 17
Candidate Starts for RockieBear_73:
(Start: 17 @45190 has 143 MA's), (20, 45175), (23, 45163), (24, 45154), (30, 45058), (37, 45007), (44, 44887),

Gene: Rocksand_70 Start: 45187, Stop: 44873, Start Num: 17
Candidate Starts for Rocksand_70:
(Start: 17 @45187 has 143 MA's), (20, 45172), (23, 45160), (24, 45151), (30, 45055), (37, 45004), (44, 44884),

Gene: Romney_72 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Romney_72:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Roosevelt_71 Start: 45193, Stop: 44879, Start Num: 17
Candidate Starts for Roosevelt_71:
(Start: 17 @45193 has 143 MA's), (20, 45178), (23, 45166), (24, 45157), (30, 45061), (37, 45010), (44, 44890),

Gene: Rosa24_70 Start: 45219, Stop: 44905, Start Num: 17
Candidate Starts for Rosa24_70:
(Start: 17 @45219 has 143 MA's), (20, 45204), (23, 45192), (24, 45183), (30, 45087), (37, 45036), (44, 44916),

Gene: Rowdy_75 Start: 45046, Stop: 44729, Start Num: 15
Candidate Starts for Rowdy_75:
(Start: 15 @45046 has 19 MA's), (30, 44911),

Gene: Ruin_73 Start: 45184, Stop: 44870, Start Num: 17
Candidate Starts for Ruin_73:
(Start: 17 @45184 has 143 MA's), (20, 45169), (23, 45157), (24, 45148), (30, 45052), (37, 45001), (44, 44881),

Gene: Sabertooth_73 Start: 45196, Stop: 44882, Start Num: 17
Candidate Starts for Sabertooth_73:
(Start: 17 @45196 has 143 MA's), (20, 45181), (23, 45169), (24, 45160), (30, 45064), (37, 45013), (44, 44893),

Gene: Scamp_73 Start: 45193, Stop: 44879, Start Num: 17
Candidate Starts for Scamp_73:

(Start: 17 @45193 has 143 MA's), (20, 45178), (23, 45166), (24, 45157), (30, 45061), (37, 45010), (44, 44890),

Gene: SenorClean_74 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for SenorClean_74:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: Severus_71 Start: 44053, Stop: 43718, Start Num: 15
Candidate Starts for Severus_71:
(Start: 15 @44053 has 19 MA's), (30, 43900),

Gene: Shaka_71 Start: 45189, Stop: 44875, Start Num: 17
Candidate Starts for Shaka_71:
(Start: 17 @45189 has 143 MA's), (20, 45174), (23, 45162), (24, 45153), (30, 45057), (37, 45006), (44, 44886),

Gene: Shapes_75 Start: 45046, Stop: 44729, Start Num: 15
Candidate Starts for Shapes_75:
(Start: 15 @45046 has 19 MA's), (30, 44911),

Gene: SheldonCooper_73 Start: 45629, Stop: 45315, Start Num: 17
Candidate Starts for SheldonCooper_73:
(Start: 17 @45629 has 143 MA's), (20, 45614), (23, 45602), (24, 45593), (30, 45497), (37, 45446), (44, 45326),

Gene: Shygu2_72 Start: 45292, Stop: 44978, Start Num: 17
Candidate Starts for Shygu2_72:
(Start: 17 @45292 has 143 MA's), (20, 45277), (23, 45265), (24, 45256), (30, 45160), (37, 45109), (44, 44989),

Gene: Skadoosh_71 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Skadoosh_71:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Skipitt_72 Start: 45185, Stop: 44871, Start Num: 17
Candidate Starts for Skipitt_72:
(Start: 17 @45185 has 143 MA's), (20, 45170), (23, 45158), (24, 45149), (30, 45053), (37, 45002), (44, 44882),

Gene: Sparxx_74 Start: 45187, Stop: 44873, Start Num: 17
Candidate Starts for Sparxx_74:
(Start: 17 @45187 has 143 MA's), (20, 45172), (23, 45160), (24, 45151), (30, 45055), (37, 45004), (44, 44884),

Gene: Spino_72 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for Spino_72:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: Stasia_71 Start: 45170, Stop: 44856, Start Num: 17
Candidate Starts for Stasia_71:

(Start: 17 @45170 has 143 MA's), (20, 45155), (30, 45038), (31, 45035), (37, 44987),

Gene: SteMason_73 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for SteMason_73:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Stink_72 Start: 45069, Stop: 44755, Start Num: 17
Candidate Starts for Stink_72:
(Start: 17 @45069 has 143 MA's), (23, 45042), (30, 44937), (37, 44886), (44, 44766),

Gene: Sultana_73 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Sultana_73:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Taquarus_72 Start: 45194, Stop: 44880, Start Num: 17
Candidate Starts for Taquarus_72:
(Start: 17 @45194 has 143 MA's), (20, 45179), (23, 45167), (24, 45158), (30, 45062), (37, 45011), (44, 44891),

Gene: Thanksgivukkah_72 Start: 45189, Stop: 44875, Start Num: 17
Candidate Starts for Thanksgivukkah_72:
(Start: 17 @45189 has 143 MA's), (20, 45174), (23, 45162), (24, 45153), (30, 45057), (37, 45006), (44, 44886),

Gene: Thumb_77 Start: 55088, Stop: 55489, Start Num: 13
Candidate Starts for Thumb_77:
(5, 54992), (11, 55049), (Start: 13 @55088 has 11 MA's), (14, 55094), (16, 55103), (20, 55127), (22, 55136), (33, 55268), (35, 55283),

Gene: Timshel_74 Start: 48213, Stop: 47875, Start Num: 15
Candidate Starts for Timshel_74:
(1, 48453), (3, 48420), (Start: 15 @48213 has 19 MA's), (19, 48198), (21, 48177), (26, 48096), (30, 48057), (31, 48054), (34, 48030), (36, 48012), (41, 47943), (42, 47940), (44, 47886),

Gene: TinaFeyge_71 Start: 45186, Stop: 44872, Start Num: 17
Candidate Starts for TinaFeyge_71:
(Start: 17 @45186 has 143 MA's), (20, 45171), (23, 45159), (24, 45150), (30, 45054), (37, 45003), (44, 44883),

Gene: Tinybot_72 Start: 45218, Stop: 44904, Start Num: 17
Candidate Starts for Tinybot_72:
(Start: 17 @45218 has 143 MA's), (20, 45203), (23, 45191), (24, 45182), (30, 45086), (37, 45035), (44, 44915),

Gene: TiroTheta9_72 Start: 45185, Stop: 44871, Start Num: 17
Candidate Starts for TiroTheta9_72:
(Start: 17 @45185 has 143 MA's), (20, 45170), (23, 45158), (24, 45149), (30, 45053), (37, 45002), (44, 44882),

Gene: Toro_75 Start: 48937, Stop: 48617, Start Num: 15
Candidate Starts for Toro_75:

(2, 49147), (4, 49066), (7, 49036), (10, 49003), (Start: 15 @48937 has 19 MA's), (27, 48832), (30, 48799), (36, 48754), (40, 48730), (44, 48628),

Gene: TroyPia_74 Start: 45226, Stop: 44912, Start Num: 17
Candidate Starts for TroyPia_74:
(Start: 17 @45226 has 143 MA's), (20, 45211), (23, 45199), (24, 45190), (30, 45094), (37, 45043), (44, 44923),

Gene: Twister_73 Start: 44890, Stop: 44573, Start Num: 15
Candidate Starts for Twister_73:
(Start: 15 @44890 has 19 MA's), (30, 44755),

Gene: TygerBlood_73 Start: 45191, Stop: 44877, Start Num: 17
Candidate Starts for TygerBlood_73:
(Start: 17 @45191 has 143 MA's), (20, 45176), (23, 45164), (24, 45155), (30, 45059), (37, 45008), (44, 44888),

Gene: Ulysses_72 Start: 44874, Stop: 44560, Start Num: 17
Candidate Starts for Ulysses_72:
(Start: 17 @44874 has 143 MA's), (20, 44859), (23, 44847), (24, 44838), (30, 44742), (37, 44691), (44, 44571),

Gene: WalterMcMickey_72 Start: 44890, Stop: 44573, Start Num: 15
Candidate Starts for WalterMcMickey_72:
(Start: 15 @44890 has 19 MA's), (30, 44755),

Gene: Wander_73 Start: 45185, Stop: 44871, Start Num: 17
Candidate Starts for Wander_73:
(Start: 17 @45185 has 143 MA's), (20, 45170), (23, 45158), (24, 45149), (30, 45053), (37, 45002), (44, 44882),

Gene: Wilbur_73 Start: 45188, Stop: 44874, Start Num: 17
Candidate Starts for Wilbur_73:
(Start: 17 @45188 has 143 MA's), (20, 45173), (23, 45161), (24, 45152), (30, 45056), (37, 45005), (44, 44885),

Gene: Wile_71 Start: 45270, Stop: 44956, Start Num: 17
Candidate Starts for Wile_71:
(Start: 17 @45270 has 143 MA's), (20, 45255), (23, 45243), (24, 45234), (30, 45138), (37, 45087), (44, 44967),

Gene: Wizard007_72 Start: 44996, Stop: 44682, Start Num: 17
Candidate Starts for Wizard007_72:
(Start: 17 @44996 has 143 MA's), (20, 44981), (23, 44969), (24, 44960), (30, 44864), (37, 44813), (44, 44693),

Gene: Xena_71 Start: 45261, Stop: 44947, Start Num: 17
Candidate Starts for Xena_71:
(Start: 17 @45261 has 143 MA's), (20, 45246), (23, 45234), (24, 45225), (37, 45078), (44, 44958),

Gene: YoSam321_73 Start: 45186, Stop: 44872, Start Num: 17
Candidate Starts for YoSam321_73:

(Start: 17 @45186 has 143 MA's), (20, 45171), (23, 45159), (24, 45150), (30, 45054), (37, 45003), (44, 44883),