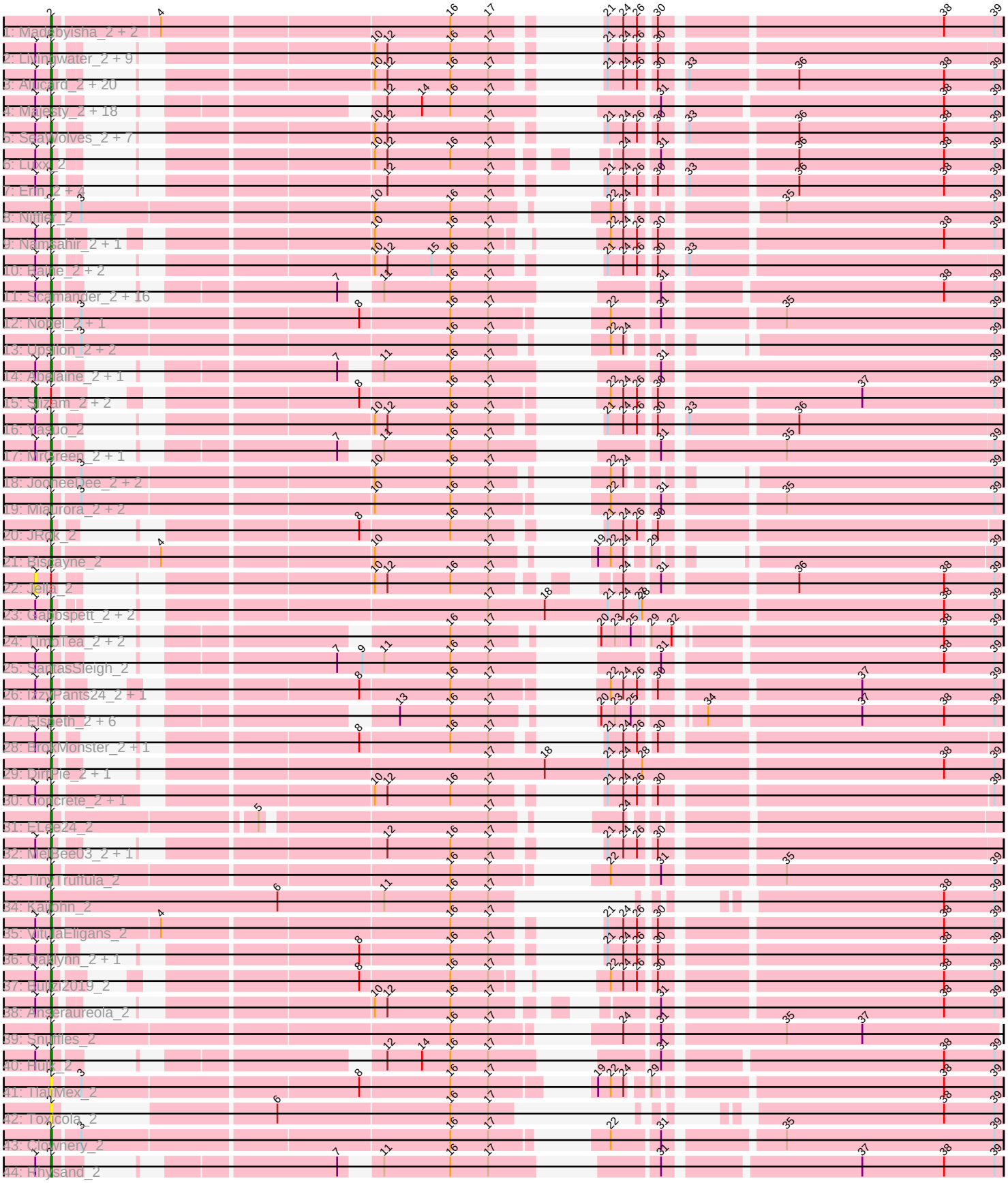
# Pham 347347


1: Madebyisha_2 + 2
2: Livingwater_2 + 9
3: Allicard_2 + 20
4: Majesty_2 + 18
5: SeaWolves_2 + 7
6: Luko_2
7: Erin_2 + 4
8: Niffler_2
9: Namsahir_2 + 1
10: Ellie_2 + 2
11: Scamander_2 + 16
12: Nobel_2 + 1
13: Upsilon_2 + 2
14: Abelaine_2 + 1
15: Sizzam_2 + 2
16: Yasuo_2
17: MrGreen_2 + 1
18: JocheeDee_2 + 2
19: Miaurora_2 + 2
20: JRok_2
21: Biscayne_2
22: Jeija_2
23: Gabbspett_2 + 2
24: TinyTea_2 + 2
25: SantasSleigh_2
26: IzzyPants24_2 + 1
27: Elspeth_2 + 6
28: BrokMonster_2 + 1
29: DimPie_2 + 1
30: Goncrete_2 + 1
31: ELee24_2
32: MelBee03_2 + 1
33: TinyTruffula_2
34: Kathnn_2
35: VirtuaEligans_2
36: Caitlynn_2 + 1
37: Buzzi2019_2
38: Angeraureola_2
39: Snuffles_2
40: Hulk_2
41: TiaMex_2
42: Toxicola_2
43: Clockwery_2
44: Rhysand_2

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 347347 Report

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

Pham number 347347 has 150 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Madebyisha_2, OdetoJoy_2, Jerky_2
• Track 2 : Livingwater_2, KillerTomato_2, Douggie_2, Sippinontea_2, Quaker_2, Belthelas_2, Bodhi17_2, Wolfpack_2, BoomRoasted_2, KayPaulus_2
• Track 3 : Alucard_2, Minima_2, Goulash_2, ManAs_2, Jahseh_2, Horacetta_2, Gardevoir_2, Jannah_2, GoldenBlanche_2, Witch_2, Picnic_2, Sara_2, Pondwater_2, Puddles3_2, PaoPu_2, Yubaba_2, KyriosFaba_2, JoBros_2, Danimal_2, Duggle_2, EdElric_2
• Track 4 : Majesty_2, Goobery_2, NeumannU_2, Eightball_2, Owens_2, TeddyBoy_2, LionelHutz_2, JaimeB_2, Tyrellus_2, Slentz_2, Picconator_2, BarBear_2, BurtonThePup_2, HeadMave_2, Scrunchy_2, Ciel_2, BinkBonk_2, Rhogar_2, Astro16_2
• Track 5 : SeaWolves_2, Sachet_2, Dooby_2, Dongwon_2, Myram_2, LemonPepper_2, YertPhresh_2, Chatham_2
• Track 6 : Luxx_2
• Track 7 : Erin_2, Gillker_2, Bradley2_2, Aztec_2, Octopus_2
• Track 8 : Niffler_2
• Track 9 : Namsahir_2, Publix_2
• Track 10 : Baine_2, Lola20_2, Cayde6_2
• Track 11 : Scamander_2, Avvas_2, RoscoWindex_2, Otwor_2, DaftyDuck_2, LaviMo_2, Grayscar_2, MasterPitts_2, Aries55_2, Burgy_2, Vanisius_2, Josuke_2, Godfather_2, Sage7_2, Danno_2, Cheesecake_2, Kojax4_2
• Track 12 : Nobel_2, MauiIvory_2
• Track 13 : Upsilon_2, PoRanda_2, MirimarMandM_2
• Track 14 : Abelaine_2, Leafy_2
• Track 15 : Slizam_2, Rira_2, TomBrady12_2
• Track 16 : Yasuo_2
• Track 17 : MrGreen_2, Loca_2
• Track 18 : JooneeDee_2, Bintii_2, PuffyCat_2
• Track 19 : Miaurora_2, Trackstar_2, Trireme_2
• Track 20 : JRok_2
• Track 21 : Biscayne_2
• Track 22 : Jella_2
• Track 23 : Gabbspett_2, Zahlia_2, Hernandez44_2
• Track 24 : TimoTea_2, Charbie_2, Maneater_2
• Track 25 : SantasSleigh_2
• Track 26 : IzzyPants24_2, Stem_2

• Track 27 : Elspeth_2, Ekko14_2, Lunatic_2, Yami_2, Noelani_2, Cazares_2, HarperAnne_2
• Track 28 : BrokMonster_2, McShie_2
• Track 29 : DirtPie_2, Marichuy_2
• Track 30 : Concrete_2, Bri160_2
• Track 31 : ELee24_2
• Track 32 : MelBee03_2, Kevanna_2
• Track 33 : TinyTruffula_2
• Track 34 : Kaijohn_2
• Track 35 : VitulaEligans_2
• Track 36 : Oaklynn_2, Azizam_2
• Track 37 : Bullzi2019_2
• Track 38 : Anseraureola_2
• Track 39 : Snuffles_2
• Track 40 : Hulk_2
• Track 41 : TlaliMex_2
• Track 42 : Toxicola_2
• Track 43 : Clownery_2
• Track 44 : Rhysand_2

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

The start number called the most often in the published annotations is 2, it was called in 140 of the 143 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abelaine_2, Alucard_2, Anseraureola_2, Aries55_2, Astro16_2, Avvas_2, Azizam_2, Aztec_2, Baine_2, BarBear_2, Belthelas_2, BinkBonk_2, Bintii_2, Biscayne_2, Bodhi17_2, BoomRoasted_2, Bradley2_2, Bri160_2, BrokMonster_2, Bullzi2019_2, Burgy_2, BurtonThePup_2, Cayde6_2, Cazares_2, Charbie_2, Chatham_2, Cheesecake_2, Ciel_2, Clownery_2, Concrete_2, DaftyDuck_2, Danimal_2, Danno_2, DirtPie_2, Dongwon_2, Dooby_2, Douggie_2, Duggle_2, ELee24_2, EdElric_2, Eightball_2, Ekko14_2, Elspeth_2, Erin_2, Gabbspett_2, Gardevoir_2, Gillker_2, Godfather_2, GoldenBlanche_2, Goobery_2, Goulash_2, Grayscar_2, HarperAnne_2, HeadMave_2, Hernandez44_2, Horacetta_2, Hulk_2, IzzyPants24_2, JRok_2, Jahseh_2, JaimeB_2, Jannah_2, Jerky_2, JoBros_2, JooneeDee_2, Josuke_2, Kaijohn_2, KayPaulus_2, Kevanna_2, KillerTomato_2, Kojax4_2, KyriosFaba_2, LaviMo_2, Leafy_2, LemonPepper_2, LionelHutz_2, Livingwater_2, Loca_2, Lola20_2, Lunatic_2, Luxx_2, Madebyisha_2, Majesty_2, ManAs_2, Maneater_2, Marichuy_2, MasterPitts_2, MauiIvory_2, McShie_2, MelBee03_2, Miaurora_2, Minima_2, MirimarMandM_2, MrGreen_2, Myram_2, Namsahir_2, NeumannU_2, Niffler_2, Nobel_2, Noelani_2, Oaklynn_2, Octopus_2, OdetoJoy_2, Otwor_2, Owens_2, PaoPu_2, Picconator_2, Picnic_2, PoRanda_2, Pondwater_2, Publix_2, Puddles3_2, PuffyCat_2, Quaker_2, Rhogar_2, Rhysand_2, RoscoWindex_2, Sachet_2, Sage7_2, SantasSleigh_2, Sara_2, Scamander_2, Scrunchy_2, SeaWolves_2, Sippinontea_2, Slentz_2, Snuffles_2, Stem_2, TeddyBoy_2, TimoTea_2, TinyTruffula_2, TlaliMex_2, Toxicola_2, Trackstar_2, Trireme_2, Tyrellus_2, Upsilon_2, Vanisius_2, VitulaEligans_2, Witch_2, Wolfpack_2, Yami_2, Yasuo_2, YertPhresh_2, Yubaba_2, Zahlia_2,

Genes that have the "Most Annotated" start but do not call it:
• Jella_2, Rira_2, Slizam_2, TomBrady12_2,

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

**Summary by start number:**

Start 1:
• Found in 114 of 150 ( 76.0% ) of genes in pham
• Manual Annotations of this start: 3 of 143
• Called 3.5% of time when present
• Phage (with cluster) where this start called: Jella_2 (EE), Rira_2 (EE), Slizam_2 (EE), TomBrady12_2 (EE),

Start 2:
• Found in 150 of 150 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 140 of 143
• Called 97.3% of time when present
• Phage (with cluster) where this start called: Abelaine_2 (EE), Alucard_2 (EE), Anseraureola_2 (EE), Aries55_2 (EE), Astro16_2 (EE), Avvas_2 (EE), Azizam_2 (EE), Aztec_2 (EE), Baine_2 (EE), BarBear_2 (EE), Belthelas_2 (EE), BinkBonk_2 (EE), Bintii_2 (EE), Biscayne_2 (EE), Bodhi17_2 (EE), BoomRoasted_2 (EE), Bradley2_2 (EE), Bri160_2 (EE), BrokMonster_2 (EE), Bullzi2019_2 (EE), Burgy_2 (EE), BurtonThePup_2 (EE), Cayde6_2 (EE), Cazares_2 (EE), Charbie_2 (EE), Chatham_2 (EE), Cheesecake_2 (EE), Ciel_2 (EE), Clownery_2 (EE), Concrete_2 (EE), DaftyDuck_2 (EE), Danimal_2 (EE), Danno_2 (EE), DirtPie_2 (EE), Dongwon_2 (EE), Dooby_2 (EE), Douggie_2 (EE), Duggle_2 (EE), ELee24_2 (EE), EdElric_2 (EE), Eightball_2 (EE), Ekko14_2 (EE), Elspeth_2 (EE), Erin_2 (EE), Gabbspett_2 (EE), Gardevoir_2 (EE), Gillker_2 (EE), Godfather_2 (EE), GoldenBlanche_2 (EE), Goobery_2 (EE), Goulash_2 (EE), Grayscar_2 (EE), HarperAnne_2 (EE), HeadMave_2 (EE), Hernandez44_2 (EE), Horacetta_2 (EE), Hulk_2 (EE), IzzyPants24_2 (EE), JRok_2 (EE), Jahseh_2 (EE), JaimeB_2 (EE), Jannah_2 (EE), Jerky_2 (EE), JoBros_2 (EE), JooneeDee_2 (EE), Josuke_2 (EE), Kaijohn_2 (EE), KayPaulus_2 (EE), Kevanna_2 (EE), KillerTomato_2 (EE), Kojax4_2 (EE), KyriosFaba_2 (EE), LaviMo_2 (EE), Leafy_2 (EE), LemonPepper_2 (EE), LionelHutz_2 (EE), Livingwater_2 (EE), Loca_2 (EE), Lola20_2 (EE), Lunatic_2 (EE), Luxx_2 (EE), Madebyisha_2 (EE), Majesty_2 (EE), ManAs_2 (EE), Maneater_2 (EE), Marichuy_2 (EE), MasterPitts_2 (EE), MauiIvory_2 (EE), McShie_2 (EE), MelBee03_2 (EE), Miaurora_2 (EE), Minima_2 (EE), MirimarMandM_2 (EE), MrGreen_2 (EE), Myram_2 (EE), Namsahir_2 (EE), NeumannU_2 (EE), Niffler_2 (EE), Nobel_2 (EE), Noelani_2 (EE), Oaklynn_2 (EE), Octopus_2 (EE), OdetoJoy_2 (EE), Otwor_2 (EE), Owens_2 (EE), PaoPu_2 (EE), Picconator_2 (EE), Picnic_2 (EE), PoRanda_2 (EE), Pondwater_2 (EE), Publix_2 (EE), Puddles3_2 (EE), PuffyCat_2 (EE), Quaker_2 (EE), Rhogar_2 (EE), Rhysand_2 (EE), RoscoWindex_2 (EE), Sachet_2 (EE), Sage7_2 (EE), SantasSleigh_2 (EE), Sara_2 (EE), Scamander_2 (EE), Scrunchy_2 (EE), SeaWolves_2 (EE), Sippinontea_2 (EE), Slentz_2 (EE), Snuffles_2 (EE), Stem_2 (EE), TeddyBoy_2 (EE), TimoTea_2 (EE), TinyTruffula_2 (EE), TlaliMex_2 (EE), Toxicola_2 (EE), Trackstar_2 (EE), Trireme_2 (EE), Tyrellus_2 (EE), Upsilon_2 (EE), Vanisius_2 (EE), VitulaEligans_2 (EE), Witch_2 (EE), Wolfpack_2 (EE), Yami_2 (EE), Yasuo_2 (EE), YertPhresh_2 (EE), Yubaba_2 (EE), Zahlia_2 (EE),

**Summary by clusters:**

There is one cluster represented in this pham: EE

Info for manual annotations of cluster EE:
•Start number 1 was manually annotated 3 times for cluster EE.
•Start number 2 was manually annotated 140 times for cluster EE.

***Gene Information:***

Gene: Abelaine_2 Start: 376, Stop: 1089, Start Num: 2
Candidate Starts for Abelaine_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (39, 1081),

Gene: Alucard_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Alucard_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Anseraureola_2 Start: 376, Stop: 1095, Start Num: 2
Candidate Starts for Anseraureola_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (31, 790), (38, 1039), (39, 1087),

Gene: Aries55_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Aries55_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Astro16_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Astro16_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Avvas_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Avvas_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Azizam_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Azizam_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 571), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (38, 1015), (39, 1063),

Gene: Aztec_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Aztec_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Baine_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Baine_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (15, 637), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781),

Gene: BarBear_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for BarBear_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Belthelas_2 Start: 376, Stop: 1122, Start Num: 2
Candidate Starts for Belthelas_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 637), (12, 649), (16, 709), (17, 745), (21, 781), (24, 793), (26, 805), (30, 817),

Gene: BinkBonk_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for BinkBonk_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Bintii_2 Start: 376, Stop: 1101, Start Num: 2
Candidate Starts for Bintii_2:
(Start: 2 @376 has 140 MA's), (3, 400), (10, 664), (16, 736), (17, 772), (22, 820), (24, 832), (39, 1093),

Gene: Biscayne_2 Start: 376, Stop: 1098, Start Num: 2
Candidate Starts for Biscayne_2:
(Start: 2 @376 has 140 MA's), (4, 472), (10, 664), (17, 772), (19, 808), (22, 820), (24, 832), (29, 844), (39, 1090),

Gene: Bodhi17_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Bodhi17_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: BoomRoasted_2 Start: 376, Stop: 1122, Start Num: 2
Candidate Starts for BoomRoasted_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 637), (12, 649), (16, 709), (17, 745), (21, 781), (24, 793), (26, 805), (30, 817),

Gene: Bradley2_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Bradley2_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Bri160_2 Start: 376, Stop: 1122, Start Num: 2
Candidate Starts for Bri160_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 637), (12, 649), (16, 709), (17, 745), (21, 781), (24, 793), (26, 805), (30, 817), (39, 1114),

Gene: BrokMonster_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for BrokMonster_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 571), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: Bullzi2019_2 Start: 376, Stop: 1092, Start Num: 2
Candidate Starts for Bullzi2019_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 592), (16, 676), (17, 712), (22, 748), (24, 760), (26, 772), (30, 784), (38, 1036), (39, 1084),

Gene: Burgy_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Burgy_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: BurtonThePup_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for BurtonThePup_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Cayde6_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Cayde6_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (15, 637), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781),

Gene: Cazares_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for Cazares_2:
(Start: 2 @376 has 140 MA's), (13, 595), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Charbie_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for Charbie_2:
(Start: 2 @376 has 140 MA's), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (29, 751), (32, 769), (38, 1003), (39, 1051),

Gene: Chatham_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Chatham_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Cheesecake_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Cheesecake_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Ciel_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Ciel_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Clownery_2 Start: 376, Stop: 1176, Start Num: 2
Candidate Starts for Clownery_2:
(Start: 2 @376 has 140 MA's), (3, 400), (16, 736), (17, 772), (22, 829), (31, 871), (35, 970), (39, 1168),

Gene: Concrete_2 Start: 376, Stop: 1122, Start Num: 2
Candidate Starts for Concrete_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 637), (12, 649), (16, 709), (17, 745), (21, 781), (24, 793), (26, 805), (30, 817), (39, 1114),

Gene: DaftyDuck_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for DaftyDuck_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Danimal_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Danimal_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Danno_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Danno_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: DirtPie_2 Start: 376, Stop: 1176, Start Num: 2
Candidate Starts for DirtPie_2:
(Start: 2 @376 has 140 MA's), (17, 694), (18, 748), (21, 808), (24, 823), (28, 841), (38, 1120), (39, 1168),

Gene: Dongwon_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Dongwon_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Dooby_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Dooby_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Douggie_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Douggie_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: Duggle_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Duggle_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: ELee24_2 Start: 376, Stop: 1131, Start Num: 2
Candidate Starts for ELee24_2:
(Start: 2 @376 has 140 MA's), (5, 553), (17, 754), (24, 814),

Gene: EdElric_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for EdElric_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Eightball_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Eightball_2:

(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Ekko14_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for Ekko14_2:
(Start: 2 @376 has 140 MA's), (13, 595), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Elspeth_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for Elspeth_2:
(Start: 2 @376 has 140 MA's), (13, 595), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Erin_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Erin_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Gabbspett_2 Start: 376, Stop: 1173, Start Num: 2
Candidate Starts for Gabbspett_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (17, 691), (18, 745), (21, 805), (24, 820), (27, 835), (28, 838), (38, 1117), (39, 1165),

Gene: Gardevoir_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Gardevoir_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Gillker_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Gillker_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Godfather_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Godfather_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: GoldenBlanche_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for GoldenBlanche_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Goobery_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Goobery_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Goulash_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Goulash_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Grayscar_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Grayscar_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: HarperAnne_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for HarperAnne_2:
(Start: 2 @376 has 140 MA's), (13, 595), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: HeadMave_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for HeadMave_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Hernandez44_2 Start: 376, Stop: 1173, Start Num: 2
Candidate Starts for Hernandez44_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (17, 691), (18, 745), (21, 805), (24, 820), (27, 835), (28, 838), (38, 1117), (39, 1165),

Gene: Horacetta_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Horacetta_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Hulk_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Hulk_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: IzzyPants24_2 Start: 376, Stop: 1110, Start Num: 2
Candidate Starts for IzzyPants24_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 592), (16, 676), (17, 712), (22, 766), (24, 778), (26, 790), (30, 802), (37, 976), (39, 1102),

Gene: JRok_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for JRok_2:
(Start: 2 @376 has 140 MA's), (8, 571), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: Jahseh_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Jahseh_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: JaimeB_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for JaimeB_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Jannah_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Jannah_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Jella_2 Start: 361, Stop: 1095, Start Num: 1
Candidate Starts for Jella_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (24, 760), (31, 790), (36, 901), (38, 1039), (39, 1087),

Gene: Jerky_2 Start: 376, Stop: 1152, Start Num: 2
Candidate Starts for Jerky_2:
(Start: 2 @376 has 140 MA's), (4, 472), (16, 736), (17, 772), (21, 808), (24, 820), (26, 832), (30, 844), (38, 1096), (39, 1144),

Gene: JoBros_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for JoBros_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: JooneeDee_2 Start: 376, Stop: 1101, Start Num: 2
Candidate Starts for JooneeDee_2:
(Start: 2 @376 has 140 MA's), (3, 400), (10, 664), (16, 736), (17, 772), (22, 820), (24, 832), (39, 1093),

Gene: Josuke_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Josuke_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Kaijohn_2 Start: 376, Stop: 1077, Start Num: 2
Candidate Starts for Kaijohn_2:
(Start: 2 @376 has 140 MA's), (6, 592), (11, 691), (16, 754), (17, 790), (38, 1021), (39, 1069),

Gene: KayPaulus_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for KayPaulus_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: Kevanna_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Kevanna_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: KillerTomato_2 Start: 376, Stop: 1122, Start Num: 2
Candidate Starts for KillerTomato_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 637), (12, 649), (16, 709), (17, 745), (21, 781), (24, 793), (26, 805), (30, 817),

Gene: Kojax4_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Kojax4_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: KyriosFaba_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for KyriosFaba_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: LaviMo_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for LaviMo_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Leafy_2 Start: 376, Stop: 1089, Start Num: 2
Candidate Starts for Leafy_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (39, 1081),

Gene: LemonPepper_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for LemonPepper_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: LionelHutz_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for LionelHutz_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Livingwater_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Livingwater_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: Loca_2 Start: 376, Stop: 1089, Start Num: 2
Candidate Starts for Loca_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (35, 886), (39, 1081),

Gene: Lola20_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Lola20_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (15, 637), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781),

Gene: Lunatic_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for Lunatic_2:
(Start: 2 @376 has 140 MA's), (13, 595), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Luxx_2 Start: 376, Stop: 1095, Start Num: 2
Candidate Starts for Luxx_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (24, 760), (31, 790), (36, 901), (38, 1039), (39, 1087),

Gene: Madebyisha_2 Start: 376, Stop: 1152, Start Num: 2
Candidate Starts for Madebyisha_2:
(Start: 2 @376 has 140 MA's), (4, 472), (16, 736), (17, 772), (21, 808), (24, 820), (26, 832), (30, 844), (38, 1096), (39, 1144),

Gene: Majesty_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Majesty_2:

(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: ManAs_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for ManAs_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Maneater_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for Maneater_2:
(Start: 2 @376 has 140 MA's), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (29, 751), (32, 769), (38, 1003), (39, 1051),

Gene: Marichuy_2 Start: 376, Stop: 1176, Start Num: 2
Candidate Starts for Marichuy_2:
(Start: 2 @376 has 140 MA's), (17, 694), (18, 748), (21, 808), (24, 823), (28, 841), (38, 1120), (39, 1168),

Gene: MasterPitts_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for MasterPitts_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: MauiIvory_2 Start: 376, Stop: 1176, Start Num: 2
Candidate Starts for MauiIvory_2:
(Start: 2 @376 has 140 MA's), (3, 400), (8, 652), (16, 736), (17, 772), (22, 829), (31, 871), (35, 970), (39, 1168),

Gene: McShie_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for McShie_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 571), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: MelBee03_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for MelBee03_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: Miaurora_2 Start: 376, Stop: 1176, Start Num: 2
Candidate Starts for Miaurora_2:
(Start: 2 @376 has 140 MA's), (3, 400), (10, 664), (16, 736), (17, 772), (22, 829), (31, 871), (35, 970), (39, 1168),

Gene: Minima_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Minima_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: MirimarMandM_2 Start: 376, Stop: 1101, Start Num: 2
Candidate Starts for MirimarMandM_2:
(Start: 2 @376 has 140 MA's), (3, 400), (16, 736), (17, 772), (22, 820), (24, 832), (39, 1093),

Gene: MrGreen_2 Start: 376, Stop: 1089, Start Num: 2

Candidate Starts for MrGreen_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (35, 886), (39, 1081),

Gene: Myram_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Myram_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Namsahir_2 Start: 376, Stop: 1092, Start Num: 2
Candidate Starts for Namsahir_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 604), (16, 676), (17, 712), (22, 748), (24, 760), (26, 772), (30, 784), (38, 1036), (39, 1084),

Gene: NeumannU_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for NeumannU_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Niffler_2 Start: 376, Stop: 1149, Start Num: 2
Candidate Starts for Niffler_2:
(Start: 2 @376 has 140 MA's), (3, 400), (10, 664), (16, 736), (17, 772), (22, 820), (24, 832), (35, 943), (39, 1141),

Gene: Nobel_2 Start: 376, Stop: 1176, Start Num: 2
Candidate Starts for Nobel_2:
(Start: 2 @376 has 140 MA's), (3, 400), (8, 652), (16, 736), (17, 772), (22, 829), (31, 871), (35, 970), (39, 1168),

Gene: Noelani_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for Noelani_2:
(Start: 2 @376 has 140 MA's), (13, 595), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Oaklynn_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Oaklynn_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 571), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (38, 1015), (39, 1063),

Gene: Octopus_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Octopus_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: OdetoJoy_2 Start: 376, Stop: 1152, Start Num: 2
Candidate Starts for OdetoJoy_2:
(Start: 2 @376 has 140 MA's), (4, 472), (16, 736), (17, 772), (21, 808), (24, 820), (26, 832), (30, 844), (38, 1096), (39, 1144),

Gene: Otwor_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Otwor_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Owens_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Owens_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: PaoPu_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for PaoPu_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Picconator_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Picconator_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Picnic_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Picnic_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: PoRanda_2 Start: 376, Stop: 1101, Start Num: 2
Candidate Starts for PoRanda_2:
(Start: 2 @376 has 140 MA's), (3, 400), (16, 736), (17, 772), (22, 820), (24, 832), (39, 1093),

Gene: Pondwater_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Pondwater_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Publix_2 Start: 376, Stop: 1092, Start Num: 2
Candidate Starts for Publix_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 604), (16, 676), (17, 712), (22, 748), (24, 760), (26, 772), (30, 784), (38, 1036), (39, 1084),

Gene: Puddles3_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Puddles3_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: PuffyCat_2 Start: 376, Stop: 1101, Start Num: 2
Candidate Starts for PuffyCat_2:
(Start: 2 @376 has 140 MA's), (3, 400), (10, 664), (16, 736), (17, 772), (22, 820), (24, 832), (39, 1093),

Gene: Quaker_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Quaker_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: Rhogar_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Rhogar_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Rhysand_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Rhysand_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (37, 949), (38, 1027), (39, 1075),

Gene: Rira_2 Start: 361, Stop: 1110, Start Num: 1
Candidate Starts for Rira_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 592), (16, 676), (17, 712), (22, 766), (24, 778), (26, 790), (30, 802), (37, 976), (39, 1102),

Gene: RoscoWindex_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for RoscoWindex_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Sachet_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Sachet_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Sage7_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Sage7_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: SantasSleigh_2 Start: 376, Stop: 1107, Start Num: 2
Candidate Starts for SantasSleigh_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (9, 583), (11, 604), (16, 667), (17, 703), (31, 802), (38, 1051), (39, 1099),

Gene: Sara_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Sara_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Scamander_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Scamander_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Scrunchy_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Scrunchy_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: SeaWolves_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for SeaWolves_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Sippinontea_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Sippinontea_2:

(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: Slentz_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Slentz_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Slizam_2 Start: 361, Stop: 1110, Start Num: 1
Candidate Starts for Slizam_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 592), (16, 676), (17, 712), (22, 766), (24, 778), (26, 790), (30, 802), (37, 976), (39, 1102),

Gene: Snuffles_2 Start: 376, Stop: 1179, Start Num: 2
Candidate Starts for Snuffles_2:
(Start: 2 @376 has 140 MA's), (16, 736), (17, 772), (24, 841), (31, 871), (35, 979), (37, 1051),

Gene: Stem_2 Start: 376, Stop: 1110, Start Num: 2
Candidate Starts for Stem_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 592), (16, 676), (17, 712), (22, 766), (24, 778), (26, 790), (30, 802), (37, 976), (39, 1102),

Gene: TeddyBoy_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for TeddyBoy_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: TimoTea_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for TimoTea_2:
(Start: 2 @376 has 140 MA's), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (29, 751), (32, 769), (38, 1003), (39, 1051),

Gene: TinyTruffula_2 Start: 376, Stop: 1176, Start Num: 2
Candidate Starts for TinyTruffula_2:
(Start: 2 @376 has 140 MA's), (16, 736), (17, 772), (22, 829), (31, 871), (35, 970), (39, 1168),

Gene: TlaliMex_2 Start: 376, Stop: 1170, Start Num: 2
Candidate Starts for TlaliMex_2:
(Start: 2 @376 has 140 MA's), (3, 400), (8, 652), (16, 736), (17, 772), (19, 826), (22, 838), (24, 850), (29, 862), (38, 1114), (39, 1162),

Gene: TomBrady12_2 Start: 361, Stop: 1110, Start Num: 1
Candidate Starts for TomBrady12_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (8, 592), (16, 676), (17, 712), (22, 766), (24, 778), (26, 790), (30, 802), (37, 976), (39, 1102),

Gene: Toxicola_2 Start: 376, Stop: 984, Start Num: 2
Candidate Starts for Toxicola_2:
(Start: 2 @376 has 140 MA's), (6, 499), (16, 661), (17, 697), (38, 928), (39, 976),

Gene: Trackstar_2 Start: 376, Stop: 1176, Start Num: 2
Candidate Starts for Trackstar_2:

(Start: 2 @376 has 140 MA's), (3, 400), (10, 664), (16, 736), (17, 772), (22, 829), (31, 871), (35, 970), (39, 1168),

Gene: Trireme_2 Start: 376, Stop: 1176, Start Num: 2
Candidate Starts for Trireme_2:
(Start: 2 @376 has 140 MA's), (3, 400), (10, 664), (16, 736), (17, 772), (22, 829), (31, 871), (35, 970), (39, 1168),

Gene: Tyrellus_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Tyrellus_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (12, 583), (14, 616), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Upsilon_2 Start: 376, Stop: 1101, Start Num: 2
Candidate Starts for Upsilon_2:
(Start: 2 @376 has 140 MA's), (3, 400), (16, 736), (17, 772), (22, 820), (24, 832), (39, 1093),

Gene: Vanisius_2 Start: 376, Stop: 1083, Start Num: 2
Candidate Starts for Vanisius_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (7, 559), (11, 580), (16, 643), (17, 679), (31, 778), (38, 1027), (39, 1075),

Gene: VitulaEligans_2 Start: 376, Stop: 1152, Start Num: 2
Candidate Starts for VitulaEligans_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (4, 472), (16, 736), (17, 772), (21, 808), (24, 820), (26, 832), (30, 844), (38, 1096), (39, 1144),

Gene: Witch_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for Witch_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Wolfpack_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Wolfpack_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763),

Gene: Yami_2 Start: 376, Stop: 1059, Start Num: 2
Candidate Starts for Yami_2:
(Start: 2 @376 has 140 MA's), (13, 595), (16, 643), (17, 679), (20, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Yasuo_2 Start: 376, Stop: 1068, Start Num: 2
Candidate Starts for Yasuo_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877),

Gene: YertPhresh_2 Start: 376, Stop: 1071, Start Num: 2
Candidate Starts for YertPhresh_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Yubaba_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Yubaba_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (10, 583), (12, 595), (16, 655), (17, 691), (21, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Zahlia_2 Start: 376, Stop: 1173, Start Num: 2
Candidate Starts for Zahlia_2:
(Start: 1 @361 has 3 MA's), (Start: 2 @376 has 140 MA's), (17, 691), (18, 745), (21, 805), (24, 820), (27, 835), (28, 838), (38, 1117), (39, 1165),