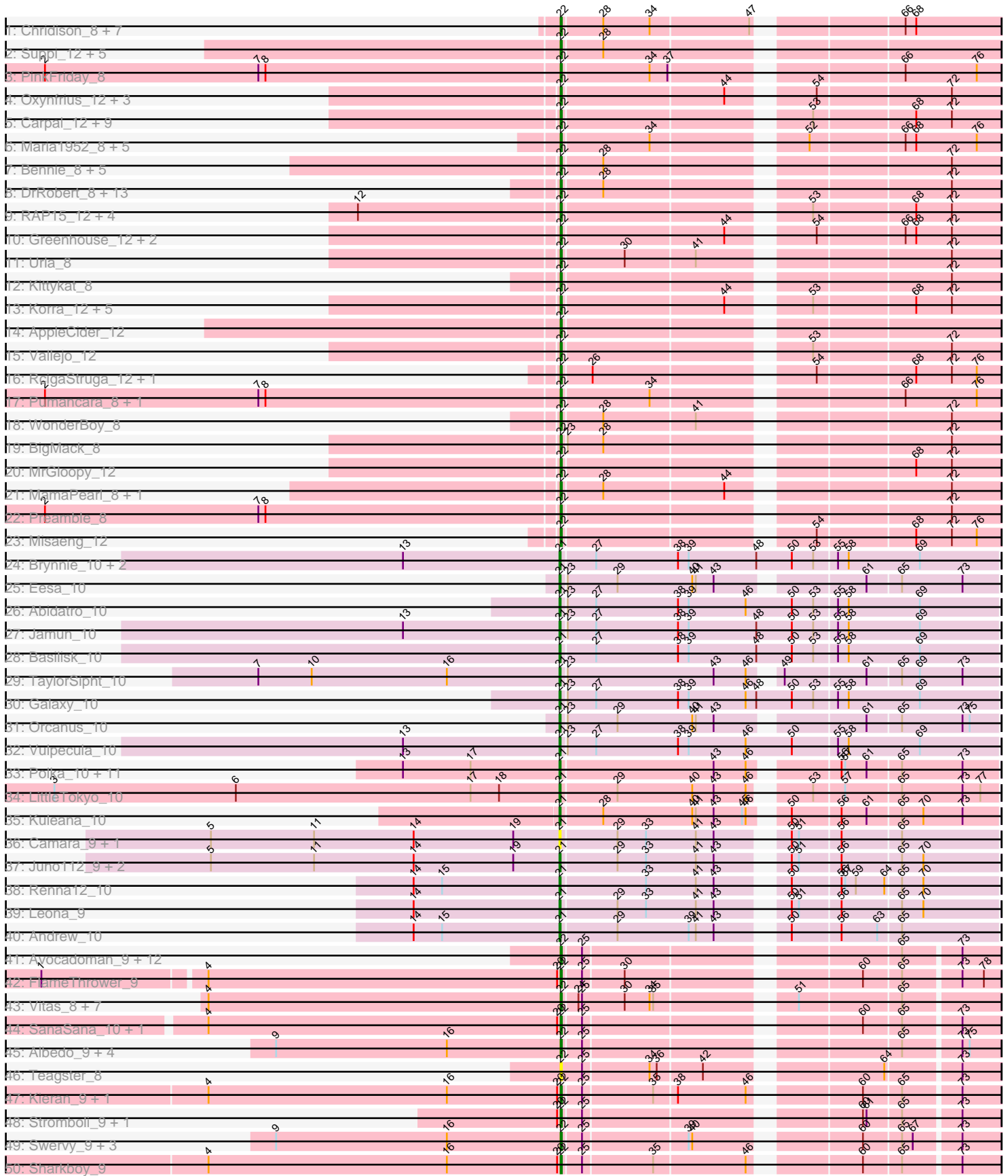
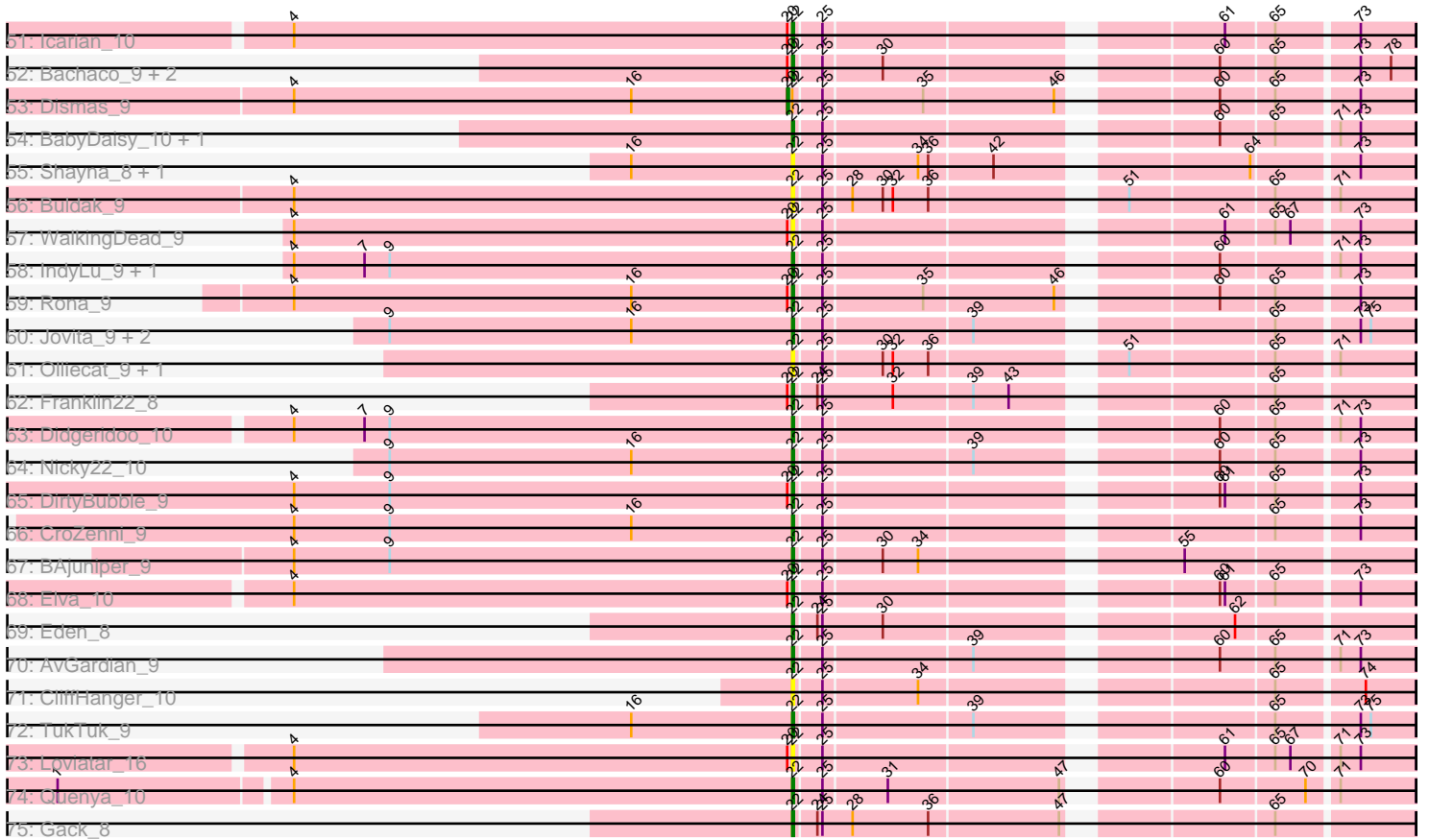


Pham 192248



Pham 192248



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 192248 Report

This analysis was run 11/02/24 on database version 579.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 192248 has 189 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Chridison_8, Vulture_8, HunterDalle_8, Eunoia_8, Aledel_8, OMalley_8, Riovina_8, AustinPowers_8
- Track 2 : Suppi_12, Canowicakte_12, Litotes_12, PartyCup_12, Wayne_12, CallieOMalley_12
- Track 3 : PinkFriday_8
- Track 4 : Oxyfrius_12, Albanese_12, GreenHearts_12, Lakshmi_12
- Track 5 : Carpal_12, Potatoes_12, Cholula_12, Fluke_12, Glenn_12, TattModd_12, Rozby_12, Riverdale_12, Immaculata_12, Beethoven_12
- Track 6 : Maria1952_8, KingBob_8, Herb_8, Sergei_8, Daiboju_8, Temper16_8
- Track 7 : Bennie_8, HeadNerd_8, Moki_8, Huckleberry_8, DreamTeam_8, Gisselle_8
- Track 8 : DrRobert_8, Lennox_8, Nancia_8, Makoto_8, Christian_8, Lucy_8, Bodacious_8, PitaDog_8, Pterodactyl_8, CristinaYang_8, LilStuart_8, Lasagna_8, ChewChew_8, OurGirlNessie_8
- Track 9 : RAP15_12, Savage2526_12, Jumboset_12, MeganNoll_12, Scuttle_12
- Track 10 : Greenhouse_12, Joann_12, Nubia_12
- Track 11 : Urla_8
- Track 12 : Kittykat_8
- Track 13 : Korra_12, Dino_12, Wawa_12, Kalizoi_12, BrotherBLo_12, Zorro_12
- Track 14 : AppleCider_12
- Track 15 : Vallejo_12
- Track 16 : RcigaStruga_12, Huntingdon_12
- Track 17 : Pumancara_8, Supakev_8
- Track 18 : WonderBoy_8
- Track 19 : BigMack_8
- Track 20 : MrGloopy_12
- Track 21 : MamaPearl_8, EstebanJulior_8
- Track 22 : Preamble_8
- Track 23 : Misaeng_12
- Track 24 : Brynnie_10, Chickaboom_9, Ruchi_10
- Track 25 : Eesa_10
- Track 26 : Abidatro_10
- Track 27 : Jamun_10

- Track 28 : Basilisk_10
- Track 29 : TaylorSipht_10
- Track 30 : Galaxy_10
- Track 31 : Orcanus_10
- Track 32 : Vulpecula_10
- Track 33 : Polka_10, Melons_11, Amelia_11, Cote_11, Bedetta_11, Lunar_11, Coral_10, Colusalem_10, Kepler_10, Jerole_11, Daob_11, HannahPhantana_11
- Track 34 : LittleTokyo_10
- Track 35 : Kuleana_10
- Track 36 : Camara_9, PhluffyCoco_9
- Track 37 : Juno112_9, KHumphrey_9, RedFox_9
- Track 38 : Renna12_10
- Track 39 : Leona_9
- Track 40 : Andrew_10
- Track 41 : Avocadoman_9, Arroyo_10, Burritobowl_9, Johnathan_9, Cashington_9, Albright_9, Abigail_9, LimaBean_9, SansAfet_9, Doobus_9, DickRichards_9, BelmontSKP_10, AnnaLie_10
- Track 42 : FlameThrower_9
- Track 43 : Vitas_8, Clayda5_8, Brahms_8, Bernstein_8, Rollins_8, Coltrane_8, Armstrong_8, Skylord_8
- Track 44 : SanaSana_10, Stoor_9
- Track 45 : Albedo_9, Lynlen_9, Kenzers_9, BubbaBear_9, Phisb_9
- Track 46 : Teagster_8
- Track 47 : Kieran_9, ChiliPepper_9
- Track 48 : Stromboli_9, BabyYoda_9
- Track 49 : Swervy_9, SarBear_9, Slay_9, Finalfrontier_10
- Track 50 : Sharkboy_9
- Track 51 : Icarian_10
- Track 52 : Bachaco_9, Celaena_9, Katzastrophic_9
- Track 53 : Dismas_9
- Track 54 : BabyDaisy_10, Lahqtemish_9
- Track 55 : Shayna_8, SunnyD_8
- Track 56 : Buldak_9
- Track 57 : WalkingDead_9
- Track 58 : IndyLu_9, Kate33_9
- Track 59 : Rona_9
- Track 60 : Jovita_9, QMacho_10, Eula_9
- Track 61 : Olliecat_9, Squircle_9
- Track 62 : Franklin22_8
- Track 63 : Didgeridoo_10
- Track 64 : Nicky22_10
- Track 65 : DirtyBubble_9
- Track 66 : CroZenni_9
- Track 67 : BAjuniper_9
- Track 68 : Elva_10
- Track 69 : Eden_8
- Track 70 : AvGardian_9
- Track 71 : CliffHanger_10
- Track 72 : TukTuk_9
- Track 73 : Loviatar_16
- Track 74 : Quenya_10
- Track 75 : Gack_8

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

The start number called the most often in the published annotations is 22, it was called in 143 of the 172 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail_9, Albanese_12, Albedo_9, Albright_9, Aledel_8, AnnaLie_10, AppleCider_12, Armstrong_8, Arroyo_10, AustinPowers_8, AvGardian_9, Avocadoman_9, BAjuniper_9, BabyDaisy_10, BabyYoda_9, Bachaco_9, Beethoven_12, BelmontSKP_10, Bennie_8, Bernstein_8, BigMack_8, Bodacious_8, Brahms_8, BrotherBLo_12, BubbaBear_9, Buldak_9, Burritobowl_9, CallieOMalley_12, Canowicakte_12, Carpal_12, Cashington_9, Celaena_9, ChewChew_8, ChiliPepper_9, Cholula_12, Chridison_8, Christian_8, Clayda5_8, CliffHanger_10, Coltrane_8, CristinaYang_8, CroZenni_9, Daiboju_8, DickRichards_9, Didgeridoo_10, Dino_12, DirtyBubble_9, Doobus_9, DrRobert_8, DreamTeam_8, Eden_8, Elva_10, EstebanJulior_8, Eula_9, Eunoia_8, Finalfrontier_10, FlameThrower_9, Fluke_12, Franklin22_8, Gack_8, Gisselle_8, Glenn_12, GreenHearts_12, Greenhouse_12, HeadNerd_8, Herb_8, Huckleberry_8, HunterDalle_8, Huntingdon_12, Icarian_10, Immaculata_12, IndyLu_9, Joann_12, Johnathan_9, Jovita_9, Jumboset_12, Kalizoi_12, Kate33_9, Katzastrophic_9, Kenzers_9, Kieran_9, KingBob_8, Kittykat_8, Korra_12, Lahqtemish_9, Lakshmi_12, Lasagna_8, Lennox_8, LilStuart_8, LimaBean_9, Litotes_12, Loviatar_16, Lucy_8, Lynlen_9, Makoto_8, MamaPearl_8, Maria1952_8, MeganNoll_12, Misaeng_12, Moki_8, MrGloopy_12, Nancia_8, Nicky22_10, Nubia_12, OMalley_8, Olliecat_9, OurGirlNessie_8, Oxynfrius_12, PartyCup_12, Phisb_9, PinkFriday_8, PitaDog_8, Potatoes_12, Preamble_8, Pterodactyl_8, Pumancara_8, QMacho_10, Quenya_10, RAP15_12, RcigaStruga_12, Riovina_8, Riverdale_12, Rollins_8, Rona_9, Rozby_12, SanaSana_10, SansAfet_9, SarBear_9, Savage2526_12, Scuttle_12, Sergei_8, Sharkboy_9, Shayna_8, Skylord_8, Slay_9, Squircle_9, Stoor_9, Stromboli_9, SunnyD_8, Supakev_8, Suppi_12, Swervy_9, TattModd_12, Teagster_8, Temper16_8, TukTuk_9, Urla_8, Vallejo_12, Vitas_8, Vulture_8, WalkingDead_9, Wawa_12, Wayne_12, WonderBoy_8, Zorro_12,

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

- Dismas_9,

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

- Abidatro_10, Amelia_11, Andrew_10, Basilisk_10, Bedetta_11, Brynnie_10, Camara_9, Chickaboom_9, Colusalem_10, Coral_10, Cote_11, Daob_11, Eesa_10, Galaxy_10, HannahPhantana_11, Jamun_10, Jerole_11, Juno112_9, KHumphrey_9, Kepler_10, Kuleana_10, Leona_9, LittleTokyo_10, Lunar_11, Melons_11, Orcanus_10, PhluffyCoco_9, Polka_10, RedFox_9, Renna12_10, Ruchi_10, TaylorSipht_10, Vulpecula_10,

Summary by start number:

Start 20:

- Found in 19 of 189 (10.1%) of genes in pham
- Manual Annotations of this start: 1 of 172
- Called 5.3% of time when present

- Phage (with cluster) where this start called: Dismas_9 (EB),

Start 21:

- Found in 33 of 189 (17.5%) of genes in pham
- Manual Annotations of this start: 28 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro_10 (AS1), Amelia_11 (AS2), Andrew_10 (AS3), Basilisk_10 (AS1), Bedetta_11 (AS2), Brynnie_10 (AS1), Camara_9 (AS3), Chickaboom_9 (AS1), Colusalem_10 (AS2), Coral_10 (AS2), Cote_11 (AS2), Daob_11 (AS2), Eesa_10 (AS1), Galaxy_10 (AS1), HannahPhantana_11 (AS2), Jamun_10 (AS1), Jerole_11 (AS2), Juno112_9 (AS3), KHumphrey_9 (AS3), Kepler_10 (AS2), Kuleana_10 (AS2), Leona_9 (AS3), LittleTokyo_10 (AS2), Lunar_11 (AS2), Melons_11 (AS2), Orcanus_10 (AS1), PhluffyCoco_9 (AS3), Polka_10 (AS2), RedFox_9 (AS3), Renna12_10 (AS3), Ruchi_10 (AS1), TaylorSipht_10 (AS1), Vulpecula_10 (AS1),

Start 22:

- Found in 156 of 189 (82.5%) of genes in pham
- Manual Annotations of this start: 143 of 172
- Called 99.4% of time when present
- Phage (with cluster) where this start called: Abigail_9 (EB), Albanese_12 (AK), Albedo_9 (EB), Albright_9 (EB), Aledel_8 (AK), AnnaLie_10 (EB), AppleCider_12 (AK), Armstrong_8 (EB), Arroyo_10 (EB), AustinPowers_8 (AK), AvGardian_9 (EB), Avocadoman_9 (EB), BAjuniper_9 (EB), BabyDaisy_10 (EB), BabyYoda_9 (EB), Bachaco_9 (EB), Beethoven_12 (AK), BelmontSKP_10 (EB), Bennie_8 (AK), Bernstein_8 (EB), BigMack_8 (AK), Bodacious_8 (AK), Brahms_8 (EB), BrotherBLo_12 (AK), BubbaBear_9 (EB), Buldak_9 (EB), Burritobowl_9 (EB), CallieOMalley_12 (AK), Canowicakte_12 (AK), Carpal_12 (AK), Cashington_9 (EB), Celaena_9 (EB), ChewChew_8 (AK), ChiliPepper_9 (EB), Cholula_12 (AK), Chridison_8 (AK), Christian_8 (AK), Clayda5_8 (EB), CliffHanger_10 (EB), Coltrane_8 (EB), CristinaYang_8 (AK), CroZenni_9 (EB), Daiboju_8 (AK), DickRichards_9 (EB), Didgeridoo_10 (EB), Dino_12 (AK), DirtyBubble_9 (EB), Doobus_9 (EB), DrRobert_8 (AK), DreamTeam_8 (AK), Eden_8 (EB), Elva_10 (EB), EstebanJulior_8 (AK), Eula_9 (EB), Eunoia_8 (AK), Finalfrontier_10 (EB), FlameThrower_9 (EB), Fluke_12 (AK), Franklin22_8 (EB), Gack_8 (EB), Gisselle_8 (AK), Glenn_12 (AK), GreenHearts_12 (AK), Greenhouse_12 (AK), HeadNerd_8 (AK), Herb_8 (AK), Huckleberry_8 (AK), HunterDalle_8 (AK), Huntingdon_12 (AK), Icarian_10 (EB), Immaculata_12 (AK), IndyLu_9 (EB), Joann_12 (AK), Johnathan_9 (EB), Jovita_9 (EB), Jumboset_12 (AK), Kalizoi_12 (AK), Kate33_9 (EB), Katzastrophic_9 (EB), Kenzers_9 (EB), Kieran_9 (EB), KingBob_8 (AK), Kittykat_8 (AK), Korra_12 (AK), Lahqtemish_9 (EB), Lakshmi_12 (AK), Lasagna_8 (AK), Lennox_8 (AK), LilStuart_8 (AK), LimaBean_9 (EB), Litotes_12 (AK), Loviatar_16 (EB), Lucy_8 (AK), Lynlen_9 (EB), Makoto_8 (AK), MamaPearl_8 (AK), Maria1952_8 (AK), MeganNoll_12 (AK), Misaeng_12 (AK), Moki_8 (AK), MrGloopy_12 (AK), Nancia_8 (AK), Nicky22_10 (EB), Nubia_12 (AK), OMalley_8 (AK), Olliecat_9 (EB), OurGirlNessie_8 (AK), Oxynfrius_12 (AK), PartyCup_12 (AK), Phisb_9 (EB), PinkFriday_8 (AK), PitaDog_8 (AK), Potatoes_12 (AK), Preamble_8 (AK), Pterodactyl_8 (AK), Pumancara_8 (AK), QMacho_10 (EB), Quenya_10 (EB), RAP15_12 (AK), RcigaStruga_12 (AK), Riovina_8 (AK), Riverdale_12 (AK), Rollins_8 (EB), Rona_9 (EB), Rozby_12 (AK), SanaSana_10 (EB), SansAfet_9 (EB), SarBear_9 (EB), Savage2526_12 (AK), Scuttle_12 (AK), Sergei_8 (AK), Sharkboy_9 (EB), Shayna_8 (EB), Skylord_8 (EB), Slay_9 (EB), Squirrel_9 (EB), Stoor_9 (EB), Stromboli_9 (EB), SunnyD_8 (EB), Supakev_8 (AK), Suppi_12 (AK), Swervy_9 (EB),

TattModd_12 (AK), Teagster_8 (EB), Temper16_8 (AK), TukTuk_9 (EB), Urla_8 (AK), Vallejo_12 (AK), Vitas_8 (EB), Vulture_8 (AK), WalkingDead_9 (EB), Wawa_12 (AK), Wayne_12 (AK), WonderBoy_8 (AK), Zorro_12 (AK),

Summary by clusters:

There are 5 clusters represented in this pham: AS3, AS2, AK, AS1, EB,

Info for manual annotations of cluster AK:

- Start number 22 was manually annotated 83 times for cluster AK.

Info for manual annotations of cluster AS1:

- Start number 21 was manually annotated 11 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 21 was manually annotated 11 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 21 was manually annotated 6 times for cluster AS3.

Info for manual annotations of cluster EB:

- Start number 20 was manually annotated 1 time for cluster EB.
- Start number 22 was manually annotated 60 times for cluster EB.

Gene Information:

Gene: Abidatro_10 Start: 7704, Stop: 8066, Start Num: 21

Candidate Starts for Abidatro_10:

(Start: 21 @7704 has 28 MA's), (23, 7707), (27, 7731), (38, 7800), (39, 7809), (46, 7857), (50, 7896), (53, 7914), (55, 7932), (58, 7941), (69, 8001),

Gene: Abigail_9 Start: 7444, Stop: 7773, Start Num: 22

Candidate Starts for Abigail_9:

(Start: 22 @7444 has 143 MA's), (25, 7459), (65, 7696), (73, 7741),

Gene: Albanese_12 Start: 9846, Stop: 10184, Start Num: 22

Candidate Starts for Albanese_12:

(Start: 22 @9846 has 143 MA's), (44, 9978), (54, 10035), (72, 10143),

Gene: Albedo_9 Start: 7316, Stop: 7645, Start Num: 22

Candidate Starts for Albedo_9:

(9, 7076), (16, 7220), (Start: 22 @7316 has 143 MA's), (25, 7331), (65, 7568), (73, 7613), (75, 7619),

Gene: Albright_9 Start: 7325, Stop: 7654, Start Num: 22

Candidate Starts for Albright_9:

(Start: 22 @7325 has 143 MA's), (25, 7340), (65, 7577), (73, 7622),

Gene: Aledel_8 Start: 6923, Stop: 7261, Start Num: 22

Candidate Starts for Aledel_8:

(Start: 22 @6923 has 143 MA's), (28, 6956), (34, 6995), (47, 7076), (66, 7181), (68, 7190),

Gene: Amelia_11 Start: 7903, Stop: 8244, Start Num: 21
Candidate Starts for Amelia_11:
(13, 7771), (17, 7828), (Start: 21 @7903 has 28 MA's), (43, 8029), (46, 8056), (56, 8116), (57, 8119),
(61, 8137), (65, 8164), (73, 8215),

Gene: Andrew_10 Start: 7691, Stop: 8029, Start Num: 21
Candidate Starts for Andrew_10:
(14, 7568), (15, 7592), (Start: 21 @7691 has 28 MA's), (29, 7736), (39, 7796), (41, 7802), (43, 7817),
(50, 7862), (56, 7901), (63, 7931), (65, 7949),

Gene: AnnaLie_10 Start: 7671, Stop: 8000, Start Num: 22
Candidate Starts for AnnaLie_10:
(Start: 22 @7671 has 143 MA's), (25, 7686), (65, 7923), (73, 7968),

Gene: AppleCider_12 Start: 9802, Stop: 10140, Start Num: 22
Candidate Starts for AppleCider_12:
(Start: 22 @9802 has 143 MA's),

Gene: Armstrong_8 Start: 7093, Stop: 7425, Start Num: 22
Candidate Starts for Armstrong_8:
(4, 6796), (Start: 22 @7093 has 143 MA's), (24, 7105), (25, 7108), (30, 7144), (34, 7165), (35, 7168),
(51, 7267), (65, 7348),

Gene: Arroyo_10 Start: 7795, Stop: 8124, Start Num: 22
Candidate Starts for Arroyo_10:
(Start: 22 @7795 has 143 MA's), (25, 7810), (65, 8047), (73, 8092),

Gene: AustinPowers_8 Start: 6924, Stop: 7262, Start Num: 22
Candidate Starts for AustinPowers_8:
(Start: 22 @6924 has 143 MA's), (28, 6957), (34, 6996), (47, 7077), (66, 7182), (68, 7191),

Gene: AvGardian_9 Start: 7373, Stop: 7702, Start Num: 22
Candidate Starts for AvGardian_9:
(Start: 22 @7373 has 143 MA's), (25, 7388), (39, 7472), (60, 7595), (65, 7625), (71, 7658), (73, 7670),

Gene: Avocadoman_9 Start: 7383, Stop: 7712, Start Num: 22
Candidate Starts for Avocadoman_9:
(Start: 22 @7383 has 143 MA's), (25, 7398), (65, 7635), (73, 7680),

Gene: BAjuniper_9 Start: 7266, Stop: 7598, Start Num: 22
Candidate Starts for BAjuniper_9:
(4, 6969), (9, 7026), (Start: 22 @7266 has 143 MA's), (25, 7281), (30, 7314), (34, 7335), (55, 7470),

Gene: BabyDaisy_10 Start: 7544, Stop: 7873, Start Num: 22
Candidate Starts for BabyDaisy_10:
(Start: 22 @7544 has 143 MA's), (25, 7559), (60, 7766), (65, 7796), (71, 7829), (73, 7841),

Gene: BabyYoda_9 Start: 7566, Stop: 7895, Start Num: 22
Candidate Starts for BabyYoda_9:
(Start: 20 @7563 has 1 MA's), (Start: 22 @7566 has 143 MA's), (25, 7581), (60, 7788), (61, 7791),
(65, 7818), (73, 7863),

Gene: Bachaco_9 Start: 7457, Stop: 7786, Start Num: 22

Candidate Starts for Bachaco_9:

(Start: 20 @7454 has 1 MA's), (Start: 22 @7457 has 143 MA's), (25, 7472), (30, 7505), (60, 7679), (65, 7709), (73, 7754), (78, 7772),

Gene: Basilisk_10 Start: 8028, Stop: 8390, Start Num: 21

Candidate Starts for Basilisk_10:

(Start: 21 @8028 has 28 MA's), (27, 8055), (38, 8124), (39, 8133), (48, 8190), (50, 8220), (53, 8238), (55, 8256), (58, 8265), (69, 8325),

Gene: Bedetta_11 Start: 7903, Stop: 8244, Start Num: 21

Candidate Starts for Bedetta_11:

(13, 7771), (17, 7828), (Start: 21 @7903 has 28 MA's), (43, 8029), (46, 8056), (56, 8116), (57, 8119), (61, 8137), (65, 8164), (73, 8215),

Gene: Beethoven_12 Start: 9762, Stop: 10100, Start Num: 22

Candidate Starts for Beethoven_12:

(Start: 22 @9762 has 143 MA's), (53, 9948), (68, 10029), (72, 10059),

Gene: BelmontSKP_10 Start: 7671, Stop: 8000, Start Num: 22

Candidate Starts for BelmontSKP_10:

(Start: 22 @7671 has 143 MA's), (25, 7686), (65, 7923), (73, 7968),

Gene: Bennie_8 Start: 6907, Stop: 7245, Start Num: 22

Candidate Starts for Bennie_8:

(Start: 22 @6907 has 143 MA's), (28, 6940), (72, 7204),

Gene: Bernstein_8 Start: 7153, Stop: 7485, Start Num: 22

Candidate Starts for Bernstein_8:

(4, 6856), (Start: 22 @7153 has 143 MA's), (24, 7165), (25, 7168), (30, 7204), (34, 7225), (35, 7228), (51, 7327), (65, 7408),

Gene: BigMack_8 Start: 6907, Stop: 7245, Start Num: 22

Candidate Starts for BigMack_8:

(Start: 22 @6907 has 143 MA's), (23, 6910), (28, 6940), (72, 7204),

Gene: Bodacious_8 Start: 6905, Stop: 7243, Start Num: 22

Candidate Starts for Bodacious_8:

(Start: 22 @6905 has 143 MA's), (28, 6938), (72, 7202),

Gene: Brahms_8 Start: 7093, Stop: 7425, Start Num: 22

Candidate Starts for Brahms_8:

(4, 6796), (Start: 22 @7093 has 143 MA's), (24, 7105), (25, 7108), (30, 7144), (34, 7165), (35, 7168), (51, 7267), (65, 7348),

Gene: BrotherBLo_12 Start: 9769, Stop: 10107, Start Num: 22

Candidate Starts for BrotherBLo_12:

(Start: 22 @9769 has 143 MA's), (44, 9901), (53, 9955), (68, 10036), (72, 10066),

Gene: Brynnie_10 Start: 7840, Stop: 8202, Start Num: 21

Candidate Starts for Brynnie_10:

(13, 7708), (Start: 21 @7840 has 28 MA's), (27, 7867), (38, 7936), (39, 7945), (48, 8002), (50, 8032), (53, 8050), (55, 8068), (58, 8077), (69, 8137),

Gene: BubbaBear_9 Start: 7316, Stop: 7645, Start Num: 22
Candidate Starts for BubbaBear_9:
(9, 7076), (16, 7220), (Start: 22 @7316 has 143 MA's), (25, 7331), (65, 7568), (73, 7613), (75, 7619),

Gene: Buldak_9 Start: 7601, Stop: 7930, Start Num: 22
Candidate Starts for Buldak_9:
(4, 7304), (Start: 22 @7601 has 143 MA's), (25, 7616), (28, 7631), (30, 7649), (32, 7655), (36, 7676),
(51, 7772), (65, 7853), (71, 7886),

Gene: Burritobowl_9 Start: 7352, Stop: 7681, Start Num: 22
Candidate Starts for Burritobowl_9:
(Start: 22 @7352 has 143 MA's), (25, 7367), (65, 7604), (73, 7649),

Gene: CallieOMalley_12 Start: 9802, Stop: 10140, Start Num: 22
Candidate Starts for CallieOMalley_12:
(Start: 22 @9802 has 143 MA's), (28, 9835),

Gene: Camara_9 Start: 7313, Stop: 7651, Start Num: 21
Candidate Starts for Camara_9:
(5, 7019), (11, 7106), (14, 7190), (19, 7274), (Start: 21 @7313 has 28 MA's), (29, 7358), (33, 7382),
(41, 7424), (43, 7439), (50, 7484), (51, 7490), (56, 7523), (65, 7571),

Gene: Canowicakte_12 Start: 9837, Stop: 10175, Start Num: 22
Candidate Starts for Canowicakte_12:
(Start: 22 @9837 has 143 MA's), (28, 9870),

Gene: Carpal_12 Start: 9769, Stop: 10107, Start Num: 22
Candidate Starts for Carpal_12:
(Start: 22 @9769 has 143 MA's), (53, 9955), (68, 10036), (72, 10066),

Gene: Cashington_9 Start: 7342, Stop: 7671, Start Num: 22
Candidate Starts for Cashington_9:
(Start: 22 @7342 has 143 MA's), (25, 7357), (65, 7594), (73, 7639),

Gene: Celaena_9 Start: 7394, Stop: 7723, Start Num: 22
Candidate Starts for Celaena_9:
(Start: 20 @7391 has 1 MA's), (Start: 22 @7394 has 143 MA's), (25, 7409), (30, 7442), (60, 7616),
(65, 7646), (73, 7691), (78, 7709),

Gene: ChewChew_8 Start: 6904, Stop: 7242, Start Num: 22
Candidate Starts for ChewChew_8:
(Start: 22 @6904 has 143 MA's), (28, 6937), (72, 7201),

Gene: Chickaboom_9 Start: 7385, Stop: 7747, Start Num: 21
Candidate Starts for Chickaboom_9:
(13, 7253), (Start: 21 @7385 has 28 MA's), (27, 7412), (38, 7481), (39, 7490), (48, 7547), (50, 7577),
(53, 7595), (55, 7613), (58, 7622), (69, 7682),

Gene: ChiliPepper_9 Start: 7553, Stop: 7882, Start Num: 22
Candidate Starts for ChiliPepper_9:
(4, 7256), (16, 7457), (Start: 20 @7550 has 1 MA's), (Start: 22 @7553 has 143 MA's), (25, 7568), (35,
7625), (38, 7643), (46, 7700), (60, 7775), (65, 7805), (73, 7850),

Gene: Cholula_12 Start: 9814, Stop: 10152, Start Num: 22
Candidate Starts for Cholula_12:
(Start: 22 @9814 has 143 MA's), (53, 10000), (68, 10081), (72, 10111),

Gene: Chridison_8 Start: 6924, Stop: 7262, Start Num: 22
Candidate Starts for Chridison_8:
(Start: 22 @6924 has 143 MA's), (28, 6957), (34, 6996), (47, 7077), (66, 7182), (68, 7191),

Gene: Christian_8 Start: 6905, Stop: 7243, Start Num: 22
Candidate Starts for Christian_8:
(Start: 22 @6905 has 143 MA's), (28, 6938), (72, 7202),

Gene: Clayda5_8 Start: 7093, Stop: 7425, Start Num: 22
Candidate Starts for Clayda5_8:
(4, 6796), (Start: 22 @7093 has 143 MA's), (24, 7105), (25, 7108), (30, 7144), (34, 7165), (35, 7168),
(51, 7267), (65, 7348),

Gene: CliffHanger_10 Start: 7300, Stop: 7629, Start Num: 22
Candidate Starts for CliffHanger_10:
(Start: 22 @7300 has 143 MA's), (25, 7315), (34, 7369), (65, 7552), (74, 7600),

Gene: Coltrane_8 Start: 7093, Stop: 7425, Start Num: 22
Candidate Starts for Coltrane_8:
(4, 6796), (Start: 22 @7093 has 143 MA's), (24, 7105), (25, 7108), (30, 7144), (34, 7165), (35, 7168),
(51, 7267), (65, 7348),

Gene: Colusalem_10 Start: 7742, Stop: 8083, Start Num: 21
Candidate Starts for Colusalem_10:
(13, 7610), (17, 7667), (Start: 21 @7742 has 28 MA's), (43, 7868), (46, 7895), (56, 7955), (57, 7958),
(61, 7976), (65, 8003), (73, 8054),

Gene: Coral_10 Start: 7742, Stop: 8083, Start Num: 21
Candidate Starts for Coral_10:
(13, 7610), (17, 7667), (Start: 21 @7742 has 28 MA's), (43, 7868), (46, 7895), (56, 7955), (57, 7958),
(61, 7976), (65, 8003), (73, 8054),

Gene: Cote_11 Start: 7903, Stop: 8244, Start Num: 21
Candidate Starts for Cote_11:
(13, 7771), (17, 7828), (Start: 21 @7903 has 28 MA's), (43, 8029), (46, 8056), (56, 8116), (57, 8119),
(61, 8137), (65, 8164), (73, 8215),

Gene: CristinaYang_8 Start: 6905, Stop: 7243, Start Num: 22
Candidate Starts for CristinaYang_8:
(Start: 22 @6905 has 143 MA's), (28, 6938), (72, 7202),

Gene: CroZenni_9 Start: 7325, Stop: 7654, Start Num: 22
Candidate Starts for CroZenni_9:
(4, 7028), (9, 7085), (16, 7229), (Start: 22 @7325 has 143 MA's), (25, 7340), (65, 7577), (73, 7622),

Gene: Daiboju_8 Start: 6925, Stop: 7263, Start Num: 22
Candidate Starts for Daiboju_8:
(Start: 22 @6925 has 143 MA's), (34, 6997), (52, 7108), (66, 7183), (68, 7192), (76, 7243),

Gene: Daob_11 Start: 7906, Stop: 8247, Start Num: 21
Candidate Starts for Daob_11:
(13, 7774), (17, 7831), (Start: 21 @7906 has 28 MA's), (43, 8032), (46, 8059), (56, 8119), (57, 8122),
(61, 8140), (65, 8167), (73, 8218),

Gene: DickRichards_9 Start: 7819, Stop: 8148, Start Num: 22
Candidate Starts for DickRichards_9:
(Start: 22 @7819 has 143 MA's), (25, 7834), (65, 8071), (73, 8116),

Gene: Didgeridoo_10 Start: 7544, Stop: 7873, Start Num: 22
Candidate Starts for Didgeridoo_10:
(4, 7247), (7, 7289), (9, 7304), (Start: 22 @7544 has 143 MA's), (25, 7559), (60, 7766), (65, 7796), (71,
7829), (73, 7841),

Gene: Dino_12 Start: 9768, Stop: 10106, Start Num: 22
Candidate Starts for Dino_12:
(Start: 22 @9768 has 143 MA's), (44, 9900), (53, 9954), (68, 10035), (72, 10065),

Gene: DirtyBubble_9 Start: 7574, Stop: 7903, Start Num: 22
Candidate Starts for DirtyBubble_9:
(4, 7277), (9, 7334), (Start: 20 @7571 has 1 MA's), (Start: 22 @7574 has 143 MA's), (25, 7589), (60,
7796), (61, 7799), (65, 7826), (73, 7871),

Gene: Dismas_9 Start: 7550, Stop: 7882, Start Num: 20
Candidate Starts for Dismas_9:
(4, 7256), (16, 7457), (Start: 20 @7550 has 1 MA's), (Start: 22 @7553 has 143 MA's), (25, 7568), (35,
7625), (46, 7700), (60, 7775), (65, 7805), (73, 7850),

Gene: Doobus_9 Start: 7556, Stop: 7885, Start Num: 22
Candidate Starts for Doobus_9:
(Start: 22 @7556 has 143 MA's), (25, 7571), (65, 7808), (73, 7853),

Gene: DrRobert_8 Start: 6905, Stop: 7243, Start Num: 22
Candidate Starts for DrRobert_8:
(Start: 22 @6905 has 143 MA's), (28, 6938), (72, 7202),

Gene: DreamTeam_8 Start: 6951, Stop: 7289, Start Num: 22
Candidate Starts for DreamTeam_8:
(Start: 22 @6951 has 143 MA's), (28, 6984), (72, 7248),

Gene: Eden_8 Start: 7182, Stop: 7514, Start Num: 22
Candidate Starts for Eden_8:
(Start: 22 @7182 has 143 MA's), (24, 7194), (25, 7197), (30, 7233), (62, 7416),

Gene: Eesa_10 Start: 7902, Stop: 8243, Start Num: 21
Candidate Starts for Eesa_10:
(Start: 21 @7902 has 28 MA's), (23, 7905), (29, 7947), (40, 8010), (41, 8013), (43, 8028), (61, 8136),
(65, 8163), (73, 8214),

Gene: Elva_10 Start: 7631, Stop: 7960, Start Num: 22
Candidate Starts for Elva_10:
(4, 7334), (Start: 20 @7628 has 1 MA's), (Start: 22 @7631 has 143 MA's), (25, 7646), (60, 7853), (61,
7856), (65, 7883), (73, 7928),

Gene: EstebanJulior_8 Start: 6949, Stop: 7287, Start Num: 22
Candidate Starts for EstebanJulior_8:
(Start: 22 @6949 has 143 MA's), (28, 6982), (44, 7081), (72, 7246),

Gene: Eula_9 Start: 7323, Stop: 7652, Start Num: 22
Candidate Starts for Eula_9:
(9, 7083), (16, 7227), (Start: 22 @7323 has 143 MA's), (25, 7338), (39, 7422), (65, 7575), (73, 7620),
(75, 7626),

Gene: Eunoia_8 Start: 6923, Stop: 7261, Start Num: 22
Candidate Starts for Eunoia_8:
(Start: 22 @6923 has 143 MA's), (28, 6956), (34, 6995), (47, 7076), (66, 7181), (68, 7190),

Gene: Finalfrontier_10 Start: 7834, Stop: 8163, Start Num: 22
Candidate Starts for Finalfrontier_10:
(9, 7594), (16, 7738), (Start: 22 @7834 has 143 MA's), (25, 7849), (39, 7933), (40, 7936), (60, 8056),
(65, 8086), (67, 8095), (73, 8131),

Gene: FlameThrower_9 Start: 7282, Stop: 7611, Start Num: 22
Candidate Starts for FlameThrower_9:
(1, 6853), (4, 6985), (Start: 20 @7279 has 1 MA's), (Start: 22 @7282 has 143 MA's), (25, 7297), (30,
7330), (60, 7504), (65, 7534), (73, 7579), (78, 7597),

Gene: Fluke_12 Start: 9810, Stop: 10148, Start Num: 22
Candidate Starts for Fluke_12:
(Start: 22 @9810 has 143 MA's), (53, 9996), (68, 10077), (72, 10107),

Gene: Franklin22_8 Start: 7163, Stop: 7495, Start Num: 22
Candidate Starts for Franklin22_8:
(Start: 20 @7160 has 1 MA's), (Start: 22 @7163 has 143 MA's), (24, 7175), (25, 7178), (32, 7220),
(39, 7265), (43, 7286), (65, 7418),

Gene: Gack_8 Start: 7233, Stop: 7565, Start Num: 22
Candidate Starts for Gack_8:
(Start: 22 @7233 has 143 MA's), (24, 7245), (25, 7248), (28, 7266), (36, 7311), (47, 7386), (65, 7488),

Gene: Galaxy_10 Start: 7711, Stop: 8073, Start Num: 21
Candidate Starts for Galaxy_10:
(Start: 21 @7711 has 28 MA's), (23, 7714), (27, 7738), (38, 7807), (39, 7816), (46, 7864), (48, 7873),
(50, 7903), (53, 7921), (55, 7939), (58, 7948), (69, 8008),

Gene: Gisselle_8 Start: 6951, Stop: 7289, Start Num: 22
Candidate Starts for Gisselle_8:
(Start: 22 @6951 has 143 MA's), (28, 6984), (72, 7248),

Gene: Glenn_12 Start: 9820, Stop: 10158, Start Num: 22
Candidate Starts for Glenn_12:
(Start: 22 @9820 has 143 MA's), (53, 10006), (68, 10087), (72, 10117),

Gene: GreenHearts_12 Start: 9892, Stop: 10230, Start Num: 22
Candidate Starts for GreenHearts_12:
(Start: 22 @9892 has 143 MA's), (44, 10024), (54, 10081), (72, 10189),

Gene: Greenhouse_12 Start: 9817, Stop: 10155, Start Num: 22
Candidate Starts for Greenhouse_12:
(Start: 22 @9817 has 143 MA's), (44, 9949), (54, 10006), (66, 10075), (68, 10084), (72, 10114),

Gene: HannahPhantana_11 Start: 7906, Stop: 8247, Start Num: 21
Candidate Starts for HannahPhantana_11:
(13, 7774), (17, 7831), (Start: 21 @7906 has 28 MA's), (43, 8032), (46, 8059), (56, 8119), (57, 8122),
(61, 8140), (65, 8167), (73, 8218),

Gene: HeadNerd_8 Start: 6907, Stop: 7245, Start Num: 22
Candidate Starts for HeadNerd_8:
(Start: 22 @6907 has 143 MA's), (28, 6940), (72, 7204),

Gene: Herb_8 Start: 6925, Stop: 7263, Start Num: 22
Candidate Starts for Herb_8:
(Start: 22 @6925 has 143 MA's), (34, 6997), (52, 7108), (66, 7183), (68, 7192), (76, 7243),

Gene: Huckleberry_8 Start: 6907, Stop: 7245, Start Num: 22
Candidate Starts for Huckleberry_8:
(Start: 22 @6907 has 143 MA's), (28, 6940), (72, 7204),

Gene: HunterDalle_8 Start: 6923, Stop: 7261, Start Num: 22
Candidate Starts for HunterDalle_8:
(Start: 22 @6923 has 143 MA's), (28, 6956), (34, 6995), (47, 7076), (66, 7181), (68, 7190),

Gene: Huntingdon_12 Start: 9803, Stop: 10141, Start Num: 22
Candidate Starts for Huntingdon_12:
(Start: 22 @9803 has 143 MA's), (26, 9827), (54, 9992), (68, 10070), (72, 10100), (76, 10121),

Gene: Icarian_10 Start: 7557, Stop: 7886, Start Num: 22
Candidate Starts for Icarian_10:
(4, 7260), (Start: 20 @7554 has 1 MA's), (Start: 22 @7557 has 143 MA's), (25, 7572), (61, 7782), (65, 7809), (73, 7854),

Gene: Immaculata_12 Start: 9814, Stop: 10152, Start Num: 22
Candidate Starts for Immaculata_12:
(Start: 22 @9814 has 143 MA's), (53, 10000), (68, 10081), (72, 10111),

Gene: IndyLu_9 Start: 7368, Stop: 7697, Start Num: 22
Candidate Starts for IndyLu_9:
(4, 7071), (7, 7113), (9, 7128), (Start: 22 @7368 has 143 MA's), (25, 7383), (60, 7590), (71, 7653), (73, 7665),

Gene: Jamun_10 Start: 8052, Stop: 8414, Start Num: 21
Candidate Starts for Jamun_10:
(13, 7920), (Start: 21 @8052 has 28 MA's), (23, 8055), (27, 8079), (38, 8148), (39, 8157), (48, 8214),
(50, 8244), (53, 8262), (55, 8280), (58, 8289), (69, 8349),

Gene: Jerole_11 Start: 7903, Stop: 8244, Start Num: 21
Candidate Starts for Jerole_11:
(13, 7771), (17, 7828), (Start: 21 @7903 has 28 MA's), (43, 8029), (46, 8056), (56, 8116), (57, 8119),
(61, 8137), (65, 8164), (73, 8215),

Gene: Joann_12 Start: 9795, Stop: 10133, Start Num: 22

Candidate Starts for Joann_12:

(Start: 22 @9795 has 143 MA's), (44, 9927), (54, 9984), (66, 10053), (68, 10062), (72, 10092),

Gene: Johnathan_9 Start: 7325, Stop: 7654, Start Num: 22

Candidate Starts for Johnathan_9:

(Start: 22 @7325 has 143 MA's), (25, 7340), (65, 7577), (73, 7622),

Gene: Jovita_9 Start: 7424, Stop: 7753, Start Num: 22

Candidate Starts for Jovita_9:

(9, 7184), (16, 7328), (Start: 22 @7424 has 143 MA's), (25, 7439), (39, 7523), (65, 7676), (73, 7721), (75, 7727),

Gene: Jumboset_12 Start: 9763, Stop: 10101, Start Num: 22

Candidate Starts for Jumboset_12:

(12, 9598), (Start: 22 @9763 has 143 MA's), (53, 9949), (68, 10030), (72, 10060),

Gene: Juno112_9 Start: 7313, Stop: 7651, Start Num: 21

Candidate Starts for Juno112_9:

(5, 7019), (11, 7106), (14, 7190), (19, 7274), (Start: 21 @7313 has 28 MA's), (29, 7358), (33, 7382), (41, 7424), (43, 7439), (50, 7484), (51, 7490), (56, 7523), (65, 7571), (70, 7589),

Gene: KHumphrey_9 Start: 7312, Stop: 7650, Start Num: 21

Candidate Starts for KHumphrey_9:

(5, 7018), (11, 7105), (14, 7189), (19, 7273), (Start: 21 @7312 has 28 MA's), (29, 7357), (33, 7381), (41, 7423), (43, 7438), (50, 7483), (51, 7489), (56, 7522), (65, 7570), (70, 7588),

Gene: Kalizoi_12 Start: 9762, Stop: 10100, Start Num: 22

Candidate Starts for Kalizoi_12:

(Start: 22 @9762 has 143 MA's), (44, 9894), (53, 9948), (68, 10029), (72, 10059),

Gene: Kate33_9 Start: 7367, Stop: 7696, Start Num: 22

Candidate Starts for Kate33_9:

(4, 7070), (7, 7112), (9, 7127), (Start: 22 @7367 has 143 MA's), (25, 7382), (60, 7589), (71, 7652), (73, 7664),

Gene: Katzastrophic_9 Start: 7457, Stop: 7786, Start Num: 22

Candidate Starts for Katzastrophic_9:

(Start: 20 @7454 has 1 MA's), (Start: 22 @7457 has 143 MA's), (25, 7472), (30, 7505), (60, 7679), (65, 7709), (73, 7754), (78, 7772),

Gene: Kenzers_9 Start: 7339, Stop: 7668, Start Num: 22

Candidate Starts for Kenzers_9:

(9, 7099), (16, 7243), (Start: 22 @7339 has 143 MA's), (25, 7354), (65, 7591), (73, 7636), (75, 7642),

Gene: Kepler_10 Start: 7741, Stop: 8082, Start Num: 21

Candidate Starts for Kepler_10:

(13, 7609), (17, 7666), (Start: 21 @7741 has 28 MA's), (43, 7867), (46, 7894), (56, 7954), (57, 7957), (61, 7975), (65, 8002), (73, 8053),

Gene: Kieran_9 Start: 7556, Stop: 7885, Start Num: 22

Candidate Starts for Kieran_9:

(4, 7259), (16, 7460), (Start: 20 @7553 has 1 MA's), (Start: 22 @7556 has 143 MA's), (25, 7571), (35, 7628), (38, 7646), (46, 7703), (60, 7778), (65, 7808), (73, 7853),

Gene: KingBob_8 Start: 6925, Stop: 7263, Start Num: 22

Candidate Starts for KingBob_8:

(Start: 22 @6925 has 143 MA's), (34, 6997), (52, 7108), (66, 7183), (68, 7192), (76, 7243),

Gene: Kittykat_8 Start: 6948, Stop: 7286, Start Num: 22

Candidate Starts for Kittykat_8:

(Start: 22 @6948 has 143 MA's), (72, 7245),

Gene: Korra_12 Start: 9768, Stop: 10106, Start Num: 22

Candidate Starts for Korra_12:

(Start: 22 @9768 has 143 MA's), (44, 9900), (53, 9954), (68, 10035), (72, 10065),

Gene: Kuleana_10 Start: 7701, Stop: 8042, Start Num: 21

Candidate Starts for Kuleana_10:

(Start: 21 @7701 has 28 MA's), (28, 7734), (40, 7809), (41, 7812), (43, 7827), (45, 7851), (46, 7854), (50, 7875), (56, 7914), (61, 7935), (65, 7962), (70, 7980), (73, 8013),

Gene: Lahqtemish_9 Start: 7412, Stop: 7741, Start Num: 22

Candidate Starts for Lahqtemish_9:

(Start: 22 @7412 has 143 MA's), (25, 7427), (60, 7634), (65, 7664), (71, 7697), (73, 7709),

Gene: Lakshmi_12 Start: 9822, Stop: 10160, Start Num: 22

Candidate Starts for Lakshmi_12:

(Start: 22 @9822 has 143 MA's), (44, 9954), (54, 10011), (72, 10119),

Gene: Lasagna_8 Start: 6905, Stop: 7243, Start Num: 22

Candidate Starts for Lasagna_8:

(Start: 22 @6905 has 143 MA's), (28, 6938), (72, 7202),

Gene: Lennox_8 Start: 6905, Stop: 7243, Start Num: 22

Candidate Starts for Lennox_8:

(Start: 22 @6905 has 143 MA's), (28, 6938), (72, 7202),

Gene: Leona_9 Start: 7363, Stop: 7701, Start Num: 21

Candidate Starts for Leona_9:

(14, 7240), (Start: 21 @7363 has 28 MA's), (29, 7408), (33, 7432), (41, 7474), (43, 7489), (50, 7534), (51, 7540), (56, 7573), (65, 7621), (70, 7639),

Gene: LilStuart_8 Start: 6905, Stop: 7243, Start Num: 22

Candidate Starts for LilStuart_8:

(Start: 22 @6905 has 143 MA's), (28, 6938), (72, 7202),

Gene: LimaBean_9 Start: 7325, Stop: 7654, Start Num: 22

Candidate Starts for LimaBean_9:

(Start: 22 @7325 has 143 MA's), (25, 7340), (65, 7577), (73, 7622),

Gene: Litotes_12 Start: 9790, Stop: 10128, Start Num: 22

Candidate Starts for Litotes_12:

(Start: 22 @9790 has 143 MA's), (28, 9823),

Gene: LittleTokyo_10 Start: 7645, Stop: 7983, Start Num: 21

Candidate Starts for LittleTokyo_10:

(3, 7219), (6, 7372), (17, 7570), (18, 7594), (Start: 21 @7645 has 28 MA's), (29, 7690), (40, 7753), (43, 7771), (46, 7798), (53, 7834), (57, 7858), (65, 7903), (73, 7954), (77, 7969),

Gene: Loviatar_16 Start: 7578, Stop: 7907, Start Num: 22

Candidate Starts for Loviatar_16:

(4, 7281), (Start: 20 @7575 has 1 MA's), (Start: 22 @7578 has 143 MA's), (25, 7593), (61, 7803), (65, 7830), (67, 7839), (71, 7863), (73, 7875),

Gene: Lucy_8 Start: 6896, Stop: 7234, Start Num: 22

Candidate Starts for Lucy_8:

(Start: 22 @6896 has 143 MA's), (28, 6929), (72, 7193),

Gene: Lunar_11 Start: 7903, Stop: 8244, Start Num: 21

Candidate Starts for Lunar_11:

(13, 7771), (17, 7828), (Start: 21 @7903 has 28 MA's), (43, 8029), (46, 8056), (56, 8116), (57, 8119), (61, 8137), (65, 8164), (73, 8215),

Gene: Lynlen_9 Start: 7339, Stop: 7668, Start Num: 22

Candidate Starts for Lynlen_9:

(9, 7099), (16, 7243), (Start: 22 @7339 has 143 MA's), (25, 7354), (65, 7591), (73, 7636), (75, 7642),

Gene: Makoto_8 Start: 6905, Stop: 7243, Start Num: 22

Candidate Starts for Makoto_8:

(Start: 22 @6905 has 143 MA's), (28, 6938), (72, 7202),

Gene: MamaPearl_8 Start: 6949, Stop: 7287, Start Num: 22

Candidate Starts for MamaPearl_8:

(Start: 22 @6949 has 143 MA's), (28, 6982), (44, 7081), (72, 7246),

Gene: Maria1952_8 Start: 6925, Stop: 7263, Start Num: 22

Candidate Starts for Maria1952_8:

(Start: 22 @6925 has 143 MA's), (34, 6997), (52, 7108), (66, 7183), (68, 7192), (76, 7243),

Gene: MeganNoll_12 Start: 9820, Stop: 10158, Start Num: 22

Candidate Starts for MeganNoll_12:

(12, 9655), (Start: 22 @9820 has 143 MA's), (53, 10006), (68, 10087), (72, 10117),

Gene: Melons_11 Start: 7903, Stop: 8244, Start Num: 21

Candidate Starts for Melons_11:

(13, 7771), (17, 7828), (Start: 21 @7903 has 28 MA's), (43, 8029), (46, 8056), (56, 8116), (57, 8119), (61, 8137), (65, 8164), (73, 8215),

Gene: Misaeng_12 Start: 9868, Stop: 10206, Start Num: 22

Candidate Starts for Misaeng_12:

(Start: 22 @9868 has 143 MA's), (54, 10057), (68, 10135), (72, 10165), (76, 10186),

Gene: Moki_8 Start: 6907, Stop: 7245, Start Num: 22

Candidate Starts for Moki_8:

(Start: 22 @6907 has 143 MA's), (28, 6940), (72, 7204),

Gene: MrGloopy_12 Start: 9753, Stop: 10091, Start Num: 22

Candidate Starts for MrGloopy_12:
(Start: 22 @9753 has 143 MA's), (68, 10020), (72, 10050),

Gene: Nancia_8 Start: 6905, Stop: 7243, Start Num: 22
Candidate Starts for Nancia_8:
(Start: 22 @6905 has 143 MA's), (28, 6938), (72, 7202),

Gene: Nicky22_10 Start: 7773, Stop: 8102, Start Num: 22
Candidate Starts for Nicky22_10:
(9, 7533), (16, 7677), (Start: 22 @7773 has 143 MA's), (25, 7788), (39, 7872), (60, 7995), (65, 8025),
(73, 8070),

Gene: Nubia_12 Start: 9782, Stop: 10120, Start Num: 22
Candidate Starts for Nubia_12:
(Start: 22 @9782 has 143 MA's), (44, 9914), (54, 9971), (66, 10040), (68, 10049), (72, 10079),

Gene: OMalley_8 Start: 6923, Stop: 7261, Start Num: 22
Candidate Starts for OMalley_8:
(Start: 22 @6923 has 143 MA's), (28, 6956), (34, 6995), (47, 7076), (66, 7181), (68, 7190),

Gene: Olliecat_9 Start: 7556, Stop: 7885, Start Num: 22
Candidate Starts for Olliecat_9:
(Start: 22 @7556 has 143 MA's), (25, 7571), (30, 7604), (32, 7610), (36, 7631), (51, 7727), (65, 7808),
(71, 7841),

Gene: Orcanus_10 Start: 7692, Stop: 8033, Start Num: 21
Candidate Starts for Orcanus_10:
(Start: 21 @7692 has 28 MA's), (23, 7695), (29, 7737), (40, 7800), (41, 7803), (43, 7818), (61, 7926),
(65, 7953), (73, 8004), (75, 8010),

Gene: OurGirlNessie_8 Start: 6896, Stop: 7234, Start Num: 22
Candidate Starts for OurGirlNessie_8:
(Start: 22 @6896 has 143 MA's), (28, 6929), (72, 7193),

Gene: Oxynfrius_12 Start: 9795, Stop: 10133, Start Num: 22
Candidate Starts for Oxynfrius_12:
(Start: 22 @9795 has 143 MA's), (44, 9927), (54, 9984), (72, 10092),

Gene: PartyCup_12 Start: 9837, Stop: 10175, Start Num: 22
Candidate Starts for PartyCup_12:
(Start: 22 @9837 has 143 MA's), (28, 9870),

Gene: Phisb_9 Start: 7316, Stop: 7645, Start Num: 22
Candidate Starts for Phisb_9:
(9, 7076), (16, 7220), (Start: 22 @7316 has 143 MA's), (25, 7331), (65, 7568), (73, 7613), (75, 7619),

Gene: PhluffyCoco_9 Start: 7312, Stop: 7650, Start Num: 21
Candidate Starts for PhluffyCoco_9:
(5, 7018), (11, 7105), (14, 7189), (19, 7273), (Start: 21 @7312 has 28 MA's), (29, 7357), (33, 7381),
(41, 7423), (43, 7438), (50, 7483), (51, 7489), (56, 7522), (65, 7570),

Gene: PinkFriday_8 Start: 6926, Stop: 7264, Start Num: 22
Candidate Starts for PinkFriday_8:

(2, 6494), (7, 6674), (8, 6680), (Start: 22 @6926 has 143 MA's), (34, 6998), (37, 7013), (66, 7184), (76, 7244),

Gene: PitaDog_8 Start: 6896, Stop: 7234, Start Num: 22

Candidate Starts for PitaDog_8:

(Start: 22 @6896 has 143 MA's), (28, 6929), (72, 7193),

Gene: Polka_10 Start: 7742, Stop: 8083, Start Num: 21

Candidate Starts for Polka_10:

(13, 7610), (17, 7667), (Start: 21 @7742 has 28 MA's), (43, 7868), (46, 7895), (56, 7955), (57, 7958), (61, 7976), (65, 8003), (73, 8054),

Gene: Potatoes_12 Start: 9814, Stop: 10152, Start Num: 22

Candidate Starts for Potatoes_12:

(Start: 22 @9814 has 143 MA's), (53, 10000), (68, 10081), (72, 10111),

Gene: Preamble_8 Start: 6906, Stop: 7244, Start Num: 22

Candidate Starts for Preamble_8:

(2, 6477), (7, 6657), (8, 6663), (Start: 22 @6906 has 143 MA's), (72, 7203),

Gene: Pterodactyl_8 Start: 6897, Stop: 7235, Start Num: 22

Candidate Starts for Pterodactyl_8:

(Start: 22 @6897 has 143 MA's), (28, 6930), (72, 7194),

Gene: Pumancara_8 Start: 6925, Stop: 7263, Start Num: 22

Candidate Starts for Pumancara_8:

(2, 6493), (7, 6673), (8, 6679), (Start: 22 @6925 has 143 MA's), (34, 6997), (66, 7183), (76, 7243),

Gene: QMacho_10 Start: 7806, Stop: 8135, Start Num: 22

Candidate Starts for QMacho_10:

(9, 7566), (16, 7710), (Start: 22 @7806 has 143 MA's), (25, 7821), (39, 7905), (65, 8058), (73, 8103), (75, 8109),

Gene: Quenya_10 Start: 7452, Stop: 7781, Start Num: 22

Candidate Starts for Quenya_10:

(1, 7023), (4, 7155), (Start: 22 @7452 has 143 MA's), (25, 7467), (31, 7503), (47, 7602), (60, 7674), (70, 7722), (71, 7737),

Gene: RAP15_12 Start: 9820, Stop: 10158, Start Num: 22

Candidate Starts for RAP15_12:

(12, 9655), (Start: 22 @9820 has 143 MA's), (53, 10006), (68, 10087), (72, 10117),

Gene: RcigaStruga_12 Start: 9803, Stop: 10141, Start Num: 22

Candidate Starts for RcigaStruga_12:

(Start: 22 @9803 has 143 MA's), (26, 9827), (54, 9992), (68, 10070), (72, 10100), (76, 10121),

Gene: RedFox_9 Start: 7312, Stop: 7650, Start Num: 21

Candidate Starts for RedFox_9:

(5, 7018), (11, 7105), (14, 7189), (19, 7273), (Start: 21 @7312 has 28 MA's), (29, 7357), (33, 7381), (41, 7423), (43, 7438), (50, 7483), (51, 7489), (56, 7522), (65, 7570), (70, 7588),

Gene: Renna12_10 Start: 7512, Stop: 7850, Start Num: 21

Candidate Starts for Renna12_10:

(14, 7389), (15, 7413), (Start: 21 @7512 has 28 MA's), (33, 7581), (41, 7623), (43, 7638), (50, 7683), (56, 7722), (57, 7725), (59, 7734), (64, 7758), (65, 7770), (70, 7788),

Gene: Riovina_8 Start: 6923, Stop: 7261, Start Num: 22

Candidate Starts for Riovina_8:

(Start: 22 @6923 has 143 MA's), (28, 6956), (34, 6995), (47, 7076), (66, 7181), (68, 7190),

Gene: Riverdale_12 Start: 9751, Stop: 10089, Start Num: 22

Candidate Starts for Riverdale_12:

(Start: 22 @9751 has 143 MA's), (53, 9937), (68, 10018), (72, 10048),

Gene: Rollins_8 Start: 7153, Stop: 7485, Start Num: 22

Candidate Starts for Rollins_8:

(4, 6856), (Start: 22 @7153 has 143 MA's), (24, 7165), (25, 7168), (30, 7204), (34, 7225), (35, 7228), (51, 7327), (65, 7408),

Gene: Rona_9 Start: 7553, Stop: 7882, Start Num: 22

Candidate Starts for Rona_9:

(4, 7256), (16, 7457), (Start: 20 @7550 has 1 MA's), (Start: 22 @7553 has 143 MA's), (25, 7568), (35, 7625), (46, 7700), (60, 7775), (65, 7805), (73, 7850),

Gene: Rozby_12 Start: 9751, Stop: 10089, Start Num: 22

Candidate Starts for Rozby_12:

(Start: 22 @9751 has 143 MA's), (53, 9937), (68, 10018), (72, 10048),

Gene: Ruchi_10 Start: 7974, Stop: 8336, Start Num: 21

Candidate Starts for Ruchi_10:

(13, 7842), (Start: 21 @7974 has 28 MA's), (27, 8001), (38, 8070), (39, 8079), (48, 8136), (50, 8166), (53, 8184), (55, 8202), (58, 8211), (69, 8271),

Gene: SanaSana_10 Start: 7567, Stop: 7896, Start Num: 22

Candidate Starts for SanaSana_10:

(4, 7270), (Start: 20 @7564 has 1 MA's), (Start: 22 @7567 has 143 MA's), (25, 7582), (60, 7789), (65, 7819), (73, 7864),

Gene: SansAfet_9 Start: 7336, Stop: 7665, Start Num: 22

Candidate Starts for SansAfet_9:

(Start: 22 @7336 has 143 MA's), (25, 7351), (65, 7588), (73, 7633),

Gene: SarBear_9 Start: 7299, Stop: 7628, Start Num: 22

Candidate Starts for SarBear_9:

(9, 7059), (16, 7203), (Start: 22 @7299 has 143 MA's), (25, 7314), (39, 7398), (40, 7401), (60, 7521), (65, 7551), (67, 7560), (73, 7596),

Gene: Savage2526_12 Start: 9814, Stop: 10152, Start Num: 22

Candidate Starts for Savage2526_12:

(12, 9649), (Start: 22 @9814 has 143 MA's), (53, 10000), (68, 10081), (72, 10111),

Gene: Scuttle_12 Start: 9820, Stop: 10158, Start Num: 22

Candidate Starts for Scuttle_12:

(12, 9655), (Start: 22 @9820 has 143 MA's), (53, 10006), (68, 10087), (72, 10117),

Gene: Sergei_8 Start: 6925, Stop: 7263, Start Num: 22

Candidate Starts for Sergei_8:

(Start: 22 @6925 has 143 MA's), (34, 6997), (52, 7108), (66, 7183), (68, 7192), (76, 7243),

Gene: Sharkboy_9 Start: 7552, Stop: 7881, Start Num: 22

Candidate Starts for Sharkboy_9:

(4, 7255), (16, 7456), (Start: 20 @7549 has 1 MA's), (Start: 22 @7552 has 143 MA's), (25, 7567), (35, 7624), (46, 7699), (60, 7774), (65, 7804), (73, 7849),

Gene: Shayna_8 Start: 7158, Stop: 7490, Start Num: 22

Candidate Starts for Shayna_8:

(16, 7062), (Start: 22 @7158 has 143 MA's), (25, 7176), (34, 7230), (36, 7236), (42, 7272), (64, 7401), (73, 7458),

Gene: Skylord_8 Start: 7093, Stop: 7425, Start Num: 22

Candidate Starts for Skylord_8:

(4, 6796), (Start: 22 @7093 has 143 MA's), (24, 7105), (25, 7108), (30, 7144), (34, 7165), (35, 7168), (51, 7267), (65, 7348),

Gene: Slay_9 Start: 7775, Stop: 8104, Start Num: 22

Candidate Starts for Slay_9:

(9, 7535), (16, 7679), (Start: 22 @7775 has 143 MA's), (25, 7790), (39, 7874), (40, 7877), (60, 7997), (65, 8027), (67, 8036), (73, 8072),

Gene: Squircle_9 Start: 7555, Stop: 7884, Start Num: 22

Candidate Starts for Squircle_9:

(Start: 22 @7555 has 143 MA's), (25, 7570), (30, 7603), (32, 7609), (36, 7630), (51, 7726), (65, 7807), (71, 7840),

Gene: Stoor_9 Start: 7564, Stop: 7893, Start Num: 22

Candidate Starts for Stoor_9:

(4, 7267), (Start: 20 @7561 has 1 MA's), (Start: 22 @7564 has 143 MA's), (25, 7579), (60, 7786), (65, 7816), (73, 7861),

Gene: Stromboli_9 Start: 7565, Stop: 7894, Start Num: 22

Candidate Starts for Stromboli_9:

(Start: 20 @7562 has 1 MA's), (Start: 22 @7565 has 143 MA's), (25, 7580), (60, 7787), (61, 7790), (65, 7817), (73, 7862),

Gene: SunnyD_8 Start: 7158, Stop: 7490, Start Num: 22

Candidate Starts for SunnyD_8:

(16, 7062), (Start: 22 @7158 has 143 MA's), (25, 7176), (34, 7230), (36, 7236), (42, 7272), (64, 7401), (73, 7458),

Gene: Supakev_8 Start: 6925, Stop: 7263, Start Num: 22

Candidate Starts for Supakev_8:

(2, 6493), (7, 6673), (8, 6679), (Start: 22 @6925 has 143 MA's), (34, 6997), (66, 7183), (76, 7243),

Gene: Suppi_12 Start: 9837, Stop: 10175, Start Num: 22

Candidate Starts for Suppi_12:

(Start: 22 @9837 has 143 MA's), (28, 9870),

Gene: Swervy_9 Start: 7299, Stop: 7628, Start Num: 22

Candidate Starts for Swervy_9:

(9, 7059), (16, 7203), (Start: 22 @7299 has 143 MA's), (25, 7314), (39, 7398), (40, 7401), (60, 7521), (65, 7551), (67, 7560), (73, 7596),

Gene: TattModd_12 Start: 9814, Stop: 10152, Start Num: 22

Candidate Starts for TattModd_12:

(Start: 22 @9814 has 143 MA's), (53, 10000), (68, 10081), (72, 10111),

Gene: TaylorSipt_10 Start: 7777, Stop: 8118, Start Num: 21

Candidate Starts for TaylorSipt_10:

(7, 7525), (10, 7570), (16, 7684), (Start: 21 @7777 has 28 MA's), (23, 7780), (43, 7903), (46, 7930), (49, 7945), (61, 8011), (65, 8038), (69, 8053), (73, 8089),

Gene: Teagster_8 Start: 7158, Stop: 7490, Start Num: 22

Candidate Starts for Teagster_8:

(Start: 22 @7158 has 143 MA's), (25, 7176), (34, 7230), (36, 7236), (42, 7272), (64, 7401), (73, 7458),

Gene: Temper16_8 Start: 6925, Stop: 7263, Start Num: 22

Candidate Starts for Temper16_8:

(Start: 22 @6925 has 143 MA's), (34, 6997), (52, 7108), (66, 7183), (68, 7192), (76, 7243),

Gene: TukTuk_9 Start: 7299, Stop: 7628, Start Num: 22

Candidate Starts for TukTuk_9:

(16, 7203), (Start: 22 @7299 has 143 MA's), (25, 7314), (39, 7398), (65, 7551), (73, 7596), (75, 7602),

Gene: Urla_8 Start: 6952, Stop: 7290, Start Num: 22

Candidate Starts for Urla_8:

(Start: 22 @6952 has 143 MA's), (30, 7003), (41, 7060), (72, 7249),

Gene: Vallejo_12 Start: 9752, Stop: 10090, Start Num: 22

Candidate Starts for Vallejo_12:

(Start: 22 @9752 has 143 MA's), (53, 9938), (72, 10049),

Gene: Vitas_8 Start: 7093, Stop: 7425, Start Num: 22

Candidate Starts for Vitas_8:

(4, 6796), (Start: 22 @7093 has 143 MA's), (24, 7105), (25, 7108), (30, 7144), (34, 7165), (35, 7168), (51, 7267), (65, 7348),

Gene: Vulpecula_10 Start: 8050, Stop: 8412, Start Num: 21

Candidate Starts for Vulpecula_10:

(13, 7918), (Start: 21 @8050 has 28 MA's), (23, 8053), (27, 8077), (38, 8146), (39, 8155), (46, 8203), (50, 8242), (55, 8278), (58, 8287), (69, 8347),

Gene: Vulture_8 Start: 6923, Stop: 7261, Start Num: 22

Candidate Starts for Vulture_8:

(Start: 22 @6923 has 143 MA's), (28, 6956), (34, 6995), (47, 7076), (66, 7181), (68, 7190),

Gene: WalkingDead_9 Start: 7553, Stop: 7882, Start Num: 22

Candidate Starts for WalkingDead_9:

(4, 7256), (Start: 20 @7550 has 1 MA's), (Start: 22 @7553 has 143 MA's), (25, 7568), (61, 7778), (65, 7805), (67, 7814), (73, 7850),

Gene: Wawa_12 Start: 9789, Stop: 10127, Start Num: 22

Candidate Starts for Wawa_12:

(Start: 22 @9789 has 143 MA's), (44, 9921), (53, 9975), (68, 10056), (72, 10086),

Gene: Wayne_12 Start: 9883, Stop: 10221, Start Num: 22

Candidate Starts for Wayne_12:

(Start: 22 @9883 has 143 MA's), (28, 9916),

Gene: WonderBoy_8 Start: 6905, Stop: 7243, Start Num: 22

Candidate Starts for WonderBoy_8:

(Start: 22 @6905 has 143 MA's), (28, 6938), (41, 7013), (72, 7202),

Gene: Zorro_12 Start: 9768, Stop: 10106, Start Num: 22

Candidate Starts for Zorro_12:

(Start: 22 @9768 has 143 MA's), (44, 9900), (53, 9954), (68, 10035), (72, 10065),