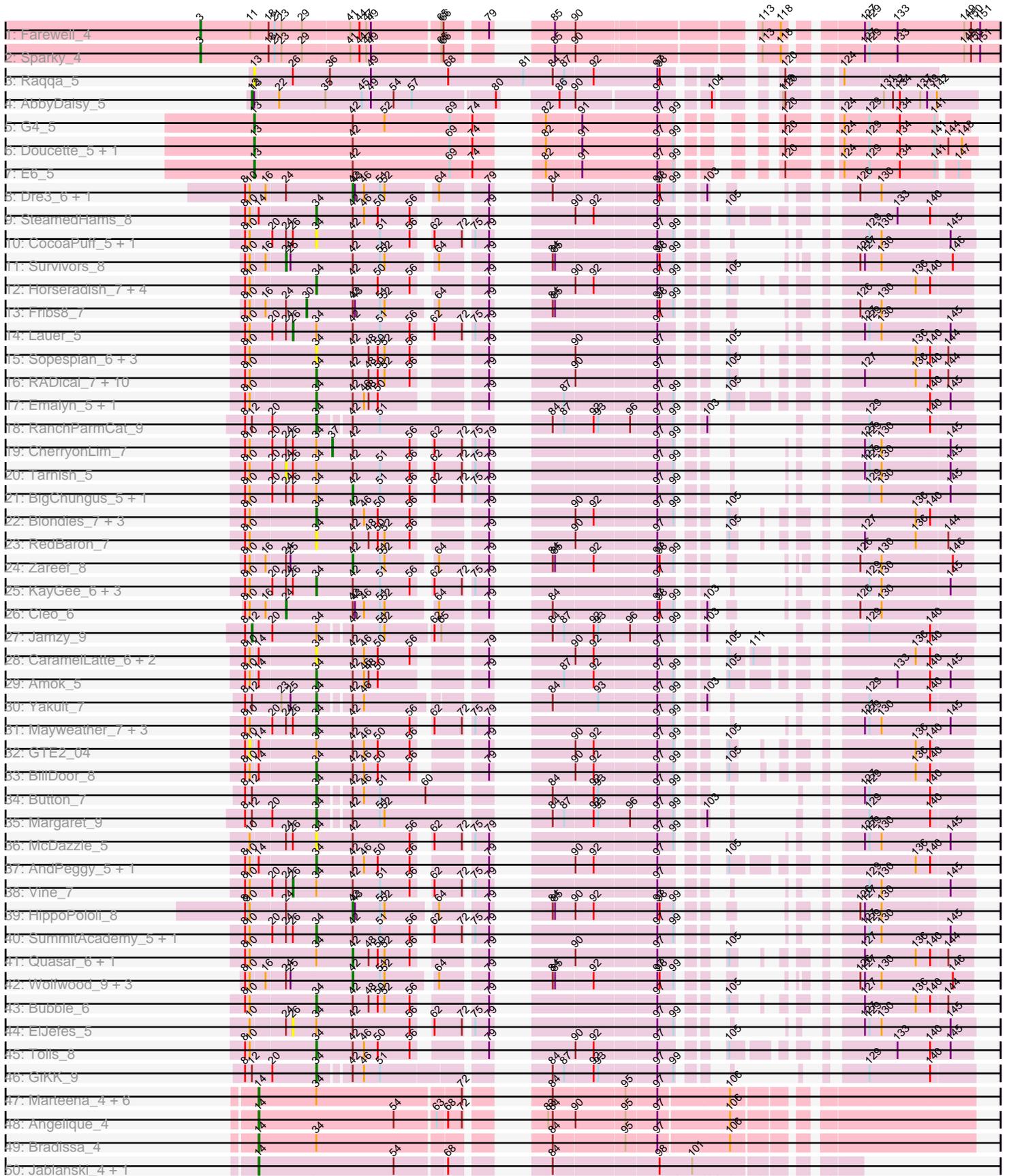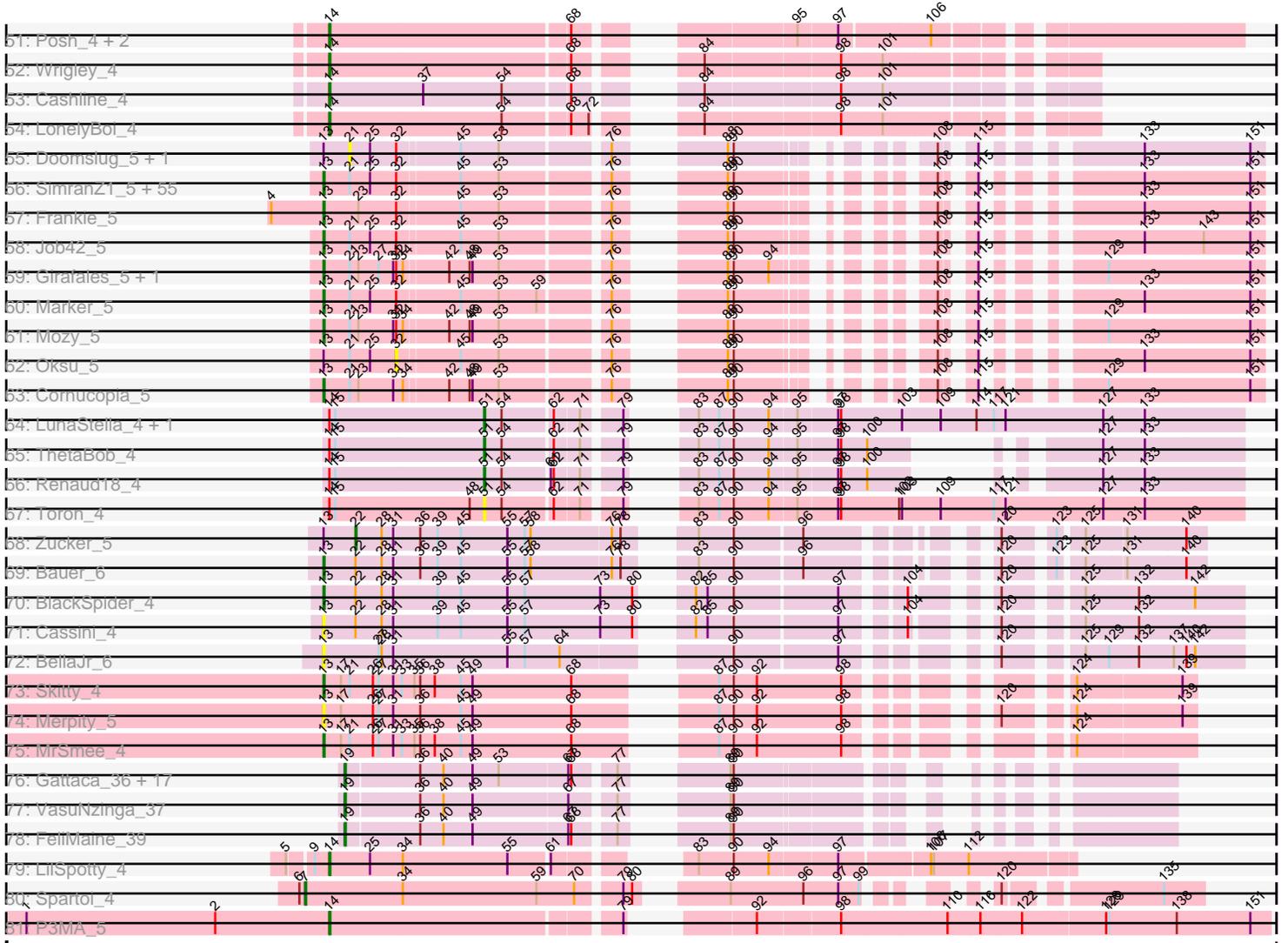Pham 290857

Pham 290857

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 290857 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290857 has 204 members, 36 are drafts.

Phages represented in each track:
• Track 1 : Farewell_4
• Track 2 : Sparky_4
• Track 3 : Raqqa_5
• Track 4 : AbbyDaisy_5
• Track 5 : G4_5
• Track 6 : Doucette_5, B22_5
• Track 7 : E6_5
• Track 8 : Dre3_6, Gibbous_6
• Track 9 : SteamedHams_8
• Track 10 : CocoaPuff_5, Balloona_5
• Track 11 : Survivors_8
• Track 12 : Horseradish_7, Biskit_7, SketchMex_5, SweatNTears_8, Yummy_7
• Track 13 : Fribs8_7
• Track 14 : Lauer_5
• Track 15 : Sopespian_6, Eliott_6, Carsonalex_7, PsychoKiller_6
• Track 16 : RADical_7, Cozz_6, RSchmailzl_7, ChickenTender_8, MunkgeeRoachy_6, Agatha_6, Socotra_7, GoldHunter_7, Starburst_7, Burnsey_6, Axym_6
• Track 17 : Emalyn_5, AikoCarson_5
• Track 18 : RanchParmCat_9
• Track 19 : CherryonLim_7
• Track 20 : Tarnish_5
• Track 21 : BigChungus_5, Feastonyeet_5
• Track 22 : Blondies_7, MScarn_8, Troje_6, Buttrmlkdreams_6
• Track 23 : RedBaron_7
• Track 24 : Zareef_8
• Track 25 : KayGee_6, Bavilard_6, Elinal_7, Yucky_6
• Track 26 : Cleo_6
• Track 27 : Jamzy_9
• Track 28 : CaramelLatte_6, ChocoMunchkin_6, CanesSauce_6
• Track 29 : Amok_5
• Track 30 : Yakult_7
• Track 31 : Mayweather_7, SheckWes_5, MAnor_6, Pons_6
• Track 32 : GTE2_04
• Track 33 : BillDoor_8
• Track 34 : Button_7
• Track 35 : Margaret_9

- Track 36 : McDazzle_5
- Track 37 : AndPeggy_5, Yarn_5
- Track 38 : Vine_7
- Track 39 : HippoPololi_8
- Track 40 : SummitAcademy_5, PotPie_6
- Track 41 : Quasar_6, Typhonomachy_6
- Track 42 : Wolfwood_9, Azira_8, Nibbles_8, MaVan_8
- Track 43 : Bubble_6
- Track 44 : ElJefes_5
- Track 45 : Tolls_8
- Track 46 : GiKK_9
- Track 47 : Marteena_4, EnalisNailo_4, EMsquaredA_4, Floral_4, BritBrat_4, Lilas_4, Pollux_4
- Track 48 : Angelique_4
- Track 49 : Bradissa_4
- Track 50 : Jablanski_4, Pytheas_4
- Track 51 : Posh_4, BeeGee_4, Confidence_4
- Track 52 : Wrigley_4
- Track 53 : Cashline_4
- Track 54 : LonelyBoi_4
- Track 55 : Doomslug_5, MulchExplorer_5
- Track 56 : SimranZ1_5, TootsiePop_5, Leozinho_5, Spikelee_5, Brookers_5, Plumbus_5, Alexphander_5, Coco12_5, BigPhil_5, Bobi_5, Beakin_5, Kingsley_5, Lorde_5, RockyHorror_5, Seagreen_5, Boomer_5, Enby_5, BuzzLyseyear_5, Emmaloid_5, Aloeri_5, Rialto_5, Flathead_5, Starcevich_5, Juice456_5, ChickenDinner_5, Slim_5, DirtMcgirt_5, Stap_5, Piper2020_5, Cerasum_5, Beanstalk_5, OwlsT2W_5, Ramsey_5, Hegedechwinu_5, LittleShirley_5, DocMcStuffins_5, Pollywog_5, Madiba_5, Tchotchke_5, Lucia_5, Sarma624_5, DosHalletts_5, Brushbloom_5, JalFarm20_5, Mova_5, UncleRicky_5, DaWorst_5, Kimberlium_5, Peridot_5, Awesomesauce_5, Squirty_5, Drago_5, Misha28_5, Totinger_5, Velveteen_5, Tootsieroll_5
- Track 57 : Frankie_5
- Track 58 : Job42_5
- Track 59 : Girafales_5, Quico_5
- Track 60 : Marker_5
- Track 61 : Mozy_5
- Track 62 : Oksu_5
- Track 63 : Cornucopia_5
- Track 64 : LunaStella_4, TChen_4
- Track 65 : ThetaBob_4
- Track 66 : Renaud18_4
- Track 67 : Toron_4
- Track 68 : Zucker_5
- Track 69 : Bauer_6
- Track 70 : BlackSpider_4
- Track 71 : Cassini_4
- Track 72 : BellaJr_6
- Track 73 : Skitty_4
- Track 74 : Merpity_5
- Track 75 : MrSmee_4
- Track 76 : Gattaca_36, GoongGoong_36, RedRaider77_37, Corazon_35, Huphlepuff_39, Raela_37, Tesla_36, Poise_37, LittleLaf_37, Pringar_37, Lilbit_36, Beelzebub_41, JoieB_38, MosMoris_35, Caprice_34, Clarkson_38, Marvin_35,

Blackbeetle_37
• Track 77 : VasuNzinga_37
• Track 78 : FeliMaine_39
• Track 79 : LilSpotty_4
• Track 80 : Spartoi_4
• Track 81 : P3MA_5

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

The start number called the most often in the published annotations is 13, it was called in 67 of the 168 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alexphander_5, Aloeri_5, Awesomesauce_5, B22_5, Bauer_6, Beakin_5, Beanstalk_5, BellaJr_6, BigPhil_5, BlackSpider_4, Bobi_5, Boomer_5, Brookers_5, Brushbloom_5, BuzzLyseyear_5, Cassini_4, Cerasum_5, ChickenDinner_5, Coco12_5, Cornucopia_5, DaWorst_5, DirtMcgirt_5, DocMcStuffins_5, DosHalletts_5, Doucette_5, Drago_5, E6_5, Emmaloid_5, Enby_5, Flathead_5, Frankie_5, G4_5, Girafales_5, Hegedechwinu_5, JalFarm20_5, Job42_5, Juice456_5, Kimberlium_5, Kingsley_5, Leozinho_5, LittleShirley_5, Lorde_5, Lucia_5, Madiba_5, Marker_5, Merpity_5, Misha28_5, Mova_5, Mozy_5, MrSmee_4, OwlsT2W_5, Peridot_5, Piper2020_5, Plumbus_5, Pollywog_5, Quico_5, Ramsey_5, Raqqa_5, Rialto_5, RockyHorror_5, Sarma624_5, Seagreen_5, SimranZ1_5, Skitty_4, Slim_5, Spikelee_5, Squirty_5, Stap_5, Starcevich_5, Tchotchke_5, TootsiePop_5, Tootsieroll_5, Totinger_5, UncleRicky_5, Velveteen_5,

Genes that have the "Most Annotated" start but do not call it:
• AbbyDaisy_5, Doomslug_5, MulchExplorer_5, Oksu_5, Zucker_5,

Genes that do not have the "Most Annotated" start:
• Agatha_6, AikoCarson_5, Amok_5, AndPeggy_5, Angelique_4, Axym_6, Azira_8, Balloona_5, Bavilard_6, BeeGee_4, Beelzebub_41, BigChungus_5, BillDoor_8, Biskit_7, Blackbeetle_37, Blondies_7, Bradissa_4, BritBrat_4, Bubble_6, Burnsey_6, Button_7, Buttrmlkdreams_6, CanesSauce_6, Caprice_34, CaramelLatte_6, Carsonalex_7, Cashline_4, CherryonLim_7, ChickenTender_8, ChocoMunchkin_6, Clarkson_38, Cleo_6, CocoaPuff_5, Confidence_4, Corazon_35, Cozz_6, Dre3_6, EMsquaredA_4, ElJefes_5, Elinal_7, Eliott_6, Emalyn_5, EnalisNailo_4, Farewell_4, Feastonyeet_5, FeliMaine_39, Floral_4, Fribs8_7, GTE2_04, Gattaca_36, GiKK_9, Gibbous_6, GoldHunter_7, GoongGoong_36, HippoPololi_8, Horseradish_7, Huphlepuff_39, Jablanski_4, Jamzy_9, JoieB_38, KayGee_6, Lauer_5, LilSpotty_4, Lilas_4, Lilbit_36, LittleLaf_37, LonelyBoi_4, LunaStella_4, MAnor_6, MScarn_8, MaVan_8, Margaret_9, Marteena_4, Marvin_35, Mayweather_7, McDazzle_5, MosMoris_35, MunkgeeRoachy_6, Nibbles_8, P3MA_5, Poise_37, Pollux_4, Pons_6, Posh_4, PotPie_6, Pringar_37, PsychoKiller_6, Pytheas_4, Quasar_6, RADical_7, RSchmailzl_7, Raela_37, RanchParmCat_9, RedBaron_7, RedRaider77_37, Renaud18_4, SheckWes_5, SketchMex_5, Socotra_7, Sopespian_6, Sparky_4, Spartoi_4, Starburst_7, SteamedHams_8, SummitAcademy_5, Survivors_8, SweatNTears_8, TChen_4, Tarnish_5, Tesla_36, ThetaBob_4, Tolls_8, Toron_4, Troje_6, Typhonomachy_6, VasuNzinga_37, Vine_7, Wolfwood_9, Wrigley_4, Yakult_7, Yarn_5, Yucky_6, Yummy_7, Zareef_8,

Summary by start number:

Start 3:
• Found in 2 of 204 (1.0%) of genes in pham
• Manual Annotations of this start: 2 of 168
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Farewell_4 (AF), Sparky_4 (AF),

Start 7:
• Found in 1 of 204 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Spartoi_4 (singleton),

Start 10:
• Found in 71 of 204 (34.8%) of genes in pham
• No Manual Annotations of this start.
• Called 1.4% of time when present
• Phage (with cluster) where this start called: GTE2_04 (CT),

Start 12:
• Found in 7 of 204 (3.4%) of genes in pham
• Manual Annotations of this start: 2 of 168
• Called 28.6% of time when present
• Phage (with cluster) where this start called: AbbyDaisy_5 (AY), Jamzy_9 (CT),

Start 13:
• Found in 80 of 204 (39.2%) of genes in pham
• Manual Annotations of this start: 67 of 168
• Called 93.8% of time when present
• Phage (with cluster) where this start called: Alexphander_5 (F1), Aloeri_5 (F1), Awesomesauce_5 (F1), B22_5 (BW), Bauer_6 (FN), Beakin_5 (F1), Beanstalk_5 (F1), BellaJr_6 (FN), BigPhil_5 (F1), BlackSpider_4 (FN), Bobi_5 (F1), Boomer_5 (F1), Brookers_5 (F1), Brushbloom_5 (F1), BuzzLyseyear_5 (F1), Cassini_4 (FN), Cerasum_5 (F1), ChickenDinner_5 (F1), Coco12_5 (F1), Cornucopia_5 (F1), DaWorst_5 (F1), DirtMcgirt_5 (F1), DocMcStuffins_5 (F1), DosHalletts_5 (F1), Doucette_5 (BW), Drago_5 (F1), E6_5 (BW), Emmaloid_5 (F1), Enby_5 (F1), Flathead_5 (F1), Frankie_5 (F1), G4_5 (BW), Girafales_5 (F1), Hegedechwinu_5 (F1), JalFarm20_5 (F1), Job42_5 (F1), Juice456_5 (F1), Kimberlium_5 (F1), Kingsley_5 (F1), Leozinho_5 (F1), LittleShirley_5 (F1), Lorde_5 (F1), Lucia_5 (F1), Madiba_5 (F1), Marker_5 (F1), Merpity_5 (FQ), Misha28_5 (F1), Mova_5 (F1), Mozy_5 (F1), MrSmee_4 (FQ), OwlsT2W_5 (F1), Peridot_5 (F1), Piper2020_5 (F1), Plumbus_5 (F1), Pollywog_5 (F1), Quico_5 (F1), Ramsey_5 (F1), Raqqa_5 (AY), Rialto_5 (F1), RockyHorror_5 (F1), Sarma624_5 (F1), Seagreen_5 (F1), SimranZ1_5 (F1), Skitty_4 (FQ), Slim_5 (F1), Spikelee_5 (F1), Squirty_5 (F3), Stap_5 (F1), Starcevich_5 (F1), Tchotchke_5 (F1), TootsiePop_5 (F1), Tootsieroll_5 (F1), Totinger_5 (F1), UncleRicky_5 (F1), Velveteen_5 (F1),

Start 14:
• Found in 33 of 204 (16.2%) of genes in pham
• Manual Annotations of this start: 19 of 168
• Called 57.6% of time when present

• Phage (with cluster) where this start called: Angelique_4 (CY1), BeeGee_4 (CY5), Bradissa_4 (CY1), BritBrat_4 (CY2), Cashline_4 (CY6), Confidence_4 (CY1), EMsquaredA_4 (CY1), EnalisNailo_4 (CY1), Floral_4 (CY1), Jablanski_4 (CY3), LilSpotty_4 (singleton), Lilas_4 (CY1), LonelyBoi_4 (CY7), Marteena_4 (CY1), P3MA_5 (singleton), Pollux_4 (CY1), Posh_4 (CY4), Pytheas_4 (CY3), Wrigley_4 (CY4),

Start 19:
• Found in 20 of 204 (9.8%) of genes in pham
• Manual Annotations of this start: 18 of 168
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beelzebub_41 (S), Blackbeetle_37 (S), Caprice_34 (S), Clarkson_38 (S), Corazon_35 (S), FeliMaine_39 (S), Gattaca_36 (S), GoongGoong_36 (S), Huphlepuff_39 (S), JoieB_38 (S), Lilbit_36 (S), LittleLaf_37 (S), Marvin_35 (S), MosMoris_35 (S), Poise_37 (S), Pringar_37 (S), Raela_37 (S), RedRaider77_37 (S), Tesla_36 (S), VasuNzinga_37 (S),

Start 21:
• Found in 69 of 204 (33.8%) of genes in pham
• No Manual Annotations of this start.
• Called 2.9% of time when present
• Phage (with cluster) where this start called: Doomslug_5 (F), MulchExplorer_5 (F1),

Start 22:
• Found in 5 of 204 (2.5%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Zucker_5 (FN),

Start 24:
• Found in 31 of 204 (15.2%) of genes in pham
• Manual Annotations of this start: 2 of 168
• Called 9.7% of time when present
• Phage (with cluster) where this start called: Cleo_6 (CT), Survivors_8 (CT), Tarnish_5 (CT),

Start 26:
• Found in 24 of 204 (11.8%) of genes in pham
• Manual Annotations of this start: 2 of 168
• Called 12.5% of time when present
• Phage (with cluster) where this start called: ElJefes_5 (CT), Lauer_5 (CT), Vine_7 (CT),

Start 30:
• Found in 1 of 204 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fribs8_7 (CT),

Start 32:
• Found in 65 of 204 (31.9%) of genes in pham
• No Manual Annotations of this start.
• Called 1.5% of time when present

• Phage (with cluster) where this start called: Oksu_5 (F1),

Start 34:
• Found in 80 of 204 (39.2%) of genes in pham
• Manual Annotations of this start: 37 of 168
• Called 68.8% of time when present
• Phage (with cluster) where this start called: Agatha_6 (CT), AikoCarson_5 (CT), Amok_5 (CT), AndPeggy_5 (CT), Axym_6 (CT), Balloona_5 (CT), Bavilard_6 (CT), BillDoor_8 (CT), Biskit_7 (CT), Blondies_7 (CT), Bubble_6 (CT), Burnsey_6 (CT), Button_7 (CT), Buttrmlkdreams_6 (CT), CanesSauce_6 (CT), CaramelLatte_6 (CT), Carsonalex_7 (CT), ChickenTender_8 (CT), ChocoMunchkin_6 (CT), CocoaPuff_5 (CT), Cozz_6 (CT), Elinal_7 (CT), Eliott_6 (CT), Emalyn_5 (CT), GiKK_9 (CT), GoldHunter_7 (CT), Horseradish_7 (CT), KayGee_6 (CT), MAnor_6 (CT), MScarn_8 (CT), Margaret_9 (CT), Mayweather_7 (CT), McDazzle_5 (CT), MunkgeeRoachy_6 (CT), Pons_6 (CT), PotPie_6 (CT), PsychoKiller_6 (CT), RADical_7 (CT), RSchmailzl_7 (CT), RanchParmCat_9 (CT), RedBaron_7 (CT), SheckWes_5 (CT), SketchMex_5 (CT), Socotra_7 (CT), Sopespian_6 (CT), Starburst_7 (CT), SteamedHams_8 (CT), SummitAcademy_5 (CT), SweatNTears_8 (CT), Tolls_8 (CT), Troje_6 (CT), Yakult_7 (CT), Yarn_5 (CT), Yucky_6 (CT), Yummy_7 (CT),

Start 37:
• Found in 2 of 204 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 50.0% of time when present
• Phage (with cluster) where this start called: CherryonLim_7 (CT),

Start 42:
• Found in 85 of 204 (41.7%) of genes in pham
• Manual Annotations of this start: 11 of 168
• Called 14.1% of time when present
• Phage (with cluster) where this start called: Azira_8 (CT), BigChungus_5 (CT), Dre3_6 (CT), Feastonyeet_5 (CT), Gibbous_6 (CT), HippoPololi_8 (CT), MaVan_8 (CT), Nibbles_8 (CT), Quasar_6 (CT), Typhonomachy_6 (CT), Wolfwood_9 (CT), Zareef_8 (CT),

Start 51:
• Found in 34 of 204 (16.7%) of genes in pham
• Manual Annotations of this start: 4 of 168
• Called 14.7% of time when present
• Phage (with cluster) where this start called: LunaStella_4 (F4), Renaud18_4 (F4), TChen_4 (F4), ThetaBob_4 (F4), Toron_4 (F6),

Summary by clusters:

There are 20 clusters represented in this pham: CY3, FQ, singleton, F3, F4, CY6, F6, F1, CY5, AF, CY1, S, BW, F, CY4, AY, CY7, CY2, FN, CT,

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

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

Info for manual annotations of cluster BW:
•Start number 13 was manually annotated 4 times for cluster BW.

Info for manual annotations of cluster CT:
•Start number 12 was manually annotated 1 time for cluster CT.
•Start number 24 was manually annotated 2 times for cluster CT.
•Start number 26 was manually annotated 2 times for cluster CT.
•Start number 30 was manually annotated 1 time for cluster CT.
•Start number 34 was manually annotated 37 times for cluster CT.
•Start number 37 was manually annotated 1 time for cluster CT.
•Start number 42 was manually annotated 11 times for cluster CT.

Info for manual annotations of cluster CY1:
•Start number 14 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:
•Start number 14 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:
•Start number 14 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:
•Start number 14 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 14 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:
•Start number 14 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:
•Start number 14 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster F1:
•Start number 13 was manually annotated 58 times for cluster F1.

Info for manual annotations of cluster F3:
•Start number 13 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:
•Start number 51 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster FN:
•Start number 13 was manually annotated 2 times for cluster FN.
•Start number 22 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FQ:
•Start number 13 was manually annotated 2 times for cluster FQ.

Info for manual annotations of cluster S:
•Start number 19 was manually annotated 18 times for cluster S.

Gene Information:

Gene: AbbyDaisy_5 Start: 3558, Stop: 4358, Start Num: 12
Candidate Starts for AbbyDaisy_5:
(Start: 12 @3558 has 2 MA's), (Start: 13 @3561 has 67 MA's), (Start: 22 @3591 has 1 MA's), (35, 3651), (45, 3699), (49, 3711), (54, 3741), (57, 3765), (80, 3867), (86, 3909), (90, 3927), (97, 4029), (104, 4080), (119, 4131), (120, 4134), (131, 4236), (132, 4248), (134, 4257), (137, 4284), (139, 4293), (142, 4305),

Gene: Agatha_6 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for Agatha_6:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (127, 4707), (136, 4773), (140, 4791), (144, 4812),

Gene: AikoCarson_5 Start: 3913, Stop: 4572, Start Num: 34
Candidate Starts for AikoCarson_5:
(8, 3826), (10, 3832), (Start: 34 @3913 has 37 MA's), (Start: 42 @3961 has 11 MA's), (46, 3976), (48, 3982), (50, 3994), (79, 4108), (87, 4156), (97, 4270), (99, 4291), (105, 4321), (140, 4516), (145, 4543),

Gene: Alexphander_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Alexphander_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Aloeri_5 Start: 3607, Stop: 4332, Start Num: 13
Candidate Starts for Aloeri_5:
(Start: 13 @3607 has 67 MA's), (21, 3634), (25, 3655), (32, 3682), (45, 3742), (53, 3781), (76, 3880), (88, 3949), (90, 3952), (108, 4081), (115, 4102), (133, 4210), (151, 4318),

Gene: Amok_5 Start: 3914, Stop: 4573, Start Num: 34
Candidate Starts for Amok_5:
(8, 3827), (10, 3833), (Start: 14 @3842 has 19 MA's), (Start: 34 @3914 has 37 MA's), (Start: 42 @3962 has 11 MA's), (46, 3977), (48, 3983), (50, 3995), (79, 4109), (87, 4157), (92, 4193), (97, 4271), (99, 4292), (105, 4322), (133, 4475), (140, 4517), (145, 4544),

Gene: AndPeggy_5 Start: 4225, Stop: 4881, Start Num: 34
Candidate Starts for AndPeggy_5:
(8, 4138), (10, 4144), (Start: 14 @4153 has 19 MA's), (Start: 34 @4225 has 37 MA's), (Start: 42 @4273 has 11 MA's), (46, 4288), (50, 4306), (56, 4348), (79, 4420), (90, 4480), (92, 4504), (97, 4582), (105, 4633), (136, 4810), (140, 4828),

Gene: Angelique_4 Start: 3707, Stop: 4519, Start Num: 14
Candidate Starts for Angelique_4:
(Start: 14 @3707 has 19 MA's), (54, 3884), (63, 3935), (68, 3947), (72, 3965), (83, 4016), (84, 4022), (90, 4049), (95, 4112), (97, 4151), (106, 4238),

Gene: Awesomesauce_5 Start: 3607, Stop: 4332, Start Num: 13
Candidate Starts for Awesomesauce_5:

(Start: 13 @3607 has 67 MA's), (21, 3634), (25, 3655), (32, 3682), (45, 3742), (53, 3781), (76, 3880), (88, 3949), (90, 3952), (108, 4081), (115, 4102), (133, 4210), (151, 4318),

Gene: Axym_6 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for Axym_6:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (127, 4707), (136, 4773), (140, 4791), (144, 4812),

Gene: Azira_8 Start: 5151, Stop: 5714, Start Num: 42
Candidate Starts for Azira_8:
(8, 5016), (10, 5022), (16, 5040), (Start: 24 @5064 has 2 MA's), (25, 5070), (Start: 42 @5151 has 11 MA's), (Start: 51 @5187 has 4 MA's), (52, 5193), (64, 5250), (79, 5304), (84, 5337), (85, 5340), (92, 5388), (97, 5466), (98, 5469), (99, 5487), (126, 5571), (127, 5577), (130, 5598), (146, 5688),

Gene: B22_5 Start: 3905, Stop: 4687, Start Num: 13
Candidate Starts for B22_5:
(Start: 13 @3905 has 67 MA's), (Start: 42 @4034 has 11 MA's), (69, 4157), (74, 4184), (82, 4229), (91, 4274), (97, 4373), (99, 4394), (120, 4460), (124, 4514), (129, 4547), (134, 4586), (141, 4631), (144, 4649), (148, 4667),

Gene: Balloona_5 Start: 3999, Stop: 4592, Start Num: 34
Candidate Starts for Balloona_5:
(8, 3909), (10, 3915), (20, 3942), (Start: 24 @3960 has 2 MA's), (Start: 26 @3969 has 2 MA's), (Start: 34 @3999 has 37 MA's), (Start: 42 @4047 has 11 MA's), (Start: 51 @4083 has 4 MA's), (56, 4122), (62, 4134), (72, 4170), (75, 4176), (79, 4194), (97, 4356), (99, 4377), (129, 4458), (130, 4473), (145, 4560),

Gene: Bauer_6 Start: 4443, Stop: 5192, Start Num: 13
Candidate Starts for Bauer_6:
(Start: 13 @4443 has 67 MA's), (Start: 22 @4476 has 1 MA's), (28, 4503), (31, 4515), (36, 4542), (39, 4560), (45, 4584), (55, 4632), (57, 4650), (58, 4656), (76, 4737), (78, 4746), (83, 4785), (90, 4818), (96, 4884), (120, 5016), (123, 5055), (125, 5076), (131, 5115), (140, 5172),

Gene: Bavilard_6 Start: 4775, Stop: 5368, Start Num: 34
Candidate Starts for Bavilard_6:
(8, 4685), (10, 4691), (20, 4718), (Start: 24 @4736 has 2 MA's), (Start: 26 @4745 has 2 MA's), (Start: 34 @4775 has 37 MA's), (Start: 42 @4823 has 11 MA's), (Start: 51 @4859 has 4 MA's), (56, 4898), (62, 4910), (72, 4946), (75, 4952), (79, 4970), (97, 5132), (129, 5234), (130, 5249), (145, 5336),

Gene: Beakin_5 Start: 3607, Stop: 4332, Start Num: 13
Candidate Starts for Beakin_5:
(Start: 13 @3607 has 67 MA's), (21, 3634), (25, 3655), (32, 3682), (45, 3742), (53, 3781), (76, 3880), (88, 3949), (90, 3952), (108, 4081), (115, 4102), (133, 4210), (151, 4318),

Gene: Beanstalk_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Beanstalk_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: BeeGee_4 Start: 3710, Stop: 4522, Start Num: 14
Candidate Starts for BeeGee_4:
(Start: 14 @3710 has 19 MA's), (68, 3950), (95, 4115), (97, 4154), (106, 4241),

Gene: Beelzebub_41 Start: 14720, Stop: 15364, Start Num: 19
Candidate Starts for Beelzebub_41:
(Start: 19 @14720 has 18 MA's), (36, 14792), (40, 14816), (49, 14846), (53, 14873), (67, 14942), (68, 14945), (77, 14981), (89, 15047), (90, 15050),

Gene: BellaJr_6 Start: 4447, Stop: 5247, Start Num: 13
Candidate Starts for BellaJr_6:
(Start: 13 @4447 has 67 MA's), (27, 4504), (28, 4507), (31, 4519), (55, 4636), (57, 4654), (64, 4690), (90, 4822), (97, 4924), (120, 5026), (125, 5086), (129, 5110), (132, 5140), (137, 5176), (140, 5188), (142, 5197),

Gene: BigChungus_5 Start: 4072, Stop: 4617, Start Num: 42
Candidate Starts for BigChungus_5:
(8, 3934), (10, 3940), (20, 3967), (Start: 24 @3985 has 2 MA's), (Start: 26 @3994 has 2 MA's), (Start: 34 @4024 has 37 MA's), (Start: 42 @4072 has 11 MA's), (Start: 51 @4108 has 4 MA's), (56, 4147), (62, 4159), (72, 4195), (75, 4201), (79, 4219), (97, 4381), (99, 4402), (129, 4483), (130, 4498), (145, 4585),

Gene: BigPhil_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for BigPhil_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: BillDoor_8 Start: 4220, Stop: 4846, Start Num: 34
Candidate Starts for BillDoor_8:
(8, 4133), (10, 4139), (Start: 14 @4148 has 19 MA's), (Start: 34 @4220 has 37 MA's), (Start: 42 @4268 has 11 MA's), (46, 4283), (50, 4301), (56, 4343), (79, 4415), (90, 4475), (92, 4499), (97, 4577), (99, 4598), (105, 4628), (136, 4775), (140, 4793),

Gene: Biskit_7 Start: 4215, Stop: 4838, Start Num: 34
Candidate Starts for Biskit_7:
(8, 4128), (10, 4134), (Start: 34 @4215 has 37 MA's), (Start: 42 @4263 has 11 MA's), (50, 4296), (56, 4338), (79, 4410), (90, 4470), (92, 4494), (97, 4572), (99, 4593), (105, 4623), (136, 4767), (140, 4785),

Gene: BlackSpider_4 Start: 3452, Stop: 4255, Start Num: 13
Candidate Starts for BlackSpider_4:
(Start: 13 @3452 has 67 MA's), (Start: 22 @3485 has 1 MA's), (28, 3512), (31, 3524), (39, 3569), (45, 3593), (55, 3641), (57, 3659), (73, 3734), (80, 3767), (82, 3791), (85, 3803), (90, 3827), (97, 3929), (104, 3980), (120, 4034), (125, 4094), (132, 4148), (142, 4205),

Gene: Blackbeetle_37 Start: 13739, Stop: 14383, Start Num: 19
Candidate Starts for Blackbeetle_37:
(Start: 19 @13739 has 18 MA's), (36, 13811), (40, 13835), (49, 13865), (53, 13892), (67, 13961), (68, 13964), (77, 14000), (89, 14066), (90, 14069),

Gene: Blondies_7 Start: 4216, Stop: 4839, Start Num: 34
Candidate Starts for Blondies_7:
(8, 4129), (10, 4135), (Start: 34 @4216 has 37 MA's), (Start: 42 @4264 has 11 MA's), (46, 4279), (50, 4297), (56, 4339), (79, 4411), (90, 4471), (92, 4495), (97, 4573), (99, 4594), (105, 4624), (136, 4768), (140, 4786),

Gene: Bobi_5 Start: 3604, Stop: 4329, Start Num: 13

Candidate Starts for Bobi_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Boomer_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Boomer_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Bradissa_4 Start: 3716, Stop: 4528, Start Num: 14
Candidate Starts for Bradissa_4:
(Start: 14 @3716 has 19 MA's), (Start: 34 @3791 has 37 MA's), (84, 4031), (95, 4121), (97, 4160), (106, 4247),

Gene: BritBrat_4 Start: 3716, Stop: 4528, Start Num: 14
Candidate Starts for BritBrat_4:
(Start: 14 @3716 has 19 MA's), (Start: 34 @3791 has 37 MA's), (72, 3974), (84, 4031), (95, 4121), (97, 4160), (106, 4247),

Gene: Brookers_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Brookers_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Brushbloom_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Brushbloom_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Bubble_6 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for Bubble_6:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (97, 4578), (105, 4629), (127, 4707), (136, 4773), (140, 4791), (144, 4812),

Gene: Burnsey_6 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for Burnsey_6:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (127, 4707), (136, 4773), (140, 4791), (144, 4812),

Gene: Button_7 Start: 4307, Stop: 4906, Start Num: 34
Candidate Starts for Button_7:
(8, 4214), (Start: 12 @4223 has 2 MA's), (Start: 34 @4307 has 37 MA's), (Start: 42 @4343 has 11 MA's), (46, 4358), (Start: 51 @4379 has 4 MA's), (60, 4439), (84, 4544), (92, 4595), (93, 4601), (97, 4673), (99, 4694), (127, 4766), (129, 4772), (140, 4850),

Gene: Buttrmlkdreams_6 Start: 4216, Stop: 4839, Start Num: 34
Candidate Starts for Buttrmlkdreams_6:
(8, 4129), (10, 4135), (Start: 34 @4216 has 37 MA's), (Start: 42 @4264 has 11 MA's), (46, 4279), (50, 4297), (56, 4339), (79, 4411), (90, 4471), (92, 4495), (97, 4573), (99, 4594), (105, 4624), (136, 4768), (140, 4786),

Gene: BuzzLyseyear_5 Start: 3603, Stop: 4328, Start Num: 13
Candidate Starts for BuzzLyseyear_5:
(Start: 13 @3603 has 67 MA's), (21, 3630), (25, 3651), (32, 3678), (45, 3738), (53, 3777), (76, 3876), (88, 3945), (90, 3948), (108, 4077), (115, 4098), (133, 4206), (151, 4314),

Gene: CanesSauce_6 Start: 4225, Stop: 4881, Start Num: 34
Candidate Starts for CanesSauce_6:
(8, 4138), (10, 4144), (Start: 14 @4153 has 19 MA's), (Start: 34 @4225 has 37 MA's), (Start: 42 @4273 has 11 MA's), (46, 4288), (50, 4306), (56, 4348), (79, 4420), (90, 4480), (92, 4504), (97, 4582), (105, 4633), (111, 4657), (136, 4810), (140, 4828),

Gene: Caprice_34 Start: 13809, Stop: 14453, Start Num: 19
Candidate Starts for Caprice_34:
(Start: 19 @13809 has 18 MA's), (36, 13881), (40, 13905), (49, 13935), (53, 13962), (67, 14031), (68, 14034), (77, 14070), (89, 14136), (90, 14139),

Gene: CaramelLatte_6 Start: 4225, Stop: 4881, Start Num: 34
Candidate Starts for CaramelLatte_6:
(8, 4138), (10, 4144), (Start: 14 @4153 has 19 MA's), (Start: 34 @4225 has 37 MA's), (Start: 42 @4273 has 11 MA's), (46, 4288), (50, 4306), (56, 4348), (79, 4420), (90, 4480), (92, 4504), (97, 4582), (105, 4633), (111, 4657), (136, 4810), (140, 4828),

Gene: Carsonalex_7 Start: 4278, Stop: 4901, Start Num: 34
Candidate Starts for Carsonalex_7:
(8, 4188), (10, 4194), (Start: 34 @4278 has 37 MA's), (Start: 42 @4326 has 11 MA's), (48, 4347), (50, 4359), (52, 4368), (56, 4401), (79, 4473), (90, 4533), (97, 4635), (105, 4686), (136, 4830), (140, 4848), (144, 4869),

Gene: Cashline_4 Start: 3710, Stop: 4375, Start Num: 14
Candidate Starts for Cashline_4:
(Start: 14 @3710 has 19 MA's), (Start: 37 @3806 has 1 MA's), (54, 3887), (68, 3950), (84, 4025), (98, 4157), (101, 4199),

Gene: Cassini_4 Start: 3417, Stop: 4220, Start Num: 13
Candidate Starts for Cassini_4:
(Start: 13 @3417 has 67 MA's), (Start: 22 @3450 has 1 MA's), (28, 3477), (31, 3489), (39, 3534), (45, 3558), (55, 3606), (57, 3624), (73, 3699), (80, 3732), (82, 3756), (85, 3768), (90, 3792), (97, 3894), (104, 3945), (120, 3999), (125, 4059), (132, 4113),

Gene: Cerasum_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Cerasum_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: CherryonLim_7 Start: 4771, Stop: 5343, Start Num: 37
Candidate Starts for CherryonLim_7:
(8, 4660), (10, 4666), (20, 4693), (Start: 24 @4711 has 2 MA's), (Start: 26 @4720 has 2 MA's), (Start: 34 @4750 has 37 MA's), (Start: 37 @4771 has 1 MA's), (Start: 42 @4798 has 11 MA's), (56, 4873), (62, 4885), (72, 4921), (75, 4927), (79, 4945), (97, 5107), (99, 5128), (127, 5203), (129, 5209), (130, 5224), (145, 5311),

Gene: ChickenDinner_5 Start: 3607, Stop: 4332, Start Num: 13
Candidate Starts for ChickenDinner_5:

(Start: 13 @3607 has 67 MA's), (21, 3634), (25, 3655), (32, 3682), (45, 3742), (53, 3781), (76, 3880), (88, 3949), (90, 3952), (108, 4081), (115, 4102), (133, 4210), (151, 4318),

Gene: ChickenTender_8 Start: 4269, Stop: 4892, Start Num: 34
Candidate Starts for ChickenTender_8:
(8, 4179), (10, 4185), (Start: 34 @4269 has 37 MA's), (Start: 42 @4317 has 11 MA's), (48, 4338), (50, 4350), (52, 4359), (56, 4392), (79, 4464), (90, 4524), (97, 4626), (105, 4677), (127, 4755), (136, 4821), (140, 4839), (144, 4860),

Gene: ChocoMunchkin_6 Start: 4225, Stop: 4881, Start Num: 34
Candidate Starts for ChocoMunchkin_6:
(8, 4138), (10, 4144), (Start: 14 @4153 has 19 MA's), (Start: 34 @4225 has 37 MA's), (Start: 42 @4273 has 11 MA's), (46, 4288), (50, 4306), (56, 4348), (79, 4420), (90, 4480), (92, 4504), (97, 4582), (105, 4633), (111, 4657), (136, 4810), (140, 4828),

Gene: Clarkson_38 Start: 14421, Stop: 15065, Start Num: 19
Candidate Starts for Clarkson_38:
(Start: 19 @14421 has 18 MA's), (36, 14493), (40, 14517), (49, 14547), (53, 14574), (67, 14643), (68, 14646), (77, 14682), (89, 14748), (90, 14751),

Gene: Cleo_6 Start: 4357, Stop: 5013, Start Num: 24
Candidate Starts for Cleo_6:
(8, 4306), (10, 4312), (16, 4333), (Start: 24 @4357 has 2 MA's), (Start: 42 @4444 has 11 MA's), (43, 4447), (46, 4459), (Start: 51 @4480 has 4 MA's), (52, 4486), (64, 4543), (79, 4597), (84, 4630), (97, 4759), (98, 4762), (99, 4780), (103, 4804), (126, 4870), (130, 4897),

Gene: Coco12_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Coco12_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: CocoaPuff_5 Start: 3999, Stop: 4592, Start Num: 34
Candidate Starts for CocoaPuff_5:
(8, 3909), (10, 3915), (20, 3942), (Start: 24 @3960 has 2 MA's), (Start: 26 @3969 has 2 MA's), (Start: 34 @3999 has 37 MA's), (Start: 42 @4047 has 11 MA's), (Start: 51 @4083 has 4 MA's), (56, 4122), (62, 4134), (72, 4170), (75, 4176), (79, 4194), (97, 4356), (99, 4377), (129, 4458), (130, 4473), (145, 4560),

Gene: Confidence_4 Start: 3710, Stop: 4522, Start Num: 14
Candidate Starts for Confidence_4:
(Start: 14 @3710 has 19 MA's), (68, 3950), (95, 4115), (97, 4154), (106, 4241),

Gene: Corazon_35 Start: 14374, Stop: 15018, Start Num: 19
Candidate Starts for Corazon_35:
(Start: 19 @14374 has 18 MA's), (36, 14446), (40, 14470), (49, 14500), (53, 14527), (67, 14596), (68, 14599), (77, 14635), (89, 14701), (90, 14704),

Gene: Cornucopia_5 Start: 3606, Stop: 4331, Start Num: 13
Candidate Starts for Cornucopia_5:
(Start: 13 @3606 has 67 MA's), (21, 3633), (23, 3642), (31, 3678), (Start: 34 @3687 has 37 MA's), (Start: 42 @3729 has 11 MA's), (48, 3750), (49, 3753), (53, 3780), (76, 3879), (88, 3948), (90, 3951), (108, 4080), (115, 4101), (129, 4173), (151, 4317),

Gene: Cozz_6 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for Cozz_6:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (127, 4707), (136, 4773), (140, 4791), (144, 4812),

Gene: DaWorst_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for DaWorst_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: DirtMcgirt_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for DirtMcgirt_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: DocMcStuffins_5 Start: 3607, Stop: 4332, Start Num: 13
Candidate Starts for DocMcStuffins_5:
(Start: 13 @3607 has 67 MA's), (21, 3634), (25, 3655), (32, 3682), (45, 3742), (53, 3781), (76, 3880), (88, 3949), (90, 3952), (108, 4081), (115, 4102), (133, 4210), (151, 4318),

Gene: Doomslug_5 Start: 3631, Stop: 4329, Start Num: 21
Candidate Starts for Doomslug_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: DosHalletts_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for DosHalletts_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Doucette_5 Start: 3905, Stop: 4690, Start Num: 13
Candidate Starts for Doucette_5:
(Start: 13 @3905 has 67 MA's), (Start: 42 @4034 has 11 MA's), (69, 4160), (74, 4187), (82, 4232), (91, 4277), (97, 4376), (99, 4397), (120, 4463), (124, 4517), (129, 4550), (134, 4589), (141, 4634), (144, 4652), (148, 4670),

Gene: Drago_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Drago_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Dre3_6 Start: 4388, Stop: 4960, Start Num: 42
Candidate Starts for Dre3_6:
(8, 4250), (10, 4256), (16, 4277), (Start: 24 @4301 has 2 MA's), (Start: 42 @4388 has 11 MA's), (43, 4391), (46, 4403), (Start: 51 @4424 has 4 MA's), (52, 4430), (64, 4490), (79, 4544), (84, 4577), (97, 4706), (98, 4709), (99, 4727), (103, 4751), (126, 4817), (130, 4844),

Gene: E6_5 Start: 3906, Stop: 4670, Start Num: 13
Candidate Starts for E6_5:
(Start: 13 @3906 has 67 MA's), (Start: 42 @4035 has 11 MA's), (69, 4161), (74, 4188), (82, 4233), (91, 4278), (97, 4377), (99, 4398), (120, 4464), (124, 4518), (129, 4551), (134, 4590), (141, 4635), (147, 4656),

Gene: EMsquaredA_4 Start: 3716, Stop: 4528, Start Num: 14
Candidate Starts for EMsquaredA_4:
(Start: 14 @3716 has 19 MA's), (Start: 34 @3791 has 37 MA's), (72, 3974), (84, 4031), (95, 4121), (97, 4160), (106, 4247),

Gene: ElJefes_5 Start: 4440, Stop: 5063, Start Num: 26
Candidate Starts for ElJefes_5:
(10, 4389), (Start: 24 @4431 has 2 MA's), (Start: 26 @4440 has 2 MA's), (Start: 34 @4470 has 37 MA's), (Start: 42 @4518 has 11 MA's), (56, 4593), (62, 4605), (72, 4641), (75, 4647), (79, 4665), (97, 4827), (99, 4848), (127, 4923), (129, 4929), (130, 4944), (145, 5031),

Gene: Elinal_7 Start: 4002, Stop: 4595, Start Num: 34
Candidate Starts for Elinal_7:
(8, 3912), (10, 3918), (20, 3945), (Start: 24 @3963 has 2 MA's), (Start: 26 @3972 has 2 MA's), (Start: 34 @4002 has 37 MA's), (Start: 42 @4050 has 11 MA's), (Start: 51 @4086 has 4 MA's), (56, 4125), (62, 4137), (72, 4173), (75, 4179), (79, 4197), (97, 4359), (129, 4461), (130, 4476), (145, 4563),

Gene: Eliott_6 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for Eliott_6:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (136, 4773), (140, 4791), (144, 4812),

Gene: Emalyn_5 Start: 3913, Stop: 4572, Start Num: 34
Candidate Starts for Emalyn_5:
(8, 3826), (10, 3832), (Start: 34 @3913 has 37 MA's), (Start: 42 @3961 has 11 MA's), (46, 3976), (48, 3982), (50, 3994), (79, 4108), (87, 4156), (97, 4270), (99, 4291), (105, 4321), (140, 4516), (145, 4543),

Gene: Emmaloid_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Emmaloid_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: EnalisNailo_4 Start: 3716, Stop: 4528, Start Num: 14
Candidate Starts for EnalisNailo_4:
(Start: 14 @3716 has 19 MA's), (Start: 34 @3791 has 37 MA's), (72, 3974), (84, 4031), (95, 4121), (97, 4160), (106, 4247),

Gene: Enby_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Enby_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Farewell_4 Start: 3759, Stop: 4664, Start Num: 3
Candidate Starts for Farewell_4:
(Start: 3 @3759 has 2 MA's), (11, 3825), (18, 3849), (21, 3855), (23, 3864), (29, 3891), (41, 3951), (44, 3963), (47, 3972), (49, 3978), (65, 4065), (66, 4068), (79, 4113), (85, 4149), (90, 4173), (113, 4383), (118, 4407), (127, 4488), (129, 4494), (133, 4530), (149, 4617), (150, 4626), (151, 4638),

Gene: Feastonyeet_5 Start: 4072, Stop: 4617, Start Num: 42
Candidate Starts for Feastonyeet_5:

(8, 3934), (10, 3940), (20, 3967), (Start: 24 @3985 has 2 MA's), (Start: 26 @3994 has 2 MA's), (Start: 34 @4024 has 37 MA's), (Start: 42 @4072 has 11 MA's), (Start: 51 @4108 has 4 MA's), (56, 4147), (62, 4159), (72, 4195), (75, 4201), (79, 4219), (97, 4381), (99, 4402), (129, 4483), (130, 4498), (145, 4585),

Gene: FeliMaine_39 Start: 14422, Stop: 15066, Start Num: 19
Candidate Starts for FeliMaine_39:
(Start: 19 @14422 has 18 MA's), (36, 14494), (40, 14518), (49, 14548), (67, 14644), (68, 14647), (77, 14683), (89, 14749), (90, 14752),

Gene: Flathead_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Flathead_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Floral_4 Start: 3716, Stop: 4528, Start Num: 14
Candidate Starts for Floral_4:
(Start: 14 @3716 has 19 MA's), (Start: 34 @3791 has 37 MA's), (72, 3974), (84, 4031), (95, 4121), (97, 4160), (106, 4247),

Gene: Frankie_5 Start: 3798, Stop: 4523, Start Num: 13
Candidate Starts for Frankie_5:
(4, 3744), (Start: 13 @3798 has 67 MA's), (23, 3834), (32, 3873), (45, 3933), (53, 3972), (76, 4071), (88, 4140), (90, 4143), (108, 4272), (115, 4293), (133, 4401), (151, 4509),

Gene: Fribs8_7 Start: 4879, Stop: 5508, Start Num: 30
Candidate Starts for Fribs8_7:
(8, 4804), (10, 4810), (16, 4828), (Start: 24 @4852 has 2 MA's), (Start: 30 @4879 has 1 MA's), (Start: 42 @4939 has 11 MA's), (43, 4942), (Start: 51 @4975 has 4 MA's), (52, 4981), (64, 5038), (79, 5092), (84, 5125), (85, 5128), (97, 5254), (98, 5257), (99, 5275), (126, 5365), (130, 5392),

Gene: G4_5 Start: 3905, Stop: 4669, Start Num: 13
Candidate Starts for G4_5:
(Start: 13 @3905 has 67 MA's), (Start: 42 @4034 has 11 MA's), (52, 4076), (69, 4160), (74, 4187), (82, 4232), (91, 4277), (97, 4376), (99, 4397), (120, 4463), (124, 4517), (129, 4550), (134, 4589), (141, 4634),

Gene: GTE2_04 Start: 3827, Stop: 4531, Start Num: 10
Candidate Starts for GTE2_04:
(8, 3821), (10, 3827), (Start: 14 @3836 has 19 MA's), (Start: 34 @3908 has 37 MA's), (Start: 42 @3956 has 11 MA's), (46, 3971), (50, 3989), (56, 4031), (79, 4103), (90, 4163), (92, 4187), (97, 4265), (99, 4286), (105, 4316), (136, 4460), (140, 4478),

Gene: Gattaca_36 Start: 13601, Stop: 14245, Start Num: 19
Candidate Starts for Gattaca_36:
(Start: 19 @13601 has 18 MA's), (36, 13673), (40, 13697), (49, 13727), (53, 13754), (67, 13823), (68, 13826), (77, 13862), (89, 13928), (90, 13931),

Gene: GiKK_9 Start: 4616, Stop: 5209, Start Num: 34
Candidate Starts for GiKK_9:
(8, 4523), (Start: 12 @4532 has 2 MA's), (20, 4559), (Start: 34 @4616 has 37 MA's), (Start: 42 @4652 has 11 MA's), (46, 4667), (Start: 51 @4688 has 4 MA's), (84, 4847), (87, 4862), (92, 4898), (93, 4904), (97, 4976), (99, 4997), (129, 5075), (140, 5153),

Gene: Gibbous_6 Start: 4388, Stop: 4960, Start Num: 42
Candidate Starts for Gibbous_6:
(8, 4250), (10, 4256), (16, 4277), (Start: 24 @4301 has 2 MA's), (Start: 42 @4388 has 11 MA's), (43, 4391), (46, 4403), (Start: 51 @4424 has 4 MA's), (52, 4430), (64, 4490), (79, 4544), (84, 4577), (97, 4706), (98, 4709), (99, 4727), (103, 4751), (126, 4817), (130, 4844),

Gene: Girafales_5 Start: 3602, Stop: 4327, Start Num: 13
Candidate Starts for Girafales_5:
(Start: 13 @3602 has 67 MA's), (21, 3629), (23, 3638), (27, 3659), (31, 3674), (32, 3677), (Start: 34 @3683 has 37 MA's), (Start: 42 @3725 has 11 MA's), (48, 3746), (49, 3749), (53, 3776), (76, 3875), (88, 3944), (90, 3947), (94, 3983), (108, 4076), (115, 4097), (129, 4169), (151, 4313),

Gene: GoldHunter_7 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for GoldHunter_7:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (127, 4707), (136, 4773), (140, 4791), (144, 4812),

Gene: GoongGoong_36 Start: 13641, Stop: 14285, Start Num: 19
Candidate Starts for GoongGoong_36:
(Start: 19 @13641 has 18 MA's), (36, 13713), (40, 13737), (49, 13767), (53, 13794), (67, 13863), (68, 13866), (77, 13902), (89, 13968), (90, 13971),

Gene: Hegedechwinu_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Hegedechwinu_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: HippoPololi_8 Start: 5028, Stop: 5600, Start Num: 42
Candidate Starts for HippoPololi_8:
(8, 4890), (9, 4893), (10, 4896), (Start: 24 @4941 has 2 MA's), (Start: 42 @5028 has 11 MA's), (43, 5031), (Start: 51 @5064 has 4 MA's), (52, 5070), (64, 5130), (79, 5184), (84, 5217), (85, 5220), (90, 5244), (92, 5268), (97, 5346), (98, 5349), (99, 5367), (126, 5457), (127, 5463), (130, 5484),

Gene: Horseradish_7 Start: 4122, Stop: 4745, Start Num: 34
Candidate Starts for Horseradish_7:
(8, 4035), (10, 4041), (Start: 34 @4122 has 37 MA's), (Start: 42 @4170 has 11 MA's), (50, 4203), (56, 4245), (79, 4317), (90, 4377), (92, 4401), (97, 4479), (99, 4500), (105, 4530), (136, 4674), (140, 4692),

Gene: Huphlepuff_39 Start: 14226, Stop: 14870, Start Num: 19
Candidate Starts for Huphlepuff_39:
(Start: 19 @14226 has 18 MA's), (36, 14298), (40, 14322), (49, 14352), (53, 14379), (67, 14448), (68, 14451), (77, 14487), (89, 14553), (90, 14556),

Gene: Jablanski_4 Start: 3710, Stop: 4375, Start Num: 14
Candidate Starts for Jablanski_4:
(Start: 14 @3710 has 19 MA's), (54, 3887), (68, 3950), (84, 4025), (98, 4157), (101, 4199),

Gene: JalFarm20_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for JalFarm20_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Jamzy_9 Start: 4537, Stop: 5217, Start Num: 12
Candidate Starts for Jamzy_9:
(8, 4528), (Start: 12 @4537 has 2 MA's), (20, 4564), (Start: 34 @4621 has 37 MA's), (Start: 42 @4657 has 11 MA's), (Start: 51 @4693 has 4 MA's), (52, 4699), (62, 4759), (65, 4768), (84, 4852), (87, 4867), (92, 4903), (93, 4909), (96, 4948), (97, 4981), (99, 5002), (103, 5026), (129, 5083), (140, 5161),

Gene: Job42_5 Start: 3603, Stop: 4328, Start Num: 13
Candidate Starts for Job42_5:
(Start: 13 @3603 has 67 MA's), (21, 3630), (25, 3651), (32, 3678), (45, 3738), (53, 3777), (76, 3876), (88, 3945), (90, 3948), (108, 4077), (115, 4098), (133, 4206), (143, 4266), (151, 4314),

Gene: JoieB_38 Start: 14445, Stop: 15089, Start Num: 19
Candidate Starts for JoieB_38:
(Start: 19 @14445 has 18 MA's), (36, 14517), (40, 14541), (49, 14571), (53, 14598), (67, 14667), (68, 14670), (77, 14706), (89, 14772), (90, 14775),

Gene: Juice456_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Juice456_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: KayGee_6 Start: 4002, Stop: 4595, Start Num: 34
Candidate Starts for KayGee_6:
(8, 3912), (10, 3918), (20, 3945), (Start: 24 @3963 has 2 MA's), (Start: 26 @3972 has 2 MA's), (Start: 34 @4002 has 37 MA's), (Start: 42 @4050 has 11 MA's), (Start: 51 @4086 has 4 MA's), (56, 4125), (62, 4137), (72, 4173), (75, 4179), (79, 4197), (97, 4359), (129, 4461), (130, 4476), (145, 4563),

Gene: Kimberlium_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Kimberlium_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: Kingsley_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Kingsley_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Lauer_5 Start: 4024, Stop: 4647, Start Num: 26
Candidate Starts for Lauer_5:
(8, 3964), (10, 3970), (20, 3997), (Start: 24 @4015 has 2 MA's), (Start: 26 @4024 has 2 MA's), (Start: 34 @4054 has 37 MA's), (Start: 42 @4102 has 11 MA's), (Start: 51 @4138 has 4 MA's), (56, 4177), (62, 4189), (72, 4225), (75, 4231), (79, 4249), (97, 4411), (127, 4507), (129, 4513), (130, 4528), (145, 4615),

Gene: Leozinho_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Leozinho_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: LilSpotty_4 Start: 3229, Stop: 3888, Start Num: 14
Candidate Starts for LilSpotty_4:

(5, 3193), (9, 3214), (Start: 14 @3229 has 19 MA's), (25, 3271), (Start: 34 @3304 has 37 MA's), (55, 3412), (61, 3451), (83, 3529), (90, 3562), (94, 3598), (97, 3664), (106, 3748), (107, 3751), (112, 3787),

Gene: Lilas_4 Start: 3716, Stop: 4528, Start Num: 14
Candidate Starts for Lilas_4:
(Start: 14 @3716 has 19 MA's), (Start: 34 @3791 has 37 MA's), (72, 3974), (84, 4031), (95, 4121), (97, 4160), (106, 4247),

Gene: Lilbit_36 Start: 14422, Stop: 15066, Start Num: 19
Candidate Starts for Lilbit_36:
(Start: 19 @14422 has 18 MA's), (36, 14494), (40, 14518), (49, 14548), (53, 14575), (67, 14644), (68, 14647), (77, 14683), (89, 14749), (90, 14752),

Gene: LittleLaf_37 Start: 14151, Stop: 14795, Start Num: 19
Candidate Starts for LittleLaf_37:
(Start: 19 @14151 has 18 MA's), (36, 14223), (40, 14247), (49, 14277), (53, 14304), (67, 14373), (68, 14376), (77, 14412), (89, 14478), (90, 14481),

Gene: LittleShirley_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for LittleShirley_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: LonelyBoi_4 Start: 3710, Stop: 4375, Start Num: 14
Candidate Starts for LonelyBoi_4:
(Start: 14 @3710 has 19 MA's), (54, 3887), (68, 3950), (72, 3968), (84, 4025), (98, 4157), (101, 4199),

Gene: Lorde_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Lorde_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Lucia_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Lucia_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: LunaStella_4 Start: 3803, Stop: 4498, Start Num: 51
Candidate Starts for LunaStella_4:
(Start: 14 @3644 has 19 MA's), (15, 3650), (Start: 51 @3803 has 4 MA's), (54, 3821), (62, 3869), (71, 3893), (79, 3926), (83, 3950), (87, 3971), (90, 3983), (94, 4019), (95, 4046), (97, 4085), (98, 4088), (103, 4151), (109, 4190), (114, 4226), (117, 4244), (121, 4256), (127, 4355), (133, 4397),

Gene: MAnor_6 Start: 3999, Stop: 4592, Start Num: 34
Candidate Starts for MAnor_6:
(8, 3909), (10, 3915), (20, 3942), (Start: 24 @3960 has 2 MA's), (Start: 26 @3969 has 2 MA's), (Start: 34 @3999 has 37 MA's), (Start: 42 @4047 has 11 MA's), (56, 4122), (62, 4134), (72, 4170), (75, 4176), (79, 4194), (97, 4356), (99, 4377), (127, 4452), (129, 4458), (130, 4473), (145, 4560),

Gene: MScarn_8 Start: 4216, Stop: 4839, Start Num: 34
Candidate Starts for MScarn_8:
(8, 4129), (10, 4135), (Start: 34 @4216 has 37 MA's), (Start: 42 @4264 has 11 MA's), (46, 4279), (50, 4297), (56, 4339), (79, 4411), (90, 4471), (92, 4495), (97, 4573), (99, 4594), (105, 4624), (136, 4768),

(140, 4786),

Gene: MaVan_8 Start: 5151, Stop: 5714, Start Num: 42
Candidate Starts for MaVan_8:
(8, 5016), (10, 5022), (16, 5040), (Start: 24 @5064 has 2 MA's), (25, 5070), (Start: 42 @5151 has 11 MA's), (Start: 51 @5187 has 4 MA's), (52, 5193), (64, 5250), (79, 5304), (84, 5337), (85, 5340), (92, 5388), (97, 5466), (98, 5469), (99, 5487), (126, 5571), (127, 5577), (130, 5598), (146, 5688),

Gene: Madiba_5 Start: 3603, Stop: 4328, Start Num: 13
Candidate Starts for Madiba_5:
(Start: 13 @3603 has 67 MA's), (21, 3630), (25, 3651), (32, 3678), (45, 3738), (53, 3777), (76, 3876), (88, 3945), (90, 3948), (108, 4077), (115, 4098), (133, 4206), (151, 4314),

Gene: Margaret_9 Start: 4991, Stop: 5593, Start Num: 34
Candidate Starts for Margaret_9:
(8, 4898), (Start: 12 @4907 has 2 MA's), (20, 4934), (Start: 34 @4991 has 37 MA's), (Start: 42 @5027 has 11 MA's), (Start: 51 @5063 has 4 MA's), (52, 5069), (84, 5228), (87, 5243), (92, 5279), (93, 5285), (96, 5324), (97, 5357), (99, 5378), (103, 5402), (129, 5459), (140, 5537),

Gene: Marker_5 Start: 3603, Stop: 4328, Start Num: 13
Candidate Starts for Marker_5:
(Start: 13 @3603 has 67 MA's), (21, 3630), (25, 3651), (32, 3678), (45, 3738), (53, 3777), (59, 3816), (76, 3876), (88, 3945), (90, 3948), (108, 4077), (115, 4098), (133, 4206), (151, 4314),

Gene: Marteena_4 Start: 3716, Stop: 4528, Start Num: 14
Candidate Starts for Marteena_4:
(Start: 14 @3716 has 19 MA's), (Start: 34 @3791 has 37 MA's), (72, 3974), (84, 4031), (95, 4121), (97, 4160), (106, 4247),

Gene: Marvin_35 Start: 14421, Stop: 15065, Start Num: 19
Candidate Starts for Marvin_35:
(Start: 19 @14421 has 18 MA's), (36, 14493), (40, 14517), (49, 14547), (53, 14574), (67, 14643), (68, 14646), (77, 14682), (89, 14748), (90, 14751),

Gene: Mayweather_7 Start: 4620, Stop: 5213, Start Num: 34
Candidate Starts for Mayweather_7:
(8, 4530), (10, 4536), (20, 4563), (Start: 24 @4581 has 2 MA's), (Start: 26 @4590 has 2 MA's), (Start: 34 @4620 has 37 MA's), (Start: 42 @4668 has 11 MA's), (56, 4743), (62, 4755), (72, 4791), (75, 4797), (79, 4815), (97, 4977), (99, 4998), (127, 5073), (129, 5079), (130, 5094), (145, 5181),

Gene: McDazzle_5 Start: 4464, Stop: 5057, Start Num: 34
Candidate Starts for McDazzle_5:
(10, 4383), (Start: 24 @4425 has 2 MA's), (Start: 26 @4434 has 2 MA's), (Start: 34 @4464 has 37 MA's), (Start: 42 @4512 has 11 MA's), (56, 4587), (62, 4599), (72, 4635), (75, 4641), (79, 4659), (97, 4821), (99, 4842), (127, 4917), (129, 4923), (130, 4938), (145, 5025),

Gene: Merpity_5 Start: 3158, Stop: 3907, Start Num: 13
Candidate Starts for Merpity_5:
(Start: 13 @3158 has 67 MA's), (17, 3176), (Start: 26 @3209 has 2 MA's), (27, 3215), (31, 3230), (36, 3257), (45, 3299), (49, 3311), (68, 3413), (87, 3512), (90, 3524), (92, 3548), (98, 3635), (120, 3734), (124, 3788), (139, 3893),

Gene: Misha28_5 Start: 3607, Stop: 4332, Start Num: 13

Candidate Starts for Misha28_5:
(Start: 13 @3607 has 67 MA's), (21, 3634), (25, 3655), (32, 3682), (45, 3742), (53, 3781), (76, 3880), (88, 3949), (90, 3952), (108, 4081), (115, 4102), (133, 4210), (151, 4318),

Gene: MosMoris_35 Start: 13601, Stop: 14245, Start Num: 19
Candidate Starts for MosMoris_35:
(Start: 19 @13601 has 18 MA's), (36, 13673), (40, 13697), (49, 13727), (53, 13754), (67, 13823), (68, 13826), (77, 13862), (89, 13928), (90, 13931),

Gene: Mova_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Mova_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: Mozy_5 Start: 3603, Stop: 4328, Start Num: 13
Candidate Starts for Mozy_5:
(Start: 13 @3603 has 67 MA's), (21, 3630), (23, 3639), (31, 3675), (32, 3678), (Start: 34 @3684 has 37 MA's), (Start: 42 @3726 has 11 MA's), (48, 3747), (49, 3750), (53, 3777), (76, 3876), (88, 3945), (90, 3948), (108, 4077), (115, 4098), (129, 4170), (151, 4314),

Gene: MrSmee_4 Start: 3158, Stop: 3907, Start Num: 13
Candidate Starts for MrSmee_4:
(Start: 13 @3158 has 67 MA's), (17, 3176), (21, 3185), (Start: 26 @3209 has 2 MA's), (27, 3215), (31, 3230), (33, 3239), (35, 3251), (36, 3257), (38, 3272), (45, 3299), (49, 3311), (68, 3413), (87, 3512), (90, 3524), (92, 3548), (98, 3635), (124, 3788),

Gene: MulchExplorer_5 Start: 3632, Stop: 4330, Start Num: 21
Candidate Starts for MulchExplorer_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: MunkgeeRoachy_6 Start: 4269, Stop: 4892, Start Num: 34
Candidate Starts for MunkgeeRoachy_6:
(8, 4179), (10, 4185), (Start: 34 @4269 has 37 MA's), (Start: 42 @4317 has 11 MA's), (48, 4338), (50, 4350), (52, 4359), (56, 4392), (79, 4464), (90, 4524), (97, 4626), (105, 4677), (127, 4755), (136, 4821), (140, 4839), (144, 4860),

Gene: Nibbles_8 Start: 5151, Stop: 5714, Start Num: 42
Candidate Starts for Nibbles_8:
(8, 5016), (10, 5022), (16, 5040), (Start: 24 @5064 has 2 MA's), (25, 5070), (Start: 42 @5151 has 11 MA's), (Start: 51 @5187 has 4 MA's), (52, 5193), (64, 5250), (79, 5304), (84, 5337), (85, 5340), (92, 5388), (97, 5466), (98, 5469), (99, 5487), (126, 5571), (127, 5577), (130, 5598), (146, 5688),

Gene: Oksu_5 Start: 3680, Stop: 4330, Start Num: 32
Candidate Starts for Oksu_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: OwlsT2W_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for OwlsT2W_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: P3MA_5 Start: 3858, Stop: 4730, Start Num: 14
Candidate Starts for P3MA_5:
(1, 3546), (2, 3741), (Start: 14 @3858 has 19 MA's), (79, 4140), (92, 4215), (98, 4296), (110, 4404), (116, 4437), (122, 4479), (128, 4563), (129, 4566), (138, 4635), (151, 4710),

Gene: Peridot_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Peridot_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Piper2020_5 Start: 3607, Stop: 4332, Start Num: 13
Candidate Starts for Piper2020_5:
(Start: 13 @3607 has 67 MA's), (21, 3634), (25, 3655), (32, 3682), (45, 3742), (53, 3781), (76, 3880), (88, 3949), (90, 3952), (108, 4081), (115, 4102), (133, 4210), (151, 4318),

Gene: Plumbus_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Plumbus_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: Poise_37 Start: 13739, Stop: 14383, Start Num: 19
Candidate Starts for Poise_37:
(Start: 19 @13739 has 18 MA's), (36, 13811), (40, 13835), (49, 13865), (53, 13892), (67, 13961), (68, 13964), (77, 14000), (89, 14066), (90, 14069),

Gene: Pollux_4 Start: 3716, Stop: 4528, Start Num: 14
Candidate Starts for Pollux_4:
(Start: 14 @3716 has 19 MA's), (Start: 34 @3791 has 37 MA's), (72, 3974), (84, 4031), (95, 4121), (97, 4160), (106, 4247),

Gene: Pollywog_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Pollywog_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Pons_6 Start: 3999, Stop: 4592, Start Num: 34
Candidate Starts for Pons_6:
(8, 3909), (10, 3915), (20, 3942), (Start: 24 @3960 has 2 MA's), (Start: 26 @3969 has 2 MA's), (Start: 34 @3999 has 37 MA's), (Start: 42 @4047 has 11 MA's), (56, 4122), (62, 4134), (72, 4170), (75, 4176), (79, 4194), (97, 4356), (99, 4377), (127, 4452), (129, 4458), (130, 4473), (145, 4560),

Gene: Posh_4 Start: 3710, Stop: 4522, Start Num: 14
Candidate Starts for Posh_4:
(Start: 14 @3710 has 19 MA's), (68, 3950), (95, 4115), (97, 4154), (106, 4241),

Gene: PotPie_6 Start: 4858, Stop: 5451, Start Num: 34
Candidate Starts for PotPie_6:
(8, 4768), (10, 4774), (20, 4801), (Start: 24 @4819 has 2 MA's), (Start: 26 @4828 has 2 MA's), (Start: 34 @4858 has 37 MA's), (Start: 42 @4906 has 11 MA's), (Start: 51 @4942 has 4 MA's), (56, 4981), (62, 4993), (72, 5029), (75, 5035), (79, 5053), (97, 5215), (99, 5236), (127, 5311), (129, 5317), (130, 5332), (145, 5419),

Gene: Pringar_37 Start: 14051, Stop: 14695, Start Num: 19

Candidate Starts for Pringar_37:
(Start: 19 @14051 has 18 MA's), (36, 14123), (40, 14147), (49, 14177), (53, 14204), (67, 14273), (68, 14276), (77, 14312), (89, 14378), (90, 14381),

Gene: PsychoKiller_6 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for PsychoKiller_6:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (136, 4773), (140, 4791), (144, 4812),

Gene: Pytheas_4 Start: 3710, Stop: 4375, Start Num: 14
Candidate Starts for Pytheas_4:
(Start: 14 @3710 has 19 MA's), (54, 3887), (68, 3950), (84, 4025), (98, 4157), (101, 4199),

Gene: Quasar_6 Start: 4890, Stop: 5465, Start Num: 42
Candidate Starts for Quasar_6:
(8, 4752), (10, 4758), (Start: 34 @4842 has 37 MA's), (Start: 42 @4890 has 11 MA's), (48, 4911), (50, 4923), (52, 4932), (56, 4965), (79, 5037), (90, 5097), (97, 5199), (105, 5250), (127, 5328), (136, 5394), (140, 5412), (144, 5433),

Gene: Quico_5 Start: 3602, Stop: 4327, Start Num: 13
Candidate Starts for Quico_5:
(Start: 13 @3602 has 67 MA's), (21, 3629), (23, 3638), (27, 3659), (31, 3674), (32, 3677), (Start: 34 @3683 has 37 MA's), (Start: 42 @3725 has 11 MA's), (48, 3746), (49, 3749), (53, 3776), (76, 3875), (88, 3944), (90, 3947), (94, 3983), (108, 4076), (115, 4097), (129, 4169), (151, 4313),

Gene: RADical_7 Start: 4222, Stop: 4845, Start Num: 34
Candidate Starts for RADical_7:
(8, 4132), (10, 4138), (Start: 34 @4222 has 37 MA's), (Start: 42 @4270 has 11 MA's), (48, 4291), (50, 4303), (52, 4312), (56, 4345), (79, 4417), (90, 4477), (97, 4579), (105, 4630), (127, 4708), (136, 4774), (140, 4792), (144, 4813),

Gene: RSchmailzl_7 Start: 4362, Stop: 4985, Start Num: 34
Candidate Starts for RSchmailzl_7:
(8, 4272), (10, 4278), (Start: 34 @4362 has 37 MA's), (Start: 42 @4410 has 11 MA's), (48, 4431), (50, 4443), (52, 4452), (56, 4485), (79, 4557), (90, 4617), (97, 4719), (105, 4770), (127, 4848), (136, 4914), (140, 4932), (144, 4953),

Gene: Raela_37 Start: 14294, Stop: 14938, Start Num: 19
Candidate Starts for Raela_37:
(Start: 19 @14294 has 18 MA's), (36, 14366), (40, 14390), (49, 14420), (53, 14447), (67, 14516), (68, 14519), (77, 14555), (89, 14621), (90, 14624),

Gene: Ramsey_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Ramsey_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: RanchParmCat_9 Start: 4991, Stop: 5593, Start Num: 34
Candidate Starts for RanchParmCat_9:
(8, 4898), (Start: 12 @4907 has 2 MA's), (20, 4934), (Start: 34 @4991 has 37 MA's), (Start: 42 @5027 has 11 MA's), (Start: 51 @5063 has 4 MA's), (84, 5228), (87, 5243), (92, 5279), (93, 5285), (96, 5324), (97, 5357), (99, 5378), (103, 5402), (129, 5459), (140, 5537),

Gene: Raqqa_5 Start: 3858, Stop: 4661, Start Num: 13
Candidate Starts for Raqqa_5:
(Start: 13 @3858 has 67 MA's), (Start: 26 @3909 has 2 MA's), (36, 3957), (49, 4011), (68, 4113), (81, 4212), (84, 4251), (87, 4266), (92, 4302), (97, 4386), (98, 4389), (120, 4488), (124, 4542),

Gene: RedBaron_7 Start: 4266, Stop: 4889, Start Num: 34
Candidate Starts for RedBaron_7:
(8, 4176), (10, 4182), (Start: 34 @4266 has 37 MA's), (Start: 42 @4314 has 11 MA's), (48, 4335), (50, 4347), (52, 4356), (56, 4389), (79, 4461), (90, 4521), (97, 4623), (105, 4674), (127, 4752), (136, 4818), (144, 4857),

Gene: RedRaider77_37 Start: 14195, Stop: 14839, Start Num: 19
Candidate Starts for RedRaider77_37:
(Start: 19 @14195 has 18 MA's), (36, 14267), (40, 14291), (49, 14321), (53, 14348), (67, 14417), (68, 14420), (77, 14456), (89, 14522), (90, 14525),

Gene: Renaud18_4 Start: 3803, Stop: 4378, Start Num: 51
Candidate Starts for Renaud18_4:
(Start: 14 @3644 has 19 MA's), (15, 3650), (Start: 51 @3803 has 4 MA's), (54, 3821), (61, 3866), (62, 3869), (71, 3893), (79, 3926), (83, 3950), (87, 3971), (90, 3983), (94, 4019), (95, 4046), (97, 4085), (98, 4088), (100, 4115), (127, 4235), (133, 4277),

Gene: Rialto_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Rialto_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: RockyHorror_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for RockyHorror_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Sarma624_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Sarma624_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Seagreen_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Seagreen_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: SheckWes_5 Start: 3999, Stop: 4592, Start Num: 34
Candidate Starts for SheckWes_5:
(8, 3909), (10, 3915), (20, 3942), (Start: 24 @3960 has 2 MA's), (Start: 26 @3969 has 2 MA's), (Start: 34 @3999 has 37 MA's), (Start: 42 @4047 has 11 MA's), (56, 4122), (62, 4134), (72, 4170), (75, 4176), (79, 4194), (97, 4356), (99, 4377), (127, 4452), (129, 4458), (130, 4473), (145, 4560),

Gene: SimranZ1_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for SimranZ1_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: SketchMex_5 Start: 4215, Stop: 4838, Start Num: 34
Candidate Starts for SketchMex_5:
(8, 4128), (10, 4134), (Start: 34 @4215 has 37 MA's), (Start: 42 @4263 has 11 MA's), (50, 4296), (56, 4338), (79, 4410), (90, 4470), (92, 4494), (97, 4572), (99, 4593), (105, 4623), (136, 4767), (140, 4785),

Gene: Skitty_4 Start: 3158, Stop: 3907, Start Num: 13
Candidate Starts for Skitty_4:
(Start: 13 @3158 has 67 MA's), (17, 3176), (21, 3185), (Start: 26 @3209 has 2 MA's), (27, 3215), (31, 3230), (33, 3239), (35, 3251), (36, 3257), (38, 3272), (45, 3299), (49, 3311), (68, 3413), (87, 3512), (90, 3524), (92, 3548), (98, 3635), (124, 3788), (139, 3893),

Gene: Slim_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Slim_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: Socotra_7 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for Socotra_7:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (127, 4707), (136, 4773), (140, 4791), (144, 4812),

Gene: Sopespian_6 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for Sopespian_6:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (136, 4773), (140, 4791), (144, 4812),

Gene: Sparky_4 Start: 3760, Stop: 4665, Start Num: 3
Candidate Starts for Sparky_4:
(Start: 3 @3760 has 2 MA's), (18, 3850), (21, 3856), (23, 3865), (29, 3892), (41, 3952), (44, 3964), (47, 3973), (49, 3979), (65, 4066), (66, 4069), (85, 4150), (90, 4174), (113, 4384), (118, 4408), (127, 4489), (129, 4495), (133, 4531), (149, 4618), (150, 4627), (151, 4639),

Gene: Spartoi_4 Start: 3328, Stop: 4098, Start Num: 7
Candidate Starts for Spartoi_4:
(6, 3322), (Start: 7 @3328 has 1 MA's), (Start: 34 @3427 has 37 MA's), (59, 3565), (70, 3604), (79, 3643), (80, 3652), (89, 3715), (96, 3790), (97, 3826), (99, 3847), (120, 3916), (135, 4057),

Gene: Spikelee_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Spikelee_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Squirty_5 Start: 3603, Stop: 4328, Start Num: 13
Candidate Starts for Squirty_5:
(Start: 13 @3603 has 67 MA's), (21, 3630), (25, 3651), (32, 3678), (45, 3738), (53, 3777), (76, 3876), (88, 3945), (90, 3948), (108, 4077), (115, 4098), (133, 4206), (151, 4314),

Gene: Stap_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Stap_5:

(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Starburst_7 Start: 4221, Stop: 4844, Start Num: 34
Candidate Starts for Starburst_7:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (127, 4707), (136, 4773), (140, 4791), (144, 4812),

Gene: Starcevich_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Starcevich_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: SteamedHams_8 Start: 4225, Stop: 4881, Start Num: 34
Candidate Starts for SteamedHams_8:
(8, 4138), (10, 4144), (Start: 14 @4153 has 19 MA's), (Start: 34 @4225 has 37 MA's), (Start: 42 @4273 has 11 MA's), (46, 4288), (50, 4306), (56, 4348), (79, 4420), (90, 4480), (92, 4504), (97, 4582), (105, 4633), (133, 4786), (140, 4828),

Gene: SummitAcademy_5 Start: 4073, Stop: 4666, Start Num: 34
Candidate Starts for SummitAcademy_5:
(8, 3983), (10, 3989), (20, 4016), (Start: 24 @4034 has 2 MA's), (Start: 26 @4043 has 2 MA's), (Start: 34 @4073 has 37 MA's), (Start: 42 @4121 has 11 MA's), (Start: 51 @4157 has 4 MA's), (56, 4196), (62, 4208), (72, 4244), (75, 4250), (79, 4268), (97, 4430), (99, 4451), (127, 4526), (129, 4532), (130, 4547), (145, 4634),

Gene: Survivors_8 Start: 4918, Stop: 5568, Start Num: 24
Candidate Starts for Survivors_8:
(8, 4870), (10, 4876), (16, 4894), (Start: 24 @4918 has 2 MA's), (25, 4924), (Start: 42 @5005 has 11 MA's), (Start: 51 @5041 has 4 MA's), (52, 5047), (64, 5104), (79, 5158), (84, 5191), (85, 5194), (97, 5320), (98, 5323), (99, 5341), (126, 5425), (127, 5431), (130, 5452), (146, 5542),

Gene: SweatNTears_8 Start: 4742, Stop: 5365, Start Num: 34
Candidate Starts for SweatNTears_8:
(8, 4655), (10, 4661), (Start: 34 @4742 has 37 MA's), (Start: 42 @4790 has 11 MA's), (50, 4823), (56, 4865), (79, 4937), (90, 4997), (92, 5021), (97, 5099), (99, 5120), (105, 5150), (136, 5294), (140, 5312),

Gene: TChen_4 Start: 3803, Stop: 4498, Start Num: 51
Candidate Starts for TChen_4:
(Start: 14 @3644 has 19 MA's), (15, 3650), (Start: 51 @3803 has 4 MA's), (54, 3821), (62, 3869), (71, 3893), (79, 3926), (83, 3950), (87, 3971), (90, 3983), (94, 4019), (95, 4046), (97, 4085), (98, 4088), (103, 4151), (109, 4190), (114, 4226), (117, 4244), (121, 4256), (127, 4355), (133, 4397),

Gene: Tarnish_5 Start: 4333, Stop: 4965, Start Num: 24
Candidate Starts for Tarnish_5:
(8, 4282), (10, 4288), (20, 4315), (Start: 24 @4333 has 2 MA's), (Start: 26 @4342 has 2 MA's), (Start: 34 @4372 has 37 MA's), (Start: 42 @4420 has 11 MA's), (Start: 51 @4456 has 4 MA's), (56, 4495), (62, 4507), (72, 4543), (75, 4549), (79, 4567), (97, 4729), (99, 4750), (127, 4825), (129, 4831), (130, 4846), (145, 4933),

Gene: Tchotchke_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Tchotchke_5:

(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: Tesla_36 Start: 14044, Stop: 14688, Start Num: 19
Candidate Starts for Tesla_36:
(Start: 19 @14044 has 18 MA's), (36, 14116), (40, 14140), (49, 14170), (53, 14197), (67, 14266), (68, 14269), (77, 14305), (89, 14371), (90, 14374),

Gene: ThetaBob_4 Start: 3803, Stop: 4378, Start Num: 51
Candidate Starts for ThetaBob_4:
(Start: 14 @3644 has 19 MA's), (15, 3650), (Start: 51 @3803 has 4 MA's), (54, 3821), (62, 3869), (71, 3893), (79, 3926), (83, 3950), (87, 3971), (90, 3983), (94, 4019), (95, 4046), (97, 4085), (98, 4088), (100, 4115), (127, 4235), (133, 4277),

Gene: Tolls_8 Start: 4226, Stop: 4885, Start Num: 34
Candidate Starts for Tolls_8:
(8, 4139), (10, 4145), (Start: 34 @4226 has 37 MA's), (Start: 42 @4274 has 11 MA's), (46, 4289), (50, 4307), (56, 4349), (79, 4421), (90, 4481), (92, 4505), (97, 4583), (105, 4634), (133, 4787), (140, 4829), (145, 4856),

Gene: TootsiePop_5 Start: 3607, Stop: 4332, Start Num: 13
Candidate Starts for TootsiePop_5:
(Start: 13 @3607 has 67 MA's), (21, 3634), (25, 3655), (32, 3682), (45, 3742), (53, 3781), (76, 3880), (88, 3949), (90, 3952), (108, 4081), (115, 4102), (133, 4210), (151, 4318),

Gene: Tootsieroll_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Tootsieroll_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Toron_4 Start: 3803, Stop: 4498, Start Num: 51
Candidate Starts for Toron_4:
(Start: 14 @3644 has 19 MA's), (15, 3650), (48, 3788), (Start: 51 @3803 has 4 MA's), (54, 3821), (62, 3869), (71, 3893), (79, 3926), (83, 3950), (87, 3971), (90, 3983), (94, 4019), (95, 4046), (97, 4085), (98, 4088), (102, 4148), (103, 4151), (109, 4190), (117, 4244), (121, 4256), (127, 4355), (133, 4397),

Gene: Totinger_5 Start: 3605, Stop: 4330, Start Num: 13
Candidate Starts for Totinger_5:
(Start: 13 @3605 has 67 MA's), (21, 3632), (25, 3653), (32, 3680), (45, 3740), (53, 3779), (76, 3878), (88, 3947), (90, 3950), (108, 4079), (115, 4100), (133, 4208), (151, 4316),

Gene: Troje_6 Start: 4216, Stop: 4839, Start Num: 34
Candidate Starts for Troje_6:
(8, 4129), (10, 4135), (Start: 34 @4216 has 37 MA's), (Start: 42 @4264 has 11 MA's), (46, 4279), (50, 4297), (56, 4339), (79, 4411), (90, 4471), (92, 4495), (97, 4573), (99, 4594), (105, 4624), (136, 4768), (140, 4786),

Gene: Typhonomachy_6 Start: 4269, Stop: 4844, Start Num: 42
Candidate Starts for Typhonomachy_6:
(8, 4131), (10, 4137), (Start: 34 @4221 has 37 MA's), (Start: 42 @4269 has 11 MA's), (48, 4290), (50, 4302), (52, 4311), (56, 4344), (79, 4416), (90, 4476), (97, 4578), (105, 4629), (127, 4707), (136, 4773), (140, 4791), (144, 4812),

Gene: UncleRicky_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for UncleRicky_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: VasuNzinga_37 Start: 13628, Stop: 14272, Start Num: 19
Candidate Starts for VasuNzinga_37:
(Start: 19 @13628 has 18 MA's), (36, 13700), (40, 13724), (49, 13754), (67, 13850), (77, 13889), (89, 13955), (90, 13958),

Gene: Velveteen_5 Start: 3604, Stop: 4329, Start Num: 13
Candidate Starts for Velveteen_5:
(Start: 13 @3604 has 67 MA's), (21, 3631), (25, 3652), (32, 3679), (45, 3739), (53, 3778), (76, 3877), (88, 3946), (90, 3949), (108, 4078), (115, 4099), (133, 4207), (151, 4315),

Gene: Vine_7 Start: 4967, Stop: 5590, Start Num: 26
Candidate Starts for Vine_7:
(8, 4907), (10, 4913), (20, 4940), (Start: 24 @4958 has 2 MA's), (Start: 26 @4967 has 2 MA's), (Start: 34 @4997 has 37 MA's), (Start: 42 @5045 has 11 MA's), (Start: 51 @5081 has 4 MA's), (56, 5120), (62, 5132), (72, 5168), (75, 5174), (79, 5192), (97, 5354), (129, 5456), (130, 5471), (145, 5558),

Gene: Wolfwood_9 Start: 5150, Stop: 5713, Start Num: 42
Candidate Starts for Wolfwood_9:
(8, 5015), (10, 5021), (16, 5039), (Start: 24 @5063 has 2 MA's), (25, 5069), (Start: 42 @5150 has 11 MA's), (Start: 51 @5186 has 4 MA's), (52, 5192), (64, 5249), (79, 5303), (84, 5336), (85, 5339), (92, 5387), (97, 5465), (98, 5468), (99, 5486), (126, 5570), (127, 5576), (130, 5597), (146, 5687),

Gene: Wrigley_4 Start: 3707, Stop: 4372, Start Num: 14
Candidate Starts for Wrigley_4:
(Start: 14 @3707 has 19 MA's), (68, 3947), (84, 4022), (98, 4154), (101, 4196),

Gene: Yakult_7 Start: 4190, Stop: 4777, Start Num: 34
Candidate Starts for Yakult_7:
(8, 4097), (Start: 12 @4106 has 2 MA's), (23, 4145), (25, 4157), (Start: 34 @4190 has 37 MA's), (Start: 42 @4226 has 11 MA's), (46, 4241), (84, 4412), (93, 4469), (97, 4541), (99, 4562), (103, 4586), (129, 4643), (140, 4721),

Gene: Yarn_5 Start: 4219, Stop: 4875, Start Num: 34
Candidate Starts for Yarn_5:
(8, 4132), (10, 4138), (Start: 14 @4147 has 19 MA's), (Start: 34 @4219 has 37 MA's), (Start: 42 @4267 has 11 MA's), (46, 4282), (50, 4300), (56, 4342), (79, 4414), (90, 4474), (92, 4498), (97, 4576), (105, 4627), (136, 4804), (140, 4822),

Gene: Yucky_6 Start: 4858, Stop: 5451, Start Num: 34
Candidate Starts for Yucky_6:
(8, 4768), (10, 4774), (20, 4801), (Start: 24 @4819 has 2 MA's), (Start: 26 @4828 has 2 MA's), (Start: 34 @4858 has 37 MA's), (Start: 42 @4906 has 11 MA's), (Start: 51 @4942 has 4 MA's), (56, 4981), (62, 4993), (72, 5029), (75, 5035), (79, 5053), (97, 5215), (129, 5317), (130, 5332), (145, 5419),

Gene: Yummy_7 Start: 4122, Stop: 4745, Start Num: 34
Candidate Starts for Yummy_7:
(8, 4035), (10, 4041), (Start: 34 @4122 has 37 MA's), (Start: 42 @4170 has 11 MA's), (50, 4203), (56, 4245), (79, 4317), (90, 4377), (92, 4401), (97, 4479), (99, 4500), (105, 4530), (136, 4674), (140, 4692),

Gene: Zareef_8 Start: 5152, Stop: 5715, Start Num: 42
Candidate Starts for Zareef_8:
(8, 5017), (10, 5023), (16, 5041), (Start: 24 @5065 has 2 MA's), (25, 5071), (Start: 42 @5152 has 11 MA's), (Start: 51 @5188 has 4 MA's), (52, 5194), (64, 5251), (79, 5305), (84, 5338), (85, 5341), (92, 5389), (97, 5467), (98, 5470), (99, 5488), (126, 5572), (130, 5599), (146, 5689),

Gene: Zucker_5 Start: 3788, Stop: 4504, Start Num: 22
Candidate Starts for Zucker_5:
(Start: 13 @3755 has 67 MA's), (Start: 22 @3788 has 1 MA's), (28, 3815), (31, 3827), (36, 3854), (39, 3872), (45, 3896), (55, 3944), (57, 3962), (58, 3968), (76, 4049), (78, 4058), (83, 4097), (90, 4130), (96, 4196), (120, 4328), (123, 4367), (125, 4388), (131, 4427), (140, 4484),