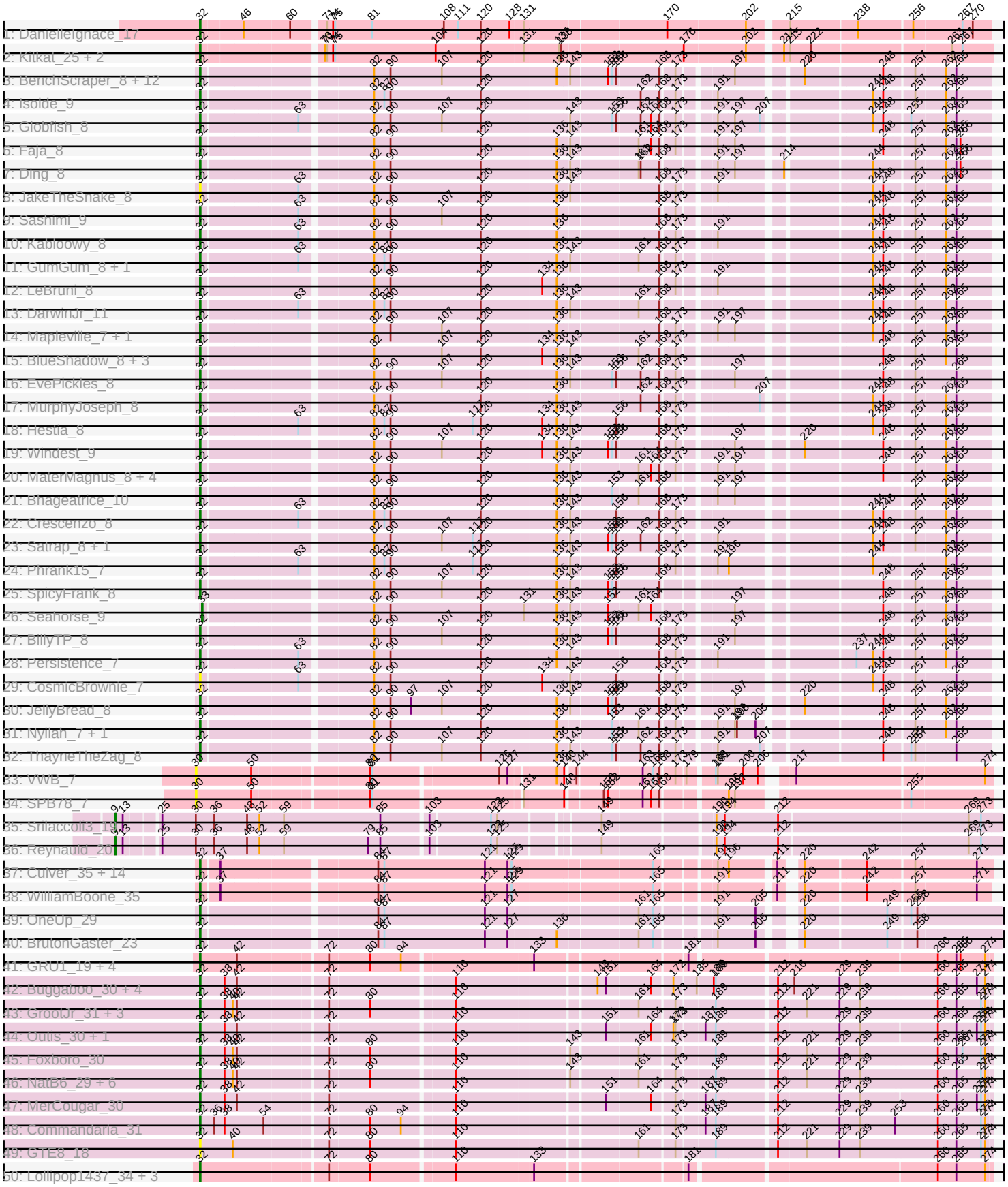
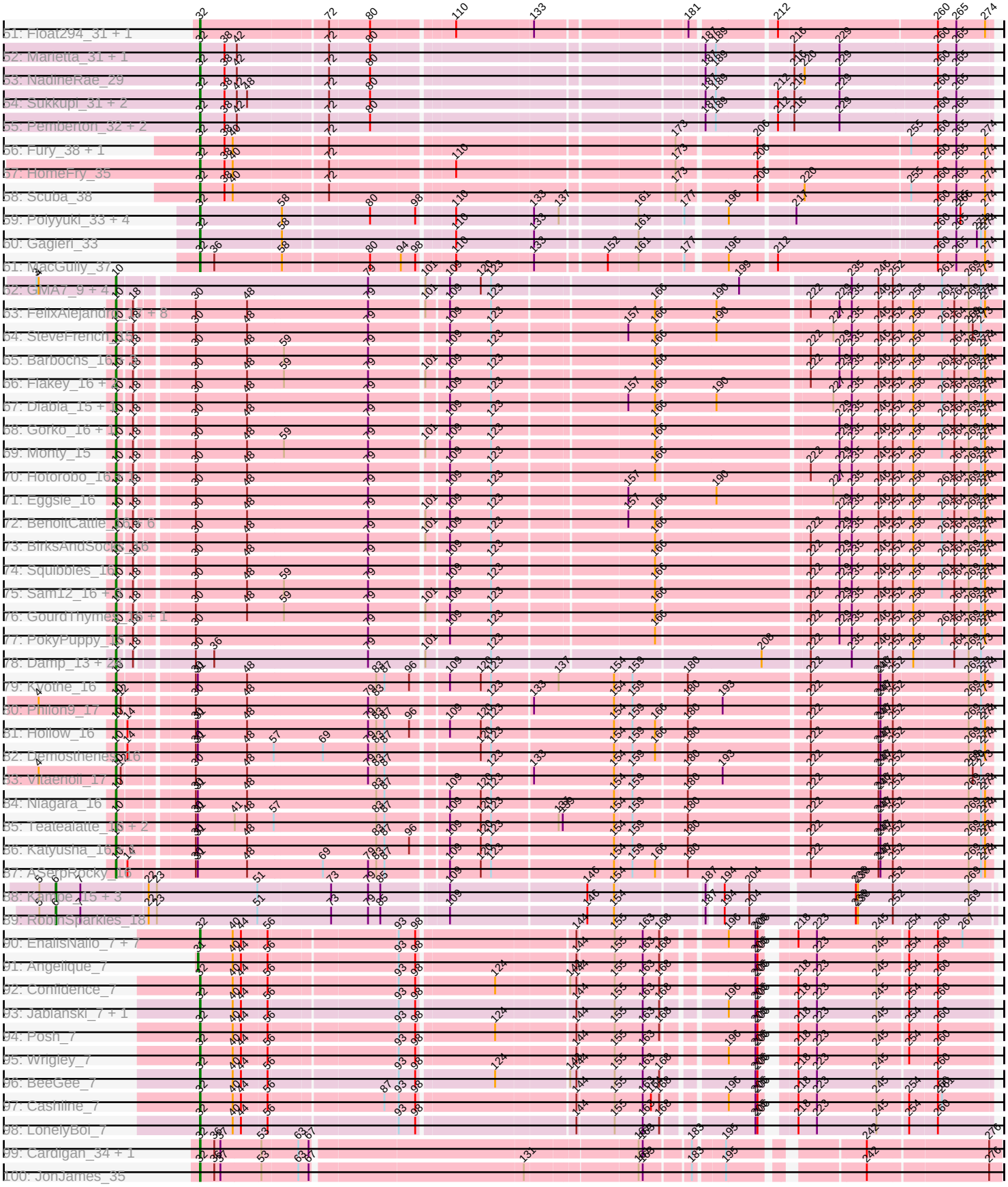
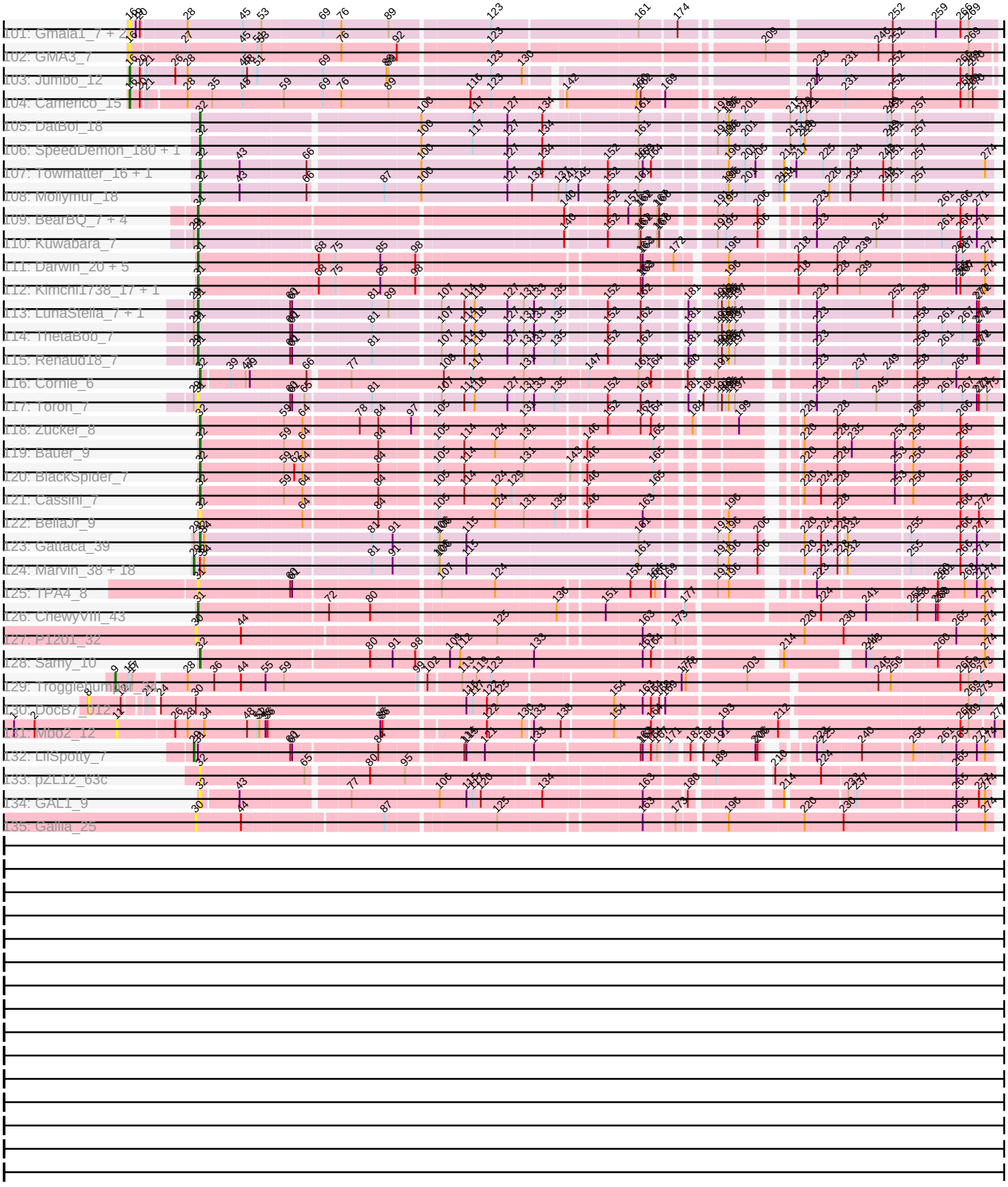
Pham 332429


1: DanielleIgnace_17
2: Kitkat_25 + 2
3: BenchScraper_8 + 12
4: Isolde_9
5: Globfish_8
6: Faja_8
7: Ding_8
8: JakeTheSnake_8
9: Sashimi_9
10: Kabloowy_8
11: GumGum_8 + 1
12: LeBrunt_8
13: DarwinJr_11
14: Mapleville_7 + 1
15: BlueShadow_8 + 3
16: EvePickles_8
17: MurphyJoseph_8
18: Hestia_8
19: Windest_9
20: MaterMagnus_8 + 4
21: Bhageatrice_10
22: Crescenzo_8
23: Satrap_8 + 1
24: Phrank15_7
25: SpicyFrank_8
26: Seahorse_9
27: BillyTP_8
28: Persistence_7
29: CosmicBrownie_7
30: JellyBread_8
31: Nyllah_7 + 1
32: MayneTheZag_8
33: VWB_7
34: SPB78_7
35: Smaccoli3_13
36: Reynauld_20
37: Culver_35 + 14
38: WilliamBoone_35
39: OneUp_29
40: BrutonGaster_23
41: GRO1_19 + 4
42: Buggaboo_30 + 4
43: GrootJr_31 + 3
44: Outis_30 + 1
45: Foxboro_30
46: NatB6_29 + 6
47: MerCougar_30
48: Commandaria_31
49: GTE8_18
50: Lollipop1437_34 + 3

Pham 332429



Pham 332429


I01: Gmala1_7 + 2
I02: GMA3_7
I03: Jumbo_12
I04: Camerico_15
I05: DatBoi_18
I06: SpeedDemon_180 + 1
I07: Towmatter_16 + 1
I08: Mollymur_18
I09: BearBQ_7 + 4
I10: Kuwabara_7
I11: Darwin_20 + 5
I12: Kimchi1738_17 + 1
I13: LunaStella_7 + 1
I14: TheTaBob_7
I15: Renaud18_7
I16: Cornie_6
I17: Toron_7
I18: Zucker_8
I19: Bauer_9
I20: BlackSpider_7
I21: Cassini_7
I22: BellaJr_9
I23: Gattaca_39
I24: Marvin_38 + 18
I25: TPA4_8
I26: ChewyVIII_43
I27: P1201_32
I28: Samy_10
I29: Troggletumpkin_24
I30: DocB7_012
I31: Mibo2_12
I32: LilSpotty_7
I33: pZ112_63c
I34: GAL1_9
I35: Gallia_25

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 332429 Report

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

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 332429 has 308 members, 33 are drafts.

Phages represented in each track:
- Track 1 : DanielleIgnace_17
- Track 2 : Kitkat_25, KellEzio_24, BeatusComedenti_24
- Track 3 : BenchScraper_8, Auxilium_8, BasketStar_8, Sporco_8, YoungHarleezy_8, CookieBear_8, MUWow_7, Raphaella_8, AdaS_8, Richie_8, Vopal_9, Lasker_8, NewKitty_9
- Track 4 : Isolde_9
- Track 5 : Globfish_8
- Track 6 : Faja_8
- Track 7 : Ding_8
- Track 8 : JakeTheSnake_8
- Track 9 : Sashimi_9
- Track 10 : Kabloowy_8
- Track 11 : GumGum_8, Anekin_7
- Track 12 : LeBruni_8
- Track 13 : DarwinJr_11
- Track 14 : Mapleville_7, Lawnathon_8
- Track 15 : BlueShadow_8, MidnightRain_8, RadFad_8, Hillester_8
- Track 16 : EvePickles_8
- Track 17 : MurphyJoseph_8
- Track 18 : Hestia_8
- Track 19 : Windest_9
- Track 20 : MaterMagnus_8, SonDevVon_7, Gorpy_8, Sakai_8, Aikyam_8
- Track 21 : Bhageatrice_10
- Track 22 : Crescenzo_8
- Track 23 : Satrap_8, Shukran_8
- Track 24 : Phrank15_7
- Track 25 : SpicyFrank_8
- Track 26 : Seahorse_9
- Track 27 : BillyTP_8
- Track 28 : Persistence_7
- Track 29 : CosmicBrownie_7
- Track 30 : JellyBread_8
- Track 31 : Nyilah_7, Tiff81_9

• Track 32 : ThayneTheZag_8
• Track 33 : VWB_7
• Track 34 : SPB78_7
• Track 35 : Srilaccoli3_19
• Track 36 : Reynauld_20
• Track 37 : Culver_35, Miskis_33, Geeche_34, Dusty_34, Lozinak_35, Abscondus_34, Smoothie_36, Cucurbita_37, Engineer_36, Bachita_37, Toniann_35, Norvs_36, ClubL_35, PhinkBoden_35, Aphelion_35
• Track 38 : WilliamBoone_35
• Track 39 : OneUp_29
• Track 40 : BrutonGaster_23
• Track 41 : GRU1_19, Dalilpop_34, Flapper_33, Turuncu_33, GTE5_20
• Track 42 : Buggaboo_30, Kabluna_32, NosilaM_32, Bonum_32, SuperSulley_30
• Track 43 : GrootJr_31, Wheezy_29, Arti_29, NovumRegina_29
• Track 44 : Outis_30, StarStruck_30
• Track 45 : Foxboro_30
• Track 46 : NatB6_29, Kurt_29, KidneyBean_29, Jifall16_28, Phomeo_28, Emianna_29, Tracker_29
• Track 47 : MerCougar_30
• Track 48 : Commandaria_31
• Track 49 : GTE8_18
• Track 50 : Lollipop1437_34, Patio_32, Ennea_35, RedRaider_36
• Track 51 : Float294_31, Skysand_31
• Track 52 : Marietta_31, HubbaBubba_27
• Track 53 : NadineRae_29
• Track 54 : Sukkupi_31, BiPauneto_32, Yndexa_31
• Track 55 : Pemberton_32, WhoseManz_31, IDyn_30
• Track 56 : Fury_38, Pleakley_38
• Track 57 : HomeFry_35
• Track 58 : Scuba_38
• Track 59 : Polyyuki_33, Apiary_33, CoffeeBean_33, Maselop_33, Braxoaddie_33
• Track 60 : Gagieri_33
• Track 61 : MacGully_37
• Track 62 : GMA7_9, HayZem_17, GTE7_9, Amore2_18, Austin_18
• Track 63 : FelixAlejandro_17, Boneham_16, BillyBobJr_17, CinnamonToast_17, Sombrero_16, Msay19_17, Poland_17, Butterball_16, Jellybones_16
• Track 64 : SteveFrench_15
• Track 65 : Barbochs_16, Breezic_16, Beaver_16, Worcestershire_16
• Track 66 : Flakey_16, Lizzo_16, CathyBurgh_16
• Track 67 : Diabla_15, RoyalG_17
• Track 68 : Gorko_16, Ekhein_16
• Track 69 : Monty_15
• Track 70 : Hotorobo_16, John316_16
• Track 71 : Eggsie_16
• Track 72 : BenoitCattle_16, Crete_17, PierreThree_16, Dakiti_16, BigShaq_16, Chelms_16, Linetti_17
• Track 73 : BirksAndSocks_16
• Track 74 : Squibbles_16
• Track 75 : Sam12_16, Kelzog_16, Exiguo_16, Adgers_17
• Track 76 : GourdThymes_16, RemRem_17
• Track 77 : PokyPuppy_15
• Track 78 : Damp_13, Anamika_13, MrWormie_13, Lahirium_13, Hail2Pitt_13, Newt_13, Bianmat_13, Lidong_13, Neoevie_13, Teal_13, Guillaume_13, Hello_13,

Berries_13, Nimi13_13, Minos_13, Woes_13, Jams_13, Shelley_13, Charianelly_13, Jormungandr_13, GalacticEye_13, Kaseim_13, Harambe_13, Sticker17_13, Luker_13
• Track 79 : Kvothe_16
• Track 80 : Philon9_17
• Track 81 : Hollow_16
• Track 82 : Demosthenes_16
• Track 83 : Vitaenoii_17
• Track 84 : Niagara_16
• Track 85 : Teatealatte_16, Teech_16, Tredge_16
• Track 86 : Katyusha_16, Benczkowski14_16
• Track 87 : ASerpRocky_16
• Track 88 : Kampe_15, PatrickStar_15, Orchid_15, Gibbles_14
• Track 89 : RobinSparkles_18
• Track 90 : EnalisNailo_7, Lilas_7, Floral_7, Marteena_7, BritBrat_7, Bradissa_7, EMsquaredA_7, Pollux_7
• Track 91 : Angelique_7
• Track 92 : Confidence_7
• Track 93 : Jablanski_7, Pytheas_7
• Track 94 : Posh_7
• Track 95 : Wrigley_7
• Track 96 : BeeGee_7
• Track 97 : Cashline_7
• Track 98 : LonelyBoi_7
• Track 99 : Cardigan_34, Yvonnetastic_33
• Track 100 : JonJames_35
• Track 101 : Gmala1_7, GordTnk2_7, GordDuk1_7
• Track 102 : GMA3_7
• Track 103 : Jumbo_12
• Track 104 : Camerico_15
• Track 105 : DatBoi_18
• Track 106 : SpeedDemon_180, Bantam_17
• Track 107 : Towmatter_16, Daredevil_17
• Track 108 : Mollymur_18
• Track 109 : BearBQ_7, MortyNRick_7, Crater_7, Apricot_7, Birdsong_7
• Track 110 : Kuwabara_7
• Track 111 : Darwin_20, PeteyPab_16, Zion_17, Cruella_17, C3PO_17, PotatoChip_17
• Track 112 : Kimchi1738_17, Stickynote_19
• Track 113 : LunaStella_7, TChen_7
• Track 114 : ThetaBob_7
• Track 115 : Renaud18_7
• Track 116 : Cornie_6
• Track 117 : Toron_7
• Track 118 : Zucker_8
• Track 119 : Bauer_9
• Track 120 : BlackSpider_7
• Track 121 : Cassini_7
• Track 122 : BellaJr_9
• Track 123 : Gattaca_39
• Track 124 : Marvin_38, Corazon_38, Clarkson_41, Pringar_40, Tesla_39, Blackbeetle_40, RedRaider77_40, FeliMaine_42, Lilbit_39, JoieB_41, Poise_40, Huphlepuff_42, Raela_40, Caprice_39, MosMoris_38, LittleLaf_40, Beelzebub_44,

VasuNzinga_40, GoongGoong_39
• Track 125 : TPA4_8
• Track 126 : ChewyVIII_43
• Track 127 : P1201_32
• Track 128 : Samy_10
• Track 129 : Trogglehumper_34
• Track 130 : DocB7_012
• Track 131 : Mbo2_12
• Track 132 : LilSpotty_7
• Track 133 : pZL12_63c
• Track 134 : GAL1_9
• Track 135 : Gallia_25

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

The start number called the most often in the published annotations is 32, it was called in 146 of the 275 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abscondus_34, AdaS_8, Aikyam_8, Anekin_7, Aphelion_35, Apiary_33, Arti_29, Auxilium_8, Bachita_37, Bantam_17, BasketStar_8, Bauer_9, BeatusComedenti_24, BeeGee_7, BellaJr_9, BenchScraper_8, Bhageatrice_10, BiPauneto_32, BillyTP_8, BlackSpider_7, BlueShadow_8, Bonum_32, Bradissa_7, Braxoaddie_33, BritBrat_7, BrutonGaster_23, Buggaboo_30, Cardigan_34, Cashline_7, Cassini_7, ClubL_35, CoffeeBean_33, Commandaria_31, Confidence_7, CookieBear_8, Cornie_6, CosmicBrownie_7, Crescenzo_8, Cucurbita_37, Culver_35, Dalilpop_34, DanielleIgnace_17, Daredevil_17, DarwinJr_11, DatBoi_18, Ding_8, Dusty_34, EMsquaredA_7, Emianna_29, EnalisNailo_7, Engineer_36, Ennea_35, EvePickles_8, Faja_8, Flapper_33, Float294_31, Floral_7, Foxboro_30, Fury_38, GAL1_9, GRU1_19, GTE5_20, GTE8_18, Gagieri_33, Gattaca_39, Geeche_34, Globfish_8, Gorpy_8, GrootJr_31, GumGum_8, Hestia_8, Hillester_8, HomeFry_35, HubbaBubba_27, IDyn_30, Isolde_9, Jablanski_7, JakeTheSnake_8, JellyBread_8, Jifall16_28, JonJames_35, Kabloowy_8, Kabluna_32, KellEzio_24, KidneyBean_29, Kitkat_25, Kurt_29, Lasker_8, Lawnathon_8, LeBruni_8, Lilas_7, Lollipop1437_34, LonelyBoi_7, Lozinak_35, MUWow_7, MacGully_37, Mapleville_7, Marietta_31, Marteena_7, Maselop_33, MaterMagnus_8, MerCougar_30, MidnightRain_8, Miskis_33, Mollymur_18, MurphyJoseph_8, NadineRae_29, NatB6_29, NewKitty_9, Norvs_36, NosilaM_32, NovumRegina_29, Nyilah_7, OneUp_29, Outis_30, Patio_32, Pemberton_32, Persistence_7, PhinkBoden_35, Phomeo_28, Phrank15_7, Pleakley_38, Pollux_7, Polyyuki_33, Posh_7, Pytheas_7, RadFad_8, Raphaella_8, RedRaider_36, Richie_8, Sakai_8, Samy_10, Sashimi_9, Satrap_8, Scuba_38, Shukran_8, Skysand_31, Smoothie_36, SonDevVon_7, SpeedDemon_180, SpicyFrank_8, Sporco_8, StarStruck_30, Sukkupi_31, SuperSulley_30, ThayneTheZag_8, Tiff81_9, Toniann_35, Towmatter_16, Tracker_29, Turuncu_33, Vopal_9, Wheezy_29, WhoseManz_31, WilliamBoone_35, Windest_9, Wrigley_7, Yndexa_31, YoungHarleezy_8, Yvonnetastic_33, Zucker_8, pZL12_63c,

Genes that have the "Most Annotated" start but do not call it:
• Beelzebub_44, Blackbeetle_40, Caprice_39, Clarkson_41, Corazon_38, FeliMaine_42, GoongGoong_39, Huphlepuff_42, JoieB_41, Lilbit_39, LittleLaf_40,

Marvin_38, MosMoris_38, Poise_40, Pringar_40, Raela_40, RedRaider77_40, Tesla_39, VasuNzinga_40,

Genes that do not have the "Most Annotated" start:
• ASerpRocky_16, Adgers_17, Amore2_18, Anamika_13, Angelique_7, Apricot_7, Austin_18, Barbochs_16, BearBQ_7, Beaver_16, Benczkowski14_16, BenoitCattle_16, Berries_13, Bianmat_13, BigShaq_16, BillyBobJr_17, Birdsong_7, BirksAndSocks_16, Boneham_16, Breezic_16, Butterball_16, C3PO_17, Camerico_15, CathyBurgh_16, Charianelly_13, Chelms_16, ChewyVIII_43, CinnamonToast_17, Crater_7, Crete_17, Cruella_17, Dakiti_16, Damp_13, Darwin_20, Demosthenes_16, Diabla_15, DocB7_012, Eggsie_16, Ekhein_16, Exiguo_16, FelixAlejandro_17, Flakey_16, GMA3_7, GMA7_9, GTE7_9, GalacticEye_13, Gallia_25, Gibbles_14, Gmala1_7, GordDuk1_7, GordTnk2_7, Gorko_16, GourdThymes_16, Guillaume_13, Hail2Pitt_13, Harambe_13, HayZem_17, Hello_13, Hollow_16, Hotorobo_16, Jams_13, Jellybones_16, John316_16, Jormungandr_13, Jumbo_12, Kampe_15, Kaseim_13, Katyusha_16, Kelzog_16, Kimchi1738_17, Kuwabara_7, Kvothe_16, Lahirium_13, Lidong_13, LilSpotty_7, Linetti_17, Lizzo_16, Luker_13, LunaStella_7, Mbo2_12, Minos_13, Monty_15, MortyNRick_7, MrWormie_13, Msay19_17, Neoevie_13, Newt_13, Niagara_16, Nimi13_13, Orchid_15, P1201_32, PatrickStar_15, PeteyPab_16, Philon9_17, PierreThree_16, PokyPuppy_15, Poland_17, PotatoChip_17, RemRem_17, Renaud18_7, Reynauld_20, RobinSparkles_18, RoyalG_17, SPB78_7, Sam12_16, Seahorse_9, Shelley_13, Sombrero_16, Squibbles_16, Srilaccoli3_19, SteveFrench_15, Sticker17_13, Stickynote_19, TChen_7, TPA4_8, Teal_13, Teatealatte_16, Teech_16, ThetaBob_7, Toron_7, Tredge_16, Trogglehumper_34, VWB_7, Vitaenoii_17, Woes_13, Worcestershire_16, Zion_17,

Summary by start number:

Start 6:
• Found in 5 of 308 (1.6%) of genes in pham
• Manual Annotations of this start: 5 of 275
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gibbles_14 (CX), Kampe_15 (CX), Orchid_15 (CX), PatrickStar_15 (CX), RobinSparkles_18 (CX),

Start 8:
• Found in 1 of 308 (0.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DocB7_012 (singleton),

Start 9:
• Found in 3 of 308 (1.0%) of genes in pham
• Manual Annotations of this start: 3 of 275
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Reynauld_20 (CH), Srilaccoli3_19 (CH), Trogglehumper_34 (singleton),

Start 10:
• Found in 83 of 308 (26.9%) of genes in pham
• Manual Annotations of this start: 78 of 275
• Called 100.0% of time when present

• Phage (with cluster) where this start called: ASerpRocky_16 (CS4), Adgers_17 (CS2), Amore2_18 (CS1), Anamika_13 (CS3), Austin_18 (CS1), Barbochs_16 (CS2), Beaver_16 (CS2), Benczkowski14_16 (CS4), BenoitCattle_16 (CS2), Berries_13 (CS3), Bianmat_13 (CS3), BigShaq_16 (CS2), BillyBobJr_17 (CS2), BirksAndSocks_16 (CS2), Boneham_16 (CS2), Breezic_16 (CS2), Butterball_16 (CS2), CathyBurgh_16 (CS2), Charianelly_13 (CS3), Chelms_16 (CS2), CinnamonToast_17 (CS2), Crete_17 (CS2), Dakiti_16 (CS2), Damp_13 (CS3), Demosthenes_16 (CS4), Diabla_15 (CS2), Eggsie_16 (CS2), Ekhein_16 (CS2), Exiguo_16 (CS2), FelixAlejandro_17 (CS2), Flakey_16 (CS2), GMA7_9 (CS1), GTE7_9 (CS1), GalacticEye_13 (CS3), Gorko_16 (CS2), GourdThymes_16 (CS2), Guillaume_13 (CS3), Hail2Pitt_13 (CS3), Harambe_13 (CS3), HayZem_17 (CS1), Hello_13 (CS3), Hollow_16 (CS4), Hotorobo_16 (CS2), Jams_13 (CS3), Jellybones_16 (CS2), John316_16 (CS2), Jormungandr_13 (CS3), Kaseim_13 (CS3), Katyusha_16 (CS4), Kelzog_16 (CS2), Kvothe_16 (CS4), Lahirium_13 (CS3), Lidong_13 (CS3), Linetti_17 (CS2), Lizzo_16 (CS2), Luker_13 (CS3), Minos_13 (CS3), Monty_15 (CS2), MrWormie_13 (CS3), Msay19_17 (CS2), Neoevie_13 (CS3), Newt_13 (CS3), Niagara_16 (CS4), Nimi13_13 (CS3), Philon9_17 (CS4), PierreThree_16 (CS2), PokyPuppy_15 (CS2), Poland_17 (CS2), RemRem_17 (CS2), RoyalG_17 (CS2), Sam12_16 (CS2), Shelley_13 (CS3), Sombrero_16 (CS2), Squibbles_16 (CS2), SteveFrench_15 (CS2), Sticker17_13 (CS3), Teal_13 (CS3), Teatealatte_16 (CS4), Teech_16 (CS4), Tredge_16 (CS4), Vitaenoii_17 (CS4), Woes_13 (CS3), Worcestershire_16 (CS2),

Start 11:
• Found in 1 of 308 (0.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mbo2_12 (singleton),

Start 16:
• Found in 6 of 308 (1.9%) of genes in pham
• Manual Annotations of this start: 2 of 275
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Camerico_15 (DF4), GMA3_7 (DF2), Gmala1_7 (DF1), GordDuk1_7 (DF1), GordTnk2_7 (DF1), Jumbo_12 (DF3),

Start 29:
• Found in 27 of 308 (8.8%) of genes in pham
• Manual Annotations of this start: 20 of 275
• Called 74.1% of time when present
• Phage (with cluster) where this start called: Beelzebub_44 (S), Blackbeetle_40 (S), Caprice_39 (S), Clarkson_41 (S), Corazon_38 (S), FeliMaine_42 (S), GoongGoong_39 (S), Huphlepuff_42 (S), JoieB_41 (S), LilSpotty_7 (singleton), Lilbit_39 (S), LittleLaf_40 (S), Marvin_38 (S), MosMoris_38 (S), Poise_40 (S), Pringar_40 (S), Raela_40 (S), RedRaider77_40 (S), Tesla_39 (S), VasuNzinga_40 (S),

Start 30:
• Found in 85 of 308 (27.6%) of genes in pham
• No Manual Annotations of this start.
• Called 4.7% of time when present
• Phage (with cluster) where this start called: Gallia_25 (singleton), P1201_32 (singleton), SPB78_7 (BA), VWB_7 (BA),

Start 31:
• Found in 33 of 308 (10.7%) of genes in pham
• Manual Annotations of this start: 20 of 275
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Angelique_7 (CY1), Apricot_7 (DN3), BearBQ_7 (DN), Birdsong_7 (DN), C3PO_17 (EN), ChewyVIII_43 (singleton), Crater_7 (DN3), Cruella_17 (EN), Darwin_20 (EN), Kimchi1738_17 (EN), Kuwabara_7 (DN4), LunaStella_7 (F4), MortyNRick_7 (DN), PeteyPab_16 (EN), PotatoChip_17 (EN), Renaud18_7 (F4), Stickynote_19 (EN), TChen_7 (F4), TPA4_8 (singleton), ThetaBob_7 (F4), Toron_7 (F6), Zion_17 (EN),

Start 32:
• Found in 181 of 308 (58.8%) of genes in pham
• Manual Annotations of this start: 146 of 275
• Called 89.5% of time when present
• Phage (with cluster) where this start called: Abscondus_34 (CQ1), AdaS_8 (AY), Aikyam_8 (AY), Anekin_7 (AY), Aphelion_35 (CQ1), Apiary_33 (CR6), Arti_29 (CR2), Auxilium_8 (AY), Bachita_37 (CQ1), Bantam_17 (DL), BasketStar_8 (AY), Bauer_9 (FN), BeatusComedenti_24 (AT), BeeGee_7 (CY5), BellaJr_9 (FN), BenchScraper_8 (AY), Bhageatrice_10 (AY), BiPauneto_32 (CR4), BillyTP_8 (AY), BlackSpider_7 (FN), BlueShadow_8 (AY), Bonum_32 (CR2), Bradissa_7 (CY1), Braxoaddie_33 (CR6), BritBrat_7 (CY2), BrutonGaster_23 (CQ2), Buggaboo_30 (CR2), Cardigan_34 (DD), Cashline_7 (CY6), Cassini_7 (FN), ClubL_35 (CQ1), CoffeeBean_33 (CR6), Commandaria_31 (CR2), Confidence_7 (CY1), CookieBear_8 (AY), Cornie_6 (F5), CosmicBrownie_7 (AY), Crescenzo_8 (AY), Cucurbita_37 (CQ1), Culver_35 (CQ1), Dalilpop_34 (CR1), DanielleIgnace_17 (AT), Daredevil_17 (DL), DarwinJr_11 (AY), DatBoi_18 (DL), Ding_8 (AY), Dusty_34 (CQ1), EMsquaredA_7 (CY1), Emianna_29 (CR2), EnalisNailo_7 (CY1), Engineer_36 (CQ1), Ennea_35 (CR3), EvePickles_8 (AY), Faja_8 (AY), Flapper_33 (CR1), Float294_31 (CR3), Floral_7 (CY1), Foxboro_30 (CR2), Fury_38 (CR5), GAL1_9 (singleton), GRU1_19 (CR1), GTE5_20 (CR1), GTE8_18 (CR2), Gagieri_33 (CR6), Gattaca_39 (S), Geeche_34 (CQ1), Globfish_8 (AY), Gorpy_8 (AY), GrootJr_31 (CR2), GumGum_8 (AY), Hestia_8 (AY), Hillester_8 (AY), HomeFry_35 (CR5), HubbaBubba_27 (CR4), IDyn_30 (CR4), Isolde_9 (AY), Jablanski_7 (CY3), JakeTheSnake_8 (AY), JellyBread_8 (AY), Jifall16_28 (CR2), JonJames_35 (DD), Kabloowy_8 (AY), Kabluna_32 (CR2), KellEzio_24 (AT), KidneyBean_29 (CR2), Kitkat_25 (AT), Kurt_29 (CR2), Lasker_8 (AY), Lawnathon_8 (AY), LeBruni_8 (AY), Lilas_7 (CY1), Lollipop1437_34 (CR3), LonelyBoi_7 (CY7), Lozinak_35 (CQ1), MUWow_7 (AY), MacGully_37 (CR7), Mapleville_7 (AY), Marietta_31 (CR4), Marteena_7 (CY1), Maselop_33 (CR6), MaterMagnus_8 (AY), MerCougar_30 (CR2), MidnightRain_8 (AY), Miskis_33 (CQ1), Mollymur_18 (DL), MurphyJoseph_8 (AY), NadineRae_29 (CR4), NatB6_29 (CR2), NewKitty_9 (AY), Norvs_36 (CQ1), NosilaM_32 (CR2), NovumRegina_29 (CR2), Nyilah_7 (AY), OneUp_29 (CQ2), Outis_30 (CR2), Patio_32 (CR3), Pemberton_32 (CR4), Persistence_7 (AY), PhinkBoden_35 (CQ1), Phomeo_28 (CR2), Phrank15_7 (AY), Pleakley_38 (CR5), Pollux_7 (CY1), Polyyuki_33 (CR6), Posh_7 (CY4), Pytheas_7 (CY3), RadFad_8 (AY), Raphaella_8 (AY), RedRaider_36 (CR3), Richie_8 (AY), Sakai_8 (AY), Samy_10 (singleton), Sashimi_9 (AY), Satrap_8 (AY), Scuba_38 (CR5), Shukran_8 (AY), Skysand_31 (CR3), Smoothie_36 (CQ1), SonDevVon_7 (AY), SpeedDemon_180 (DL), SpicyFrank_8 (AY), Sporco_8 (AY), StarStruck_30 (CR2), Sukkupi_31 (CR4), SuperSulley_30 (CR2), ThayneTheZag_8 (AY), Tiff81_9 (AY), Toniann_35 (CQ1), Towmatter_16 (DL), Tracker_29 (CR2), Turuncu_33 (CR1), Vopal_9 (AY), Wheezy_29 (CR2), WhoseManz_31 (CR4), WilliamBoone_35 (CQ1),

Windest_9 (AY), Wrigley_7 (CY4), Yndexa_31 (CR4), YoungHarleezy_8 (AY), Yvonnetastic_33 (DD), Zucker_8 (FN), pZL12_63c (singleton),

Start 33:
• Found in 1 of 308 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 275
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Seahorse_9 (AY),

Summary by clusters:

There are 41 clusters represented in this pham: DN, DL, BA, DD, singleton, EN, CR7, FN, DF4, DF1, DF3, DF2, DN4, DN3, CS4, CQ1, CS1, CS3, CS2, CY3, CY2, CY1, CH, CY7, CY6, CY5, CY4, S, CX, AT, CQ2, AY, CR6, F5, CR2, CR3, CR1, F4, F6, CR4, CR5,

Info for manual annotations of cluster AT:
•Start number 32 was manually annotated 4 times for cluster AT.

Info for manual annotations of cluster AY:
•Start number 32 was manually annotated 43 times for cluster AY.
•Start number 33 was manually annotated 1 time for cluster AY.

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

Info for manual annotations of cluster CQ1:
•Start number 32 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 32 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CR1:
•Start number 32 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 32 was manually annotated 21 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 32 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 32 was manually annotated 9 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 32 was manually annotated 4 times for cluster CR5.

Info for manual annotations of cluster CR6:
•Start number 32 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:
•Start number 32 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster CS1:
•Start number 10 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:
•Start number 10 was manually annotated 38 times for cluster CS2.

Info for manual annotations of cluster CS3:
•Start number 10 was manually annotated 25 times for cluster CS3.

Info for manual annotations of cluster CS4:
•Start number 10 was manually annotated 12 times for cluster CS4.

Info for manual annotations of cluster CX:
•Start number 6 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster CY1:
•Start number 31 was manually annotated 1 time for cluster CY1.
•Start number 32 was manually annotated 8 times for cluster CY1.

Info for manual annotations of cluster CY2:
•Start number 32 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:
•Start number 32 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:
•Start number 32 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 32 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:
•Start number 32 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:
•Start number 32 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DD:
•Start number 32 was manually annotated 3 times for cluster DD.

Info for manual annotations of cluster DF3:
•Start number 16 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DF4:
•Start number 16 was manually annotated 1 time for cluster DF4.

Info for manual annotations of cluster DL:
•Start number 32 was manually annotated 6 times for cluster DL.

Info for manual annotations of cluster DN:

•Start number 31 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN3:
•Start number 31 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:
•Start number 31 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster EN:
•Start number 31 was manually annotated 8 times for cluster EN.

Info for manual annotations of cluster F4:
•Start number 31 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster F5:
•Start number 32 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster FN:
•Start number 32 was manually annotated 4 times for cluster FN.

Info for manual annotations of cluster S:
•Start number 29 was manually annotated 19 times for cluster S.
•Start number 32 was manually annotated 1 time for cluster S.

Gene Information:

Gene: ASerpRocky_16 Start: 16996, Stop: 18210, Start Num: 10
Candidate Starts for ASerpRocky_16:
(Start: 10 @16996 has 78 MA's), (14, 17008), (30, 17092), (Start: 31 @17095 has 20 MA's), (48, 17167), (69, 17275), (79, 17341), (83, 17353), (87, 17365), (109, 17446), (120, 17491), (123, 17506), (154, 17680), (159, 17704), (166, 17737), (180, 17779), (222, 17950), (246, 18049), (247, 18052), (252, 18070), (269, 18175), (273, 18193), (274, 18199),

Gene: Abscondus_34 Start: 14077, Stop: 15108, Start Num: 32
Candidate Starts for Abscondus_34:
(Start: 32 @14077 has 146 MA's), (37, 14101), (84, 14311), (87, 14320), (121, 14464), (127, 14497), (129, 14503), (165, 14689), (191, 14761), (196, 14776), (211, 14833), (220, 14851), (242, 14935), (257, 14998), (271, 15085),

Gene: AdaS_8 Start: 5902, Stop: 6942, Start Num: 32
Candidate Starts for AdaS_8:
(Start: 32 @5902 has 146 MA's), (82, 6130), (90, 6154), (107, 6226), (120, 6283), (136, 6388), (143, 6403), (152, 6454), (153, 6460), (156, 6466), (168, 6526), (173, 6544), (197, 6610), (220, 6688), (248, 6796), (257, 6835), (262, 6877), (265, 6892),

Gene: Adgers_17 Start: 14667, Stop: 15866, Start Num: 10
Candidate Starts for Adgers_17:
(Start: 10 @14667 has 78 MA's), (18, 14685), (30, 14751), (48, 14826), (59, 14877), (79, 15000), (109, 15105), (123, 15165), (166, 15387), (222, 15594), (229, 15636), (235, 15654), (246, 15693), (252, 15714), (256, 15741), (261, 15780), (264, 15798), (269, 15819), (273, 15837), (274, 15843),

Gene: Aikyam_8 Start: 5888, Stop: 6928, Start Num: 32
Candidate Starts for Aikyam_8:
(Start: 32 @5888 has 146 MA's), (82, 6116), (90, 6140), (120, 6269), (136, 6374), (143, 6389), (161, 6482), (164, 6500), (168, 6512), (173, 6530), (191, 6572), (197, 6596), (248, 6782), (257, 6821), (262, 6863), (265, 6878),

Gene: Amore2_18 Start: 14523, Stop: 15725, Start Num: 10
Candidate Starts for Amore2_18:
(3, 14409), (4, 14412), (Start: 10 @14523 has 78 MA's), (79, 14865), (101, 14940), (109, 14970), (120, 15015), (123, 15030), (199, 15366), (235, 15519), (246, 15558), (252, 15579), (261, 15645), (269, 15684), (273, 15702),

Gene: Anamika_13 Start: 15570, Stop: 16769, Start Num: 10
Candidate Starts for Anamika_13:
(Start: 10 @15570 has 78 MA's), (18, 15588), (30, 15654), (36, 15681), (79, 15903), (101, 15978), (123, 16068), (208, 16437), (222, 16497), (235, 16557), (246, 16596), (252, 16617), (256, 16644), (264, 16701), (269, 16722), (273, 16740),

Gene: Anekin_7 Start: 6040, Stop: 7080, Start Num: 32
Candidate Starts for Anekin_7:
(Start: 32 @6040 has 146 MA's), (63, 6172), (82, 6268), (87, 6283), (90, 6292), (120, 6421), (136, 6526), (143, 6541), (161, 6634), (168, 6664), (173, 6682), (244, 6919), (248, 6934), (257, 6973), (262, 7015), (265, 7030),

Gene: Angelique_7 Start: 5696, Stop: 6739, Start Num: 31
Candidate Starts for Angelique_7:
(Start: 31 @5696 has 20 MA's), (40, 5747), (44, 5759), (56, 5795), (93, 5969), (98, 5993), (144, 6203), (155, 6254), (163, 6293), (168, 6317), (205, 6431), (206, 6434), (223, 6494), (245, 6581), (254, 6623), (260, 6662),

Gene: Aphelion_35 Start: 14324, Stop: 15352, Start Num: 32
Candidate Starts for Aphelion_35:
(Start: 32 @14324 has 146 MA's), (37, 14348), (84, 14558), (87, 14567), (121, 14711), (127, 14744), (129, 14750), (165, 14936), (191, 15008), (196, 15023), (211, 15080), (220, 15098), (242, 15182), (257, 15245), (271, 15332),

Gene: Apiary_33 Start: 20020, Stop: 21072, Start Num: 32
Candidate Starts for Apiary_33:
(Start: 32 @20020 has 146 MA's), (58, 20137), (80, 20254), (98, 20317), (110, 20362), (133, 20470), (137, 20506), (161, 20605), (177, 20662), (196, 20713), (217, 20800), (260, 20995), (265, 21022), (266, 21028), (274, 21064),

Gene: Apricot_7 Start: 5225, Stop: 6259, Start Num: 31
Candidate Starts for Apricot_7:
(Start: 31 @5225 has 20 MA's), (140, 5720), (152, 5774), (157, 5804), (161, 5819), (162, 5822), (167, 5846), (168, 5849), (191, 5909), (195, 5921), (206, 5966), (223, 6014), (261, 6185), (266, 6212), (271, 6236),

Gene: Arti_29 Start: 18056, Stop: 19126, Start Num: 32
Candidate Starts for Arti_29:
(Start: 32 @18056 has 146 MA's), (38, 18092), (40, 18104), (42, 18110), (72, 18233), (80, 18290), (110, 18398), (161, 18641), (173, 18689), (189, 18740), (212, 18821), (221, 18860), (229, 18908),

(239, 18938), (260, 19049), (265, 19076), (273, 19112), (274, 19118),

Gene: Austin_18 Start: 14523, Stop: 15725, Start Num: 10
Candidate Starts for Austin_18:
(3, 14409), (4, 14412), (Start: 10 @14523 has 78 MA's), (79, 14865), (101, 14940), (109, 14970), (120, 15015), (123, 15030), (199, 15366), (235, 15519), (246, 15558), (252, 15579), (261, 15645), (269, 15684), (273, 15702),

Gene: Auxilium_8 Start: 5902, Stop: 6942, Start Num: 32
Candidate Starts for Auxilium_8:
(Start: 32 @5902 has 146 MA's), (82, 6130), (90, 6154), (107, 6226), (120, 6283), (136, 6388), (143, 6403), (152, 6454), (153, 6460), (156, 6466), (168, 6526), (173, 6544), (197, 6610), (220, 6688), (248, 6796), (257, 6835), (262, 6877), (265, 6892),

Gene: Bachita_37 Start: 14757, Stop: 15785, Start Num: 32
Candidate Starts for Bachita_37:
(Start: 32 @14757 has 146 MA's), (37, 14781), (84, 14991), (87, 15000), (121, 15144), (127, 15177), (129, 15183), (165, 15369), (191, 15441), (196, 15456), (211, 15513), (220, 15531), (242, 15615), (257, 15678), (271, 15765),

Gene: Bantam_17 Start: 11610, Stop: 12665, Start Num: 32
Candidate Starts for Bantam_17:
(Start: 32 @11610 has 146 MA's), (100, 11907), (117, 11982), (127, 12033), (134, 12081), (161, 12207), (191, 12300), (195, 12312), (196, 12315), (201, 12339), (215, 12387), (219, 12402), (220, 12408), (249, 12522), (251, 12528), (257, 12555),

Gene: Barbochs_16 Start: 14505, Stop: 15704, Start Num: 10
Candidate Starts for Barbochs_16:
(Start: 10 @14505 has 78 MA's), (18, 14523), (30, 14589), (48, 14664), (59, 14715), (79, 14838), (109, 14943), (123, 15003), (166, 15225), (222, 15432), (229, 15474), (235, 15492), (246, 15531), (252, 15552), (256, 15579), (264, 15636), (269, 15657), (273, 15675), (274, 15681),

Gene: BasketStar_8 Start: 5941, Stop: 6981, Start Num: 32
Candidate Starts for BasketStar_8:
(Start: 32 @5941 has 146 MA's), (82, 6169), (90, 6193), (107, 6265), (120, 6322), (136, 6427), (143, 6442), (152, 6493), (153, 6499), (156, 6505), (168, 6565), (173, 6583), (197, 6649), (220, 6727), (248, 6835), (257, 6874), (262, 6916), (265, 6931),

Gene: Bauer_9 Start: 6314, Stop: 7333, Start Num: 32
Candidate Starts for Bauer_9:
(Start: 32 @6314 has 146 MA's), (59, 6431), (64, 6455), (84, 6557), (105, 6629), (114, 6665), (124, 6710), (131, 6749), (146, 6824), (165, 6920), (220, 7070), (228, 7118), (235, 7136), (253, 7199), (256, 7220), (266, 7289),

Gene: BearBQ_7 Start: 5225, Stop: 6259, Start Num: 31
Candidate Starts for BearBQ_7:
(Start: 31 @5225 has 20 MA's), (140, 5720), (152, 5774), (157, 5804), (161, 5819), (162, 5822), (167, 5846), (168, 5849), (191, 5909), (195, 5921), (206, 5966), (223, 6014), (261, 6185), (266, 6212), (271, 6236),

Gene: BeatusComedenti_24 Start: 12882, Stop: 13964, Start Num: 32
Candidate Starts for BeatusComedenti_24:

(Start: 32 @12882 has 146 MA's), (70, 13041), (71, 13044), (74, 13053), (75, 13056), (104, 13203), (120, 13269), (131, 13329), (137, 13377), (138, 13380), (176, 13548), (202, 13635), (214, 13677), (215, 13683), (222, 13713), (263, 13905), (267, 13920),

Gene: Beaver_16 Start: 14513, Stop: 15712, Start Num: 10
Candidate Starts for Beaver_16:
(Start: 10 @14513 has 78 MA's), (18, 14531), (30, 14597), (48, 14672), (59, 14723), (79, 14846), (109, 14951), (123, 15011), (166, 15233), (222, 15440), (229, 15482), (235, 15500), (246, 15539), (252, 15560), (256, 15587), (264, 15644), (269, 15665), (273, 15683), (274, 15689),

Gene: BeeGee_7 Start: 5700, Stop: 6740, Start Num: 32
Candidate Starts for BeeGee_7:
(Start: 32 @5700 has 146 MA's), (40, 5748), (44, 5760), (56, 5796), (93, 5970), (98, 5994), (124, 6099), (143, 6195), (144, 6204), (155, 6255), (163, 6294), (168, 6318), (205, 6432), (206, 6435), (218, 6468), (223, 6495), (245, 6582), (260, 6663),

Gene: Beelzebub_44 Start: 16546, Stop: 17616, Start Num: 29
Candidate Starts for Beelzebub_44:
(Start: 29 @16546 has 20 MA's), (Start: 32 @16555 has 146 MA's), (34, 16561), (81, 16792), (91, 16822), (105, 16873), (106, 16876), (115, 16915), (161, 17158), (191, 17248), (196, 17263), (206, 17305), (220, 17347), (224, 17371), (228, 17395), (232, 17404), (255, 17491), (266, 17560), (271, 17584),

Gene: BellaJr_9 Start: 6377, Stop: 7396, Start Num: 32
Candidate Starts for BellaJr_9:
(Start: 32 @6377 has 146 MA's), (64, 6518), (84, 6620), (105, 6692), (124, 6773), (131, 6812), (135, 6854), (146, 6887), (163, 6968), (196, 7061), (228, 7181), (266, 7352), (272, 7379),

Gene: BenchScraper_8 Start: 5902, Stop: 6942, Start Num: 32
Candidate Starts for BenchScraper_8:
(Start: 32 @5902 has 146 MA's), (82, 6130), (90, 6154), (107, 6226), (120, 6283), (136, 6388), (143, 6403), (152, 6454), (153, 6460), (156, 6466), (168, 6526), (173, 6544), (197, 6610), (220, 6688), (248, 6796), (257, 6835), (262, 6877), (265, 6892),

Gene: Benczkowski14_16 Start: 17078, Stop: 18292, Start Num: 10
Candidate Starts for Benczkowski14_16:
(Start: 10 @17078 has 78 MA's), (30, 17174), (Start: 31 @17177 has 20 MA's), (48, 17249), (83, 17435), (87, 17447), (96, 17483), (109, 17528), (120, 17573), (123, 17588), (154, 17762), (159, 17786), (180, 17861), (222, 18032), (246, 18131), (247, 18134), (252, 18152), (269, 18257), (273, 18275), (274, 18281),

Gene: BenoitCattle_16 Start: 14499, Stop: 15698, Start Num: 10
Candidate Starts for BenoitCattle_16:
(Start: 10 @14499 has 78 MA's), (18, 14517), (30, 14583), (48, 14658), (79, 14832), (101, 14907), (109, 14937), (123, 14997), (157, 15180), (166, 15219), (229, 15468), (235, 15486), (246, 15525), (252, 15546), (256, 15573), (261, 15612), (264, 15630), (269, 15651), (273, 15669), (274, 15675),

Gene: Berries_13 Start: 15555, Stop: 16754, Start Num: 10
Candidate Starts for Berries_13:
(Start: 10 @15555 has 78 MA's), (18, 15573), (30, 15639), (36, 15666), (79, 15888), (101, 15963), (123, 16053), (208, 16422), (222, 16482), (235, 16542), (246, 16581), (252, 16602), (256, 16629), (264, 16686), (269, 16707), (273, 16725),

Gene: Bhageatrice_10 Start: 7097, Stop: 8137, Start Num: 32
Candidate Starts for Bhageatrice_10:
(Start: 32 @7097 has 146 MA's), (82, 7325), (90, 7349), (120, 7478), (136, 7583), (143, 7598), (153, 7655), (161, 7691), (168, 7721), (191, 7781), (197, 7805), (257, 8030), (262, 8072), (265, 8087),

Gene: BiPauneto_32 Start: 17934, Stop: 19001, Start Num: 32
Candidate Starts for BiPauneto_32:
(Start: 32 @17934 has 146 MA's), (38, 17970), (42, 17988), (48, 18003), (72, 18111), (80, 18168), (187, 18603), (189, 18618), (212, 18699), (216, 18720), (229, 18786), (260, 18924), (265, 18951),

Gene: Bianmat_13 Start: 15577, Stop: 16776, Start Num: 10
Candidate Starts for Bianmat_13:
(Start: 10 @15577 has 78 MA's), (18, 15595), (30, 15661), (36, 15688), (79, 15910), (101, 15985), (123, 16075), (208, 16444), (222, 16504), (235, 16564), (246, 16603), (252, 16624), (256, 16651), (264, 16708), (269, 16729), (273, 16747),

Gene: BigShaq_16 Start: 14501, Stop: 15700, Start Num: 10
Candidate Starts for BigShaq_16:
(Start: 10 @14501 has 78 MA's), (18, 14519), (30, 14585), (48, 14660), (79, 14834), (101, 14909), (109, 14939), (123, 14999), (157, 15182), (166, 15221), (229, 15470), (235, 15488), (246, 15527), (252, 15548), (256, 15575), (261, 15614), (264, 15632), (269, 15653), (273, 15671), (274, 15677),

Gene: BillyBobJr_17 Start: 14537, Stop: 15736, Start Num: 10
Candidate Starts for BillyBobJr_17:
(Start: 10 @14537 has 78 MA's), (18, 14555), (30, 14621), (48, 14696), (79, 14870), (101, 14945), (109, 14975), (123, 15035), (166, 15257), (190, 15338), (222, 15464), (229, 15506), (235, 15524), (246, 15563), (252, 15584), (256, 15611), (261, 15650), (264, 15668), (269, 15689), (273, 15707), (274, 15713),

Gene: BillyTP_8 Start: 5896, Stop: 6936, Start Num: 32
Candidate Starts for BillyTP_8:
(Start: 32 @5896 has 146 MA's), (82, 6124), (90, 6148), (107, 6220), (120, 6277), (136, 6382), (143, 6397), (152, 6448), (153, 6454), (156, 6460), (168, 6520), (173, 6538), (197, 6604), (248, 6790), (257, 6829), (262, 6871), (265, 6886),

Gene: Birdsong_7 Start: 5225, Stop: 6259, Start Num: 31
Candidate Starts for Birdsong_7:
(Start: 31 @5225 has 20 MA's), (140, 5720), (152, 5774), (157, 5804), (161, 5819), (162, 5822), (167, 5846), (168, 5849), (191, 5909), (195, 5921), (206, 5966), (223, 6014), (261, 6185), (266, 6212), (271, 6236),

Gene: BirksAndSocks_16 Start: 14502, Stop: 15701, Start Num: 10
Candidate Starts for BirksAndSocks_16:
(Start: 10 @14502 has 78 MA's), (18, 14520), (30, 14586), (48, 14661), (79, 14835), (101, 14910), (109, 14940), (123, 15000), (166, 15222), (222, 15429), (229, 15471), (235, 15489), (246, 15528), (252, 15549), (256, 15576), (261, 15615), (264, 15633), (269, 15654), (273, 15672), (274, 15678),

Gene: BlackSpider_7 Start: 5373, Stop: 6392, Start Num: 32
Candidate Starts for BlackSpider_7:
(Start: 32 @5373 has 146 MA's), (59, 5490), (62, 5505), (64, 5514), (84, 5616), (105, 5688), (114, 5724), (131, 5808), (143, 5865), (146, 5883), (165, 5979), (220, 6129), (228, 6177), (253, 6258), (256, 6279), (266, 6348),

Gene: Blackbeetle_40 Start: 15565, Stop: 16635, Start Num: 29
Candidate Starts for Blackbeetle_40:
(Start: 29 @15565 has 20 MA's), (Start: 32 @15574 has 146 MA's), (34, 15580), (81, 15811), (91, 15841), (105, 15892), (106, 15895), (115, 15934), (161, 16177), (191, 16267), (196, 16282), (206, 16324), (220, 16366), (224, 16390), (228, 16414), (232, 16423), (255, 16510), (266, 16579), (271, 16603),

Gene: BlueShadow_8 Start: 5887, Stop: 6927, Start Num: 32
Candidate Starts for BlueShadow_8:
(Start: 32 @5887 has 146 MA's), (82, 6115), (107, 6211), (120, 6268), (134, 6355), (136, 6373), (143, 6388), (161, 6481), (168, 6511), (173, 6529), (248, 6781), (257, 6820), (262, 6862), (265, 6877),

Gene: Boneham_16 Start: 14501, Stop: 15700, Start Num: 10
Candidate Starts for Boneham_16:
(Start: 10 @14501 has 78 MA's), (18, 14519), (30, 14585), (48, 14660), (79, 14834), (101, 14909), (109, 14939), (123, 14999), (166, 15221), (190, 15302), (222, 15428), (229, 15470), (235, 15488), (246, 15527), (252, 15548), (256, 15575), (261, 15614), (264, 15632), (269, 15653), (273, 15671), (274, 15677),

Gene: Bonum_32 Start: 18390, Stop: 19460, Start Num: 32
Candidate Starts for Bonum_32:
(Start: 32 @18390 has 146 MA's), (38, 18426), (42, 18444), (72, 18567), (110, 18732), (148, 18918), (151, 18930), (164, 18993), (172, 19020), (185, 19050), (188, 19071), (189, 19074), (212, 19155), (216, 19176), (229, 19242), (239, 19272), (260, 19383), (265, 19410), (271, 19440), (274, 19452),

Gene: Bradissa_7 Start: 5704, Stop: 6744, Start Num: 32
Candidate Starts for Bradissa_7:
(Start: 32 @5704 has 146 MA's), (40, 5752), (44, 5764), (56, 5800), (93, 5974), (98, 5998), (144, 6208), (155, 6259), (163, 6298), (168, 6322), (196, 6397), (205, 6436), (206, 6439), (218, 6472), (223, 6499), (245, 6586), (254, 6628), (260, 6667), (267, 6703),

Gene: Braxoaddie_33 Start: 20009, Stop: 21061, Start Num: 32
Candidate Starts for Braxoaddie_33:
(Start: 32 @20009 has 146 MA's), (58, 20126), (80, 20243), (98, 20306), (110, 20351), (133, 20459), (137, 20495), (161, 20594), (177, 20651), (196, 20702), (217, 20789), (260, 20984), (265, 21011), (266, 21017), (274, 21053),

Gene: Breezic_16 Start: 14516, Stop: 15715, Start Num: 10
Candidate Starts for Breezic_16:
(Start: 10 @14516 has 78 MA's), (18, 14534), (30, 14600), (48, 14675), (59, 14726), (79, 14849), (109, 14954), (123, 15014), (166, 15236), (222, 15443), (229, 15485), (235, 15503), (246, 15542), (252, 15563), (256, 15590), (264, 15647), (269, 15668), (273, 15686), (274, 15692),

Gene: BritBrat_7 Start: 5706, Stop: 6746, Start Num: 32
Candidate Starts for BritBrat_7:
(Start: 32 @5706 has 146 MA's), (40, 5754), (44, 5766), (56, 5802), (93, 5976), (98, 6000), (144, 6210), (155, 6261), (163, 6300), (168, 6324), (196, 6399), (205, 6438), (206, 6441), (218, 6474), (223, 6501), (245, 6588), (254, 6630), (260, 6669), (267, 6705),

Gene: BrutonGaster_23 Start: 11028, Stop: 12071, Start Num: 32
Candidate Starts for BrutonGaster_23:
(Start: 32 @11028 has 146 MA's), (84, 11262), (87, 11271), (121, 11415), (127, 11448), (136, 11511), (161, 11619), (165, 11640), (191, 11712), (205, 11766), (220, 11802), (249, 11916), (258, 11952),

Gene: Buggaboo_30 Start: 18875, Stop: 19945, Start Num: 32
Candidate Starts for Buggaboo_30:
(Start: 32 @18875 has 146 MA's), (38, 18911), (42, 18929), (72, 19052), (110, 19217), (148, 19403), (151, 19415), (164, 19478), (172, 19505), (185, 19535), (188, 19556), (189, 19559), (212, 19640), (216, 19661), (229, 19727), (239, 19757), (260, 19868), (265, 19895), (271, 19925), (274, 19937),

Gene: Butterball_16 Start: 14501, Stop: 15700, Start Num: 10
Candidate Starts for Butterball_16:
(Start: 10 @14501 has 78 MA's), (18, 14519), (30, 14585), (48, 14660), (79, 14834), (101, 14909), (109, 14939), (123, 14999), (166, 15221), (190, 15302), (222, 15428), (229, 15470), (235, 15488), (246, 15527), (252, 15548), (256, 15575), (261, 15614), (264, 15632), (269, 15653), (273, 15671), (274, 15677),

Gene: C3PO_17 Start: 12594, Stop: 13658, Start Num: 31
Candidate Starts for C3PO_17:
(Start: 31 @12594 has 20 MA's), (68, 12762), (75, 12786), (85, 12849), (98, 12897), (162, 13191), (163, 13194), (172, 13233), (196, 13290), (218, 13386), (228, 13443), (239, 13476), (265, 13608), (267, 13617), (274, 13650),

Gene: Camerico_15 Start: 14155, Stop: 15327, Start Num: 16
Candidate Starts for Camerico_15:
(Start: 16 @14155 has 2 MA's), (20, 14170), (21, 14176), (28, 14227), (35, 14263), (45, 14308), (59, 14365), (69, 14422), (76, 14449), (89, 14518), (116, 14626), (123, 14656), (142, 14746), (160, 14845), (162, 14851), (169, 14881), (222, 15061), (231, 15112), (252, 15181), (266, 15274), (269, 15286), (270, 15292),

Gene: Caprice_39 Start: 15635, Stop: 16705, Start Num: 29
Candidate Starts for Caprice_39:
(Start: 29 @15635 has 20 MA's), (Start: 32 @15644 has 146 MA's), (34, 15650), (81, 15881), (91, 15911), (105, 15962), (106, 15965), (115, 16004), (161, 16247), (191, 16337), (196, 16352), (206, 16394), (220, 16436), (224, 16460), (228, 16484), (232, 16493), (255, 16580), (266, 16649), (271, 16673),

Gene: Cardigan_34 Start: 16281, Stop: 17330, Start Num: 32
Candidate Starts for Cardigan_34:
(Start: 32 @16281 has 146 MA's), (36, 16302), (37, 16311), (53, 16368), (63, 16419), (67, 16434), (161, 16878), (163, 16884), (183, 16944), (195, 16983), (242, 17145), (276, 17313),

Gene: Cashline_7 Start: 5553, Stop: 6593, Start Num: 32
Candidate Starts for Cashline_7:
(Start: 32 @5553 has 146 MA's), (40, 5601), (44, 5613), (56, 5649), (87, 5805), (93, 5823), (98, 5847), (144, 6057), (155, 6108), (163, 6147), (164, 6159), (168, 6171), (196, 6246), (205, 6285), (206, 6288), (218, 6321), (223, 6348), (245, 6435), (254, 6477), (260, 6516), (261, 6522),

Gene: Cassini_7 Start: 5347, Stop: 6366, Start Num: 32
Candidate Starts for Cassini_7:
(Start: 32 @5347 has 146 MA's), (59, 5464), (64, 5488), (84, 5590), (105, 5662), (114, 5698), (124, 5743), (129, 5767), (146, 5857), (165, 5953), (220, 6103), (224, 6127), (228, 6151), (253, 6232), (256, 6253), (266, 6322),

Gene: CathyBurgh_16 Start: 15373, Stop: 16572, Start Num: 10
Candidate Starts for CathyBurgh_16:

(Start: 10 @15373 has 78 MA's), (18, 15391), (30, 15457), (48, 15532), (59, 15583), (79, 15706), (101, 15781), (109, 15811), (123, 15871), (166, 16093), (222, 16300), (229, 16342), (235, 16360), (246, 16399), (252, 16420), (256, 16447), (261, 16486), (264, 16504), (269, 16525), (273, 16543), (274, 16549),

Gene: Charianelly_13 Start: 15287, Stop: 16486, Start Num: 10
Candidate Starts for Charianelly_13:
(Start: 10 @15287 has 78 MA's), (18, 15305), (30, 15371), (36, 15398), (79, 15620), (101, 15695), (123, 15785), (208, 16154), (222, 16214), (235, 16274), (246, 16313), (252, 16334), (256, 16361), (264, 16418), (269, 16439), (273, 16457),

Gene: Chelms_16 Start: 14501, Stop: 15700, Start Num: 10
Candidate Starts for Chelms_16:
(Start: 10 @14501 has 78 MA's), (18, 14519), (30, 14585), (48, 14660), (79, 14834), (101, 14909), (109, 14939), (123, 14999), (157, 15182), (166, 15221), (229, 15470), (235, 15488), (246, 15527), (252, 15548), (256, 15575), (261, 15614), (264, 15632), (269, 15653), (273, 15671), (274, 15677),

Gene: ChewyVIII_43 Start: 25603, Stop: 26664, Start Num: 31
Candidate Starts for ChewyVIII_43:
(Start: 31 @25603 has 20 MA's), (72, 25783), (80, 25840), (136, 26089), (151, 26146), (177, 26248), (224, 26422), (241, 26488), (255, 26548), (258, 26557), (259, 26584), (260, 26587), (274, 26656),

Gene: CinnamonToast_17 Start: 14537, Stop: 15736, Start Num: 10
Candidate Starts for CinnamonToast_17:
(Start: 10 @14537 has 78 MA's), (18, 14555), (30, 14621), (48, 14696), (79, 14870), (101, 14945), (109, 14975), (123, 15035), (166, 15257), (190, 15338), (222, 15464), (229, 15506), (235, 15524), (246, 15563), (252, 15584), (256, 15611), (261, 15650), (264, 15668), (269, 15689), (273, 15707), (274, 15713),

Gene: Clarkson_41 Start: 16247, Stop: 17317, Start Num: 29
Candidate Starts for Clarkson_41:
(Start: 29 @16247 has 20 MA's), (Start: 32 @16256 has 146 MA's), (34, 16262), (81, 16493), (91, 16523), (105, 16574), (106, 16577), (115, 16616), (161, 16859), (191, 16949), (196, 16964), (206, 17006), (220, 17048), (224, 17072), (228, 17096), (232, 17105), (255, 17192), (266, 17261), (271, 17285),

Gene: ClubL_35 Start: 14258, Stop: 15286, Start Num: 32
Candidate Starts for ClubL_35:
(Start: 32 @14258 has 146 MA's), (37, 14282), (84, 14492), (87, 14501), (121, 14645), (127, 14678), (129, 14684), (165, 14870), (191, 14942), (196, 14957), (211, 15014), (220, 15032), (242, 15116), (257, 15179), (271, 15266),

Gene: CoffeeBean_33 Start: 19964, Stop: 21016, Start Num: 32
Candidate Starts for CoffeeBean_33:
(Start: 32 @19964 has 146 MA's), (58, 20081), (80, 20198), (98, 20261), (110, 20306), (133, 20414), (137, 20450), (161, 20549), (177, 20606), (196, 20657), (217, 20744), (260, 20939), (265, 20966), (266, 20972), (274, 21008),

Gene: Commandaria_31 Start: 19386, Stop: 20456, Start Num: 32
Candidate Starts for Commandaria_31:
(Start: 32 @19386 has 146 MA's), (36, 19407), (38, 19422), (54, 19479), (72, 19563), (80, 19620), (94, 19662), (110, 19728), (173, 20019), (187, 20055), (189, 20070), (212, 20151), (229, 20238), (239, 20268), (253, 20319), (260, 20379), (265, 20406), (273, 20442), (274, 20448),

Gene: Confidence_7 Start: 5700, Stop: 6740, Start Num: 32
Candidate Starts for Confidence_7:
(Start: 32 @5700 has 146 MA's), (40, 5748), (44, 5760), (56, 5796), (93, 5970), (98, 5994), (124, 6099), (143, 6195), (144, 6204), (155, 6255), (163, 6294), (168, 6318), (205, 6432), (206, 6435), (218, 6468), (223, 6495), (245, 6582), (254, 6624), (260, 6663),

Gene: CookieBear_8 Start: 5902, Stop: 6942, Start Num: 32
Candidate Starts for CookieBear_8:
(Start: 32 @5902 has 146 MA's), (82, 6130), (90, 6154), (107, 6226), (120, 6283), (136, 6388), (143, 6403), (152, 6454), (153, 6460), (156, 6466), (168, 6526), (173, 6544), (197, 6610), (220, 6688), (248, 6796), (257, 6835), (262, 6877), (265, 6892),

Gene: Corazon_38 Start: 16200, Stop: 17270, Start Num: 29
Candidate Starts for Corazon_38:
(Start: 29 @16200 has 20 MA's), (Start: 32 @16209 has 146 MA's), (34, 16215), (81, 16446), (91, 16476), (105, 16527), (106, 16530), (115, 16569), (161, 16812), (191, 16902), (196, 16917), (206, 16959), (220, 17001), (224, 17025), (228, 17049), (232, 17058), (255, 17145), (266, 17214), (271, 17238),

Gene: Cornie_6 Start: 4881, Stop: 5933, Start Num: 32
Candidate Starts for Cornie_6:
(Start: 32 @4881 has 146 MA's), (39, 4920), (47, 4941), (49, 4947), (66, 5025), (77, 5076), (108, 5208), (117, 5250), (131, 5322), (147, 5406), (161, 5475), (164, 5493), (180, 5535), (191, 5565), (223, 5685), (237, 5736), (249, 5781), (258, 5817), (265, 5871),

Gene: CosmicBrownie_7 Start: 6018, Stop: 7058, Start Num: 32
Candidate Starts for CosmicBrownie_7:
(Start: 32 @6018 has 146 MA's), (63, 6150), (82, 6246), (90, 6270), (120, 6399), (134, 6486), (143, 6519), (156, 6582), (168, 6642), (173, 6660), (244, 6897), (248, 6912), (257, 6951), (265, 7008),

Gene: Crater_7 Start: 5225, Stop: 6259, Start Num: 31
Candidate Starts for Crater_7:
(Start: 31 @5225 has 20 MA's), (140, 5720), (152, 5774), (157, 5804), (161, 5819), (162, 5822), (167, 5846), (168, 5849), (191, 5909), (195, 5921), (206, 5966), (223, 6014), (261, 6185), (266, 6212), (271, 6236),

Gene: Crescenzo_8 Start: 5968, Stop: 7008, Start Num: 32
Candidate Starts for Crescenzo_8:
(Start: 32 @5968 has 146 MA's), (63, 6100), (82, 6196), (87, 6211), (90, 6220), (120, 6349), (136, 6454), (143, 6469), (156, 6532), (168, 6592), (173, 6610), (244, 6847), (248, 6862), (257, 6901), (262, 6943), (265, 6958),

Gene: Crete_17 Start: 14752, Stop: 15951, Start Num: 10
Candidate Starts for Crete_17:
(Start: 10 @14752 has 78 MA's), (18, 14770), (30, 14836), (48, 14911), (79, 15085), (101, 15160), (109, 15190), (123, 15250), (157, 15433), (166, 15472), (229, 15721), (235, 15739), (246, 15778), (252, 15799), (256, 15826), (261, 15865), (264, 15883), (269, 15904), (273, 15922), (274, 15928),

Gene: Cruella_17 Start: 12594, Stop: 13658, Start Num: 31
Candidate Starts for Cruella_17:
(Start: 31 @12594 has 20 MA's), (68, 12762), (75, 12786), (85, 12849), (98, 12897), (162, 13191), (163, 13194), (172, 13233), (196, 13290), (218, 13386), (228, 13443), (239, 13476), (265, 13608),

(267, 13617), (274, 13650),

Gene: Cucurbita_37 Start: 15616, Stop: 16644, Start Num: 32
Candidate Starts for Cucurbita_37:
(Start: 32 @15616 has 146 MA's), (37, 15640), (84, 15850), (87, 15859), (121, 16003), (127, 16036), (129, 16042), (165, 16228), (191, 16300), (196, 16315), (211, 16372), (220, 16390), (242, 16474), (257, 16537), (271, 16624),

Gene: Culver_35 Start: 14077, Stop: 15108, Start Num: 32
Candidate Starts for Culver_35:
(Start: 32 @14077 has 146 MA's), (37, 14101), (84, 14311), (87, 14320), (121, 14464), (127, 14497), (129, 14503), (165, 14689), (191, 14761), (196, 14776), (211, 14833), (220, 14851), (242, 14935), (257, 14998), (271, 15085),

Gene: Dakiti_16 Start: 15369, Stop: 16568, Start Num: 10
Candidate Starts for Dakiti_16:
(Start: 10 @15369 has 78 MA's), (18, 15387), (30, 15453), (48, 15528), (79, 15702), (101, 15777), (109, 15807), (123, 15867), (157, 16050), (166, 16089), (229, 16338), (235, 16356), (246, 16395), (252, 16416), (256, 16443), (261, 16482), (264, 16500), (269, 16521), (273, 16539), (274, 16545),

Gene: Dalilpop_34 Start: 20415, Stop: 21476, Start Num: 32
Candidate Starts for Dalilpop_34:
(Start: 32 @20415 has 146 MA's), (42, 20469), (72, 20592), (80, 20649), (94, 20691), (133, 20865), (181, 21063), (260, 21399), (265, 21426), (266, 21432), (274, 21468),

Gene: Damp_13 Start: 14451, Stop: 15650, Start Num: 10
Candidate Starts for Damp_13:
(Start: 10 @14451 has 78 MA's), (18, 14469), (30, 14535), (36, 14562), (79, 14784), (101, 14859), (123, 14949), (208, 15318), (222, 15378), (235, 15438), (246, 15477), (252, 15498), (256, 15525), (264, 15582), (269, 15603), (273, 15621),

Gene: DanielleIgnace_17 Start: 12091, Stop: 13170, Start Num: 32
Candidate Starts for DanielleIgnace_17:
(Start: 32 @12091 has 146 MA's), (46, 12148), (60, 12211), (71, 12253), (74, 12262), (75, 12265), (81, 12319), (108, 12424), (111, 12445), (120, 12478), (128, 12520), (131, 12538), (170, 12733), (202, 12844), (215, 12892), (238, 12985), (256, 13060), (267, 13129), (270, 13144),

Gene: Daredevil_17 Start: 10493, Stop: 11542, Start Num: 32
Candidate Starts for Daredevil_17:
(Start: 32 @10493 has 146 MA's), (43, 10547), (66, 10640), (100, 10790), (127, 10916), (134, 10964), (152, 11048), (161, 11090), (163, 11096), (164, 11108), (196, 11198), (201, 11222), (205, 11237), (214, 11264), (217, 11273), (225, 11312), (234, 11345), (248, 11393), (251, 11405), (257, 11432), (274, 11534),

Gene: Darwin_20 Start: 13339, Stop: 14403, Start Num: 31
Candidate Starts for Darwin_20:
(Start: 31 @13339 has 20 MA's), (68, 13507), (75, 13531), (85, 13594), (98, 13642), (162, 13936), (163, 13939), (172, 13978), (196, 14035), (218, 14131), (228, 14188), (239, 14221), (265, 14353), (267, 14362), (274, 14395),

Gene: DarwinJr_11 Start: 7271, Stop: 8311, Start Num: 32
Candidate Starts for DarwinJr_11:

(Start: 32 @7271 has 146 MA's), (63, 7403), (82, 7499), (87, 7514), (90, 7523), (120, 7652), (136, 7757), (143, 7772), (161, 7865), (168, 7895), (244, 8150), (248, 8165), (257, 8204), (262, 8246), (265, 8261),

Gene: DatBoi_18 Start: 12446, Stop: 13501, Start Num: 32
Candidate Starts for DatBoi_18:
(Start: 32 @12446 has 146 MA's), (100, 12743), (117, 12818), (127, 12869), (134, 12917), (161, 13043), (191, 13136), (195, 13148), (196, 13151), (201, 13175), (215, 13223), (219, 13238), (221, 13247), (249, 13358), (251, 13364), (257, 13391),

Gene: Demosthenes_16 Start: 16969, Stop: 18183, Start Num: 10
Candidate Starts for Demosthenes_16:
(Start: 10 @16969 has 78 MA's), (14, 16981), (30, 17065), (Start: 31 @17068 has 20 MA's), (48, 17140), (57, 17179), (69, 17248), (79, 17314), (83, 17326), (87, 17338), (120, 17464), (123, 17479), (154, 17653), (159, 17677), (166, 17710), (180, 17752), (222, 17923), (246, 18022), (247, 18025), (252, 18043), (269, 18148), (273, 18166), (274, 18172),

Gene: Diabla_15 Start: 14320, Stop: 15519, Start Num: 10
Candidate Starts for Diabla_15:
(Start: 10 @14320 has 78 MA's), (18, 14338), (30, 14404), (48, 14479), (79, 14653), (109, 14758), (123, 14818), (157, 15001), (166, 15040), (190, 15121), (227, 15280), (235, 15307), (246, 15346), (252, 15367), (256, 15394), (261, 15433), (264, 15451), (269, 15472), (273, 15490), (274, 15496),

Gene: Ding_8 Start: 5913, Stop: 6953, Start Num: 32
Candidate Starts for Ding_8:
(Start: 32 @5913 has 146 MA's), (82, 6141), (90, 6165), (120, 6294), (136, 6399), (143, 6414), (161, 6507), (162, 6510), (168, 6537), (191, 6597), (197, 6621), (214, 6678), (244, 6792), (257, 6846), (262, 6888), (265, 6903), (266, 6909),

Gene: DocB7_012 Start: 12251, Stop: 13480, Start Num: 8
Candidate Starts for DocB7_012:
(8, 12251), (12, 12296), (21, 12320), (24, 12332), (30, 12383), (115, 12764), (117, 12773), (122, 12794), (125, 12809), (154, 12965), (163, 13004), (164, 13016), (168, 13028), (169, 13031), (269, 13445), (273, 13463),

Gene: Dusty_34 Start: 14077, Stop: 15108, Start Num: 32
Candidate Starts for Dusty_34:
(Start: 32 @14077 has 146 MA's), (37, 14101), (84, 14311), (87, 14320), (121, 14464), (127, 14497), (129, 14503), (165, 14689), (191, 14761), (196, 14776), (211, 14833), (220, 14851), (242, 14935), (257, 14998), (271, 15085),

Gene: EMsquaredA_7 Start: 5706, Stop: 6746, Start Num: 32
Candidate Starts for EMsquaredA_7:
(Start: 32 @5706 has 146 MA's), (40, 5754), (44, 5766), (56, 5802), (93, 5976), (98, 6000), (144, 6210), (155, 6261), (163, 6300), (168, 6324), (196, 6399), (205, 6438), (206, 6441), (218, 6474), (223, 6501), (245, 6588), (254, 6630), (260, 6669), (267, 6705),

Gene: Eggsie_16 Start: 14515, Stop: 15714, Start Num: 10
Candidate Starts for Eggsie_16:
(Start: 10 @14515 has 78 MA's), (18, 14533), (30, 14599), (48, 14674), (79, 14848), (109, 14953), (123, 15013), (157, 15196), (190, 15316), (227, 15475), (235, 15502), (246, 15541), (252, 15562), (256, 15589), (261, 15628), (264, 15646), (269, 15667), (273, 15685), (274, 15691),

Gene: Ekhein_16 Start: 14501, Stop: 15700, Start Num: 10
Candidate Starts for Ekhein_16:
(Start: 10 @14501 has 78 MA's), (18, 14519), (30, 14585), (48, 14660), (79, 14834), (109, 14939), (123, 14999), (166, 15221), (229, 15470), (235, 15488), (246, 15527), (252, 15548), (256, 15575), (261, 15614), (264, 15632), (269, 15653), (273, 15671), (274, 15677),

Gene: Emianna_29 Start: 19095, Stop: 20165, Start Num: 32
Candidate Starts for Emianna_29:
(Start: 32 @19095 has 146 MA's), (38, 19131), (40, 19143), (42, 19149), (72, 19272), (80, 19329), (110, 19437), (143, 19590), (161, 19680), (173, 19728), (189, 19779), (212, 19860), (221, 19899), (229, 19947), (239, 19977), (260, 20088), (265, 20115), (273, 20151), (274, 20157),

Gene: EnalisNailo_7 Start: 5706, Stop: 6746, Start Num: 32
Candidate Starts for EnalisNailo_7:
(Start: 32 @5706 has 146 MA's), (40, 5754), (44, 5766), (56, 5802), (93, 5976), (98, 6000), (144, 6210), (155, 6261), (163, 6300), (168, 6324), (196, 6399), (205, 6438), (206, 6441), (218, 6474), (223, 6501), (245, 6588), (254, 6630), (260, 6669), (267, 6705),

Gene: Engineer_36 Start: 14272, Stop: 15300, Start Num: 32
Candidate Starts for Engineer_36:
(Start: 32 @14272 has 146 MA's), (37, 14296), (84, 14506), (87, 14515), (121, 14659), (127, 14692), (129, 14698), (165, 14884), (191, 14956), (196, 14971), (211, 15028), (220, 15046), (242, 15130), (257, 15193), (271, 15280),

Gene: Ennea_35 Start: 19712, Stop: 20773, Start Num: 32
Candidate Starts for Ennea_35:
(Start: 32 @19712 has 146 MA's), (72, 19889), (80, 19946), (110, 20054), (133, 20162), (181, 20360), (260, 20696), (265, 20723), (274, 20765),

Gene: EvePickles_8 Start: 5944, Stop: 6984, Start Num: 32
Candidate Starts for EvePickles_8:
(Start: 32 @5944 has 146 MA's), (82, 6172), (90, 6196), (107, 6268), (120, 6325), (136, 6430), (143, 6445), (153, 6502), (156, 6508), (162, 6541), (168, 6568), (173, 6586), (197, 6652), (248, 6838), (257, 6877), (265, 6934),

Gene: Exiguo_16 Start: 14513, Stop: 15712, Start Num: 10
Candidate Starts for Exiguo_16:
(Start: 10 @14513 has 78 MA's), (18, 14531), (30, 14597), (48, 14672), (59, 14723), (79, 14846), (109, 14951), (123, 15011), (166, 15233), (222, 15440), (229, 15482), (235, 15500), (246, 15539), (252, 15560), (256, 15587), (261, 15626), (264, 15644), (269, 15665), (273, 15683), (274, 15689),

Gene: Faja_8 Start: 5888, Stop: 6928, Start Num: 32
Candidate Starts for Faja_8:
(Start: 32 @5888 has 146 MA's), (82, 6116), (90, 6140), (120, 6269), (136, 6374), (143, 6389), (161, 6482), (164, 6500), (168, 6512), (173, 6530), (191, 6572), (197, 6596), (248, 6782), (257, 6821), (262, 6863), (265, 6878), (266, 6884),

Gene: FeliMaine_42 Start: 16248, Stop: 17318, Start Num: 29
Candidate Starts for FeliMaine_42:
(Start: 29 @16248 has 20 MA's), (Start: 32 @16257 has 146 MA's), (34, 16263), (81, 16494), (91, 16524), (105, 16575), (106, 16578), (115, 16617), (161, 16860), (191, 16950), (196, 16965), (206, 17007), (220, 17049), (224, 17073), (228, 17097), (232, 17106), (255, 17193), (266, 17262), (271, 17286),

Gene: FelixAlejandro_17 Start: 14699, Stop: 15898, Start Num: 10
Candidate Starts for FelixAlejandro_17:
(Start: 10 @14699 has 78 MA's), (18, 14717), (30, 14783), (48, 14858), (79, 15032), (101, 15107), (109, 15137), (123, 15197), (166, 15419), (190, 15500), (222, 15626), (229, 15668), (235, 15686), (246, 15725), (252, 15746), (256, 15773), (261, 15812), (264, 15830), (269, 15851), (273, 15869), (274, 15875),

Gene: Flakey_16 Start: 15374, Stop: 16573, Start Num: 10
Candidate Starts for Flakey_16:
(Start: 10 @15374 has 78 MA's), (18, 15392), (30, 15458), (48, 15533), (59, 15584), (79, 15707), (101, 15782), (109, 15812), (123, 15872), (166, 16094), (222, 16301), (229, 16343), (235, 16361), (246, 16400), (252, 16421), (256, 16448), (261, 16487), (264, 16505), (269, 16526), (273, 16544), (274, 16550),

Gene: Flapper_33 Start: 19496, Stop: 20557, Start Num: 32
Candidate Starts for Flapper_33:
(Start: 32 @19496 has 146 MA's), (42, 19550), (72, 19673), (80, 19730), (94, 19772), (133, 19946), (181, 20144), (260, 20480), (265, 20507), (266, 20513), (274, 20549),

Gene: Float294_31 Start: 19154, Stop: 20215, Start Num: 32
Candidate Starts for Float294_31:
(Start: 32 @19154 has 146 MA's), (72, 19331), (80, 19388), (110, 19496), (133, 19604), (181, 19802), (212, 19913), (260, 20138), (265, 20165), (274, 20207),

Gene: Floral_7 Start: 5706, Stop: 6746, Start Num: 32
Candidate Starts for Floral_7:
(Start: 32 @5706 has 146 MA's), (40, 5754), (44, 5766), (56, 5802), (93, 5976), (98, 6000), (144, 6210), (155, 6261), (163, 6300), (168, 6324), (196, 6399), (205, 6438), (206, 6441), (218, 6474), (223, 6501), (245, 6588), (254, 6630), (260, 6669), (267, 6705),

Gene: Foxboro_30 Start: 19601, Stop: 20671, Start Num: 32
Candidate Starts for Foxboro_30:
(Start: 32 @19601 has 146 MA's), (38, 19637), (40, 19649), (42, 19655), (72, 19778), (80, 19835), (110, 19943), (143, 20096), (161, 20186), (173, 20234), (189, 20285), (212, 20366), (221, 20405), (229, 20453), (239, 20483), (260, 20594), (265, 20621), (267, 20630), (273, 20657), (274, 20663),

Gene: Fury_38 Start: 18776, Stop: 19837, Start Num: 32
Candidate Starts for Fury_38:
(Start: 32 @18776 has 146 MA's), (38, 18812), (40, 18824), (72, 18953), (173, 19409), (206, 19514), (255, 19721), (260, 19760), (265, 19787), (274, 19829),

Gene: GAL1_9 Start: 6815, Stop: 7852, Start Num: 32
Candidate Starts for GAL1_9:
(Start: 32 @6815 has 146 MA's), (43, 6866), (77, 7010), (106, 7136), (115, 7175), (117, 7184), (120, 7196), (134, 7280), (163, 7415), (180, 7469), (214, 7577), (233, 7655), (237, 7667), (265, 7802), (272, 7835), (274, 7844),

Gene: GMA3_7 Start: 8860, Stop: 10044, Start Num: 16
Candidate Starts for GMA3_7:
(Start: 16 @8860 has 2 MA's), (27, 8935), (45, 9019), (51, 9040), (53, 9046), (76, 9160), (92, 9241), (123, 9367), (209, 9733), (246, 9883), (252, 9904), (269, 10009),

Gene: GMA7_9 Start: 8712, Stop: 9914, Start Num: 10
Candidate Starts for GMA7_9:
(3, 8598), (4, 8601), (Start: 10 @8712 has 78 MA's), (79, 9054), (101, 9129), (109, 9159), (120, 9204), (123, 9219), (199, 9555), (235, 9708), (246, 9747), (252, 9768), (261, 9834), (269, 9873), (273, 9891),

Gene: GRU1_19 Start: 11381, Stop: 12442, Start Num: 32
Candidate Starts for GRU1_19:
(Start: 32 @11381 has 146 MA's), (42, 11435), (72, 11558), (80, 11615), (94, 11657), (133, 11831), (181, 12029), (260, 12365), (265, 12392), (266, 12398), (274, 12434),

Gene: GTE5_20 Start: 12384, Stop: 13445, Start Num: 32
Candidate Starts for GTE5_20:
(Start: 32 @12384 has 146 MA's), (42, 12438), (72, 12561), (80, 12618), (94, 12660), (133, 12834), (181, 13032), (260, 13368), (265, 13395), (266, 13401), (274, 13437),

Gene: GTE7_9 Start: 8771, Stop: 9973, Start Num: 10
Candidate Starts for GTE7_9:
(3, 8657), (4, 8660), (Start: 10 @8771 has 78 MA's), (79, 9113), (101, 9188), (109, 9218), (120, 9263), (123, 9278), (199, 9614), (235, 9767), (246, 9806), (252, 9827), (261, 9893), (269, 9932), (273, 9950),

Gene: GTE8_18 Start: 12360, Stop: 13430, Start Num: 32
Candidate Starts for GTE8_18:
(Start: 32 @12360 has 146 MA's), (40, 12408), (72, 12537), (80, 12594), (110, 12702), (161, 12945), (173, 12993), (189, 13044), (212, 13125), (221, 13164), (229, 13212), (239, 13242), (260, 13353), (265, 13380), (273, 13416), (274, 13422),

Gene: Gagieri_33 Start: 19811, Stop: 20863, Start Num: 32
Candidate Starts for Gagieri_33:
(Start: 32 @19811 has 146 MA's), (58, 19928), (110, 20153), (133, 20261), (161, 20396), (260, 20786), (265, 20813), (271, 20843), (273, 20849), (274, 20855),

Gene: GalacticEye_13 Start: 15276, Stop: 16475, Start Num: 10
Candidate Starts for GalacticEye_13:
(Start: 10 @15276 has 78 MA's), (18, 15294), (30, 15360), (36, 15387), (79, 15609), (101, 15684), (123, 15774), (208, 16143), (222, 16203), (235, 16263), (246, 16302), (252, 16323), (256, 16350), (264, 16407), (269, 16428), (273, 16446),

Gene: Gallia_25 Start: 16350, Stop: 17435, Start Num: 30
Candidate Starts for Gallia_25:
(30, 16350), (44, 16416), (87, 16611), (125, 16758), (163, 16950), (173, 16992), (196, 17055), (220, 17163), (230, 17220), (265, 17385), (274, 17427),

Gene: Gattaca_39 Start: 15436, Stop: 16497, Start Num: 32
Candidate Starts for Gattaca_39:
(Start: 29 @15427 has 20 MA's), (Start: 32 @15436 has 146 MA's), (34, 15442), (81, 15673), (91, 15703), (105, 15754), (106, 15757), (115, 15796), (161, 16039), (191, 16129), (196, 16144), (206, 16186), (220, 16228), (224, 16252), (228, 16276), (232, 16285), (255, 16372), (266, 16441), (271, 16465),

Gene: Geeche_34 Start: 14146, Stop: 15174, Start Num: 32
Candidate Starts for Geeche_34:
(Start: 32 @14146 has 146 MA's), (37, 14170), (84, 14380), (87, 14389), (121, 14533), (127, 14566), (129, 14572), (165, 14758), (191, 14830), (196, 14845), (211, 14902), (220, 14920), (242, 15004),

(257, 15067), (271, 15154),

Gene: Gibbles_14 Start: 12646, Stop: 13941, Start Num: 6
Candidate Starts for Gibbles_14:
(5, 12622), (Start: 6 @12646 has 5 MA's), (7, 12682), (22, 12778), (23, 12790), (51, 12937), (73, 13042), (79, 13096), (85, 13114), (109, 13201), (146, 13396), (154, 13435), (187, 13552), (194, 13570), (204, 13606), (236, 13747), (238, 13750), (252, 13801), (269, 13906),

Gene: Globfish_8 Start: 5947, Stop: 6987, Start Num: 32
Candidate Starts for Globfish_8:
(Start: 32 @5947 has 146 MA's), (63, 6079), (82, 6175), (90, 6199), (107, 6271), (120, 6328), (143, 6448), (153, 6505), (156, 6511), (162, 6544), (164, 6559), (168, 6571), (173, 6589), (191, 6631), (197, 6655), (207, 6691), (244, 6826), (248, 6841), (255, 6874), (262, 6922), (265, 6937),

Gene: Gmala1_7 Start: 9110, Stop: 10300, Start Num: 16
Candidate Starts for Gmala1_7:
(Start: 16 @9110 has 2 MA's), (19, 9119), (20, 9125), (28, 9188), (45, 9269), (53, 9296), (69, 9383), (76, 9410), (89, 9479), (123, 9617), (161, 9824), (174, 9875), (252, 10157), (259, 10214), (266, 10250), (269, 10262),

Gene: GoongGoong_39 Start: 15467, Stop: 16537, Start Num: 29
Candidate Starts for GoongGoong_39:
(Start: 29 @15467 has 20 MA's), (Start: 32 @15476 has 146 MA's), (34, 15482), (81, 15713), (91, 15743), (105, 15794), (106, 15797), (115, 15836), (161, 16079), (191, 16169), (196, 16184), (206, 16226), (220, 16268), (224, 16292), (228, 16316), (232, 16325), (255, 16412), (266, 16481), (271, 16505),

Gene: GordDuk1_7 Start: 9050, Stop: 10240, Start Num: 16
Candidate Starts for GordDuk1_7:
(Start: 16 @9050 has 2 MA's), (19, 9059), (20, 9065), (28, 9128), (45, 9209), (53, 9236), (69, 9323), (76, 9350), (89, 9419), (123, 9557), (161, 9764), (174, 9815), (252, 10097), (259, 10154), (266, 10190), (269, 10202),

Gene: GordTnk2_7 Start: 9017, Stop: 10207, Start Num: 16
Candidate Starts for GordTnk2_7:
(Start: 16 @9017 has 2 MA's), (19, 9026), (20, 9032), (28, 9095), (45, 9176), (53, 9203), (69, 9290), (76, 9317), (89, 9386), (123, 9524), (161, 9731), (174, 9782), (252, 10064), (259, 10121), (266, 10157), (269, 10169),

Gene: Gorko_16 Start: 14505, Stop: 15704, Start Num: 10
Candidate Starts for Gorko_16:
(Start: 10 @14505 has 78 MA's), (18, 14523), (30, 14589), (48, 14664), (79, 14838), (109, 14943), (123, 15003), (166, 15225), (229, 15474), (235, 15492), (246, 15531), (252, 15552), (256, 15579), (261, 15618), (264, 15636), (269, 15657), (273, 15675), (274, 15681),

Gene: Gorpy_8 Start: 5896, Stop: 6936, Start Num: 32
Candidate Starts for Gorpy_8:
(Start: 32 @5896 has 146 MA's), (82, 6124), (90, 6148), (120, 6277), (136, 6382), (143, 6397), (161, 6490), (164, 6508), (168, 6520), (173, 6538), (191, 6580), (197, 6604), (248, 6790), (257, 6829), (262, 6871), (265, 6886),

Gene: GourdThymes_16 Start: 15373, Stop: 16572, Start Num: 10
Candidate Starts for GourdThymes_16:

(Start: 10 @15373 has 78 MA's), (18, 15391), (30, 15457), (48, 15532), (59, 15583), (79, 15706), (101, 15781), (109, 15811), (123, 15871), (166, 16093), (222, 16300), (229, 16342), (235, 16360), (246, 16399), (252, 16420), (256, 16447), (264, 16504), (269, 16525), (273, 16543), (274, 16549),

Gene: GrootJr_31 Start: 18451, Stop: 19521, Start Num: 32
Candidate Starts for GrootJr_31:
(Start: 32 @18451 has 146 MA's), (38, 18487), (40, 18499), (42, 18505), (72, 18628), (80, 18685), (110, 18793), (161, 19036), (173, 19084), (189, 19135), (212, 19216), (221, 19255), (229, 19303), (239, 19333), (260, 19444), (265, 19471), (273, 19507), (274, 19513),

Gene: Guillaume_13 Start: 15308, Stop: 16507, Start Num: 10
Candidate Starts for Guillaume_13:
(Start: 10 @15308 has 78 MA's), (18, 15326), (30, 15392), (36, 15419), (79, 15641), (101, 15716), (123, 15806), (208, 16175), (222, 16235), (235, 16295), (246, 16334), (252, 16355), (256, 16382), (264, 16439), (269, 16460), (273, 16478),

Gene: GumGum_8 Start: 5972, Stop: 7012, Start Num: 32
Candidate Starts for GumGum_8:
(Start: 32 @5972 has 146 MA's), (63, 6104), (82, 6200), (87, 6215), (90, 6224), (120, 6353), (136, 6458), (143, 6473), (161, 6566), (168, 6596), (173, 6614), (244, 6851), (248, 6866), (257, 6905), (262, 6947), (265, 6962),

Gene: Hail2Pitt_13 Start: 15785, Stop: 16984, Start Num: 10
Candidate Starts for Hail2Pitt_13:
(Start: 10 @15785 has 78 MA's), (18, 15803), (30, 15869), (36, 15896), (79, 16118), (101, 16193), (123, 16283), (208, 16652), (222, 16712), (235, 16772), (246, 16811), (252, 16832), (256, 16859), (264, 16916), (269, 16937), (273, 16955),

Gene: Harambe_13 Start: 15569, Stop: 16768, Start Num: 10
Candidate Starts for Harambe_13:
(Start: 10 @15569 has 78 MA's), (18, 15587), (30, 15653), (36, 15680), (79, 15902), (101, 15977), (123, 16067), (208, 16436), (222, 16496), (235, 16556), (246, 16595), (252, 16616), (256, 16643), (264, 16700), (269, 16721), (273, 16739),

Gene: HayZem_17 Start: 14523, Stop: 15725, Start Num: 10
Candidate Starts for HayZem_17:
(3, 14409), (4, 14412), (Start: 10 @14523 has 78 MA's), (79, 14865), (101, 14940), (109, 14970), (120, 15015), (123, 15030), (199, 15366), (235, 15519), (246, 15558), (252, 15579), (261, 15645), (269, 15684), (273, 15702),

Gene: Hello_13 Start: 15555, Stop: 16754, Start Num: 10
Candidate Starts for Hello_13:
(Start: 10 @15555 has 78 MA's), (18, 15573), (30, 15639), (36, 15666), (79, 15888), (101, 15963), (123, 16053), (208, 16422), (222, 16482), (235, 16542), (246, 16581), (252, 16602), (256, 16629), (264, 16686), (269, 16707), (273, 16725),

Gene: Hestia_8 Start: 6036, Stop: 7076, Start Num: 32
Candidate Starts for Hestia_8:
(Start: 32 @6036 has 146 MA's), (63, 6168), (82, 6264), (87, 6279), (90, 6288), (117, 6405), (120, 6417), (134, 6504), (136, 6522), (143, 6537), (156, 6600), (168, 6660), (173, 6678), (244, 6915), (248, 6930), (257, 6969), (262, 7011), (265, 7026),

Gene: Hillester_8 Start: 5887, Stop: 6927, Start Num: 32

Candidate Starts for Hillester_8:
(Start: 32 @5887 has 146 MA's), (82, 6115), (107, 6211), (120, 6268), (134, 6355), (136, 6373), (143, 6388), (161, 6481), (168, 6511), (173, 6529), (248, 6781), (257, 6820), (262, 6862), (265, 6877),

Gene: Hollow_16 Start: 16244, Stop: 17458, Start Num: 10
Candidate Starts for Hollow_16:
(Start: 10 @16244 has 78 MA's), (14, 16256), (30, 16340), (Start: 31 @16343 has 20 MA's), (48, 16415), (79, 16589), (83, 16601), (87, 16613), (96, 16649), (109, 16694), (120, 16739), (123, 16754), (154, 16928), (159, 16952), (166, 16985), (180, 17027), (222, 17198), (246, 17297), (247, 17300), (252, 17318), (269, 17423), (273, 17441), (274, 17447),

Gene: HomeFry_35 Start: 17448, Stop: 18509, Start Num: 32
Candidate Starts for HomeFry_35:
(Start: 32 @17448 has 146 MA's), (38, 17484), (40, 17496), (72, 17625), (110, 17790), (173, 18081), (206, 18186), (260, 18432), (265, 18459), (274, 18501),

Gene: Hotorobo_16 Start: 15384, Stop: 16583, Start Num: 10
Candidate Starts for Hotorobo_16:
(Start: 10 @15384 has 78 MA's), (18, 15402), (30, 15468), (48, 15543), (79, 15717), (109, 15822), (123, 15882), (166, 16104), (222, 16311), (229, 16353), (235, 16371), (246, 16410), (252, 16431), (256, 16458), (264, 16515), (269, 16536), (273, 16554), (274, 16560),

Gene: HubbaBubba_27 Start: 14952, Stop: 16019, Start Num: 32
Candidate Starts for HubbaBubba_27:
(Start: 32 @14952 has 146 MA's), (38, 14988), (42, 15006), (72, 15129), (80, 15186), (187, 15621), (189, 15636), (216, 15738), (229, 15804), (260, 15942), (265, 15969),

Gene: Huphlepuff_42 Start: 16052, Stop: 17122, Start Num: 29
Candidate Starts for Huphlepuff_42:
(Start: 29 @16052 has 20 MA's), (Start: 32 @16061 has 146 MA's), (34, 16067), (81, 16298), (91, 16328), (105, 16379), (106, 16382), (115, 16421), (161, 16664), (191, 16754), (196, 16769), (206, 16811), (220, 16853), (224, 16877), (228, 16901), (232, 16910), (255, 16997), (266, 17066), (271, 17090),

Gene: IDyn_30 Start: 16348, Stop: 17415, Start Num: 32
Candidate Starts for IDyn_30:
(Start: 32 @16348 has 146 MA's), (38, 16384), (42, 16402), (72, 16525), (80, 16582), (187, 17017), (189, 17032), (212, 17113), (216, 17134), (229, 17200), (260, 17338), (265, 17365),

Gene: Isolde_9 Start: 5959, Stop: 6999, Start Num: 32
Candidate Starts for Isolde_9:
(Start: 32 @5959 has 146 MA's), (82, 6187), (87, 6202), (90, 6211), (120, 6340), (162, 6556), (168, 6583), (173, 6601), (191, 6643), (244, 6838), (248, 6853), (257, 6892), (262, 6934), (265, 6949),

Gene: Jablanski_7 Start: 5553, Stop: 6593, Start Num: 32
Candidate Starts for Jablanski_7:
(Start: 32 @5553 has 146 MA's), (40, 5601), (44, 5613), (56, 5649), (93, 5823), (98, 5847), (144, 6057), (155, 6108), (163, 6147), (168, 6171), (196, 6246), (205, 6285), (206, 6288), (218, 6321), (223, 6348), (245, 6435), (254, 6477), (260, 6516),

Gene: JakeTheSnake_8 Start: 5927, Stop: 6967, Start Num: 32
Candidate Starts for JakeTheSnake_8:

(Start: 32 @5927 has 146 MA's), (63, 6059), (82, 6155), (90, 6179), (120, 6308), (136, 6413), (143, 6428), (168, 6551), (173, 6569), (191, 6611), (244, 6806), (248, 6821), (257, 6860), (262, 6902), (265, 6917),

Gene: Jams_13 Start: 14749, Stop: 15948, Start Num: 10
Candidate Starts for Jams_13:
(Start: 10 @14749 has 78 MA's), (18, 14767), (30, 14833), (36, 14860), (79, 15082), (101, 15157), (123, 15247), (208, 15616), (222, 15676), (235, 15736), (246, 15775), (252, 15796), (256, 15823), (264, 15880), (269, 15901), (273, 15919),

Gene: JellyBread_8 Start: 5895, Stop: 6935, Start Num: 32
Candidate Starts for JellyBread_8:
(Start: 32 @5895 has 146 MA's), (82, 6123), (90, 6147), (97, 6174), (107, 6219), (120, 6276), (136, 6381), (143, 6396), (152, 6447), (153, 6453), (156, 6459), (168, 6519), (173, 6537), (197, 6603), (220, 6681), (248, 6789), (257, 6828), (262, 6870), (265, 6885),

Gene: Jellybones_16 Start: 14536, Stop: 15735, Start Num: 10
Candidate Starts for Jellybones_16:
(Start: 10 @14536 has 78 MA's), (18, 14554), (30, 14620), (48, 14695), (79, 14869), (101, 14944), (109, 14974), (123, 15034), (166, 15256), (190, 15337), (222, 15463), (229, 15505), (235, 15523), (246, 15562), (252, 15583), (256, 15610), (261, 15649), (264, 15667), (269, 15688), (273, 15706), (274, 15712),

Gene: Jifall16_28 Start: 18731, Stop: 19801, Start Num: 32
Candidate Starts for Jifall16_28:
(Start: 32 @18731 has 146 MA's), (38, 18767), (40, 18779), (42, 18785), (72, 18908), (80, 18965), (110, 19073), (143, 19226), (161, 19316), (173, 19364), (189, 19415), (212, 19496), (221, 19535), (229, 19583), (239, 19613), (260, 19724), (265, 19751), (273, 19787), (274, 19793),

Gene: John316_16 Start: 14501, Stop: 15700, Start Num: 10
Candidate Starts for John316_16:
(Start: 10 @14501 has 78 MA's), (18, 14519), (30, 14585), (48, 14660), (79, 14834), (109, 14939), (123, 14999), (166, 15221), (222, 15428), (229, 15470), (235, 15488), (246, 15527), (252, 15548), (256, 15575), (264, 15632), (269, 15653), (273, 15671), (274, 15677),

Gene: JoieB_41 Start: 16271, Stop: 17341, Start Num: 29
Candidate Starts for JoieB_41:
(Start: 29 @16271 has 20 MA's), (Start: 32 @16280 has 146 MA's), (34, 16286), (81, 16517), (91, 16547), (105, 16598), (106, 16601), (115, 16640), (161, 16883), (191, 16973), (196, 16988), (206, 17030), (220, 17072), (224, 17096), (228, 17120), (232, 17129), (255, 17216), (266, 17285), (271, 17309),

Gene: JonJames_35 Start: 18496, Stop: 19545, Start Num: 32
Candidate Starts for JonJames_35:
(Start: 32 @18496 has 146 MA's), (36, 18517), (37, 18526), (53, 18583), (63, 18634), (67, 18649), (131, 18943), (161, 19093), (163, 19099), (183, 19159), (195, 19198), (242, 19360), (276, 19528),

Gene: Jormungandr_13 Start: 15290, Stop: 16489, Start Num: 10
Candidate Starts for Jormungandr_13:
(Start: 10 @15290 has 78 MA's), (18, 15308), (30, 15374), (36, 15401), (79, 15623), (101, 15698), (123, 15788), (208, 16157), (222, 16217), (235, 16277), (246, 16316), (252, 16337), (256, 16364), (264, 16421), (269, 16442), (273, 16460),

Gene: Jumbo_12 Start: 13987, Stop: 15156, Start Num: 16
Candidate Starts for Jumbo_12:
(Start: 16 @13987 has 2 MA's), (20, 14002), (21, 14008), (26, 14047), (28, 14065), (45, 14146), (48, 14152), (51, 14167), (69, 14260), (88, 14353), (89, 14356), (123, 14494), (130, 14539), (223, 14905), (231, 14947), (252, 15016), (266, 15109), (269, 15121), (270, 15127),

Gene: Kabloowy_8 Start: 5969, Stop: 7009, Start Num: 32
Candidate Starts for Kabloowy_8:
(Start: 32 @5969 has 146 MA's), (63, 6101), (82, 6197), (90, 6221), (120, 6350), (136, 6455), (168, 6593), (173, 6611), (191, 6653), (244, 6848), (248, 6863), (257, 6902), (262, 6944), (265, 6959),

Gene: Kabluna_32 Start: 17790, Stop: 18860, Start Num: 32
Candidate Starts for Kabluna_32:
(Start: 32 @17790 has 146 MA's), (38, 17826), (42, 17844), (72, 17967), (110, 18132), (148, 18318), (151, 18330), (164, 18393), (172, 18420), (185, 18450), (188, 18471), (189, 18474), (212, 18555), (216, 18576), (229, 18642), (239, 18672), (260, 18783), (265, 18810), (271, 18840), (274, 18852),

Gene: Kampe_15 Start: 12504, Stop: 13799, Start Num: 6
Candidate Starts for Kampe_15:
(5, 12480), (Start: 6 @12504 has 5 MA's), (7, 12540), (22, 12636), (23, 12648), (51, 12795), (73, 12900), (79, 12954), (85, 12972), (109, 13059), (146, 13254), (154, 13293), (187, 13410), (194, 13428), (204, 13464), (236, 13605), (238, 13608), (252, 13659), (269, 13764),

Gene: Kaseim_13 Start: 14741, Stop: 15940, Start Num: 10
Candidate Starts for Kaseim_13:
(Start: 10 @14741 has 78 MA's), (18, 14759), (30, 14825), (36, 14852), (79, 15074), (101, 15149), (123, 15239), (208, 15608), (222, 15668), (235, 15728), (246, 15767), (252, 15788), (256, 15815), (264, 15872), (269, 15893), (273, 15911),

Gene: Katyusha_16 Start: 17078, Stop: 18292, Start Num: 10
Candidate Starts for Katyusha_16:
(Start: 10 @17078 has 78 MA's), (30, 17174), (Start: 31 @17177 has 20 MA's), (48, 17249), (83, 17435), (87, 17447), (96, 17483), (109, 17528), (120, 17573), (123, 17588), (154, 17762), (159, 17786), (180, 17861), (222, 18032), (246, 18131), (247, 18134), (252, 18152), (269, 18257), (273, 18275), (274, 18281),

Gene: KellEzio_24 Start: 12884, Stop: 13966, Start Num: 32
Candidate Starts for KellEzio_24:
(Start: 32 @12884 has 146 MA's), (70, 13043), (71, 13046), (74, 13055), (75, 13058), (104, 13205), (120, 13271), (131, 13331), (137, 13379), (138, 13382), (176, 13550), (202, 13637), (214, 13679), (215, 13685), (222, 13715), (263, 13907), (267, 13922),

Gene: Kelzog_16 Start: 15385, Stop: 16584, Start Num: 10
Candidate Starts for Kelzog_16:
(Start: 10 @15385 has 78 MA's), (18, 15403), (30, 15469), (48, 15544), (59, 15595), (79, 15718), (109, 15823), (123, 15883), (166, 16105), (222, 16312), (229, 16354), (235, 16372), (246, 16411), (252, 16432), (256, 16459), (261, 16498), (264, 16516), (269, 16537), (273, 16555), (274, 16561),

Gene: KidneyBean_29 Start: 18843, Stop: 19913, Start Num: 32
Candidate Starts for KidneyBean_29:
(Start: 32 @18843 has 146 MA's), (38, 18879), (40, 18891), (42, 18897), (72, 19020), (80, 19077), (110, 19185), (143, 19338), (161, 19428), (173, 19476), (189, 19527), (212, 19608), (221, 19647), (229, 19695), (239, 19725), (260, 19836), (265, 19863), (273, 19899), (274, 19905),

Gene: Kimchi1738_17 Start: 12192, Stop: 13256, Start Num: 31
Candidate Starts for Kimchi1738_17:
(Start: 31 @12192 has 20 MA's), (68, 12360), (75, 12384), (85, 12447), (98, 12495), (162, 12789), (163, 12792), (196, 12888), (218, 12984), (228, 13041), (239, 13074), (265, 13206), (266, 13212), (267, 13215), (274, 13248),

Gene: Kitkat_25 Start: 13002, Stop: 14084, Start Num: 32
Candidate Starts for Kitkat_25:
(Start: 32 @13002 has 146 MA's), (70, 13161), (71, 13164), (74, 13173), (75, 13176), (104, 13323), (120, 13389), (131, 13449), (137, 13497), (138, 13500), (176, 13668), (202, 13755), (214, 13797), (215, 13803), (222, 13833), (263, 14025), (267, 14040),

Gene: Kurt_29 Start: 19110, Stop: 20180, Start Num: 32
Candidate Starts for Kurt_29:
(Start: 32 @19110 has 146 MA's), (38, 19146), (40, 19158), (42, 19164), (72, 19287), (80, 19344), (110, 19452), (143, 19605), (161, 19695), (173, 19743), (189, 19794), (212, 19875), (221, 19914), (229, 19962), (239, 19992), (260, 20103), (265, 20130), (273, 20166), (274, 20172),

Gene: Kuwabara_7 Start: 5225, Stop: 6259, Start Num: 31
Candidate Starts for Kuwabara_7:
(Start: 29 @5219 has 20 MA's), (Start: 31 @5225 has 20 MA's), (140, 5720), (152, 5774), (161, 5819), (162, 5822), (167, 5846), (168, 5849), (191, 5909), (195, 5921), (206, 5966), (223, 6014), (245, 6098), (261, 6185), (266, 6212), (271, 6236),

Gene: Kvothe_16 Start: 17015, Stop: 18229, Start Num: 10
Candidate Starts for Kvothe_16:
(Start: 10 @17015 has 78 MA's), (30, 17111), (Start: 31 @17114 has 20 MA's), (48, 17186), (83, 17372), (87, 17384), (96, 17420), (109, 17465), (120, 17510), (123, 17525), (137, 17618), (154, 17699), (159, 17723), (180, 17798), (222, 17969), (246, 18068), (247, 18071), (252, 18089), (269, 18194), (273, 18212), (274, 18218),

Gene: Lahirium_13 Start: 15806, Stop: 17005, Start Num: 10
Candidate Starts for Lahirium_13:
(Start: 10 @15806 has 78 MA's), (18, 15824), (30, 15890), (36, 15917), (79, 16139), (101, 16214), (123, 16304), (208, 16673), (222, 16733), (235, 16793), (246, 16832), (252, 16853), (256, 16880), (264, 16937), (269, 16958), (273, 16976),

Gene: Lasker_8 Start: 5895, Stop: 6935, Start Num: 32
Candidate Starts for Lasker_8:
(Start: 32 @5895 has 146 MA's), (82, 6123), (90, 6147), (107, 6219), (120, 6276), (136, 6381), (143, 6396), (152, 6447), (153, 6453), (156, 6459), (168, 6519), (173, 6537), (197, 6603), (220, 6681), (248, 6789), (257, 6828), (262, 6870), (265, 6885),

Gene: Lawnathon_8 Start: 5971, Stop: 7011, Start Num: 32
Candidate Starts for Lawnathon_8:
(Start: 32 @5971 has 146 MA's), (82, 6199), (90, 6223), (107, 6295), (120, 6352), (136, 6457), (168, 6595), (173, 6613), (191, 6655), (197, 6679), (244, 6850), (248, 6865), (257, 6904), (262, 6946), (265, 6961),

Gene: LeBruni_8 Start: 5942, Stop: 6982, Start Num: 32
Candidate Starts for LeBruni_8:

(Start: 32 @5942 has 146 MA's), (82, 6170), (90, 6194), (120, 6323), (134, 6410), (136, 6428), (168, 6566), (173, 6584), (191, 6626), (244, 6821), (248, 6836), (257, 6875), (262, 6917), (265, 6932),

Gene: Lidong_13 Start: 15555, Stop: 16754, Start Num: 10
Candidate Starts for Lidong_13:
(Start: 10 @15555 has 78 MA's), (18, 15573), (30, 15639), (36, 15666), (79, 15888), (101, 15963), (123, 16053), (208, 16422), (222, 16482), (235, 16542), (246, 16581), (252, 16602), (256, 16629), (264, 16686), (269, 16707), (273, 16725),

Gene: LilSpotty_7 Start: 4918, Stop: 5958, Start Num: 29
Candidate Starts for LilSpotty_7:
(Start: 29 @4918 has 20 MA's), (Start: 31 @4924 has 20 MA's), (60, 5050), (61, 5053), (84, 5167), (114, 5278), (115, 5281), (121, 5308), (133, 5374), (162, 5521), (163, 5524), (164, 5536), (167, 5545), (171, 5557), (182, 5578), (186, 5587), (191, 5608), (205, 5662), (206, 5665), (223, 5713), (225, 5722), (240, 5776), (256, 5845), (261, 5884), (265, 5905), (271, 5935), (274, 5947),

Gene: Lilas_7 Start: 5706, Stop: 6746, Start Num: 32
Candidate Starts for Lilas_7:
(Start: 32 @5706 has 146 MA's), (40, 5754), (44, 5766), (56, 5802), (93, 5976), (98, 6000), (144, 6210), (155, 6261), (163, 6300), (168, 6324), (196, 6399), (205, 6438), (206, 6441), (218, 6474), (223, 6501), (245, 6588), (254, 6630), (260, 6669), (267, 6705),

Gene: Lilbit_39 Start: 16248, Stop: 17318, Start Num: 29
Candidate Starts for Lilbit_39:
(Start: 29 @16248 has 20 MA's), (Start: 32 @16257 has 146 MA's), (34, 16263), (81, 16494), (91, 16524), (105, 16575), (106, 16578), (115, 16617), (161, 16860), (191, 16950), (196, 16965), (206, 17007), (220, 17049), (224, 17073), (228, 17097), (232, 17106), (255, 17193), (266, 17262), (271, 17286),

Gene: Linetti_17 Start: 15518, Stop: 16717, Start Num: 10
Candidate Starts for Linetti_17:
(Start: 10 @15518 has 78 MA's), (18, 15536), (30, 15602), (48, 15677), (79, 15851), (101, 15926), (109, 15956), (123, 16016), (157, 16199), (166, 16238), (229, 16487), (235, 16505), (246, 16544), (252, 16565), (256, 16592), (261, 16631), (264, 16649), (269, 16670), (273, 16688), (274, 16694),

Gene: LittleLaf_40 Start: 15977, Stop: 17047, Start Num: 29
Candidate Starts for LittleLaf_40:
(Start: 29 @15977 has 20 MA's), (Start: 32 @15986 has 146 MA's), (34, 15992), (81, 16223), (91, 16253), (105, 16304), (106, 16307), (115, 16346), (161, 16589), (191, 16679), (196, 16694), (206, 16736), (220, 16778), (224, 16802), (228, 16826), (232, 16835), (255, 16922), (266, 16991), (271, 17015),

Gene: Lizzo_16 Start: 15373, Stop: 16572, Start Num: 10
Candidate Starts for Lizzo_16:
(Start: 10 @15373 has 78 MA's), (18, 15391), (30, 15457), (48, 15532), (59, 15583), (79, 15706), (101, 15781), (109, 15811), (123, 15871), (166, 16093), (222, 16300), (229, 16342), (235, 16360), (246, 16399), (252, 16420), (256, 16447), (261, 16486), (264, 16504), (269, 16525), (273, 16543), (274, 16549),

Gene: Lollipop1437_34 Start: 19700, Stop: 20761, Start Num: 32
Candidate Starts for Lollipop1437_34:
(Start: 32 @19700 has 146 MA's), (72, 19877), (80, 19934), (110, 20042), (133, 20150), (181, 20348), (260, 20684), (265, 20711), (274, 20753),

Gene: LonelyBoi_7 Start: 5553, Stop: 6593, Start Num: 32
Candidate Starts for LonelyBoi_7:
(Start: 32 @5553 has 146 MA's), (40, 5601), (44, 5613), (56, 5649), (93, 5823), (98, 5847), (144, 6057), (155, 6108), (163, 6147), (168, 6171), (205, 6285), (206, 6288), (218, 6321), (223, 6348), (245, 6435), (254, 6477), (260, 6516),

Gene: Lozinak_35 Start: 14327, Stop: 15355, Start Num: 32
Candidate Starts for Lozinak_35:
(Start: 32 @14327 has 146 MA's), (37, 14351), (84, 14561), (87, 14570), (121, 14714), (127, 14747), (129, 14753), (165, 14939), (191, 15011), (196, 15026), (211, 15083), (220, 15101), (242, 15185), (257, 15248), (271, 15335),

Gene: Luker_13 Start: 15270, Stop: 16469, Start Num: 10
Candidate Starts for Luker_13:
(Start: 10 @15270 has 78 MA's), (18, 15288), (30, 15354), (36, 15381), (79, 15603), (101, 15678), (123, 15768), (208, 16137), (222, 16197), (235, 16257), (246, 16296), (252, 16317), (256, 16344), (264, 16401), (269, 16422), (273, 16440),

Gene: LunaStella_7 Start: 5476, Stop: 6522, Start Num: 31
Candidate Starts for LunaStella_7:
(Start: 29 @5470 has 20 MA's), (Start: 31 @5476 has 20 MA's), (60, 5605), (61, 5608), (81, 5713), (89, 5737), (107, 5800), (114, 5833), (118, 5848), (127, 5896), (131, 5917), (133, 5929), (135, 5959), (152, 6022), (162, 6070), (181, 6124), (191, 6157), (192, 6163), (195, 6169), (196, 6172), (197, 6181), (223, 6262), (252, 6370), (258, 6400), (271, 6484), (272, 6487),

Gene: MUWow_7 Start: 5974, Stop: 7014, Start Num: 32
Candidate Starts for MUWow_7:
(Start: 32 @5974 has 146 MA's), (82, 6202), (90, 6226), (107, 6298), (120, 6355), (136, 6460), (143, 6475), (152, 6526), (153, 6532), (156, 6538), (168, 6598), (173, 6616), (197, 6682), (220, 6760), (248, 6868), (257, 6907), (262, 6949), (265, 6964),

Gene: MacGully_37 Start: 19988, Stop: 21046, Start Num: 32
Candidate Starts for MacGully_37:
(Start: 32 @19988 has 146 MA's), (36, 20009), (58, 20105), (80, 20222), (94, 20264), (98, 20285), (110, 20330), (133, 20438), (152, 20531), (161, 20573), (177, 20630), (196, 20681), (212, 20744), (260, 20969), (265, 20996), (274, 21038),

Gene: Mapleville_7 Start: 6041, Stop: 7081, Start Num: 32
Candidate Starts for Mapleville_7:
(Start: 32 @6041 has 146 MA's), (82, 6269), (90, 6293), (107, 6365), (120, 6422), (136, 6527), (168, 6665), (173, 6683), (191, 6725), (197, 6749), (244, 6920), (248, 6935), (257, 6974), (262, 7016), (265, 7031),

Gene: Marietta_31 Start: 16268, Stop: 17335, Start Num: 32
Candidate Starts for Marietta_31:
(Start: 32 @16268 has 146 MA's), (38, 16304), (42, 16322), (72, 16445), (80, 16502), (187, 16937), (189, 16952), (216, 17054), (229, 17120), (260, 17258), (265, 17285),

Gene: Marteena_7 Start: 5706, Stop: 6746, Start Num: 32
Candidate Starts for Marteena_7:
(Start: 32 @5706 has 146 MA's), (40, 5754), (44, 5766), (56, 5802), (93, 5976), (98, 6000), (144, 6210), (155, 6261), (163, 6300), (168, 6324), (196, 6399), (205, 6438), (206, 6441), (218, 6474), (223, 6501),

(245, 6588), (254, 6630), (260, 6669), (267, 6705),

Gene: Marvin_38 Start: 16247, Stop: 17317, Start Num: 29
Candidate Starts for Marvin_38:
(Start: 29 @16247 has 20 MA's), (Start: 32 @16256 has 146 MA's), (34, 16262), (81, 16493), (91, 16523), (105, 16574), (106, 16577), (115, 16616), (161, 16859), (191, 16949), (196, 16964), (206, 17006), (220, 17048), (224, 17072), (228, 17096), (232, 17105), (255, 17192), (266, 17261), (271, 17285),

Gene: Maselop_33 Start: 20040, Stop: 21092, Start Num: 32
Candidate Starts for Maselop_33:
(Start: 32 @20040 has 146 MA's), (58, 20157), (80, 20274), (98, 20337), (110, 20382), (133, 20490), (137, 20526), (161, 20625), (177, 20682), (196, 20733), (217, 20820), (260, 21015), (265, 21042), (266, 21048), (274, 21084),

Gene: MaterMagnus_8 Start: 5888, Stop: 6928, Start Num: 32
Candidate Starts for MaterMagnus_8:
(Start: 32 @5888 has 146 MA's), (82, 6116), (90, 6140), (120, 6269), (136, 6374), (143, 6389), (161, 6482), (164, 6500), (168, 6512), (173, 6530), (191, 6572), (197, 6596), (248, 6782), (257, 6821), (262, 6863), (265, 6878),

Gene: Mbo2_12 Start: 8600, Stop: 9808, Start Num: 11
Candidate Starts for Mbo2_12:
(1, 8450), (2, 8480), (11, 8600), (26, 8681), (28, 8699), (34, 8723), (48, 8786), (51, 8801), (52, 8804), (55, 8813), (56, 8816), (85, 8978), (86, 8981), (122, 9119), (130, 9170), (133, 9182), (138, 9221), (154, 9290), (164, 9341), (193, 9428), (212, 9509), (266, 9758), (269, 9770), (277, 9800),

Gene: MerCougar_30 Start: 18996, Stop: 20063, Start Num: 32
Candidate Starts for MerCougar_30:
(Start: 32 @18996 has 146 MA's), (38, 19032), (42, 19050), (72, 19173), (110, 19338), (151, 19536), (164, 19599), (173, 19629), (187, 19665), (189, 19680), (212, 19761), (229, 19848), (239, 19878), (260, 19986), (265, 20013), (271, 20043), (273, 20049), (274, 20055),

Gene: MidnightRain_8 Start: 5887, Stop: 6927, Start Num: 32
Candidate Starts for MidnightRain_8:
(Start: 32 @5887 has 146 MA's), (82, 6115), (107, 6211), (120, 6268), (134, 6355), (136, 6373), (143, 6388), (161, 6481), (168, 6511), (173, 6529), (248, 6781), (257, 6820), (262, 6862), (265, 6877),

Gene: Minos_13 Start: 15276, Stop: 16475, Start Num: 10
Candidate Starts for Minos_13:
(Start: 10 @15276 has 78 MA's), (18, 15294), (30, 15360), (36, 15387), (79, 15609), (101, 15684), (123, 15774), (208, 16143), (222, 16203), (235, 16263), (246, 16302), (252, 16323), (256, 16350), (264, 16407), (269, 16428), (273, 16446),

Gene: Miskis_33 Start: 14102, Stop: 15130, Start Num: 32
Candidate Starts for Miskis_33:
(Start: 32 @14102 has 146 MA's), (37, 14126), (84, 14336), (87, 14345), (121, 14489), (127, 14522), (129, 14528), (165, 14714), (191, 14786), (196, 14801), (211, 14858), (220, 14876), (242, 14960), (257, 15023), (271, 15110),

Gene: Mollymur_18 Start: 12528, Stop: 13580, Start Num: 32
Candidate Starts for Mollymur_18:

(Start: 32 @12528 has 146 MA's), (43, 12582), (66, 12675), (87, 12774), (100, 12825), (127, 12951), (132, 12984), (137, 13020), (141, 13029), (145, 13044), (152, 13083), (161, 13125), (195, 13230), (196, 13233), (201, 13257), (213, 13293), (214, 13299), (226, 13356), (234, 13380), (248, 13428), (251, 13440), (257, 13467),

Gene: Monty_15 Start: 14517, Stop: 15716, Start Num: 10
Candidate Starts for Monty_15:
(Start: 10 @14517 has 78 MA's), (18, 14535), (30, 14601), (48, 14676), (59, 14727), (79, 14850), (101, 14925), (109, 14955), (123, 15015), (166, 15237), (229, 15486), (235, 15504), (246, 15543), (252, 15564), (256, 15591), (261, 15630), (264, 15648), (269, 15669), (273, 15687), (274, 15693),

Gene: MortyNRick_7 Start: 5225, Stop: 6259, Start Num: 31
Candidate Starts for MortyNRick_7:
(Start: 31 @5225 has 20 MA's), (140, 5720), (152, 5774), (157, 5804), (161, 5819), (162, 5822), (167, 5846), (168, 5849), (191, 5909), (195, 5921), (206, 5966), (223, 6014), (261, 6185), (266, 6212), (271, 6236),

Gene: MosMoris_38 Start: 15427, Stop: 16497, Start Num: 29
Candidate Starts for MosMoris_38:
(Start: 29 @15427 has 20 MA's), (Start: 32 @15436 has 146 MA's), (34, 15442), (81, 15673), (91, 15703), (105, 15754), (106, 15757), (115, 15796), (161, 16039), (191, 16129), (196, 16144), (206, 16186), (220, 16228), (224, 16252), (228, 16276), (232, 16285), (255, 16372), (266, 16441), (271, 16465),

Gene: MrWormie_13 Start: 14440, Stop: 15639, Start Num: 10
Candidate Starts for MrWormie_13:
(Start: 10 @14440 has 78 MA's), (18, 14458), (30, 14524), (36, 14551), (79, 14773), (101, 14848), (123, 14938), (208, 15307), (222, 15367), (235, 15427), (246, 15466), (252, 15487), (256, 15514), (264, 15571), (269, 15592), (273, 15610),

Gene: Msay19_17 Start: 14691, Stop: 15890, Start Num: 10
Candidate Starts for Msay19_17:
(Start: 10 @14691 has 78 MA's), (18, 14709), (30, 14775), (48, 14850), (79, 15024), (101, 15099), (109, 15129), (123, 15189), (166, 15411), (190, 15492), (222, 15618), (229, 15660), (235, 15678), (246, 15717), (252, 15738), (256, 15765), (261, 15804), (264, 15822), (269, 15843), (273, 15861), (274, 15867),

Gene: MurphyJoseph_8 Start: 5898, Stop: 6938, Start Num: 32
Candidate Starts for MurphyJoseph_8:
(Start: 32 @5898 has 146 MA's), (82, 6126), (90, 6150), (120, 6279), (136, 6384), (162, 6495), (168, 6522), (173, 6540), (207, 6642), (244, 6777), (248, 6792), (257, 6831), (262, 6873), (265, 6888),

Gene: NadineRae_29 Start: 15514, Stop: 16581, Start Num: 32
Candidate Starts for NadineRae_29:
(Start: 32 @15514 has 146 MA's), (38, 15550), (42, 15568), (72, 15691), (80, 15748), (187, 16183), (189, 16198), (216, 16300), (220, 16315), (229, 16366), (260, 16504), (265, 16531),

Gene: NatB6_29 Start: 18119, Stop: 19189, Start Num: 32
Candidate Starts for NatB6_29:
(Start: 32 @18119 has 146 MA's), (38, 18155), (40, 18167), (42, 18173), (72, 18296), (80, 18353), (110, 18461), (143, 18614), (161, 18704), (173, 18752), (189, 18803), (212, 18884), (221, 18923), (229, 18971), (239, 19001), (260, 19112), (265, 19139), (273, 19175), (274, 19181),

Gene: Neoevie_13 Start: 15546, Stop: 16745, Start Num: 10
Candidate Starts for Neoevie_13:
(Start: 10 @15546 has 78 MA's), (18, 15564), (30, 15630), (36, 15657), (79, 15879), (101, 15954), (123, 16044), (208, 16413), (222, 16473), (235, 16533), (246, 16572), (252, 16593), (256, 16620), (264, 16677), (269, 16698), (273, 16716),

Gene: NewKitty_9 Start: 6117, Stop: 7157, Start Num: 32
Candidate Starts for NewKitty_9:
(Start: 32 @6117 has 146 MA's), (82, 6345), (90, 6369), (107, 6441), (120, 6498), (136, 6603), (143, 6618), (152, 6669), (153, 6675), (156, 6681), (168, 6741), (173, 6759), (197, 6825), (220, 6903), (248, 7011), (257, 7050), (262, 7092), (265, 7107),

Gene: Newt_13 Start: 15287, Stop: 16486, Start Num: 10
Candidate Starts for Newt_13:
(Start: 10 @15287 has 78 MA's), (18, 15305), (30, 15371), (36, 15398), (79, 15620), (101, 15695), (123, 15785), (208, 16154), (222, 16214), (235, 16274), (246, 16313), (252, 16334), (256, 16361), (264, 16418), (269, 16439), (273, 16457),

Gene: Niagara_16 Start: 17035, Stop: 18249, Start Num: 10
Candidate Starts for Niagara_16:
(Start: 10 @17035 has 78 MA's), (30, 17131), (Start: 31 @17134 has 20 MA's), (48, 17206), (83, 17392), (87, 17404), (109, 17485), (120, 17530), (123, 17545), (154, 17719), (159, 17743), (180, 17818), (222, 17989), (246, 18088), (247, 18091), (252, 18109), (269, 18214), (273, 18232), (274, 18238),

Gene: Nimi13_13 Start: 15288, Stop: 16487, Start Num: 10
Candidate Starts for Nimi13_13:
(Start: 10 @15288 has 78 MA's), (18, 15306), (30, 15372), (36, 15399), (79, 15621), (101, 15696), (123, 15786), (208, 16155), (222, 16215), (235, 16275), (246, 16314), (252, 16335), (256, 16362), (264, 16419), (269, 16440), (273, 16458),

Gene: Norvs_36 Start: 14329, Stop: 15357, Start Num: 32
Candidate Starts for Norvs_36:
(Start: 32 @14329 has 146 MA's), (37, 14353), (84, 14563), (87, 14572), (121, 14716), (127, 14749), (129, 14755), (165, 14941), (191, 15013), (196, 15028), (211, 15085), (220, 15103), (242, 15187), (257, 15250), (271, 15337),

Gene: NosilaM_32 Start: 18687, Stop: 19757, Start Num: 32
Candidate Starts for NosilaM_32:
(Start: 32 @18687 has 146 MA's), (38, 18723), (42, 18741), (72, 18864), (110, 19029), (148, 19215), (151, 19227), (164, 19290), (172, 19317), (185, 19347), (188, 19368), (189, 19371), (212, 19452), (216, 19473), (229, 19539), (239, 19569), (260, 19680), (265, 19707), (271, 19737), (274, 19749),

Gene: NovumRegina_29 Start: 18450, Stop: 19520, Start Num: 32
Candidate Starts for NovumRegina_29:
(Start: 32 @18450 has 146 MA's), (38, 18486), (40, 18498), (42, 18504), (72, 18627), (80, 18684), (110, 18792), (161, 19035), (173, 19083), (189, 19134), (212, 19215), (221, 19254), (229, 19302), (239, 19332), (260, 19443), (265, 19470), (273, 19506), (274, 19512),

Gene: Nyilah_7 Start: 5971, Stop: 7011, Start Num: 32
Candidate Starts for Nyilah_7:
(Start: 32 @5971 has 146 MA's), (82, 6199), (90, 6223), (120, 6352), (136, 6457), (153, 6529), (161, 6565), (168, 6595), (173, 6613), (191, 6655), (197, 6679), (198, 6682), (205, 6709), (248, 6865), (257,

6904), (262, 6946), (265, 6961),

Gene: OneUp_29 Start: 12114, Stop: 13157, Start Num: 32
Candidate Starts for OneUp_29:
(Start: 32 @12114 has 146 MA's), (84, 12348), (87, 12357), (121, 12501), (127, 12534), (161, 12705), (165, 12726), (191, 12798), (205, 12852), (220, 12888), (249, 13002), (255, 13029), (258, 13038),

Gene: Orchid_15 Start: 12504, Stop: 13799, Start Num: 6
Candidate Starts for Orchid_15:
(5, 12480), (Start: 6 @12504 has 5 MA's), (7, 12540), (22, 12636), (23, 12648), (51, 12795), (73, 12900), (79, 12954), (85, 12972), (109, 13059), (146, 13254), (154, 13293), (187, 13410), (194, 13428), (204, 13464), (236, 13605), (238, 13608), (252, 13659), (269, 13764),

Gene: Outis_30 Start: 18690, Stop: 19757, Start Num: 32
Candidate Starts for Outis_30:
(Start: 32 @18690 has 146 MA's), (38, 18726), (42, 18744), (72, 18867), (110, 19032), (151, 19230), (164, 19293), (172, 19320), (173, 19323), (187, 19359), (189, 19374), (212, 19455), (229, 19542), (239, 19572), (260, 19680), (265, 19707), (271, 19737), (273, 19743), (274, 19749),

Gene: P1201_32 Start: 19535, Stop: 20620, Start Num: 30
Candidate Starts for P1201_32:
(30, 19535), (44, 19601), (125, 19943), (163, 20135), (173, 20177), (220, 20348), (230, 20405), (265, 20570), (274, 20612),

Gene: Patio_32 Start: 18936, Stop: 19997, Start Num: 32
Candidate Starts for Patio_32:
(Start: 32 @18936 has 146 MA's), (72, 19113), (80, 19170), (110, 19278), (133, 19386), (181, 19584), (260, 19920), (265, 19947), (274, 19989),

Gene: PatrickStar_15 Start: 12504, Stop: 13799, Start Num: 6
Candidate Starts for PatrickStar_15:
(5, 12480), (Start: 6 @12504 has 5 MA's), (7, 12540), (22, 12636), (23, 12648), (51, 12795), (73, 12900), (79, 12954), (85, 12972), (109, 13059), (146, 13254), (154, 13293), (187, 13410), (194, 13428), (204, 13464), (236, 13605), (238, 13608), (252, 13659), (269, 13764),

Gene: Pemberton_32 Start: 16251, Stop: 17318, Start Num: 32
Candidate Starts for Pemberton_32:
(Start: 32 @16251 has 146 MA's), (38, 16287), (42, 16305), (72, 16428), (80, 16485), (187, 16920), (189, 16935), (212, 17016), (216, 17037), (229, 17103), (260, 17241), (265, 17268),

Gene: Persistence_7 Start: 5995, Stop: 7035, Start Num: 32
Candidate Starts for Persistence_7:
(Start: 32 @5995 has 146 MA's), (63, 6127), (82, 6223), (90, 6247), (120, 6376), (136, 6481), (143, 6496), (168, 6619), (173, 6637), (191, 6679), (237, 6850), (244, 6874), (248, 6889), (257, 6928), (262, 6970), (265, 6985),

Gene: PeteyPab_16 Start: 12559, Stop: 13623, Start Num: 31
Candidate Starts for PeteyPab_16:
(Start: 31 @12559 has 20 MA's), (68, 12727), (75, 12751), (85, 12814), (98, 12862), (162, 13156), (163, 13159), (172, 13198), (196, 13255), (218, 13351), (228, 13408), (239, 13441), (265, 13573), (267, 13582), (274, 13615),

Gene: Philon9_17 Start: 18916, Stop: 20130, Start Num: 10

Candidate Starts for Philon9_17:
(4, 18805), (Start: 10 @18916 has 78 MA's), (12, 18922), (30, 19012), (48, 19087), (79, 19261), (83, 19273), (123, 19426), (133, 19483), (154, 19600), (159, 19624), (180, 19699), (193, 19750), (222, 19870), (246, 19969), (247, 19972), (252, 19990), (269, 20095), (273, 20113),

Gene: PhinkBoden_35 Start: 14710, Stop: 15738, Start Num: 32
Candidate Starts for PhinkBoden_35:
(Start: 32 @14710 has 146 MA's), (37, 14734), (84, 14944), (87, 14953), (121, 15097), (127, 15130), (129, 15136), (165, 15322), (191, 15394), (196, 15409), (211, 15466), (220, 15484), (242, 15568), (257, 15631), (271, 15718),

Gene: Phomeo_28 Start: 18745, Stop: 19815, Start Num: 32
Candidate Starts for Phomeo_28:
(Start: 32 @18745 has 146 MA's), (38, 18781), (40, 18793), (42, 18799), (72, 18922), (80, 18979), (110, 19087), (143, 19240), (161, 19330), (173, 19378), (189, 19429), (212, 19510), (221, 19549), (229, 19597), (239, 19627), (260, 19738), (265, 19765), (273, 19801), (274, 19807),

Gene: Phrank15_7 Start: 6041, Stop: 7081, Start Num: 32
Candidate Starts for Phrank15_7:
(Start: 32 @6041 has 146 MA's), (63, 6173), (82, 6269), (87, 6284), (90, 6293), (117, 6410), (120, 6422), (136, 6527), (143, 6542), (156, 6605), (168, 6665), (173, 6683), (191, 6725), (196, 6740), (244, 6920), (262, 7016), (265, 7031),

Gene: PierreThree_16 Start: 15369, Stop: 16568, Start Num: 10
Candidate Starts for PierreThree_16:
(Start: 10 @15369 has 78 MA's), (18, 15387), (30, 15453), (48, 15528), (79, 15702), (101, 15777), (109, 15807), (123, 15867), (157, 16050), (166, 16089), (229, 16338), (235, 16356), (246, 16395), (252, 16416), (256, 16443), (261, 16482), (264, 16500), (269, 16521), (273, 16539), (274, 16545),

Gene: Pleakley_38 Start: 18777, Stop: 19838, Start Num: 32
Candidate Starts for Pleakley_38:
(Start: 32 @18777 has 146 MA's), (38, 18813), (40, 18825), (72, 18954), (173, 19410), (206, 19515), (255, 19722), (260, 19761), (265, 19788), (274, 19830),

Gene: Poise_40 Start: 15565, Stop: 16635, Start Num: 29
Candidate Starts for Poise_40:
(Start: 29 @15565 has 20 MA's), (Start: 32 @15574 has 146 MA's), (34, 15580), (81, 15811), (91, 15841), (105, 15892), (106, 15895), (115, 15934), (161, 16177), (191, 16267), (196, 16282), (206, 16324), (220, 16366), (224, 16390), (228, 16414), (232, 16423), (255, 16510), (266, 16579), (271, 16603),

Gene: PokyPuppy_15 Start: 15254, Stop: 16453, Start Num: 10
Candidate Starts for PokyPuppy_15:
(Start: 10 @15254 has 78 MA's), (18, 15272), (30, 15338), (79, 15587), (109, 15692), (123, 15752), (166, 15974), (222, 16181), (229, 16223), (235, 16241), (246, 16280), (252, 16301), (256, 16328), (261, 16367), (264, 16385), (269, 16406), (273, 16424), (274, 16430),

Gene: Poland_17 Start: 14667, Stop: 15866, Start Num: 10
Candidate Starts for Poland_17:
(Start: 10 @14667 has 78 MA's), (18, 14685), (30, 14751), (48, 14826), (79, 15000), (101, 15075), (109, 15105), (123, 15165), (166, 15387), (190, 15468), (222, 15594), (229, 15636), (235, 15654), (246, 15693), (252, 15714), (256, 15741), (261, 15780), (264, 15798), (269, 15819), (273, 15837), (274, 15843),

Gene: Pollux_7 Start: 5706, Stop: 6746, Start Num: 32
Candidate Starts for Pollux_7:
(Start: 32 @5706 has 146 MA's), (40, 5754), (44, 5766), (56, 5802), (93, 5976), (98, 6000), (144, 6210), (155, 6261), (163, 6300), (168, 6324), (196, 6399), (205, 6438), (206, 6441), (218, 6474), (223, 6501), (245, 6588), (254, 6630), (260, 6669), (267, 6705),

Gene: Polyyuki_33 Start: 20032, Stop: 21084, Start Num: 32
Candidate Starts for Polyyuki_33:
(Start: 32 @20032 has 146 MA's), (58, 20149), (80, 20266), (98, 20329), (110, 20374), (133, 20482), (137, 20518), (161, 20617), (177, 20674), (196, 20725), (217, 20812), (260, 21007), (265, 21034), (266, 21040), (274, 21076),

Gene: Posh_7 Start: 5700, Stop: 6740, Start Num: 32
Candidate Starts for Posh_7:
(Start: 32 @5700 has 146 MA's), (40, 5748), (44, 5760), (56, 5796), (93, 5970), (98, 5994), (124, 6099), (144, 6204), (155, 6255), (163, 6294), (168, 6318), (205, 6432), (206, 6435), (218, 6468), (223, 6495), (245, 6582), (254, 6624), (260, 6663),

Gene: PotatoChip_17 Start: 12561, Stop: 13625, Start Num: 31
Candidate Starts for PotatoChip_17:
(Start: 31 @12561 has 20 MA's), (68, 12729), (75, 12753), (85, 12816), (98, 12864), (162, 13158), (163, 13161), (172, 13200), (196, 13257), (218, 13353), (228, 13410), (239, 13443), (265, 13575), (267, 13584), (274, 13617),

Gene: Pringar_40 Start: 15877, Stop: 16947, Start Num: 29
Candidate Starts for Pringar_40:
(Start: 29 @15877 has 20 MA's), (Start: 32 @15886 has 146 MA's), (34, 15892), (81, 16123), (91, 16153), (105, 16204), (106, 16207), (115, 16246), (161, 16489), (191, 16579), (196, 16594), (206, 16636), (220, 16678), (224, 16702), (228, 16726), (232, 16735), (255, 16822), (266, 16891), (271, 16915),

Gene: Pytheas_7 Start: 5553, Stop: 6593, Start Num: 32
Candidate Starts for Pytheas_7:
(Start: 32 @5553 has 146 MA's), (40, 5601), (44, 5613), (56, 5649), (93, 5823), (98, 5847), (144, 6057), (155, 6108), (163, 6147), (168, 6171), (196, 6246), (205, 6285), (206, 6288), (218, 6321), (223, 6348), (245, 6435), (254, 6477), (260, 6516),

Gene: RadFad_8 Start: 5887, Stop: 6927, Start Num: 32
Candidate Starts for RadFad_8:
(Start: 32 @5887 has 146 MA's), (82, 6115), (107, 6211), (120, 6268), (134, 6355), (136, 6373), (143, 6388), (161, 6481), (168, 6511), (173, 6529), (248, 6781), (257, 6820), (262, 6862), (265, 6877),

Gene: Raela_40 Start: 16120, Stop: 17190, Start Num: 29
Candidate Starts for Raela_40:
(Start: 29 @16120 has 20 MA's), (Start: 32 @16129 has 146 MA's), (34, 16135), (81, 16366), (91, 16396), (105, 16447), (106, 16450), (115, 16489), (161, 16732), (191, 16822), (196, 16837), (206, 16879), (220, 16921), (224, 16945), (228, 16969), (232, 16978), (255, 17065), (266, 17134), (271, 17158),

Gene: Raphaella_8 Start: 5902, Stop: 6942, Start Num: 32
Candidate Starts for Raphaella_8:

(Start: 32 @5902 has 146 MA's), (82, 6130), (90, 6154), (107, 6226), (120, 6283), (136, 6388), (143, 6403), (152, 6454), (153, 6460), (156, 6466), (168, 6526), (173, 6544), (197, 6610), (220, 6688), (248, 6796), (257, 6835), (262, 6877), (265, 6892),

Gene: RedRaider_36 Start: 20940, Stop: 22001, Start Num: 32
Candidate Starts for RedRaider_36:
(Start: 32 @20940 has 146 MA's), (72, 21117), (80, 21174), (110, 21282), (133, 21390), (181, 21588), (260, 21924), (265, 21951), (274, 21993),

Gene: RedRaider77_40 Start: 16021, Stop: 17091, Start Num: 29
Candidate Starts for RedRaider77_40:
(Start: 29 @16021 has 20 MA's), (Start: 32 @16030 has 146 MA's), (34, 16036), (81, 16267), (91, 16297), (105, 16348), (106, 16351), (115, 16390), (161, 16633), (191, 16723), (196, 16738), (206, 16780), (220, 16822), (224, 16846), (228, 16870), (232, 16879), (255, 16966), (266, 17035), (271, 17059),

Gene: RemRem_17 Start: 14513, Stop: 15712, Start Num: 10
Candidate Starts for RemRem_17:
(Start: 10 @14513 has 78 MA's), (18, 14531), (30, 14597), (48, 14672), (59, 14723), (79, 14846), (101, 14921), (109, 14951), (123, 15011), (166, 15233), (222, 15440), (229, 15482), (235, 15500), (246, 15539), (252, 15560), (256, 15587), (264, 15644), (269, 15665), (273, 15683), (274, 15689),

Gene: Renaud18_7 Start: 5356, Stop: 6402, Start Num: 31
Candidate Starts for Renaud18_7:
(Start: 29 @5350 has 20 MA's), (Start: 31 @5356 has 20 MA's), (60, 5485), (61, 5488), (81, 5593), (107, 5680), (114, 5713), (118, 5728), (127, 5776), (131, 5797), (133, 5809), (135, 5839), (152, 5902), (162, 5950), (181, 6004), (191, 6037), (192, 6043), (195, 6049), (196, 6052), (197, 6061), (223, 6142), (258, 6280), (261, 6313), (271, 6364), (272, 6367),

Gene: Reynauld_20 Start: 15388, Stop: 16596, Start Num: 9
Candidate Starts for Reynauld_20:
(Start: 9 @15388 has 3 MA's), (13, 15397), (25, 15439), (30, 15487), (36, 15514), (48, 15562), (52, 15580), (59, 15613), (79, 15736), (85, 15754), (103, 15817), (123, 15901), (125, 15910), (149, 16042), (190, 16189), (194, 16201), (212, 16279), (269, 16549), (273, 16567),

Gene: Richie_8 Start: 5902, Stop: 6942, Start Num: 32
Candidate Starts for Richie_8:
(Start: 32 @5902 has 146 MA's), (82, 6130), (90, 6154), (107, 6226), (120, 6283), (136, 6388), (143, 6403), (152, 6454), (153, 6460), (156, 6466), (168, 6526), (173, 6544), (197, 6610), (220, 6688), (248, 6796), (257, 6835), (262, 6877), (265, 6892),

Gene: RobinSparkles_18 Start: 13097, Stop: 14392, Start Num: 6
Candidate Starts for RobinSparkles_18:
(5, 13073), (Start: 6 @13097 has 5 MA's), (7, 13133), (22, 13229), (23, 13241), (51, 13388), (73, 13493), (79, 13547), (85, 13565), (109, 13652), (146, 13847), (154, 13886), (187, 14003), (194, 14021), (204, 14057), (236, 14198), (238, 14201), (252, 14252), (269, 14357),

Gene: RoyalG_17 Start: 14997, Stop: 16196, Start Num: 10
Candidate Starts for RoyalG_17:
(Start: 10 @14997 has 78 MA's), (18, 15015), (30, 15081), (48, 15156), (79, 15330), (109, 15435), (123, 15495), (157, 15678), (166, 15717), (190, 15798), (227, 15957), (235, 15984), (246, 16023), (252, 16044), (256, 16071), (261, 16110), (264, 16128), (269, 16149), (273, 16167), (274, 16173),

Gene: SPB78_7 Start: 5580, Stop: 6626, Start Num: 30
Candidate Starts for SPB78_7:
(30, 5580), (50, 5661), (80, 5817), (81, 5820), (131, 6015), (140, 6069), (150, 6117), (152, 6123), (163, 6171), (164, 6183), (168, 6195), (196, 6276), (197, 6285), (255, 6510),

Gene: Sakai_8 Start: 5896, Stop: 6936, Start Num: 32
Candidate Starts for Sakai_8:
(Start: 32 @5896 has 146 MA's), (82, 6124), (90, 6148), (120, 6277), (136, 6382), (143, 6397), (161, 6490), (164, 6508), (168, 6520), (173, 6538), (191, 6580), (197, 6604), (248, 6790), (257, 6829), (262, 6871), (265, 6886),

Gene: Sam12_16 Start: 14513, Stop: 15712, Start Num: 10
Candidate Starts for Sam12_16:
(Start: 10 @14513 has 78 MA's), (18, 14531), (30, 14597), (48, 14672), (59, 14723), (79, 14846), (109, 14951), (123, 15011), (166, 15233), (222, 15440), (229, 15482), (235, 15500), (246, 15539), (252, 15560), (256, 15587), (261, 15626), (264, 15644), (269, 15665), (273, 15683), (274, 15689),

Gene: Samy_10 Start: 6935, Stop: 7969, Start Num: 32
Candidate Starts for Samy_10:
(Start: 32 @6935 has 146 MA's), (80, 7166), (91, 7199), (98, 7229), (109, 7271), (112, 7286), (133, 7388), (163, 7541), (164, 7553), (214, 7700), (241, 7796), (243, 7802), (260, 7889), (274, 7958),

Gene: Sashimi_9 Start: 6060, Stop: 7100, Start Num: 32
Candidate Starts for Sashimi_9:
(Start: 32 @6060 has 146 MA's), (63, 6192), (82, 6288), (90, 6312), (107, 6384), (120, 6441), (136, 6546), (168, 6684), (173, 6702), (244, 6939), (248, 6954), (257, 6993), (262, 7035), (265, 7050),

Gene: Satrap_8 Start: 5898, Stop: 6938, Start Num: 32
Candidate Starts for Satrap_8:
(Start: 32 @5898 has 146 MA's), (82, 6126), (90, 6150), (107, 6222), (117, 6267), (120, 6279), (136, 6384), (143, 6399), (152, 6450), (153, 6456), (156, 6462), (162, 6495), (168, 6522), (173, 6540), (191, 6582), (244, 6777), (248, 6792), (257, 6831), (262, 6873), (265, 6888),

Gene: Scuba_38 Start: 18870, Stop: 19931, Start Num: 32
Candidate Starts for Scuba_38:
(Start: 32 @18870 has 146 MA's), (38, 18906), (40, 18918), (72, 19047), (173, 19503), (206, 19608), (220, 19665), (255, 19815), (260, 19854), (265, 19881), (274, 19923),

Gene: Seahorse_9 Start: 6170, Stop: 7207, Start Num: 33
Candidate Starts for Seahorse_9:
(Start: 33 @6170 has 1 MA's), (82, 6395), (90, 6419), (120, 6548), (131, 6611), (136, 6653), (143, 6668), (152, 6719), (161, 6761), (164, 6779), (197, 6875), (248, 7061), (257, 7100), (262, 7142), (265, 7157),

Gene: Shelley_13 Start: 14764, Stop: 15963, Start Num: 10
Candidate Starts for Shelley_13:
(Start: 10 @14764 has 78 MA's), (18, 14782), (30, 14848), (36, 14875), (79, 15097), (101, 15172), (123, 15262), (208, 15631), (222, 15691), (235, 15751), (246, 15790), (252, 15811), (256, 15838), (264, 15895), (269, 15916), (273, 15934),

Gene: Shukran_8 Start: 5898, Stop: 6938, Start Num: 32
Candidate Starts for Shukran_8:

(Start: 32 @5898 has 146 MA's), (82, 6126), (90, 6150), (107, 6222), (117, 6267), (120, 6279), (136, 6384), (143, 6399), (152, 6450), (153, 6456), (156, 6462), (162, 6495), (168, 6522), (173, 6540), (191, 6582), (244, 6777), (248, 6792), (257, 6831), (262, 6873), (265, 6888),

Gene: Skysand_31 Start: 19156, Stop: 20217, Start Num: 32
Candidate Starts for Skysand_31:
(Start: 32 @19156 has 146 MA's), (72, 19333), (80, 19390), (110, 19498), (133, 19606), (181, 19804), (212, 19915), (260, 20140), (265, 20167), (274, 20209),

Gene: Smoothie_36 Start: 14327, Stop: 15355, Start Num: 32
Candidate Starts for Smoothie_36:
(Start: 32 @14327 has 146 MA's), (37, 14351), (84, 14561), (87, 14570), (121, 14714), (127, 14747), (129, 14753), (165, 14939), (191, 15011), (196, 15026), (211, 15083), (220, 15101), (242, 15185), (257, 15248), (271, 15335),

Gene: Sombrero_16 Start: 14545, Stop: 15744, Start Num: 10
Candidate Starts for Sombrero_16:
(Start: 10 @14545 has 78 MA's), (18, 14563), (30, 14629), (48, 14704), (79, 14878), (101, 14953), (109, 14983), (123, 15043), (166, 15265), (190, 15346), (222, 15472), (229, 15514), (235, 15532), (246, 15571), (252, 15592), (256, 15619), (261, 15658), (264, 15676), (269, 15697), (273, 15715), (274, 15721),

Gene: SonDevVon_7 Start: 5889, Stop: 6929, Start Num: 32
Candidate Starts for SonDevVon_7:
(Start: 32 @5889 has 146 MA's), (82, 6117), (90, 6141), (120, 6270), (136, 6375), (143, 6390), (161, 6483), (164, 6501), (168, 6513), (173, 6531), (191, 6573), (197, 6597), (248, 6783), (257, 6822), (262, 6864), (265, 6879),

Gene: SpeedDemon_180 Start: 11915, Stop: 12970, Start Num: 32
Candidate Starts for SpeedDemon_180:
(Start: 32 @11915 has 146 MA's), (100, 12212), (117, 12287), (127, 12338), (134, 12386), (161, 12512), (191, 12605), (195, 12617), (196, 12620), (201, 12644), (215, 12692), (219, 12707), (220, 12713), (249, 12827), (251, 12833), (257, 12860),

Gene: SpicyFrank_8 Start: 5950, Stop: 6990, Start Num: 32
Candidate Starts for SpicyFrank_8:
(Start: 32 @5950 has 146 MA's), (82, 6178), (90, 6202), (107, 6274), (120, 6331), (136, 6436), (143, 6451), (152, 6502), (153, 6508), (156, 6514), (168, 6574), (248, 6844), (257, 6883), (262, 6925), (265, 6940),

Gene: Sporco_8 Start: 5947, Stop: 6987, Start Num: 32
Candidate Starts for Sporco_8:
(Start: 32 @5947 has 146 MA's), (82, 6175), (90, 6199), (107, 6271), (120, 6328), (136, 6433), (143, 6448), (152, 6499), (153, 6505), (156, 6511), (168, 6571), (173, 6589), (197, 6655), (220, 6733), (248, 6841), (257, 6880), (262, 6922), (265, 6937),

Gene: Squibbles_16 Start: 15373, Stop: 16572, Start Num: 10
Candidate Starts for Squibbles_16:
(Start: 10 @15373 has 78 MA's), (18, 15391), (30, 15457), (48, 15532), (79, 15706), (109, 15811), (123, 15871), (166, 16093), (222, 16300), (229, 16342), (235, 16360), (246, 16399), (252, 16420), (256, 16447), (261, 16486), (264, 16504), (269, 16525), (273, 16543), (274, 16549),

Gene: Srilaccoli3_19 Start: 15145, Stop: 16353, Start Num: 9

Candidate Starts for Srilaccoli3_19:
(Start: 9 @15145 has 3 MA's), (13, 15154), (25, 15196), (30, 15244), (36, 15271), (48, 15319), (52, 15337), (59, 15370), (85, 15511), (103, 15574), (123, 15658), (125, 15667), (149, 15799), (190, 15946), (194, 15958), (212, 16036), (269, 16306), (273, 16324),

Gene: StarStruck_30 Start: 18690, Stop: 19757, Start Num: 32
Candidate Starts for StarStruck_30:
(Start: 32 @18690 has 146 MA's), (38, 18726), (42, 18744), (72, 18867), (110, 19032), (151, 19230), (164, 19293), (172, 19320), (173, 19323), (187, 19359), (189, 19374), (212, 19455), (229, 19542), (239, 19572), (260, 19680), (265, 19707), (271, 19737), (273, 19743), (274, 19749),

Gene: SteveFrench_15 Start: 14591, Stop: 15790, Start Num: 10
Candidate Starts for SteveFrench_15:
(Start: 10 @14591 has 78 MA's), (18, 14609), (30, 14675), (48, 14750), (79, 14924), (109, 15029), (123, 15089), (157, 15272), (166, 15311), (190, 15392), (227, 15551), (235, 15578), (246, 15617), (252, 15638), (256, 15665), (261, 15704), (264, 15722), (269, 15743), (270, 15749), (273, 15761),

Gene: Sticker17_13 Start: 15287, Stop: 16486, Start Num: 10
Candidate Starts for Sticker17_13:
(Start: 10 @15287 has 78 MA's), (18, 15305), (30, 15371), (36, 15398), (79, 15620), (101, 15695), (123, 15785), (208, 16154), (222, 16214), (235, 16274), (246, 16313), (252, 16334), (256, 16361), (264, 16418), (269, 16439), (273, 16457),

Gene: Stickynote_19 Start: 13371, Stop: 14435, Start Num: 31
Candidate Starts for Stickynote_19:
(Start: 31 @13371 has 20 MA's), (68, 13539), (75, 13563), (85, 13626), (98, 13674), (162, 13968), (163, 13971), (196, 14067), (218, 14163), (228, 14220), (239, 14253), (265, 14385), (266, 14391), (267, 14394), (274, 14427),

Gene: Sukkupi_31 Start: 17825, Stop: 18892, Start Num: 32
Candidate Starts for Sukkupi_31:
(Start: 32 @17825 has 146 MA's), (38, 17861), (42, 17879), (48, 17894), (72, 18002), (80, 18059), (187, 18494), (189, 18509), (212, 18590), (216, 18611), (229, 18677), (260, 18815), (265, 18842),

Gene: SuperSulley_30 Start: 18875, Stop: 19945, Start Num: 32
Candidate Starts for SuperSulley_30:
(Start: 32 @18875 has 146 MA's), (38, 18911), (42, 18929), (72, 19052), (110, 19217), (148, 19403), (151, 19415), (164, 19478), (172, 19505), (185, 19535), (188, 19556), (189, 19559), (212, 19640), (216, 19661), (229, 19727), (239, 19757), (260, 19868), (265, 19895), (271, 19925), (274, 19937),

Gene: TChen_7 Start: 5476, Stop: 6522, Start Num: 31
Candidate Starts for TChen_7:
(Start: 29 @5470 has 20 MA's), (Start: 31 @5476 has 20 MA's), (60, 5605), (61, 5608), (81, 5713), (89, 5737), (107, 5800), (114, 5833), (118, 5848), (127, 5896), (131, 5917), (133, 5929), (135, 5959), (152, 6022), (162, 6070), (181, 6124), (191, 6157), (192, 6163), (195, 6169), (196, 6172), (197, 6181), (223, 6262), (252, 6370), (258, 6400), (271, 6484), (272, 6487),

Gene: TPA4_8 Start: 6373, Stop: 7398, Start Num: 31
Candidate Starts for TPA4_8:
(Start: 31 @6373 has 20 MA's), (60, 6502), (61, 6505), (107, 6697), (124, 6775), (158, 6952), (164, 6982), (166, 6988), (169, 6997), (191, 7054), (196, 7069), (223, 7159), (260, 7321), (261, 7327), (268, 7360), (271, 7378), (274, 7390),

Gene: Teal_13 Start: 15264, Stop: 16463, Start Num: 10
Candidate Starts for Teal_13:
(Start: 10 @15264 has 78 MA's), (18, 15282), (30, 15348), (36, 15375), (79, 15597), (101, 15672), (123, 15762), (208, 16131), (222, 16191), (235, 16251), (246, 16290), (252, 16311), (256, 16338), (264, 16395), (269, 16416), (273, 16434),

Gene: Teatealatte_16 Start: 16998, Stop: 18212, Start Num: 10
Candidate Starts for Teatealatte_16:
(Start: 10 @16998 has 78 MA's), (30, 17094), (Start: 31 @17097 has 20 MA's), (41, 17151), (48, 17169), (57, 17208), (83, 17355), (87, 17367), (109, 17448), (120, 17493), (123, 17508), (137, 17601), (139, 17607), (154, 17682), (159, 17706), (180, 17781), (222, 17952), (246, 18051), (247, 18054), (252, 18072), (269, 18177), (273, 18195), (274, 18201),

Gene: Teech_16 Start: 16799, Stop: 18013, Start Num: 10
Candidate Starts for Teech_16:
(Start: 10 @16799 has 78 MA's), (30, 16895), (Start: 31 @16898 has 20 MA's), (41, 16952), (48, 16970), (57, 17009), (83, 17156), (87, 17168), (109, 17249), (120, 17294), (123, 17309), (137, 17402), (139, 17408), (154, 17483), (159, 17507), (180, 17582), (222, 17753), (246, 17852), (247, 17855), (252, 17873), (269, 17978), (273, 17996), (274, 18002),

Gene: Tesla_39 Start: 15870, Stop: 16940, Start Num: 29
Candidate Starts for Tesla_39:
(Start: 29 @15870 has 20 MA's), (Start: 32 @15879 has 146 MA's), (34, 15885), (81, 16116), (91, 16146), (105, 16197), (106, 16200), (115, 16239), (161, 16482), (191, 16572), (196, 16587), (206, 16629), (220, 16671), (224, 16695), (228, 16719), (232, 16728), (255, 16815), (266, 16884), (271, 16908),

Gene: ThayneTheZag_8 Start: 5924, Stop: 6964, Start Num: 32
Candidate Starts for ThayneTheZag_8:
(Start: 32 @5924 has 146 MA's), (82, 6152), (90, 6176), (107, 6248), (120, 6305), (136, 6410), (143, 6425), (153, 6482), (156, 6488), (162, 6521), (168, 6548), (173, 6566), (191, 6608), (207, 6668), (248, 6818), (255, 6851), (257, 6857), (265, 6914),

Gene: ThetaBob_7 Start: 5356, Stop: 6402, Start Num: 31
Candidate Starts for ThetaBob_7:
(Start: 29 @5350 has 20 MA's), (Start: 31 @5356 has 20 MA's), (60, 5485), (61, 5488), (81, 5593), (107, 5680), (114, 5713), (118, 5728), (127, 5776), (131, 5797), (133, 5809), (135, 5839), (152, 5902), (162, 5950), (181, 6004), (191, 6037), (192, 6043), (195, 6049), (196, 6052), (197, 6061), (223, 6142), (258, 6280), (261, 6313), (267, 6343), (271, 6364), (272, 6367),

Gene: Tiff81_9 Start: 6059, Stop: 7099, Start Num: 32
Candidate Starts for Tiff81_9:
(Start: 32 @6059 has 146 MA's), (82, 6287), (90, 6311), (120, 6440), (136, 6545), (153, 6617), (161, 6653), (168, 6683), (173, 6701), (191, 6743), (197, 6767), (198, 6770), (205, 6797), (248, 6953), (257, 6992), (262, 7034), (265, 7049),

Gene: Toniann_35 Start: 14272, Stop: 15300, Start Num: 32
Candidate Starts for Toniann_35:
(Start: 32 @14272 has 146 MA's), (37, 14296), (84, 14506), (87, 14515), (121, 14659), (127, 14692), (129, 14698), (165, 14884), (191, 14956), (196, 14971), (211, 15028), (220, 15046), (242, 15130), (257, 15193), (271, 15280),

Gene: Toron_7 Start: 5476, Stop: 6522, Start Num: 31

Candidate Starts for Toron_7:
(Start: 29 @5470 has 20 MA's), (Start: 31 @5476 has 20 MA's), (60, 5605), (61, 5608), (65, 5623), (81, 5713), (107, 5800), (114, 5833), (118, 5848), (127, 5896), (131, 5917), (133, 5929), (135, 5959), (152, 6022), (162, 6070), (181, 6124), (186, 6136), (191, 6157), (192, 6163), (195, 6169), (196, 6172), (197, 6181), (223, 6262), (245, 6346), (258, 6400), (261, 6433), (267, 6463), (271, 6484), (272, 6487), (275, 6499),

Gene: Towmatter_16 Start: 10315, Stop: 11364, Start Num: 32
Candidate Starts for Towmatter_16:
(Start: 32 @10315 has 146 MA's), (43, 10369), (66, 10462), (100, 10612), (127, 10738), (134, 10786), (152, 10870), (161, 10912), (163, 10918), (164, 10930), (196, 11020), (201, 11044), (205, 11059), (214, 11086), (217, 11095), (225, 11134), (234, 11167), (248, 11215), (251, 11227), (257, 11254), (274, 11356),

Gene: Tracker_29 Start: 17873, Stop: 18943, Start Num: 32
Candidate Starts for Tracker_29:
(Start: 32 @17873 has 146 MA's), (38, 17909), (40, 17921), (42, 17927), (72, 18050), (80, 18107), (110, 18215), (143, 18368), (161, 18458), (173, 18506), (189, 18557), (212, 18638), (221, 18677), (229, 18725), (239, 18755), (260, 18866), (265, 18893), (273, 18929), (274, 18935),

Gene: Tredge_16 Start: 16998, Stop: 18212, Start Num: 10
Candidate Starts for Tredge_16:
(Start: 10 @16998 has 78 MA's), (30, 17094), (Start: 31 @17097 has 20 MA's), (41, 17151), (48, 17169), (57, 17208), (83, 17355), (87, 17367), (109, 17448), (120, 17493), (123, 17508), (137, 17601), (139, 17607), (154, 17682), (159, 17706), (180, 17781), (222, 17952), (246, 18051), (247, 18054), (252, 18072), (269, 18177), (273, 18195), (274, 18201),

Gene: Trogglehumper_34 Start: 21825, Stop: 23036, Start Num: 9
Candidate Starts for Trogglehumper_34:
(Start: 9 @21825 has 3 MA's), (15, 21840), (17, 21846), (28, 21915), (36, 21954), (44, 21993), (55, 22029), (59, 22053), (99, 22245), (102, 22251), (113, 22296), (119, 22317), (123, 22338), (175, 22593), (178, 22599), (203, 22680), (246, 22857), (250, 22875), (266, 22974), (269, 22986), (273, 23004),

Gene: Turuncu_33 Start: 19189, Stop: 20250, Start Num: 32
Candidate Starts for Turuncu_33:
(Start: 32 @19189 has 146 MA's), (42, 19243), (72, 19366), (80, 19423), (94, 19465), (133, 19639), (181, 19837), (260, 20173), (265, 20200), (266, 20206), (274, 20242),

Gene: VWB_7 Start: 5635, Stop: 6681, Start Num: 30
Candidate Starts for VWB_7:
(30, 5635), (50, 5716), (80, 5872), (81, 5875), (126, 6043), (127, 6055), (136, 6115), (140, 6124), (144, 6136), (163, 6226), (165, 6241), (168, 6250), (173, 6268), (179, 6280), (189, 6313), (191, 6316), (200, 6352), (206, 6373), (217, 6403), (274, 6670),

Gene: VasuNzinga_40 Start: 15454, Stop: 16524, Start Num: 29
Candidate Starts for VasuNzinga_40:
(Start: 29 @15454 has 20 MA's), (Start: 32 @15463 has 146 MA's), (34, 15469), (81, 15700), (91, 15730), (105, 15781), (106, 15784), (115, 15823), (161, 16066), (191, 16156), (196, 16171), (206, 16213), (220, 16255), (224, 16279), (228, 16303), (232, 16312), (255, 16399), (266, 16468), (271, 16492),

Gene: Vitaenoii_17 Start: 18915, Stop: 20129, Start Num: 10

Candidate Starts for Vitaenoii_17:
(4, 18804), (Start: 10 @18915 has 78 MA's), (12, 18921), (30, 19011), (48, 19086), (79, 19260), (83, 19272), (87, 19284), (123, 19425), (133, 19482), (154, 19599), (159, 19623), (180, 19698), (193, 19749), (222, 19869), (246, 19968), (247, 19971), (252, 19989), (269, 20094), (270, 20100), (273, 20112),

Gene: Vopal_9 Start: 5959, Stop: 6999, Start Num: 32
Candidate Starts for Vopal_9:
(Start: 32 @5959 has 146 MA's), (82, 6187), (90, 6211), (107, 6283), (120, 6340), (136, 6445), (143, 6460), (152, 6511), (153, 6517), (156, 6523), (168, 6583), (173, 6601), (197, 6667), (220, 6745), (248, 6853), (257, 6892), (262, 6934), (265, 6949),

Gene: Wheezy_29 Start: 18076, Stop: 19146, Start Num: 32
Candidate Starts for Wheezy_29:
(Start: 32 @18076 has 146 MA's), (38, 18112), (40, 18124), (42, 18130), (72, 18253), (80, 18310), (110, 18418), (161, 18661), (173, 18709), (189, 18760), (212, 18841), (221, 18880), (229, 18928), (239, 18958), (260, 19069), (265, 19096), (273, 19132), (274, 19138),

Gene: WhoseManz_31 Start: 15879, Stop: 16946, Start Num: 32
Candidate Starts for WhoseManz_31:
(Start: 32 @15879 has 146 MA's), (38, 15915), (42, 15933), (72, 16056), (80, 16113), (187, 16548), (189, 16563), (212, 16644), (216, 16665), (229, 16731), (260, 16869), (265, 16896),

Gene: WilliamBoone_35 Start: 13661, Stop: 14689, Start Num: 32
Candidate Starts for WilliamBoone_35:
(Start: 32 @13661 has 146 MA's), (37, 13685), (84, 13895), (87, 13904), (121, 14048), (127, 14081), (129, 14087), (165, 14273), (191, 14345), (211, 14417), (220, 14435), (242, 14519), (257, 14582), (271, 14669),

Gene: Windest_9 Start: 5959, Stop: 6999, Start Num: 32
Candidate Starts for Windest_9:
(Start: 32 @5959 has 146 MA's), (82, 6187), (90, 6211), (107, 6283), (120, 6340), (134, 6427), (136, 6445), (143, 6460), (152, 6511), (153, 6517), (156, 6523), (168, 6583), (173, 6601), (197, 6667), (220, 6745), (248, 6853), (257, 6892), (262, 6934), (265, 6949),

Gene: Woes_13 Start: 15816, Stop: 17015, Start Num: 10
Candidate Starts for Woes_13:
(Start: 10 @15816 has 78 MA's), (18, 15834), (30, 15900), (36, 15927), (79, 16149), (101, 16224), (123, 16314), (208, 16683), (222, 16743), (235, 16803), (246, 16842), (252, 16863), (256, 16890), (264, 16947), (269, 16968), (273, 16986),

Gene: Worcestershire_16 Start: 14515, Stop: 15714, Start Num: 10
Candidate Starts for Worcestershire_16:
(Start: 10 @14515 has 78 MA's), (18, 14533), (30, 14599), (48, 14674), (59, 14725), (79, 14848), (109, 14953), (123, 15013), (166, 15235), (222, 15442), (229, 15484), (235, 15502), (246, 15541), (252, 15562), (256, 15589), (264, 15646), (269, 15667), (273, 15685), (274, 15691),

Gene: Wrigley_7 Start: 5550, Stop: 6590, Start Num: 32
Candidate Starts for Wrigley_7:
(Start: 32 @5550 has 146 MA's), (40, 5598), (44, 5610), (56, 5646), (93, 5820), (98, 5844), (144, 6054), (155, 6105), (163, 6144), (196, 6243), (205, 6282), (206, 6285), (218, 6318), (223, 6345), (245, 6432), (254, 6474), (260, 6513),

Gene: Yndexa_31 Start: 17825, Stop: 18892, Start Num: 32
Candidate Starts for Yndexa_31:
(Start: 32 @17825 has 146 MA's), (38, 17861), (42, 17879), (48, 17894), (72, 18002), (80, 18059), (187, 18494), (189, 18509), (212, 18590), (216, 18611), (229, 18677), (260, 18815), (265, 18842),

Gene: YoungHarleezy_8 Start: 5900, Stop: 6940, Start Num: 32
Candidate Starts for YoungHarleezy_8:
(Start: 32 @5900 has 146 MA's), (82, 6128), (90, 6152), (107, 6224), (120, 6281), (136, 6386), (143, 6401), (152, 6452), (153, 6458), (156, 6464), (168, 6524), (173, 6542), (197, 6608), (220, 6686), (248, 6794), (257, 6833), (262, 6875), (265, 6890),

Gene: Yvonnetastic_33 Start: 16045, Stop: 17094, Start Num: 32
Candidate Starts for Yvonnetastic_33:
(Start: 32 @16045 has 146 MA's), (36, 16066), (37, 16075), (53, 16132), (63, 16183), (67, 16198), (161, 16642), (163, 16648), (183, 16708), (195, 16747), (242, 16909), (276, 17077),

Gene: Zion_17 Start: 12559, Stop: 13623, Start Num: 31
Candidate Starts for Zion_17:
(Start: 31 @12559 has 20 MA's), (68, 12727), (75, 12751), (85, 12814), (98, 12862), (162, 13156), (163, 13159), (172, 13198), (196, 13255), (218, 13351), (228, 13408), (239, 13441), (265, 13573), (267, 13582), (274, 13615),

Gene: Zucker_8 Start: 5626, Stop: 6645, Start Num: 32
Candidate Starts for Zucker_8:
(Start: 32 @5626 has 146 MA's), (59, 5743), (64, 5767), (78, 5842), (84, 5869), (97, 5914), (105, 5941), (131, 6061), (152, 6166), (162, 6214), (164, 6229), (184, 6274), (199, 6325), (220, 6382), (228, 6430), (256, 6532), (266, 6601),

Gene: pZL12_63c Start: 50504, Stop: 49452, Start Num: 32
Candidate Starts for pZL12_63c:
(Start: 32 @50504 has 146 MA's), (65, 50357), (80, 50276), (95, 50225), (189, 49820), (210, 49751), (224, 49691), (265, 49508),