Pham 287598

Pham 287598

51: Toron_74
52: Chubbello_57 + 1
53: Donovan_52
54: TPA4_59
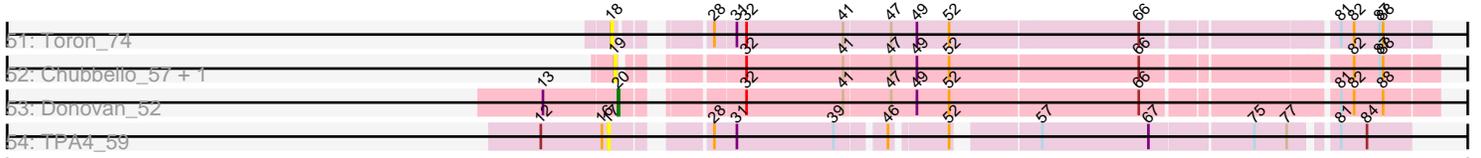
Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 287598 Report

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

Pham number 287598 has 219 members, 24 are drafts.

Phages represented in each track:
• Track 1 : Settecandela_151, Phrappuccino_151
• Track 2 : Sparky_63
• Track 3 : Buckeye_54, SilverBell_54, Murdoc_54, PinheadLarry_56, UncleHowie_54, Matalotodo_54, Pipsqueak_54
• Track 4 : CheetO_54, Schadenfreude_54, KlimbOn_54, Crownjwl_55, AbsoluteMadLad_54, Riverton_53
• Track 5 : Adriana_56, Thora_55, Morty_56, Samaymay_55, CamL_55, ABU_56, Serpentine_0055, Usavi_55, Soile_56, Hamish_54, Chaelin_56, Mulan_55, Cher_55, Nacho_0056, Bishoperium_55, ThreeOh3D2_56, Brilliant_57, Windsor_55, Mecca_55, Megatron_56, Kahve_55, QueenBeane_55, Weher20_55, Omniscient_56, Dati_55, Eugenia_55, DolOn_59, HogWash_55, Jesabah_56, Vaticameos_52, PhatCats2014_56, Oosterbaan_55, Happabalu_55, Lego3393_54, Placalicious_55, Kimbrough_56, IsaacEli_56, Badfish_56, HenryJackson_55, FugateOSU_55, Gareth_55, Jillium_55, Gwilliam_56, PG1_56, Hertubise_55, Etaye_55, Haimas_54, Waterdiva_55, Bluephacebaby_55, Melc17_55, KingTut_47, Kikipoo_56, Tomlarah_56
• Track 6 : Lasso_55, Squid_55, Daffy_55, Haleema_54, MrPhizzler_57, DaddyDaniels_57, Held_55, Mosaic_54, Craff_58, Grand2040_55, MRabcd_54, Potter_54, SassyCat97_54, Vortex_55, Mana_54, MitKao_55, Timmi_54, Chorkpop_55, Serendipity_55, Childish_55, Puhltonio_55, Cosmolli16_56, TomBombadil_55, TallGrassMM_55, Maru_55, Khan1_56, Morgushi_55, Surely_55, Cannibal_55, Kwadwo_54
• Track 7 : Roscoe_55
• Track 8 : Piglet_0055, SirBeauregard_56
• Track 9 : Frankicide_54, Eremos_54, Basato_55, Horchata_54, RedRaider89_56, Aelin_54, HSavage_54, OneBrain_56, OliverWalter_54
• Track 10 : Fozzie_54, ElvisPhasley_56, Lehmann_55, Mesh1_56, UAch1_54, Vaishali24_53, Antonia_54, Harvey_54, OSmaximus_56, Manad_54, Hetaeria_54, Cornobble_54, Inverness_54, Newman_54, Triad_55, Robyn_54
• Track 11 : Hekos_52
• Track 12 : TooFast2Furius_57
• Track 13 : Lulumae_53, Altwerkus_53, Phunky_54, DoesntMatter_53, Roy17_54, LuckyMarjie_53, Numberten_54, Dione_53, Phareon_54
• Track 14 : Spartan300_54, Valjean_54, Boehler_54, Zaider_55, Olive_54, EmpTee_54
• Track 15 : Telesworld_53
• Track 16 : Banjo_54, FremontTroll_56

- Track 17 : Sophia_54
- Track 18 : Solosis_54, Xavier_54
- Track 19 : LeeLot_55, JDog_54, Zelda_55
- Track 20 : ProfessorX_54
- Track 21 : Giraffe_56
- Track 22 : GreenChile_56
- Track 23 : Carthage_53
- Track 24 : Pops_54
- Track 25 : Freya_53
- Track 26 : Plmatters_54
- Track 27 : Vista_54
- Track 28 : DonSanchon_53
- Track 29 : BirdsNest_57
- Track 30 : Hashim76_57
- Track 31 : Zenteno07_58
- Track 32 : LittleMinkey_59
- Track 33 : Flapper_9
- Track 34 : Dalilpop_11
- Track 35 : NatB6_10
- Track 36 : Wheezy_10, Arti_10, GrootJr_12, NovumRegina_10
- Track 37 : Tracker_10, Phomeo_9, Emianna_10, Kurt_10, KidneyBean_10
- Track 38 : Foxboro_10
- Track 39 : Commandaria_9
- Track 40 : Jifall16_9
- Track 41 : RedRaider_13
- Track 42 : Ennea_13, Lollipop1437_12
- Track 43 : Bradissa_44, EnalisNailo_43, Lilas_46
- Track 44 : Confidence_46
- Track 45 : Posh_51
- Track 46 : Crater_55, Apricot_55
- Track 47 : GMA2_122
- Track 48 : LordVader_70
- Track 49 : Wee_71, WillSterrel_67, SilverChicken_76, Ogopogo_73, TDanisky_73, UncleRicky_65, Doomphist_66, Poenanya_66, Enby_67, Oksu_71, Llij_62, Lorde_66, Sparkdehlily_73, Tootsieroll_66, DirtMcgirt_65, Phatniss_64, Drago_63, Fruitloop_61, IrishSherpFalk_67, Taj_71
- Track 50 : Spartacus_68
- Track 51 : Toron_74
- Track 52 : Chubbello_57, BronnyJr_56
- Track 53 : Donovan_52
- Track 54 : TPA4_59

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

The start number called the most often in the published annotations is 21, it was called in 141 of the 195 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- ABU_56, AbsoluteMadLad_54, Adriana_56, Aelin_54, Altwerkus_53, Antonia_54, Badfish_56, Banjo_54, Basato_55, Bishoperium_55, Bluephacebaby_55, Boehler_54,

Brilliant_57, Buckeye_54, CamL_55, Cannibal_55, Carthage_53, Chaelin_56, CheetO_54, Cher_55, Childish_55, Chorkpop_55, Commandaria_9, Cornobble_54, Cosmolli16_56, Craff_58, Crownjwl_55, DaddyDaniels_57, Daffy_55, Dati_55, Dione_53, DoesntMatter_53, DolOn_59, ElvisPhasley_56, EmpTee_54, Eremos_54, Etaye_55, Eugenia_55, Fozzie_54, Frankicide_54, FremontTroll_56, Freya_53, FugateOSU_55, Gareth_55, Giraffe_56, Grand2040_55, Gwilliam_56, HSavage_54, Haimas_54, Haleema_54, Hamish_54, Happabalu_55, Harvey_54, Held_55, HenryJackson_55, Hertubise_55, Hetaeria_54, HogWash_55, Horchata_54, Inverness_54, IsaacEli_56, JDog_54, Jesabah_56, Jillium_55, Kahve_55, Khan1_56, Kikipoo_56, Kimbrough_56, KingTut_47, KlimbOn_54, Kwadwo_54, Lasso_55, LeeLot_55, Lego3393_54, Lehmann_55, LuckyMarjie_53, Lulumae_53, MRabcd_54, Mana_54, Manad_54, Maru_55, Matalotodo_54, Mecca_55, Megatron_56, Melc17_55, Mesh1_56, MitKao_55, Morgushi_55, Morty_56, Mosaic_54, MrPhizzler_57, Mulan_55, Murdoc_54, Nacho_0056, Newman_54, Numberten_54, OSmaximus_56, Olive_54, OliverWalter_54, Omniscient_56, OneBrain_56, Oosterbaan_55, PG1_56, Phareon_54, PhatCats2014_56, Phunky_54, PinheadLarry_56, Pipsqueak_54, Placalicious_55, Plmatters_54, Pops_54, Potter_54, ProfessorX_54, Puhltonio_55, QueenBeane_55, RedRaider89_56, RedRaider_13, Riverton_53, Robyn_54, Roscoe_55, Roy17_54, Samaymay_55, SassyCat97_54, Schadenfreude_54, Serendipity_55, Serpentine_0055, SilverBell_54, Soile_56, Spartan300_54, Squid_55, Surely_55, TallGrassMM_55, Telesworld_53, Thora_55, ThreeOh3D2_56, Timmi_54, TomBombadil_55, Tomlarah_56, TooFast2Furius_57, Triad_55, UAch1_54, UncleHowie_54, Usavi_55, Vaishali24_53, Valjean_54, Vaticameos_52, Vista_54, Vortex_55, Waterdiva_55, Weher20_55, Windsor_55, Zaider_55, Zelda_55,

Genes that have the "Most Annotated" start but do not call it:
• DonSanchon_53, GreenChile_56, Hekos_52, Piglet_0055, SirBeauregard_56, Solosis_54, Sophia_54, Xavier_54,

Genes that do not have the "Most Annotated" start:
• Apricot_55, Arti_10, BirdsNest_57, Bradissa_44, BronnyJr_56, Chubbello_57, Confidence_46, Crater_55, Dalilpop_11, DirtMcgirt_65, Donovan_52, Doomphist_66, Drago_63, Emianna_10, EnalisNailo_43, Enby_67, Ennea_13, Flapper_9, Foxboro_10, Fruitloop_61, GMA2_122, GrootJr_12, Hashim76_57, IrishSherpFalk_67, Jifall16_9, KidneyBean_10, Kurt_10, Lilas_46, LittleMinkey_59, Llij_62, Lollipop1437_12, LordVader_70, Lorde_66, NatB6_10, NovumRegina_10, Ogopogo_73, Oksu_71, Phatniss_64, Phomeo_9, Phrappuccino_151, Poenanya_66, Posh_51, Settecandela_151, SilverChicken_76, Sparkdehlily_73, Sparky_63, Spartacus_68, TDanisky_73, TPA4_59, Taj_71, Tootsieroll_66, Toron_74, Tracker_10, UncleRicky_65, Wee_71, Wheezy_10, WillSterrel_67, Zenteno07_58,

Summary by start number:

Start 17:
• Found in 1 of 219 (0.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TPA4_59 (singleton),

Start 18:
• Found in 1 of 219 (0.5%) of genes in pham
• No Manual Annotations of this start.

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Toron_74 (F6),

Start 19:
• Found in 4 of 219 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 195
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BronnyJr_56 (P1), Chubbello_57 (P1),
LordVader_70 (F), Spartacus_68 (F1),

Start 20:
• Found in 181 of 219 (82.6%) of genes in pham
• Manual Annotations of this start: 26 of 195
• Called 16.6% of time when present
• Phage (with cluster) where this start called: Arti_10 (CR2), BirdsNest_57 (B13),
Dalilpop_11 (CR1), DonSanchon_53 (B1), Donovan_52 (P1), Emianna_10 (CR2),
Ennea_13 (CR3), Flapper_9 (CR1), Foxboro_10 (CR2), GreenChile_56 (B1),
GrootJr_12 (CR2), Hashim76_57 (B13), Hekos_52 (B1), Jifall16_9 (CR2),
KidneyBean_10 (CR2), Kurt_10 (CR2), LittleMinkey_59 (B13), Lollipop1437_12
(CR3), NatB6_10 (CR2), NovumRegina_10 (CR2), Phomeo_9 (CR2), Piglet_0055
(B1), SirBeauregard_56 (B1), Solosis_54 (B1), Sophia_54 (B1), Sparky_63 (AF),
Tracker_10 (CR2), Wheezy_10 (CR2), Xavier_54 (B1), Zenteno07_58 (B13),

Start 21:
• Found in 161 of 219 (73.5%) of genes in pham
• Manual Annotations of this start: 141 of 195
• Called 95.0% of time when present
• Phage (with cluster) where this start called: ABU_56 (B1), AbsoluteMadLad_54 (B1),
Adriana_56 (B1), Aelin_54 (B1), Altwerkus_53 (B1), Antonia_54 (B1), Badfish_56
(B1), Banjo_54 (B1), Basato_55 (B1), Bishoperium_55 (B1), Bluephacebaby_55 (B1),
Boehler_54 (B1), Brilliant_57 (B1), Buckeye_54 (B1), CamL_55 (B1), Cannibal_55
(B1), Carthage_53 (B1), Chaelin_56 (B1), CheetO_54 (B1), Cher_55 (B1),
Childish_55 (B1), Chorkpop_55 (B1), Commandaria_9 (CR2), Cornobble_54 (B1),
Cosmolli16_56 (B1), Craff_58 (B1), Crownjwl_55 (B1), DaddyDaniels_57 (B1),
Daffy_55 (B1), Dati_55 (B1), Dione_53 (B1), DoesntMatter_53 (B1), DolOn_59 (B1),
ElvisPhasley_56 (B1), EmpTee_54 (B1), Eremos_54 (B1), Etaye_55 (B1),
Eugenia_55 (B1), Fozzie_54 (B1), Frankicide_54 (B1), FremontTroll_56 (B1),
Freya_53 (B1), FugateOSU_55 (B1), Gareth_55 (B1), Giraffe_56 (B1),
Grand2040_55 (B1), Gwilliam_56 (B1), HSavage_54 (B1), Haimas_54 (B1),
Haleema_54 (B1), Hamish_54 (B1), Happabalu_55 (B1), Harvey_54 (B1), Held_55
(B1), HenryJackson_55 (B1), Hertubise_55 (B1), Hetaeria_54 (B1), HogWash_55
(B1), Horchata_54 (B1), Inverness_54 (B1), IsaacEli_56 (B1), JDog_54 (B1),
Jesabah_56 (B1), Jillium_55 (B1), Kahve_55 (B1), Khan1_56 (B1), Kikipoo_56 (B1),
Kimbrough_56 (B1), KingTut_47 (B1), KlimbOn_54 (B1), Kwadwo_54 (B1), Lasso_55
(B1), LeeLot_55 (B1), Lego3393_54 (B1), Lehmann_55 (B1), LuckyMarjie_53 (B1),
Lulumae_53 (B1), MRabcd_54 (B1), Mana_54 (B1), Manad_54 (B1), Maru_55 (B1),
Matalotodo_54 (B1), Mecca_55 (B1), Megatron_56 (B1), Melc17_55 (B1), Mesh1_56
(B1), MitKao_55 (B1), Morgushi_55 (B1), Morty_56 (B1), Mosaic_54 (B1),
MrPhizzler_57 (B1), Mulan_55 (B1), Murdoc_54 (B1), Nacho_0056 (B1), Newman_54
(B1), Numberten_54 (B1), OSmaximus_56 (B1), Olive_54 (B1), OliverWalter_54 (B1),
Omniscient_56 (B1), OneBrain_56 (B1), Oosterbaan_55 (B1), PG1_56 (B1),
Phareon_54 (B1), PhatCats2014_56 (B1), Phunky_54 (B1), PinheadLarry_56 (B1),
Pipsqueak_54 (B1), Placalicious_55 (B1), Plmatters_54 (B1), Pops_54 (B1),

Potter_54 (B1), ProfessorX_54 (B1), Puhltonio_55 (B1), QueenBeane_55 (B1), RedRaider89_56 (B1), RedRaider_13 (CR3), Riverton_53 (B1), Robyn_54 (B1), Roscoe_55 (B1), Roy17_54 (B1), Samaymay_55 (B1), SassyCat97_54 (B1), Schadenfreude_54 (B1), Serendipity_55 (B1), Serpentine_0055 (B1), SilverBell_54 (B1), Soile_56 (B1), Spartan300_54 (B1), Squid_55 (B1), Surely_55 (B1), TallGrassMM_55 (B1), Telesworld_53 (B1), Thora_55 (B1), ThreeOh3D2_56 (B1), Timmi_54 (B1), TomBombadil_55 (B1), Tomlarah_56 (B1), TooFast2Furius_57 (B1), Triad_55 (B1), UAch1_54 (B1), UncleHowie_54 (B1), Usavi_55 (B1), Vaishali24_53 (B1), Valjean_54 (B1), Vaticameos_52 (B1), Vista_54 (B1), Vortex_55 (B1), Waterdiva_55 (B1), Weher20_55 (B1), Windsor_55 (B1), Zaider_55 (B1), Zelda_55 (B1),

Start 22:
• Found in 31 of 219 (14.2%) of genes in pham
• Manual Annotations of this start: 25 of 195
• Called 87.1% of time when present
• Phage (with cluster) where this start called: Apricot_55 (DN3), Bradissa_44 (CY1), Confidence_46 (CY1), Crater_55 (DN3), DirtMcgirt_65 (F1), Doomphist_66 (F1), Drago_63 (F1), EnalisNailo_43 (CY1), Enby_67 (F1), Fruitloop_61 (F1), IrishSherpFalk_67 (F1), Lilas_46 (CY1), Llij_62 (F1), Lorde_66 (F1), Ogopogo_73 (F1), Oksu_71 (F1), Phatniss_64 (F1), Poenanya_66 (F1), Posh_51 (CY4), SilverChicken_76 (F2), Sparkdehlily_73 (F1), TDanisky_73 (F1), Taj_71 (F1), Tootsieroll_66 (F1), UncleRicky_65 (F1), Wee_71 (F1), WillSterrel_67 (F1),

Start 23:
• Found in 1 of 219 (0.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA2_122 (DS),

Start 25:
• Found in 2 of 219 (0.9%) of genes in pham
• Manual Annotations of this start: 2 of 195
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phrappuccino_151 (AA), Settecandela_151 (AA),

Summary by clusters:

There are 17 clusters represented in this pham: CR2, F1, F2, CR1, AA, DN3, F6, AF, F, CR3, CY1, P1, B13, CY4, singleton, DS, B1,

Info for manual annotations of cluster AA:
•Start number 25 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AF:
•Start number 20 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster B1:
•Start number 20 was manually annotated 5 times for cluster B1.
•Start number 21 was manually annotated 139 times for cluster B1.

Info for manual annotations of cluster B13:

•Start number 20 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster CR1:
•Start number 20 was manually annotated 2 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 20 was manually annotated 12 times for cluster CR2.
•Start number 21 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 20 was manually annotated 2 times for cluster CR3.
•Start number 21 was manually annotated 1 time for cluster CR3.

Info for manual annotations of cluster CY1:
•Start number 22 was manually annotated 4 times for cluster CY1.

Info for manual annotations of cluster CY4:
•Start number 22 was manually annotated 1 time for cluster CY4.

Info for manual annotations of cluster DN3:
•Start number 22 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster F1:
•Start number 19 was manually annotated 1 time for cluster F1.
•Start number 22 was manually annotated 18 times for cluster F1.

Info for manual annotations of cluster P1:
•Start number 20 was manually annotated 1 time for cluster P1.

Gene Information:

Gene: ABU_56 Start: 48493, Stop: 47813, Start Num: 21
Candidate Starts for ABU_56:
(Start: 20 @48502 has 26 MA's), (Start: 21 @48493 has 141 MA's), (46, 48286), (47, 48283), (49, 48259), (52, 48229), (60, 48103), (64, 48082), (66, 48061), (74, 47971), (81, 47896), (82, 47884), (88, 47857),

Gene: AbsoluteMadLad_54 Start: 48205, Stop: 47528, Start Num: 21
Candidate Starts for AbsoluteMadLad_54:
(Start: 20 @48214 has 26 MA's), (Start: 21 @48205 has 141 MA's), (40, 48043), (43, 48028), (47, 47995), (49, 47971), (52, 47941), (57, 47863), (60, 47815), (64, 47794), (66, 47773), (74, 47683), (78, 47647), (81, 47608), (82, 47596), (86, 47575), (88, 47569),

Gene: Adriana_56 Start: 48490, Stop: 47810, Start Num: 21
Candidate Starts for Adriana_56:
(Start: 20 @48499 has 26 MA's), (Start: 21 @48490 has 141 MA's), (46, 48283), (47, 48280), (49, 48256), (52, 48226), (60, 48100), (64, 48079), (66, 48058), (74, 47968), (81, 47893), (82, 47881), (88,

47854),

Gene: Aelin_54 Start: 47769, Stop: 47092, Start Num: 21
Candidate Starts for Aelin_54:
(Start: 20 @47778 has 26 MA's), (Start: 21 @47769 has 141 MA's), (40, 47607), (43, 47592), (47, 47559), (49, 47535), (52, 47505), (57, 47427), (60, 47379), (64, 47358), (66, 47337), (74, 47247), (78, 47211), (81, 47172), (82, 47160), (88, 47133),

Gene: Altwerkus_53 Start: 47657, Stop: 46980, Start Num: 21
Candidate Starts for Altwerkus_53:
(Start: 20 @47666 has 26 MA's), (Start: 21 @47657 has 141 MA's), (37, 47528), (40, 47495), (43, 47480), (46, 47450), (47, 47447), (49, 47423), (52, 47393), (57, 47315), (60, 47267), (64, 47246), (66, 47225), (74, 47135), (78, 47099), (81, 47060), (82, 47048), (85, 47033), (88, 47021),

Gene: Antonia_54 Start: 47769, Stop: 47092, Start Num: 21
Candidate Starts for Antonia_54:
(3, 48021), (4, 48012), (5, 47988), (6, 47958), (9, 47907), (10, 47868), (Start: 20 @47778 has 26 MA's), (Start: 21 @47769 has 141 MA's), (40, 47607), (43, 47592), (47, 47559), (49, 47535), (52, 47505), (57, 47427), (60, 47379), (64, 47358), (66, 47337), (74, 47247), (78, 47211), (81, 47172), (82, 47160), (88, 47133),

Gene: Apricot_55 Start: 35565, Stop: 36167, Start Num: 22
Candidate Starts for Apricot_55:
(Start: 22 @35565 has 25 MA's), (31, 35622), (35, 35658), (36, 35667), (48, 35751), (50, 35778), (52, 35802), (65, 35958), (67, 35973), (68, 35985), (75, 36042), (89, 36156),

Gene: Arti_10 Start: 5991, Stop: 6665, Start Num: 20
Candidate Starts for Arti_10:
(8, 5856), (15, 5964), (Start: 20 @5991 has 26 MA's), (45, 6192), (46, 6195), (53, 6252), (56, 6285), (64, 6396), (75, 6513), (85, 6603),

Gene: Badfish_56 Start: 48515, Stop: 47835, Start Num: 21
Candidate Starts for Badfish_56:
(Start: 20 @48524 has 26 MA's), (Start: 21 @48515 has 141 MA's), (46, 48308), (47, 48305), (49, 48281), (52, 48251), (60, 48125), (64, 48104), (66, 48083), (74, 47993), (81, 47918), (82, 47906), (88, 47879),

Gene: Banjo_54 Start: 47962, Stop: 47282, Start Num: 21
Candidate Starts for Banjo_54:
(3, 48214), (4, 48205), (5, 48181), (6, 48151), (9, 48100), (10, 48061), (Start: 20 @47971 has 26 MA's), (Start: 21 @47962 has 141 MA's), (46, 47755), (47, 47752), (49, 47728), (52, 47698), (60, 47572), (64, 47551), (66, 47530), (74, 47440), (81, 47365), (82, 47353), (88, 47326),

Gene: Basato_55 Start: 48237, Stop: 47560, Start Num: 21
Candidate Starts for Basato_55:
(Start: 20 @48246 has 26 MA's), (Start: 21 @48237 has 141 MA's), (40, 48075), (43, 48060), (47, 48027), (49, 48003), (52, 47973), (57, 47895), (60, 47847), (64, 47826), (66, 47805), (74, 47715), (78, 47679), (81, 47640), (82, 47628), (88, 47601),

Gene: BirdsNest_57 Start: 47703, Stop: 46999, Start Num: 20
Candidate Starts for BirdsNest_57:
(Start: 20 @47703 has 26 MA's), (Start: 22 @47688 has 25 MA's), (26, 47658), (51, 47448), (52, 47436), (56, 47400), (65, 47274), (71, 47205), (82, 47076), (88, 47049), (91, 47010),

Gene: Bishoperium_55 Start: 48501, Stop: 47821, Start Num: 21
Candidate Starts for Bishoperium_55:
(Start: 20 @48510 has 26 MA's), (Start: 21 @48501 has 141 MA's), (46, 48294), (47, 48291), (49, 48267), (52, 48237), (60, 48111), (64, 48090), (66, 48069), (74, 47979), (81, 47904), (82, 47892), (88, 47865),

Gene: Bluephacebaby_55 Start: 48504, Stop: 47824, Start Num: 21
Candidate Starts for Bluephacebaby_55:
(Start: 20 @48513 has 26 MA's), (Start: 21 @48504 has 141 MA's), (46, 48297), (47, 48294), (49, 48270), (52, 48240), (60, 48114), (64, 48093), (66, 48072), (74, 47982), (81, 47907), (82, 47895), (88, 47868),

Gene: Boehler_54 Start: 47946, Stop: 47269, Start Num: 21
Candidate Starts for Boehler_54:
(Start: 20 @47955 has 26 MA's), (Start: 21 @47946 has 141 MA's), (37, 47817), (40, 47784), (43, 47769), (46, 47739), (47, 47736), (49, 47712), (52, 47682), (57, 47604), (60, 47556), (64, 47535), (66, 47514), (74, 47424), (78, 47388), (81, 47349), (82, 47337), (88, 47310),

Gene: Bradissa_44 Start: 36341, Stop: 36946, Start Num: 22
Candidate Starts for Bradissa_44:
(Start: 22 @36341 has 25 MA's), (28, 36383), (52, 36578), (54, 36611), (57, 36659), (67, 36752), (75, 36821),

Gene: Brilliant_57 Start: 48504, Stop: 47824, Start Num: 21
Candidate Starts for Brilliant_57:
(Start: 20 @48513 has 26 MA's), (Start: 21 @48504 has 141 MA's), (46, 48297), (47, 48294), (49, 48270), (52, 48240), (60, 48114), (64, 48093), (66, 48072), (74, 47982), (81, 47907), (82, 47895), (88, 47868),

Gene: BronnyJr_56 Start: 38699, Stop: 39382, Start Num: 19
Candidate Starts for BronnyJr_56:
(Start: 19 @38699 has 1 MA's), (32, 38777), (41, 38867), (47, 38909), (49, 38933), (52, 38963), (66, 39134), (82, 39308), (87, 39332), (88, 39335),

Gene: Buckeye_54 Start: 48015, Stop: 47338, Start Num: 21
Candidate Starts for Buckeye_54:
(Start: 20 @48024 has 26 MA's), (Start: 21 @48015 has 141 MA's), (46, 47808), (47, 47805), (49, 47781), (52, 47751), (60, 47625), (64, 47604), (66, 47583), (74, 47493), (78, 47457), (81, 47418), (82, 47406), (88, 47379),

Gene: CamL_55 Start: 48269, Stop: 47589, Start Num: 21
Candidate Starts for CamL_55:
(Start: 20 @48278 has 26 MA's), (Start: 21 @48269 has 141 MA's), (46, 48062), (47, 48059), (49, 48035), (52, 48005), (60, 47879), (64, 47858), (66, 47837), (74, 47747), (81, 47672), (82, 47660), (88, 47633),

Gene: Cannibal_55 Start: 48252, Stop: 47572, Start Num: 21
Candidate Starts for Cannibal_55:
(3, 48504), (4, 48495), (5, 48471), (6, 48441), (9, 48390), (10, 48351), (Start: 20 @48261 has 26 MA's), (Start: 21 @48252 has 141 MA's), (46, 48045), (47, 48042), (49, 48018), (52, 47988), (57, 47910), (60, 47862), (64, 47841), (74, 47730), (78, 47694), (81, 47655), (82, 47643), (88, 47616),

Gene: Carthage_53 Start: 47247, Stop: 46567, Start Num: 21
Candidate Starts for Carthage_53:
(Start: 20 @47256 has 26 MA's), (Start: 21 @47247 has 141 MA's), (46, 47040), (47, 47037), (49, 47013), (52, 46983), (60, 46857), (64, 46836), (66, 46815), (74, 46725), (78, 46689), (81, 46650), (82, 46638), (88, 46611),

Gene: Chaelin_56 Start: 48499, Stop: 47819, Start Num: 21
Candidate Starts for Chaelin_56:
(Start: 20 @48508 has 26 MA's), (Start: 21 @48499 has 141 MA's), (46, 48292), (47, 48289), (49, 48265), (52, 48235), (60, 48109), (64, 48088), (66, 48067), (74, 47977), (81, 47902), (82, 47890), (88, 47863),

Gene: CheetO_54 Start: 47985, Stop: 47308, Start Num: 21
Candidate Starts for CheetO_54:
(Start: 20 @47994 has 26 MA's), (Start: 21 @47985 has 141 MA's), (40, 47823), (43, 47808), (47, 47775), (49, 47751), (52, 47721), (57, 47643), (60, 47595), (64, 47574), (66, 47553), (74, 47463), (78, 47427), (81, 47388), (82, 47376), (86, 47355), (88, 47349),

Gene: Cher_55 Start: 48521, Stop: 47841, Start Num: 21
Candidate Starts for Cher_55:
(Start: 20 @48530 has 26 MA's), (Start: 21 @48521 has 141 MA's), (46, 48314), (47, 48311), (49, 48287), (52, 48257), (60, 48131), (64, 48110), (66, 48089), (74, 47999), (81, 47924), (82, 47912), (88, 47885),

Gene: Childish_55 Start: 48531, Stop: 47851, Start Num: 21
Candidate Starts for Childish_55:
(3, 48783), (4, 48774), (5, 48750), (6, 48720), (9, 48669), (10, 48630), (Start: 20 @48540 has 26 MA's), (Start: 21 @48531 has 141 MA's), (46, 48324), (47, 48321), (49, 48297), (52, 48267), (57, 48189), (60, 48141), (64, 48120), (74, 48009), (78, 47973), (81, 47934), (82, 47922), (88, 47895),

Gene: Chorkpop_55 Start: 48008, Stop: 47328, Start Num: 21
Candidate Starts for Chorkpop_55:
(3, 48260), (4, 48251), (5, 48227), (6, 48197), (9, 48146), (10, 48107), (Start: 20 @48017 has 26 MA's), (Start: 21 @48008 has 141 MA's), (46, 47801), (47, 47798), (49, 47774), (52, 47744), (57, 47666), (60, 47618), (64, 47597), (74, 47486), (78, 47450), (81, 47411), (82, 47399), (88, 47372),

Gene: Chubbello_57 Start: 37644, Stop: 38327, Start Num: 19
Candidate Starts for Chubbello_57:
(Start: 19 @37644 has 1 MA's), (32, 37722), (41, 37812), (47, 37854), (49, 37878), (52, 37908), (66, 38079), (82, 38253), (87, 38277), (88, 38280),

Gene: Commandaria_9 Start: 5029, Stop: 5676, Start Num: 21
Candidate Starts for Commandaria_9:
(15, 4993), (Start: 21 @5029 has 141 MA's), (42, 5200), (45, 5227), (46, 5230), (53, 5287), (63, 5425), (75, 5548), (85, 5638),

Gene: Confidence_46 Start: 34232, Stop: 34837, Start Num: 22
Candidate Starts for Confidence_46:
(Start: 22 @34232 has 25 MA's), (28, 34274), (31, 34289), (52, 34469), (54, 34502), (57, 34550), (67, 34643), (75, 34712), (80, 34766),

Gene: Cornobble_54 Start: 47922, Stop: 47242, Start Num: 21
Candidate Starts for Cornobble_54:

(3, 48174), (4, 48165), (5, 48141), (6, 48111), (9, 48060), (10, 48021), (Start: 20 @47931 has 26 MA's), (Start: 21 @47922 has 141 MA's), (40, 47760), (43, 47745), (47, 47712), (49, 47688), (52, 47658), (57, 47580), (60, 47532), (64, 47511), (66, 47490), (74, 47400), (78, 47364), (81, 47325), (82, 47313), (88, 47286),

Gene: Cosmolli16_56 Start: 48711, Stop: 48031, Start Num: 21
Candidate Starts for Cosmolli16_56:
(3, 48963), (4, 48954), (5, 48930), (6, 48900), (9, 48849), (10, 48810), (Start: 20 @48720 has 26 MA's), (Start: 21 @48711 has 141 MA's), (46, 48504), (47, 48501), (49, 48477), (52, 48447), (57, 48369), (60, 48321), (64, 48300), (74, 48189), (78, 48153), (81, 48114), (82, 48102), (88, 48075),

Gene: Craff_58 Start: 48956, Stop: 48276, Start Num: 21
Candidate Starts for Craff_58:
(3, 49208), (4, 49199), (5, 49175), (6, 49145), (9, 49094), (10, 49055), (Start: 20 @48965 has 26 MA's), (Start: 21 @48956 has 141 MA's), (46, 48749), (47, 48746), (49, 48722), (52, 48692), (57, 48614), (60, 48566), (64, 48545), (74, 48434), (78, 48398), (81, 48359), (82, 48347), (88, 48320),

Gene: Crater_55 Start: 35960, Stop: 36562, Start Num: 22
Candidate Starts for Crater_55:
(Start: 22 @35960 has 25 MA's), (31, 36017), (35, 36053), (36, 36062), (48, 36146), (50, 36173), (52, 36197), (65, 36353), (67, 36368), (68, 36380), (75, 36437), (89, 36551),

Gene: Crownjwl_55 Start: 47988, Stop: 47311, Start Num: 21
Candidate Starts for Crownjwl_55:
(Start: 20 @47997 has 26 MA's), (Start: 21 @47988 has 141 MA's), (40, 47826), (43, 47811), (47, 47778), (49, 47754), (52, 47724), (57, 47646), (60, 47598), (64, 47577), (66, 47556), (74, 47466), (78, 47430), (81, 47391), (82, 47379), (86, 47358), (88, 47352),

Gene: DaddyDaniels_57 Start: 48488, Stop: 47808, Start Num: 21
Candidate Starts for DaddyDaniels_57:
(3, 48740), (4, 48731), (5, 48707), (6, 48677), (9, 48626), (10, 48587), (Start: 20 @48497 has 26 MA's), (Start: 21 @48488 has 141 MA's), (46, 48281), (47, 48278), (49, 48254), (52, 48224), (57, 48146), (60, 48098), (64, 48077), (74, 47966), (78, 47930), (81, 47891), (82, 47879), (88, 47852),

Gene: Daffy_55 Start: 47994, Stop: 47314, Start Num: 21
Candidate Starts for Daffy_55:
(3, 48246), (4, 48237), (5, 48213), (6, 48183), (9, 48132), (10, 48093), (Start: 20 @48003 has 26 MA's), (Start: 21 @47994 has 141 MA's), (46, 47787), (47, 47784), (49, 47760), (52, 47730), (57, 47652), (60, 47604), (64, 47583), (74, 47472), (78, 47436), (81, 47397), (82, 47385), (88, 47358),

Gene: Dalilpop_11 Start: 6087, Stop: 6800, Start Num: 20
Candidate Starts for Dalilpop_11:
(Start: 20 @6087 has 26 MA's), (24, 6114), (30, 6171), (40, 6276), (44, 6291), (45, 6309), (46, 6312), (47, 6315), (53, 6369), (55, 6402), (75, 6633), (84, 6720), (91, 6774),

Gene: Dati_55 Start: 48526, Stop: 47846, Start Num: 21
Candidate Starts for Dati_55:
(Start: 20 @48535 has 26 MA's), (Start: 21 @48526 has 141 MA's), (46, 48319), (47, 48316), (49, 48292), (52, 48262), (60, 48136), (64, 48115), (66, 48094), (74, 48004), (81, 47929), (82, 47917), (88, 47890),

Gene: Dione_53 Start: 47666, Stop: 46989, Start Num: 21
Candidate Starts for Dione_53:

(Start: 20 @47675 has 26 MA's), (Start: 21 @47666 has 141 MA's), (37, 47537), (40, 47504), (43, 47489), (46, 47459), (47, 47456), (49, 47432), (52, 47402), (57, 47324), (60, 47276), (64, 47255), (66, 47234), (74, 47144), (78, 47108), (81, 47069), (82, 47057), (85, 47042), (88, 47030),

Gene: DirtMcgirt_65 Start: 40913, Stop: 41590, Start Num: 22
Candidate Starts for DirtMcgirt_65:
(Start: 22 @40913 has 25 MA's), (28, 40955), (46, 41114), (47, 41117), (49, 41141), (52, 41171), (57, 41249), (60, 41297), (64, 41318), (74, 41429), (78, 41465), (81, 41504), (82, 41516),

Gene: DoesntMatter_53 Start: 47959, Stop: 47282, Start Num: 21
Candidate Starts for DoesntMatter_53:
(Start: 20 @47968 has 26 MA's), (Start: 21 @47959 has 141 MA's), (37, 47830), (40, 47797), (43, 47782), (46, 47752), (47, 47749), (49, 47725), (52, 47695), (57, 47617), (60, 47569), (64, 47548), (66, 47527), (74, 47437), (78, 47401), (81, 47362), (82, 47350), (85, 47335), (88, 47323),

Gene: DolOn_59 Start: 49214, Stop: 48534, Start Num: 21
Candidate Starts for DolOn_59:
(Start: 20 @49223 has 26 MA's), (Start: 21 @49214 has 141 MA's), (46, 49007), (47, 49004), (49, 48980), (52, 48950), (60, 48824), (64, 48803), (66, 48782), (74, 48692), (81, 48617), (82, 48605), (88, 48578),

Gene: DonSanchon_53 Start: 47700, Stop: 47014, Start Num: 20
Candidate Starts for DonSanchon_53:
(Start: 20 @47700 has 26 MA's), (Start: 21 @47691 has 141 MA's), (46, 47484), (47, 47481), (49, 47457), (52, 47427), (60, 47301), (64, 47280), (66, 47259), (74, 47169), (78, 47133), (81, 47094), (82, 47082), (88, 47055),

Gene: Donovan_52 Start: 35711, Stop: 36400, Start Num: 20
Candidate Starts for Donovan_52:
(13, 35645), (Start: 20 @35711 has 26 MA's), (32, 35795), (41, 35885), (47, 35927), (49, 35951), (52, 35981), (66, 36152), (81, 36314), (82, 36326), (88, 36353),

Gene: Doomphist_66 Start: 43323, Stop: 44000, Start Num: 22
Candidate Starts for Doomphist_66:
(Start: 22 @43323 has 25 MA's), (28, 43365), (46, 43524), (47, 43527), (49, 43551), (52, 43581), (57, 43659), (60, 43707), (64, 43728), (74, 43839), (78, 43875), (81, 43914), (82, 43926),

Gene: Drago_63 Start: 40916, Stop: 41593, Start Num: 22
Candidate Starts for Drago_63:
(Start: 22 @40916 has 25 MA's), (28, 40958), (46, 41117), (47, 41120), (49, 41144), (52, 41174), (57, 41252), (60, 41300), (64, 41321), (74, 41432), (78, 41468), (81, 41507), (82, 41519),

Gene: ElvisPhasley_56 Start: 48537, Stop: 47857, Start Num: 21
Candidate Starts for ElvisPhasley_56:
(3, 48789), (4, 48780), (5, 48756), (6, 48726), (9, 48675), (10, 48636), (Start: 20 @48546 has 26 MA's), (Start: 21 @48537 has 141 MA's), (40, 48375), (43, 48360), (47, 48327), (49, 48303), (52, 48273), (57, 48195), (60, 48147), (64, 48126), (66, 48105), (74, 48015), (78, 47979), (81, 47940), (82, 47928), (88, 47901),

Gene: Emianna_10 Start: 5953, Stop: 6612, Start Num: 20
Candidate Starts for Emianna_10:
(8, 5818), (15, 5926), (Start: 20 @5953 has 26 MA's), (45, 6154), (46, 6157), (53, 6214), (56, 6247), (64, 6358), (75, 6475), (85, 6565),

Gene: EmpTee_54 Start: 47972, Stop: 47295, Start Num: 21
Candidate Starts for EmpTee_54:
(Start: 20 @47981 has 26 MA's), (Start: 21 @47972 has 141 MA's), (37, 47843), (40, 47810), (43, 47795), (46, 47765), (47, 47762), (49, 47738), (52, 47708), (57, 47630), (60, 47582), (64, 47561), (66, 47540), (74, 47450), (78, 47414), (81, 47375), (82, 47363), (88, 47336),

Gene: EnalisNailo_43 Start: 35875, Stop: 36480, Start Num: 22
Candidate Starts for EnalisNailo_43:
(Start: 22 @35875 has 25 MA's), (28, 35917), (52, 36112), (54, 36145), (57, 36193), (67, 36286), (75, 36355),

Gene: Enby_67 Start: 41192, Stop: 41869, Start Num: 22
Candidate Starts for Enby_67:
(Start: 22 @41192 has 25 MA's), (28, 41234), (46, 41393), (47, 41396), (49, 41420), (52, 41450), (57, 41528), (60, 41576), (64, 41597), (74, 41708), (78, 41744), (81, 41783), (82, 41795),

Gene: Ennea_13 Start: 6764, Stop: 7453, Start Num: 20
Candidate Starts for Ennea_13:
(11, 6692), (15, 6737), (Start: 20 @6764 has 26 MA's), (34, 6881), (45, 6980), (46, 6983), (53, 7040), (64, 7184), (73, 7277), (75, 7301), (85, 7391), (90, 7415),

Gene: Eremos_54 Start: 47965, Stop: 47288, Start Num: 21
Candidate Starts for Eremos_54:
(Start: 20 @47974 has 26 MA's), (Start: 21 @47965 has 141 MA's), (40, 47803), (43, 47788), (47, 47755), (49, 47731), (52, 47701), (57, 47623), (60, 47575), (64, 47554), (66, 47533), (74, 47443), (78, 47407), (81, 47368), (82, 47356), (88, 47329),

Gene: Etaye_55 Start: 48795, Stop: 48115, Start Num: 21
Candidate Starts for Etaye_55:
(Start: 20 @48804 has 26 MA's), (Start: 21 @48795 has 141 MA's), (46, 48588), (47, 48585), (49, 48561), (52, 48531), (60, 48405), (64, 48384), (66, 48363), (74, 48273), (81, 48198), (82, 48186), (88, 48159),

Gene: Eugenia_55 Start: 48360, Stop: 47680, Start Num: 21
Candidate Starts for Eugenia_55:
(Start: 20 @48369 has 26 MA's), (Start: 21 @48360 has 141 MA's), (46, 48153), (47, 48150), (49, 48126), (52, 48096), (60, 47970), (64, 47949), (66, 47928), (74, 47838), (81, 47763), (82, 47751), (88, 47724),

Gene: Flapper_9 Start: 4974, Stop: 5633, Start Num: 20
Candidate Starts for Flapper_9:
(Start: 20 @4974 has 26 MA's), (30, 5037), (44, 5157), (45, 5175), (46, 5178), (47, 5181), (53, 5235), (75, 5499), (84, 5586),

Gene: Foxboro_10 Start: 5964, Stop: 6641, Start Num: 20
Candidate Starts for Foxboro_10:
(8, 5829), (15, 5937), (Start: 20 @5964 has 26 MA's), (45, 6165), (46, 6168), (53, 6225), (64, 6372), (75, 6489), (85, 6579), (86, 6585),

Gene: Fozzie_54 Start: 48298, Stop: 47618, Start Num: 21
Candidate Starts for Fozzie_54:

(3, 48550), (4, 48541), (5, 48517), (6, 48487), (9, 48436), (10, 48397), (Start: 20 @48307 has 26 MA's), (Start: 21 @48298 has 141 MA's), (40, 48136), (43, 48121), (47, 48088), (49, 48064), (52, 48034), (57, 47956), (60, 47908), (64, 47887), (66, 47866), (74, 47776), (78, 47740), (81, 47701), (82, 47689), (88, 47662),

Gene: Frankicide_54 Start: 47996, Stop: 47319, Start Num: 21
Candidate Starts for Frankicide_54:
(Start: 20 @48005 has 26 MA's), (Start: 21 @47996 has 141 MA's), (40, 47834), (43, 47819), (47, 47786), (49, 47762), (52, 47732), (57, 47654), (60, 47606), (64, 47585), (66, 47564), (74, 47474), (78, 47438), (81, 47399), (82, 47387), (88, 47360),

Gene: FremontTroll_56 Start: 48563, Stop: 47883, Start Num: 21
Candidate Starts for FremontTroll_56:
(3, 48815), (4, 48806), (5, 48782), (6, 48752), (9, 48701), (10, 48662), (Start: 20 @48572 has 26 MA's), (Start: 21 @48563 has 141 MA's), (46, 48356), (47, 48353), (49, 48329), (52, 48299), (60, 48173), (64, 48152), (66, 48131), (74, 48041), (81, 47966), (82, 47954), (88, 47927),

Gene: Freya_53 Start: 47657, Stop: 46980, Start Num: 21
Candidate Starts for Freya_53:
(Start: 20 @47666 has 26 MA's), (Start: 21 @47657 has 141 MA's), (46, 47450), (47, 47447), (49, 47423), (52, 47393), (57, 47315), (60, 47267), (64, 47246), (66, 47225), (74, 47135), (78, 47099), (81, 47060), (82, 47048), (85, 47033), (88, 47021),

Gene: Fruitloop_61 Start: 42550, Stop: 43227, Start Num: 22
Candidate Starts for Fruitloop_61:
(Start: 22 @42550 has 25 MA's), (28, 42592), (46, 42751), (47, 42754), (49, 42778), (52, 42808), (57, 42886), (60, 42934), (64, 42955), (74, 43066), (78, 43102), (81, 43141), (82, 43153),

Gene: FugateOSU_55 Start: 48502, Stop: 47822, Start Num: 21
Candidate Starts for FugateOSU_55:
(Start: 20 @48511 has 26 MA's), (Start: 21 @48502 has 141 MA's), (46, 48295), (47, 48292), (49, 48268), (52, 48238), (60, 48112), (64, 48091), (66, 48070), (74, 47980), (81, 47905), (82, 47893), (88, 47866),

Gene: GMA2_122 Start: 101578, Stop: 100931, Start Num: 23
Candidate Starts for GMA2_122:
(23, 101578), (28, 101527), (29, 101521), (33, 101488), (39, 101416), (52, 101323), (70, 101098), (71, 101086), (72, 101077), (79, 101011),

Gene: Gareth_55 Start: 48496, Stop: 47816, Start Num: 21
Candidate Starts for Gareth_55:
(Start: 20 @48505 has 26 MA's), (Start: 21 @48496 has 141 MA's), (46, 48289), (47, 48286), (49, 48262), (52, 48232), (60, 48106), (64, 48085), (66, 48064), (74, 47974), (81, 47899), (82, 47887), (88, 47860),

Gene: Giraffe_56 Start: 48492, Stop: 47812, Start Num: 21
Candidate Starts for Giraffe_56:
(3, 48744), (4, 48735), (5, 48711), (6, 48681), (9, 48630), (10, 48591), (Start: 20 @48501 has 26 MA's), (Start: 21 @48492 has 141 MA's), (46, 48285), (47, 48282), (49, 48258), (52, 48228), (57, 48150), (60, 48102), (64, 48081), (74, 47970), (81, 47895), (82, 47883), (88, 47856),

Gene: Grand2040_55 Start: 48486, Stop: 47806, Start Num: 21
Candidate Starts for Grand2040_55:

(3, 48738), (4, 48729), (5, 48705), (6, 48675), (9, 48624), (10, 48585), (Start: 20 @48495 has 26 MA's), (Start: 21 @48486 has 141 MA's), (46, 48279), (47, 48276), (49, 48252), (52, 48222), (57, 48144), (60, 48096), (64, 48075), (74, 47964), (78, 47928), (81, 47889), (82, 47877), (88, 47850),

Gene: GreenChile_56 Start: 47987, Stop: 47301, Start Num: 20
Candidate Starts for GreenChile_56:
(Start: 20 @47987 has 26 MA's), (Start: 21 @47978 has 141 MA's), (40, 47816), (43, 47801), (47, 47768), (49, 47744), (52, 47714), (57, 47636), (60, 47588), (64, 47567), (66, 47546), (74, 47456), (78, 47420), (81, 47381), (82, 47369), (88, 47342),

Gene: GrootJr_12 Start: 6386, Stop: 7060, Start Num: 20
Candidate Starts for GrootJr_12:
(8, 6251), (15, 6359), (Start: 20 @6386 has 26 MA's), (45, 6587), (46, 6590), (53, 6647), (56, 6680), (64, 6791), (75, 6908), (85, 6998),

Gene: Gwilliam_56 Start: 48849, Stop: 48169, Start Num: 21
Candidate Starts for Gwilliam_56:
(Start: 20 @48858 has 26 MA's), (Start: 21 @48849 has 141 MA's), (46, 48642), (47, 48639), (49, 48615), (52, 48585), (60, 48459), (64, 48438), (66, 48417), (74, 48327), (81, 48252), (82, 48240), (88, 48213),

Gene: HSavage_54 Start: 47975, Stop: 47298, Start Num: 21
Candidate Starts for HSavage_54:
(Start: 20 @47984 has 26 MA's), (Start: 21 @47975 has 141 MA's), (40, 47813), (43, 47798), (47, 47765), (49, 47741), (52, 47711), (57, 47633), (60, 47585), (64, 47564), (66, 47543), (74, 47453), (78, 47417), (81, 47378), (82, 47366), (88, 47339),

Gene: Haimas_54 Start: 47991, Stop: 47314, Start Num: 21
Candidate Starts for Haimas_54:
(Start: 20 @48000 has 26 MA's), (Start: 21 @47991 has 141 MA's), (46, 47784), (47, 47781), (49, 47757), (52, 47727), (60, 47601), (64, 47580), (66, 47559), (74, 47469), (81, 47394), (82, 47382), (88, 47355),

Gene: Haleema_54 Start: 47990, Stop: 47310, Start Num: 21
Candidate Starts for Haleema_54:
(3, 48242), (4, 48233), (5, 48209), (6, 48179), (9, 48128), (10, 48089), (Start: 20 @47999 has 26 MA's), (Start: 21 @47990 has 141 MA's), (46, 47783), (47, 47780), (49, 47756), (52, 47726), (57, 47648), (60, 47600), (64, 47579), (74, 47468), (78, 47432), (81, 47393), (82, 47381), (88, 47354),

Gene: Hamish_54 Start: 47984, Stop: 47307, Start Num: 21
Candidate Starts for Hamish_54:
(Start: 20 @47993 has 26 MA's), (Start: 21 @47984 has 141 MA's), (46, 47777), (47, 47774), (49, 47750), (52, 47720), (60, 47594), (64, 47573), (66, 47552), (74, 47462), (81, 47387), (82, 47375), (88, 47348),

Gene: Happabalu_55 Start: 48526, Stop: 47846, Start Num: 21
Candidate Starts for Happabalu_55:
(Start: 20 @48535 has 26 MA's), (Start: 21 @48526 has 141 MA's), (46, 48319), (47, 48316), (49, 48292), (52, 48262), (60, 48136), (64, 48115), (66, 48094), (74, 48004), (81, 47929), (82, 47917), (88, 47890),

Gene: Harvey_54 Start: 48021, Stop: 47344, Start Num: 21
Candidate Starts for Harvey_54:

(3, 48273), (4, 48264), (5, 48240), (6, 48210), (9, 48159), (10, 48120), (Start: 20 @48030 has 26 MA's), (Start: 21 @48021 has 141 MA's), (40, 47859), (43, 47844), (47, 47811), (49, 47787), (52, 47757), (57, 47679), (60, 47631), (64, 47610), (66, 47589), (74, 47499), (78, 47463), (81, 47424), (82, 47412), (88, 47385),

Gene: Hashim76_57 Start: 48273, Stop: 47572, Start Num: 20
Candidate Starts for Hashim76_57:
(Start: 20 @48273 has 26 MA's), (Start: 22 @48258 has 25 MA's), (26, 48228), (51, 48018), (52, 48006), (56, 47970), (59, 47883), (66, 47832), (71, 47775), (82, 47646), (88, 47619),

Gene: Hekos_52 Start: 47372, Stop: 46683, Start Num: 20
Candidate Starts for Hekos_52:
(2, 47630), (3, 47615), (4, 47606), (5, 47582), (6, 47552), (9, 47501), (10, 47462), (Start: 20 @47372 has 26 MA's), (Start: 21 @47363 has 141 MA's), (46, 47156), (47, 47153), (49, 47129), (52, 47099), (57, 47021), (60, 46973), (64, 46952), (74, 46841), (78, 46805), (81, 46766), (82, 46754), (88, 46727),

Gene: Held_55 Start: 47995, Stop: 47315, Start Num: 21
Candidate Starts for Held_55:
(3, 48247), (4, 48238), (5, 48214), (6, 48184), (9, 48133), (10, 48094), (Start: 20 @48004 has 26 MA's), (Start: 21 @47995 has 141 MA's), (46, 47788), (47, 47785), (49, 47761), (52, 47731), (57, 47653), (60, 47605), (64, 47584), (74, 47473), (78, 47437), (81, 47398), (82, 47386), (88, 47359),

Gene: HenryJackson_55 Start: 48520, Stop: 47840, Start Num: 21
Candidate Starts for HenryJackson_55:
(Start: 20 @48529 has 26 MA's), (Start: 21 @48520 has 141 MA's), (46, 48313), (47, 48310), (49, 48286), (52, 48256), (60, 48130), (64, 48109), (66, 48088), (74, 47998), (81, 47923), (82, 47911), (88, 47884),

Gene: Hertubise_55 Start: 48287, Stop: 47607, Start Num: 21
Candidate Starts for Hertubise_55:
(Start: 20 @48296 has 26 MA's), (Start: 21 @48287 has 141 MA's), (46, 48080), (47, 48077), (49, 48053), (52, 48023), (60, 47897), (64, 47876), (66, 47855), (74, 47765), (81, 47690), (82, 47678), (88, 47651),

Gene: Hetaeria_54 Start: 48022, Stop: 47345, Start Num: 21
Candidate Starts for Hetaeria_54:
(3, 48274), (4, 48265), (5, 48241), (6, 48211), (9, 48160), (10, 48121), (Start: 20 @48031 has 26 MA's), (Start: 21 @48022 has 141 MA's), (40, 47860), (43, 47845), (47, 47812), (49, 47788), (52, 47758), (57, 47680), (60, 47632), (64, 47611), (66, 47590), (74, 47500), (78, 47464), (81, 47425), (82, 47413), (88, 47386),

Gene: HogWash_55 Start: 48817, Stop: 48137, Start Num: 21
Candidate Starts for HogWash_55:
(Start: 20 @48826 has 26 MA's), (Start: 21 @48817 has 141 MA's), (46, 48610), (47, 48607), (49, 48583), (52, 48553), (60, 48427), (64, 48406), (66, 48385), (74, 48295), (81, 48220), (82, 48208), (88, 48181),

Gene: Horchata_54 Start: 47975, Stop: 47298, Start Num: 21
Candidate Starts for Horchata_54:
(Start: 20 @47984 has 26 MA's), (Start: 21 @47975 has 141 MA's), (40, 47813), (43, 47798), (47, 47765), (49, 47741), (52, 47711), (57, 47633), (60, 47585), (64, 47564), (66, 47543), (74, 47453), (78, 47417), (81, 47378), (82, 47366), (88, 47339),

Gene: Inverness_54 Start: 47984, Stop: 47307, Start Num: 21
Candidate Starts for Inverness_54:
(3, 48236), (4, 48227), (5, 48203), (6, 48173), (9, 48122), (10, 48083), (Start: 20 @47993 has 26 MA's), (Start: 21 @47984 has 141 MA's), (40, 47822), (43, 47807), (47, 47774), (49, 47750), (52, 47720), (57, 47642), (60, 47594), (64, 47573), (66, 47552), (74, 47462), (78, 47426), (81, 47387), (82, 47375), (88, 47348),

Gene: IrishSherpFalk_67 Start: 43906, Stop: 44583, Start Num: 22
Candidate Starts for IrishSherpFalk_67:
(Start: 22 @43906 has 25 MA's), (28, 43948), (46, 44107), (47, 44110), (49, 44134), (52, 44164), (57, 44242), (60, 44290), (64, 44311), (74, 44422), (78, 44458), (81, 44497), (82, 44509),

Gene: IsaacEli_56 Start: 48508, Stop: 47828, Start Num: 21
Candidate Starts for IsaacEli_56:
(Start: 20 @48517 has 26 MA's), (Start: 21 @48508 has 141 MA's), (46, 48301), (47, 48298), (49, 48274), (52, 48244), (60, 48118), (64, 48097), (66, 48076), (74, 47986), (81, 47911), (82, 47899), (88, 47872),

Gene: JDog_54 Start: 48524, Stop: 47844, Start Num: 21
Candidate Starts for JDog_54:
(2, 48791), (3, 48776), (4, 48767), (5, 48743), (6, 48713), (9, 48662), (10, 48623), (Start: 20 @48533 has 26 MA's), (Start: 21 @48524 has 141 MA's), (46, 48317), (47, 48314), (49, 48290), (52, 48260), (60, 48134), (64, 48113), (66, 48092), (74, 48002), (81, 47927), (82, 47915), (88, 47888),

Gene: Jesabah_56 Start: 48525, Stop: 47845, Start Num: 21
Candidate Starts for Jesabah_56:
(Start: 20 @48534 has 26 MA's), (Start: 21 @48525 has 141 MA's), (46, 48318), (47, 48315), (49, 48291), (52, 48261), (60, 48135), (64, 48114), (66, 48093), (74, 48003), (81, 47928), (82, 47916), (88, 47889),

Gene: Jifall16_9 Start: 5425, Stop: 6087, Start Num: 20
Candidate Starts for Jifall16_9:
(8, 5290), (15, 5398), (Start: 20 @5425 has 26 MA's), (45, 5626), (46, 5629), (53, 5686), (64, 5833), (75, 5950), (85, 6040),

Gene: Jillium_55 Start: 48516, Stop: 47836, Start Num: 21
Candidate Starts for Jillium_55:
(Start: 20 @48525 has 26 MA's), (Start: 21 @48516 has 141 MA's), (46, 48309), (47, 48306), (49, 48282), (52, 48252), (60, 48126), (64, 48105), (66, 48084), (74, 47994), (81, 47919), (82, 47907), (88, 47880),

Gene: Kahve_55 Start: 48517, Stop: 47837, Start Num: 21
Candidate Starts for Kahve_55:
(Start: 20 @48526 has 26 MA's), (Start: 21 @48517 has 141 MA's), (46, 48310), (47, 48307), (49, 48283), (52, 48253), (60, 48127), (64, 48106), (66, 48085), (74, 47995), (81, 47920), (82, 47908), (88, 47881),

Gene: Khan1_56 Start: 48473, Stop: 47793, Start Num: 21
Candidate Starts for Khan1_56:
(3, 48725), (4, 48716), (5, 48692), (6, 48662), (9, 48611), (10, 48572), (Start: 20 @48482 has 26 MA's), (Start: 21 @48473 has 141 MA's), (46, 48266), (47, 48263), (49, 48239), (52, 48209), (57, 48131), (60, 48083), (64, 48062), (74, 47951), (78, 47915), (81, 47876), (82, 47864), (88, 47837),

Gene: KidneyBean_10 Start: 5770, Stop: 6429, Start Num: 20
Candidate Starts for KidneyBean_10:
(8, 5635), (15, 5743), (Start: 20 @5770 has 26 MA's), (45, 5971), (46, 5974), (53, 6031), (56, 6064), (64, 6175), (75, 6292), (85, 6382),

Gene: Kikipoo_56 Start: 48508, Stop: 47828, Start Num: 21
Candidate Starts for Kikipoo_56:
(Start: 20 @48517 has 26 MA's), (Start: 21 @48508 has 141 MA's), (46, 48301), (47, 48298), (49, 48274), (52, 48244), (60, 48118), (64, 48097), (66, 48076), (74, 47986), (81, 47911), (82, 47899), (88, 47872),

Gene: Kimbrough_56 Start: 48517, Stop: 47837, Start Num: 21
Candidate Starts for Kimbrough_56:
(Start: 20 @48526 has 26 MA's), (Start: 21 @48517 has 141 MA's), (46, 48310), (47, 48307), (49, 48283), (52, 48253), (60, 48127), (64, 48106), (66, 48085), (74, 47995), (81, 47920), (82, 47908), (88, 47881),

Gene: KingTut_47 Start: 44181, Stop: 43501, Start Num: 21
Candidate Starts for KingTut_47:
(Start: 20 @44190 has 26 MA's), (Start: 21 @44181 has 141 MA's), (46, 43974), (47, 43971), (49, 43947), (52, 43917), (60, 43791), (64, 43770), (66, 43749), (74, 43659), (81, 43584), (82, 43572), (88, 43545),

Gene: KlimbOn_54 Start: 47976, Stop: 47299, Start Num: 21
Candidate Starts for KlimbOn_54:
(Start: 20 @47985 has 26 MA's), (Start: 21 @47976 has 141 MA's), (40, 47814), (43, 47799), (47, 47766), (49, 47742), (52, 47712), (57, 47634), (60, 47586), (64, 47565), (66, 47544), (74, 47454), (78, 47418), (81, 47379), (82, 47367), (86, 47346), (88, 47340),

Gene: Kurt_10 Start: 5953, Stop: 6612, Start Num: 20
Candidate Starts for Kurt_10:
(8, 5818), (15, 5926), (Start: 20 @5953 has 26 MA's), (45, 6154), (46, 6157), (53, 6214), (56, 6247), (64, 6358), (75, 6475), (85, 6565),

Gene: Kwadwo_54 Start: 47969, Stop: 47289, Start Num: 21
Candidate Starts for Kwadwo_54:
(3, 48221), (4, 48212), (5, 48188), (6, 48158), (9, 48107), (10, 48068), (Start: 20 @47978 has 26 MA's), (Start: 21 @47969 has 141 MA's), (46, 47762), (47, 47759), (49, 47735), (52, 47705), (57, 47627), (60, 47579), (64, 47558), (74, 47447), (78, 47411), (81, 47372), (82, 47360), (88, 47333),

Gene: Lasso_55 Start: 48244, Stop: 47564, Start Num: 21
Candidate Starts for Lasso_55:
(3, 48496), (4, 48487), (5, 48463), (6, 48433), (9, 48382), (10, 48343), (Start: 20 @48253 has 26 MA's), (Start: 21 @48244 has 141 MA's), (46, 48037), (47, 48034), (49, 48010), (52, 47980), (57, 47902), (60, 47854), (64, 47833), (74, 47722), (78, 47686), (81, 47647), (82, 47635), (88, 47608),

Gene: LeeLot_55 Start: 48296, Stop: 47616, Start Num: 21
Candidate Starts for LeeLot_55:
(2, 48563), (3, 48548), (4, 48539), (5, 48515), (6, 48485), (9, 48434), (10, 48395), (Start: 20 @48305 has 26 MA's), (Start: 21 @48296 has 141 MA's), (46, 48089), (47, 48086), (49, 48062), (52, 48032), (60, 47906), (64, 47885), (66, 47864), (74, 47774), (81, 47699), (82, 47687), (88, 47660),

Gene: Lego3393_54 Start: 48508, Stop: 47828, Start Num: 21

Candidate Starts for Lego3393_54:
(Start: 20 @48517 has 26 MA's), (Start: 21 @48508 has 141 MA's), (46, 48301), (47, 48298), (49, 48274), (52, 48244), (60, 48118), (64, 48097), (66, 48076), (74, 47986), (81, 47911), (82, 47899), (88, 47872),

Gene: Lehmann_55 Start: 47867, Stop: 47187, Start Num: 21
Candidate Starts for Lehmann_55:
(3, 48119), (4, 48110), (5, 48086), (6, 48056), (9, 48005), (10, 47966), (Start: 20 @47876 has 26 MA's), (Start: 21 @47867 has 141 MA's), (40, 47705), (43, 47690), (47, 47657), (49, 47633), (52, 47603), (57, 47525), (60, 47477), (64, 47456), (66, 47435), (74, 47345), (78, 47309), (81, 47270), (82, 47258), (88, 47231),

Gene: Lilas_46 Start: 37586, Stop: 38191, Start Num: 22
Candidate Starts for Lilas_46:
(Start: 22 @37586 has 25 MA's), (28, 37628), (52, 37823), (54, 37856), (57, 37904), (67, 37997), (75, 38066),

Gene: LittleMinkey_59 Start: 47912, Stop: 47211, Start Num: 20
Candidate Starts for LittleMinkey_59:
(Start: 20 @47912 has 26 MA's), (Start: 22 @47897 has 25 MA's), (26, 47867), (52, 47645), (56, 47609), (71, 47414), (82, 47285), (88, 47258),

Gene: Llij_62 Start: 41070, Stop: 41747, Start Num: 22
Candidate Starts for Llij_62:
(Start: 22 @41070 has 25 MA's), (28, 41112), (46, 41271), (47, 41274), (49, 41298), (52, 41328), (57, 41406), (60, 41454), (64, 41475), (74, 41586), (78, 41622), (81, 41661), (82, 41673),

Gene: Lollipop1437_12 Start: 6752, Stop: 7441, Start Num: 20
Candidate Starts for Lollipop1437_12:
(11, 6680), (15, 6725), (Start: 20 @6752 has 26 MA's), (34, 6869), (45, 6968), (46, 6971), (53, 7028), (64, 7172), (73, 7265), (75, 7289), (85, 7379), (90, 7403),

Gene: LordVader_70 Start: 40689, Stop: 41372, Start Num: 19
Candidate Starts for LordVader_70:
(Start: 19 @40689 has 1 MA's), (32, 40767), (41, 40857), (47, 40899), (49, 40923), (52, 40953), (66, 41124), (81, 41286), (82, 41298), (87, 41322), (88, 41325),

Gene: Lorde_66 Start: 40357, Stop: 41034, Start Num: 22
Candidate Starts for Lorde_66:
(Start: 22 @40357 has 25 MA's), (28, 40399), (46, 40558), (47, 40561), (49, 40585), (52, 40615), (57, 40693), (60, 40741), (64, 40762), (74, 40873), (78, 40909), (81, 40948), (82, 40960),

Gene: LuckyMarjie_53 Start: 47677, Stop: 47000, Start Num: 21
Candidate Starts for LuckyMarjie_53:
(Start: 20 @47686 has 26 MA's), (Start: 21 @47677 has 141 MA's), (37, 47548), (40, 47515), (43, 47500), (46, 47470), (47, 47467), (49, 47443), (52, 47413), (57, 47335), (60, 47287), (64, 47266), (66, 47245), (74, 47155), (78, 47119), (81, 47080), (82, 47068), (85, 47053), (88, 47041),

Gene: Lulumae_53 Start: 47662, Stop: 46985, Start Num: 21
Candidate Starts for Lulumae_53:
(Start: 20 @47671 has 26 MA's), (Start: 21 @47662 has 141 MA's), (37, 47533), (40, 47500), (43, 47485), (46, 47455), (47, 47452), (49, 47428), (52, 47398), (57, 47320), (60, 47272), (64, 47251), (66, 47230), (74, 47140), (78, 47104), (81, 47065), (82, 47053), (85, 47038), (88, 47026),

Gene: MRabcd_54 Start: 48059, Stop: 47379, Start Num: 21
Candidate Starts for MRabcd_54:
(3, 48311), (4, 48302), (5, 48278), (6, 48248), (9, 48197), (10, 48158), (Start: 20 @48068 has 26 MA's),
(Start: 21 @48059 has 141 MA's), (46, 47852), (47, 47849), (49, 47825), (52, 47795), (57, 47717), (60,
47669), (64, 47648), (74, 47537), (78, 47501), (81, 47462), (82, 47450), (88, 47423),

Gene: Mana_54 Start: 47984, Stop: 47304, Start Num: 21
Candidate Starts for Mana_54:
(3, 48236), (4, 48227), (5, 48203), (6, 48173), (9, 48122), (10, 48083), (Start: 20 @47993 has 26 MA's),
(Start: 21 @47984 has 141 MA's), (46, 47777), (47, 47774), (49, 47750), (52, 47720), (57, 47642), (60,
47594), (64, 47573), (74, 47462), (78, 47426), (81, 47387), (82, 47375), (88, 47348),

Gene: Manad_54 Start: 47959, Stop: 47282, Start Num: 21
Candidate Starts for Manad_54:
(3, 48211), (4, 48202), (5, 48178), (6, 48148), (9, 48097), (10, 48058), (Start: 20 @47968 has 26 MA's),
(Start: 21 @47959 has 141 MA's), (40, 47797), (43, 47782), (47, 47749), (49, 47725), (52, 47695), (57,
47617), (60, 47569), (64, 47548), (66, 47527), (74, 47437), (78, 47401), (81, 47362), (82, 47350), (88,
47323),

Gene: Maru_55 Start: 48423, Stop: 47743, Start Num: 21
Candidate Starts for Maru_55:
(3, 48675), (4, 48666), (5, 48642), (6, 48612), (9, 48561), (10, 48522), (Start: 20 @48432 has 26 MA's),
(Start: 21 @48423 has 141 MA's), (46, 48216), (47, 48213), (49, 48189), (52, 48159), (57, 48081), (60,
48033), (64, 48012), (74, 47901), (78, 47865), (81, 47826), (82, 47814), (88, 47787),

Gene: Matalotodo_54 Start: 47994, Stop: 47317, Start Num: 21
Candidate Starts for Matalotodo_54:
(Start: 20 @48003 has 26 MA's), (Start: 21 @47994 has 141 MA's), (46, 47787), (47, 47784), (49,
47760), (52, 47730), (60, 47604), (64, 47583), (66, 47562), (74, 47472), (78, 47436), (81, 47397), (82,
47385), (88, 47358),

Gene: Mecca_55 Start: 48505, Stop: 47825, Start Num: 21
Candidate Starts for Mecca_55:
(Start: 20 @48514 has 26 MA's), (Start: 21 @48505 has 141 MA's), (46, 48298), (47, 48295), (49,
48271), (52, 48241), (60, 48115), (64, 48094), (66, 48073), (74, 47983), (81, 47908), (82, 47896), (88,
47869),

Gene: Megatron_56 Start: 48496, Stop: 47816, Start Num: 21
Candidate Starts for Megatron_56:
(Start: 20 @48505 has 26 MA's), (Start: 21 @48496 has 141 MA's), (46, 48289), (47, 48286), (49,
48262), (52, 48232), (60, 48106), (64, 48085), (66, 48064), (74, 47974), (81, 47899), (82, 47887), (88,
47860),

Gene: Melc17_55 Start: 48814, Stop: 48134, Start Num: 21
Candidate Starts for Melc17_55:
(Start: 20 @48823 has 26 MA's), (Start: 21 @48814 has 141 MA's), (46, 48607), (47, 48604), (49,
48580), (52, 48550), (60, 48424), (64, 48403), (66, 48382), (74, 48292), (81, 48217), (82, 48205), (88,
48178),

Gene: Mesh1_56 Start: 48516, Stop: 47836, Start Num: 21
Candidate Starts for Mesh1_56:

(3, 48768), (4, 48759), (5, 48735), (6, 48705), (9, 48654), (10, 48615), (Start: 20 @48525 has 26 MA's), (Start: 21 @48516 has 141 MA's), (40, 48354), (43, 48339), (47, 48306), (49, 48282), (52, 48252), (57, 48174), (60, 48126), (64, 48105), (66, 48084), (74, 47994), (78, 47958), (81, 47919), (82, 47907), (88, 47880),

Gene: MitKao_55 Start: 47994, Stop: 47314, Start Num: 21
Candidate Starts for MitKao_55:
(3, 48246), (4, 48237), (5, 48213), (6, 48183), (9, 48132), (10, 48093), (Start: 20 @48003 has 26 MA's), (Start: 21 @47994 has 141 MA's), (46, 47787), (47, 47784), (49, 47760), (52, 47730), (57, 47652), (60, 47604), (64, 47583), (74, 47472), (78, 47436), (81, 47397), (82, 47385), (88, 47358),

Gene: Morgushi_55 Start: 47983, Stop: 47303, Start Num: 21
Candidate Starts for Morgushi_55:
(3, 48235), (4, 48226), (5, 48202), (6, 48172), (9, 48121), (10, 48082), (Start: 20 @47992 has 26 MA's), (Start: 21 @47983 has 141 MA's), (46, 47776), (47, 47773), (49, 47749), (52, 47719), (57, 47641), (60, 47593), (64, 47572), (74, 47461), (78, 47425), (81, 47386), (82, 47374), (88, 47347),

Gene: Morty_56 Start: 48505, Stop: 47825, Start Num: 21
Candidate Starts for Morty_56:
(Start: 20 @48514 has 26 MA's), (Start: 21 @48505 has 141 MA's), (46, 48298), (47, 48295), (49, 48271), (52, 48241), (60, 48115), (64, 48094), (66, 48073), (74, 47983), (81, 47908), (82, 47896), (88, 47869),

Gene: Mosaic_54 Start: 47988, Stop: 47308, Start Num: 21
Candidate Starts for Mosaic_54:
(3, 48240), (4, 48231), (5, 48207), (6, 48177), (9, 48126), (10, 48087), (Start: 20 @47997 has 26 MA's), (Start: 21 @47988 has 141 MA's), (46, 47781), (47, 47778), (49, 47754), (52, 47724), (57, 47646), (60, 47598), (64, 47577), (74, 47466), (78, 47430), (81, 47391), (82, 47379), (88, 47352),

Gene: MrPhizzler_57 Start: 48450, Stop: 47770, Start Num: 21
Candidate Starts for MrPhizzler_57:
(3, 48702), (4, 48693), (5, 48669), (6, 48639), (9, 48588), (10, 48549), (Start: 20 @48459 has 26 MA's), (Start: 21 @48450 has 141 MA's), (46, 48243), (47, 48240), (49, 48216), (52, 48186), (57, 48108), (60, 48060), (64, 48039), (74, 47928), (78, 47892), (81, 47853), (82, 47841), (88, 47814),

Gene: Mulan_55 Start: 48222, Stop: 47542, Start Num: 21
Candidate Starts for Mulan_55:
(Start: 20 @48231 has 26 MA's), (Start: 21 @48222 has 141 MA's), (46, 48015), (47, 48012), (49, 47988), (52, 47958), (60, 47832), (64, 47811), (66, 47790), (74, 47700), (81, 47625), (82, 47613), (88, 47586),

Gene: Murdoc_54 Start: 47984, Stop: 47307, Start Num: 21
Candidate Starts for Murdoc_54:
(Start: 20 @47993 has 26 MA's), (Start: 21 @47984 has 141 MA's), (46, 47777), (47, 47774), (49, 47750), (52, 47720), (60, 47594), (64, 47573), (66, 47552), (74, 47462), (78, 47426), (81, 47387), (82, 47375), (88, 47348),

Gene: Nacho_0056 Start: 48499, Stop: 47819, Start Num: 21
Candidate Starts for Nacho_0056:
(Start: 20 @48508 has 26 MA's), (Start: 21 @48499 has 141 MA's), (46, 48292), (47, 48289), (49, 48265), (52, 48235), (60, 48109), (64, 48088), (66, 48067), (74, 47977), (81, 47902), (82, 47890), (88, 47863),

Gene: NatB6_10 Start: 6032, Stop: 6694, Start Num: 20
Candidate Starts for NatB6_10:
(8, 5897), (15, 6005), (Start: 20 @6032 has 26 MA's), (27, 6074), (45, 6233), (46, 6236), (50, 6269), (53, 6293), (64, 6440), (75, 6557), (85, 6647), (86, 6653),

Gene: Newman_54 Start: 47979, Stop: 47302, Start Num: 21
Candidate Starts for Newman_54:
(3, 48231), (4, 48222), (5, 48198), (6, 48168), (9, 48117), (10, 48078), (Start: 20 @47988 has 26 MA's), (Start: 21 @47979 has 141 MA's), (40, 47817), (43, 47802), (47, 47769), (49, 47745), (52, 47715), (57, 47637), (60, 47589), (64, 47568), (66, 47547), (74, 47457), (78, 47421), (81, 47382), (82, 47370), (88, 47343),

Gene: NovumRegina_10 Start: 6385, Stop: 7059, Start Num: 20
Candidate Starts for NovumRegina_10:
(8, 6250), (15, 6358), (Start: 20 @6385 has 26 MA's), (45, 6586), (46, 6589), (53, 6646), (56, 6679), (64, 6790), (75, 6907), (85, 6997),

Gene: Numberten_54 Start: 47974, Stop: 47297, Start Num: 21
Candidate Starts for Numberten_54:
(Start: 20 @47983 has 26 MA's), (Start: 21 @47974 has 141 MA's), (37, 47845), (40, 47812), (43, 47797), (46, 47767), (47, 47764), (49, 47740), (52, 47710), (57, 47632), (60, 47584), (64, 47563), (66, 47542), (74, 47452), (78, 47416), (81, 47377), (82, 47365), (85, 47350), (88, 47338),

Gene: OSmaximus_56 Start: 48538, Stop: 47858, Start Num: 21
Candidate Starts for OSmaximus_56:
(3, 48790), (4, 48781), (5, 48757), (6, 48727), (9, 48676), (10, 48637), (Start: 20 @48547 has 26 MA's), (Start: 21 @48538 has 141 MA's), (40, 48376), (43, 48361), (47, 48328), (49, 48304), (52, 48274), (57, 48196), (60, 48148), (64, 48127), (66, 48106), (74, 48016), (78, 47980), (81, 47941), (82, 47929), (88, 47902),

Gene: Ogopogo_73 Start: 43850, Stop: 44527, Start Num: 22
Candidate Starts for Ogopogo_73:
(Start: 22 @43850 has 25 MA's), (28, 43892), (46, 44051), (47, 44054), (49, 44078), (52, 44108), (57, 44186), (60, 44234), (64, 44255), (74, 44366), (78, 44402), (81, 44441), (82, 44453),

Gene: Oksu_71 Start: 46299, Stop: 46976, Start Num: 22
Candidate Starts for Oksu_71:
(Start: 22 @46299 has 25 MA's), (28, 46341), (46, 46500), (47, 46503), (49, 46527), (52, 46557), (57, 46635), (60, 46683), (64, 46704), (74, 46815), (78, 46851), (81, 46890), (82, 46902),

Gene: Olive_54 Start: 47964, Stop: 47287, Start Num: 21
Candidate Starts for Olive_54:
(Start: 20 @47973 has 26 MA's), (Start: 21 @47964 has 141 MA's), (37, 47835), (40, 47802), (43, 47787), (46, 47757), (47, 47754), (49, 47730), (52, 47700), (57, 47622), (60, 47574), (64, 47553), (66, 47532), (74, 47442), (78, 47406), (81, 47367), (82, 47355), (88, 47328),

Gene: OliverWalter_54 Start: 47985, Stop: 47308, Start Num: 21
Candidate Starts for OliverWalter_54:
(Start: 20 @47994 has 26 MA's), (Start: 21 @47985 has 141 MA's), (40, 47823), (43, 47808), (47, 47775), (49, 47751), (52, 47721), (57, 47643), (60, 47595), (64, 47574), (66, 47553), (74, 47463), (78, 47427), (81, 47388), (82, 47376), (88, 47349),

Gene: Omniscient_56 Start: 48812, Stop: 48132, Start Num: 21

Candidate Starts for Omniscient_56:
(Start: 20 @48821 has 26 MA's), (Start: 21 @48812 has 141 MA's), (46, 48605), (47, 48602), (49, 48578), (52, 48548), (60, 48422), (64, 48401), (66, 48380), (74, 48290), (81, 48215), (82, 48203), (88, 48176),

Gene: OneBrain_56 Start: 48016, Stop: 47336, Start Num: 21
Candidate Starts for OneBrain_56:
(Start: 20 @48025 has 26 MA's), (Start: 21 @48016 has 141 MA's), (40, 47854), (43, 47839), (47, 47806), (49, 47782), (52, 47752), (57, 47674), (60, 47626), (64, 47605), (66, 47584), (74, 47494), (78, 47458), (81, 47419), (82, 47407), (88, 47380),

Gene: Oosterbaan_55 Start: 48274, Stop: 47594, Start Num: 21
Candidate Starts for Oosterbaan_55:
(Start: 20 @48283 has 26 MA's), (Start: 21 @48274 has 141 MA's), (46, 48067), (47, 48064), (49, 48040), (52, 48010), (60, 47884), (64, 47863), (66, 47842), (74, 47752), (81, 47677), (82, 47665), (88, 47638),

Gene: PG1_56 Start: 48507, Stop: 47827, Start Num: 21
Candidate Starts for PG1_56:
(Start: 20 @48516 has 26 MA's), (Start: 21 @48507 has 141 MA's), (46, 48300), (47, 48297), (49, 48273), (52, 48243), (60, 48117), (64, 48096), (66, 48075), (74, 47985), (81, 47910), (82, 47898), (88, 47871),

Gene: Phareon_54 Start: 47671, Stop: 46994, Start Num: 21
Candidate Starts for Phareon_54:
(Start: 20 @47680 has 26 MA's), (Start: 21 @47671 has 141 MA's), (37, 47542), (40, 47509), (43, 47494), (46, 47464), (47, 47461), (49, 47437), (52, 47407), (57, 47329), (60, 47281), (64, 47260), (66, 47239), (74, 47149), (78, 47113), (81, 47074), (82, 47062), (85, 47047), (88, 47035),

Gene: PhatCats2014_56 Start: 48511, Stop: 47831, Start Num: 21
Candidate Starts for PhatCats2014_56:
(Start: 20 @48520 has 26 MA's), (Start: 21 @48511 has 141 MA's), (46, 48304), (47, 48301), (49, 48277), (52, 48247), (60, 48121), (64, 48100), (66, 48079), (74, 47989), (81, 47914), (82, 47902), (88, 47875),

Gene: Phatniss_64 Start: 42165, Stop: 42842, Start Num: 22
Candidate Starts for Phatniss_64:
(Start: 22 @42165 has 25 MA's), (28, 42207), (46, 42366), (47, 42369), (49, 42393), (52, 42423), (57, 42501), (60, 42549), (64, 42570), (74, 42681), (78, 42717), (81, 42756), (82, 42768),

Gene: Phomeo_9 Start: 5606, Stop: 6265, Start Num: 20
Candidate Starts for Phomeo_9:
(8, 5471), (15, 5579), (Start: 20 @5606 has 26 MA's), (45, 5807), (46, 5810), (53, 5867), (56, 5900), (64, 6011), (75, 6128), (85, 6218),

Gene: Phrappuccino_151 Start: 104613, Stop: 105200, Start Num: 25
Candidate Starts for Phrappuccino_151:
(7, 104412), (Start: 25 @104613 has 2 MA's), (28, 104661), (35, 104712), (38, 104757), (56, 104874), (57, 104913), (58, 104919), (61, 104964), (62, 104973), (67, 105012), (74, 105081), (75, 105084), (76, 105087),

Gene: Phunky_54 Start: 47968, Stop: 47291, Start Num: 21
Candidate Starts for Phunky_54:

(Start: 20 @47977 has 26 MA's), (Start: 21 @47968 has 141 MA's), (37, 47839), (40, 47806), (43, 47791), (46, 47761), (47, 47758), (49, 47734), (52, 47704), (57, 47626), (60, 47578), (64, 47557), (66, 47536), (74, 47446), (78, 47410), (81, 47371), (82, 47359), (85, 47344), (88, 47332),

Gene: Piglet_0055 Start: 48493, Stop: 47804, Start Num: 20
Candidate Starts for Piglet_0055:
(Start: 20 @48493 has 26 MA's), (Start: 21 @48484 has 141 MA's), (46, 48277), (47, 48274), (49, 48250), (52, 48220), (60, 48094), (64, 48073), (66, 48052), (74, 47962), (81, 47887), (82, 47875), (88, 47848),

Gene: PinheadLarry_56 Start: 48509, Stop: 47829, Start Num: 21
Candidate Starts for PinheadLarry_56:
(Start: 20 @48518 has 26 MA's), (Start: 21 @48509 has 141 MA's), (46, 48302), (47, 48299), (49, 48275), (52, 48245), (60, 48119), (64, 48098), (66, 48077), (74, 47987), (78, 47951), (81, 47912), (82, 47900), (88, 47873),

Gene: Pipsqueak_54 Start: 47997, Stop: 47320, Start Num: 21
Candidate Starts for Pipsqueak_54:
(Start: 20 @48006 has 26 MA's), (Start: 21 @47997 has 141 MA's), (46, 47790), (47, 47787), (49, 47763), (52, 47733), (60, 47607), (64, 47586), (66, 47565), (74, 47475), (78, 47439), (81, 47400), (82, 47388), (88, 47361),

Gene: Placalicious_55 Start: 48499, Stop: 47819, Start Num: 21
Candidate Starts for Placalicious_55:
(Start: 20 @48508 has 26 MA's), (Start: 21 @48499 has 141 MA's), (46, 48292), (47, 48289), (49, 48265), (52, 48235), (60, 48109), (64, 48088), (66, 48067), (74, 47977), (81, 47902), (82, 47890), (88, 47863),

Gene: Plmatters_54 Start: 47971, Stop: 47294, Start Num: 21
Candidate Starts for Plmatters_54:
(3, 48223), (4, 48214), (5, 48190), (6, 48160), (9, 48109), (10, 48070), (Start: 20 @47980 has 26 MA's), (Start: 21 @47971 has 141 MA's), (37, 47842), (40, 47809), (43, 47794), (46, 47764), (47, 47761), (49, 47737), (52, 47707), (57, 47629), (60, 47581), (64, 47560), (66, 47539), (74, 47449), (78, 47413), (81, 47374), (82, 47362), (85, 47347), (88, 47335),

Gene: Poenanya_66 Start: 43323, Stop: 44000, Start Num: 22
Candidate Starts for Poenanya_66:
(Start: 22 @43323 has 25 MA's), (28, 43365), (46, 43524), (47, 43527), (49, 43551), (52, 43581), (57, 43659), (60, 43707), (64, 43728), (74, 43839), (78, 43875), (81, 43914), (82, 43926),

Gene: Pops_54 Start: 47956, Stop: 47309, Start Num: 21
Candidate Starts for Pops_54:
(2, 48223), (3, 48208), (4, 48199), (5, 48175), (6, 48145), (9, 48094), (10, 48055), (Start: 20 @47965 has 26 MA's), (Start: 21 @47956 has 141 MA's), (30, 47899), (47, 47746), (49, 47722), (52, 47692), (60, 47566), (64, 47545), (66, 47524), (74, 47434), (81, 47389), (82, 47377), (88, 47350),

Gene: Posh_51 Start: 37991, Stop: 38596, Start Num: 22
Candidate Starts for Posh_51:
(Start: 22 @37991 has 25 MA's), (28, 38033), (52, 38228), (54, 38261), (57, 38309), (67, 38402), (75, 38471), (80, 38525),

Gene: Potter_54 Start: 48005, Stop: 47325, Start Num: 21
Candidate Starts for Potter_54:

(3, 48257), (4, 48248), (5, 48224), (6, 48194), (9, 48143), (10, 48104), (Start: 20 @48014 has 26 MA's), (Start: 21 @48005 has 141 MA's), (46, 47798), (47, 47795), (49, 47771), (52, 47741), (57, 47663), (60, 47615), (64, 47594), (74, 47483), (78, 47447), (81, 47408), (82, 47396), (88, 47369),

Gene: ProfessorX_54 Start: 47963, Stop: 47286, Start Num: 21
Candidate Starts for ProfessorX_54:
(Start: 20 @47972 has 26 MA's), (Start: 21 @47963 has 141 MA's), (46, 47756), (47, 47753), (49, 47729), (52, 47699), (57, 47621), (60, 47573), (64, 47552), (66, 47531), (74, 47441), (78, 47405), (81, 47366), (82, 47354), (88, 47327),

Gene: Puhltonio_55 Start: 48279, Stop: 47599, Start Num: 21
Candidate Starts for Puhltonio_55:
(3, 48531), (4, 48522), (5, 48498), (6, 48468), (9, 48417), (10, 48378), (Start: 20 @48288 has 26 MA's), (Start: 21 @48279 has 141 MA's), (46, 48072), (47, 48069), (49, 48045), (52, 48015), (57, 47937), (60, 47889), (64, 47868), (74, 47757), (78, 47721), (81, 47682), (82, 47670), (88, 47643),

Gene: QueenBeane_55 Start: 48269, Stop: 47589, Start Num: 21
Candidate Starts for QueenBeane_55:
(Start: 20 @48278 has 26 MA's), (Start: 21 @48269 has 141 MA's), (46, 48062), (47, 48059), (49, 48035), (52, 48005), (60, 47879), (64, 47858), (66, 47837), (74, 47747), (81, 47672), (82, 47660), (88, 47633),

Gene: RedRaider_13 Start: 6700, Stop: 7374, Start Num: 21
Candidate Starts for RedRaider_13:
(14, 6646), (Start: 21 @6700 has 141 MA's), (45, 6901), (46, 6904), (47, 6907), (53, 6961), (64, 7105), (69, 7171), (73, 7198), (75, 7222), (85, 7312),

Gene: RedRaider89_56 Start: 48196, Stop: 47519, Start Num: 21
Candidate Starts for RedRaider89_56:
(Start: 20 @48205 has 26 MA's), (Start: 21 @48196 has 141 MA's), (40, 48034), (43, 48019), (47, 47986), (49, 47962), (52, 47932), (57, 47854), (60, 47806), (64, 47785), (66, 47764), (74, 47674), (78, 47638), (81, 47599), (82, 47587), (88, 47560),

Gene: Riverton_53 Start: 47990, Stop: 47313, Start Num: 21
Candidate Starts for Riverton_53:
(Start: 20 @47999 has 26 MA's), (Start: 21 @47990 has 141 MA's), (40, 47828), (43, 47813), (47, 47780), (49, 47756), (52, 47726), (57, 47648), (60, 47600), (64, 47579), (66, 47558), (74, 47468), (78, 47432), (81, 47393), (82, 47381), (86, 47360), (88, 47354),

Gene: Robyn_54 Start: 47908, Stop: 47228, Start Num: 21
Candidate Starts for Robyn_54:
(3, 48160), (4, 48151), (5, 48127), (6, 48097), (9, 48046), (10, 48007), (Start: 20 @47917 has 26 MA's), (Start: 21 @47908 has 141 MA's), (40, 47746), (43, 47731), (47, 47698), (49, 47674), (52, 47644), (57, 47566), (60, 47518), (64, 47497), (66, 47476), (74, 47386), (78, 47350), (81, 47311), (82, 47299), (88, 47272),

Gene: Roscoe_55 Start: 48208, Stop: 47531, Start Num: 21
Candidate Starts for Roscoe_55:
(Start: 20 @48217 has 26 MA's), (Start: 21 @48208 has 141 MA's), (37, 48079), (40, 48046), (43, 48031), (46, 48001), (47, 47998), (49, 47974), (52, 47944), (57, 47866), (60, 47818), (64, 47797), (66, 47776), (74, 47686), (78, 47650), (81, 47611), (82, 47599), (88, 47572),

Gene: Roy17_54 Start: 47662, Stop: 46985, Start Num: 21

Candidate Starts for Roy17_54:
(Start: 20 @47671 has 26 MA's), (Start: 21 @47662 has 141 MA's), (37, 47533), (40, 47500), (43, 47485), (46, 47455), (47, 47452), (49, 47428), (52, 47398), (57, 47320), (60, 47272), (64, 47251), (66, 47230), (74, 47140), (78, 47104), (81, 47065), (82, 47053), (85, 47038), (88, 47026),

Gene: Samaymay_55 Start: 48269, Stop: 47589, Start Num: 21
Candidate Starts for Samaymay_55:
(Start: 20 @48278 has 26 MA's), (Start: 21 @48269 has 141 MA's), (46, 48062), (47, 48059), (49, 48035), (52, 48005), (60, 47879), (64, 47858), (66, 47837), (74, 47747), (81, 47672), (82, 47660), (88, 47633),

Gene: SassyCat97_54 Start: 47996, Stop: 47316, Start Num: 21
Candidate Starts for SassyCat97_54:
(3, 48248), (4, 48239), (5, 48215), (6, 48185), (9, 48134), (10, 48095), (Start: 20 @48005 has 26 MA's), (Start: 21 @47996 has 141 MA's), (46, 47789), (47, 47786), (49, 47762), (52, 47732), (57, 47654), (60, 47606), (64, 47585), (74, 47474), (78, 47438), (81, 47399), (82, 47387), (88, 47360),

Gene: Schadenfreude_54 Start: 47755, Stop: 47078, Start Num: 21
Candidate Starts for Schadenfreude_54:
(Start: 20 @47764 has 26 MA's), (Start: 21 @47755 has 141 MA's), (40, 47593), (43, 47578), (47, 47545), (49, 47521), (52, 47491), (57, 47413), (60, 47365), (64, 47344), (66, 47323), (74, 47233), (78, 47197), (81, 47158), (82, 47146), (86, 47125), (88, 47119),

Gene: Serendipity_55 Start: 48293, Stop: 47613, Start Num: 21
Candidate Starts for Serendipity_55:
(3, 48545), (4, 48536), (5, 48512), (6, 48482), (9, 48431), (10, 48392), (Start: 20 @48302 has 26 MA's), (Start: 21 @48293 has 141 MA's), (46, 48086), (47, 48083), (49, 48059), (52, 48029), (57, 47951), (60, 47903), (64, 47882), (74, 47771), (78, 47735), (81, 47696), (82, 47684), (88, 47657),

Gene: Serpentine_0055 Start: 48376, Stop: 47696, Start Num: 21
Candidate Starts for Serpentine_0055:
(Start: 20 @48385 has 26 MA's), (Start: 21 @48376 has 141 MA's), (46, 48169), (47, 48166), (49, 48142), (52, 48112), (60, 47986), (64, 47965), (66, 47944), (74, 47854), (81, 47779), (82, 47767), (88, 47740),

Gene: Settecandela_151 Start: 104613, Stop: 105200, Start Num: 25
Candidate Starts for Settecandela_151:
(7, 104412), (Start: 25 @104613 has 2 MA's), (28, 104661), (35, 104712), (38, 104757), (56, 104874), (57, 104913), (58, 104919), (61, 104964), (62, 104973), (67, 105012), (74, 105081), (75, 105084), (76, 105087),

Gene: SilverBell_54 Start: 48014, Stop: 47337, Start Num: 21
Candidate Starts for SilverBell_54:
(Start: 20 @48023 has 26 MA's), (Start: 21 @48014 has 141 MA's), (46, 47807), (47, 47804), (49, 47780), (52, 47750), (60, 47624), (64, 47603), (66, 47582), (74, 47492), (78, 47456), (81, 47417), (82, 47405), (88, 47378),

Gene: SilverChicken_76 Start: 42471, Stop: 43148, Start Num: 22
Candidate Starts for SilverChicken_76:
(Start: 22 @42471 has 25 MA's), (28, 42513), (46, 42672), (47, 42675), (49, 42699), (52, 42729), (57, 42807), (60, 42855), (64, 42876), (74, 42987), (78, 43023), (81, 43062), (82, 43074),

Gene: SirBeauregard_56 Start: 48508, Stop: 47819, Start Num: 20

Candidate Starts for SirBeauregard_56:
(Start: 20 @48508 has 26 MA's), (Start: 21 @48499 has 141 MA's), (46, 48292), (47, 48289), (49, 48265), (52, 48235), (60, 48109), (64, 48088), (66, 48067), (74, 47977), (81, 47902), (82, 47890), (88, 47863),

Gene: Soile_56 Start: 48517, Stop: 47837, Start Num: 21
Candidate Starts for Soile_56:
(Start: 20 @48526 has 26 MA's), (Start: 21 @48517 has 141 MA's), (46, 48310), (47, 48307), (49, 48283), (52, 48253), (60, 48127), (64, 48106), (66, 48085), (74, 47995), (81, 47920), (82, 47908), (88, 47881),

Gene: Solosis_54 Start: 47999, Stop: 47310, Start Num: 20
Candidate Starts for Solosis_54:
(3, 48242), (4, 48233), (5, 48209), (6, 48179), (9, 48128), (10, 48089), (Start: 20 @47999 has 26 MA's), (Start: 21 @47990 has 141 MA's), (46, 47783), (47, 47780), (49, 47756), (52, 47726), (57, 47648), (60, 47600), (64, 47579), (74, 47468), (78, 47432), (81, 47393), (82, 47381), (88, 47354),

Gene: Sophia_54 Start: 47993, Stop: 47304, Start Num: 20
Candidate Starts for Sophia_54:
(3, 48236), (4, 48227), (5, 48203), (6, 48173), (9, 48122), (10, 48083), (Start: 20 @47993 has 26 MA's), (Start: 21 @47984 has 141 MA's), (46, 47777), (47, 47774), (49, 47750), (52, 47720), (60, 47594), (64, 47573), (66, 47552), (74, 47462), (78, 47426), (81, 47387), (82, 47375), (88, 47348),

Gene: Sparkdehlily_73 Start: 43625, Stop: 44299, Start Num: 22
Candidate Starts for Sparkdehlily_73:
(Start: 22 @43625 has 25 MA's), (28, 43667), (46, 43826), (47, 43829), (49, 43853), (52, 43883), (57, 43961), (60, 44009), (64, 44030), (74, 44141), (78, 44177), (81, 44216), (82, 44228),

Gene: Sparky_63 Start: 43334, Stop: 44023, Start Num: 20
Candidate Starts for Sparky_63:
(13, 43268), (Start: 20 @43334 has 26 MA's), (32, 43418), (47, 43550), (49, 43574), (52, 43604), (66, 43775), (81, 43937), (82, 43949), (88, 43976),

Gene: Spartacus_68 Start: 42822, Stop: 43505, Start Num: 19
Candidate Starts for Spartacus_68:
(Start: 19 @42822 has 1 MA's), (32, 42900), (41, 42990), (47, 43032), (49, 43056), (52, 43086), (66, 43257), (81, 43419), (82, 43431),

Gene: Spartan300_54 Start: 47968, Stop: 47291, Start Num: 21
Candidate Starts for Spartan300_54:
(Start: 20 @47977 has 26 MA's), (Start: 21 @47968 has 141 MA's), (37, 47839), (40, 47806), (43, 47791), (46, 47761), (47, 47758), (49, 47734), (52, 47704), (57, 47626), (60, 47578), (64, 47557), (66, 47536), (74, 47446), (78, 47410), (81, 47371), (82, 47359), (88, 47332),

Gene: Squid_55 Start: 47996, Stop: 47316, Start Num: 21
Candidate Starts for Squid_55:
(3, 48248), (4, 48239), (5, 48215), (6, 48185), (9, 48134), (10, 48095), (Start: 20 @48005 has 26 MA's), (Start: 21 @47996 has 141 MA's), (46, 47789), (47, 47786), (49, 47762), (52, 47732), (57, 47654), (60, 47606), (64, 47585), (74, 47474), (78, 47438), (81, 47399), (82, 47387), (88, 47360),

Gene: Surely_55 Start: 48286, Stop: 47606, Start Num: 21
Candidate Starts for Surely_55:

(3, 48538), (4, 48529), (5, 48505), (6, 48475), (9, 48424), (10, 48385), (Start: 20 @48295 has 26 MA's), (Start: 21 @48286 has 141 MA's), (46, 48079), (47, 48076), (49, 48052), (52, 48022), (57, 47944), (60, 47896), (64, 47875), (74, 47764), (78, 47728), (81, 47689), (82, 47677), (88, 47650),

Gene: TDanisky_73 Start: 43625, Stop: 44299, Start Num: 22
Candidate Starts for TDanisky_73:
(Start: 22 @43625 has 25 MA's), (28, 43667), (46, 43826), (47, 43829), (49, 43853), (52, 43883), (57, 43961), (60, 44009), (64, 44030), (74, 44141), (78, 44177), (81, 44216), (82, 44228),

Gene: TPA4_59 Start: 41974, Stop: 42615, Start Num: 17
Candidate Starts for TPA4_59:
(12, 41911), (16, 41968), (17, 41974), (28, 42043), (31, 42064), (39, 42154), (46, 42193), (52, 42238), (57, 42301), (67, 42400), (75, 42490), (77, 42520), (81, 42553), (84, 42577),

Gene: Taj_71 Start: 44380, Stop: 45054, Start Num: 22
Candidate Starts for Taj_71:
(Start: 22 @44380 has 25 MA's), (28, 44422), (46, 44581), (47, 44584), (49, 44608), (52, 44638), (57, 44716), (60, 44764), (64, 44785), (74, 44896), (78, 44932), (81, 44971), (82, 44983),

Gene: TallGrassMM_55 Start: 47900, Stop: 47220, Start Num: 21
Candidate Starts for TallGrassMM_55:
(3, 48152), (4, 48143), (5, 48119), (6, 48089), (9, 48038), (10, 47999), (Start: 20 @47909 has 26 MA's), (Start: 21 @47900 has 141 MA's), (46, 47693), (47, 47690), (49, 47666), (52, 47636), (57, 47558), (60, 47510), (64, 47489), (74, 47378), (78, 47342), (81, 47303), (82, 47291), (88, 47264),

Gene: Telesworld_53 Start: 48063, Stop: 47170, Start Num: 21
Candidate Starts for Telesworld_53:
(3, 48315), (4, 48306), (5, 48282), (6, 48252), (9, 48201), (10, 48162), (Start: 20 @48072 has 26 MA's), (Start: 21 @48063 has 141 MA's), (46, 47856), (47, 47853), (49, 47829), (52, 47799), (57, 47721), (60, 47673), (64, 47652), (66, 47631), (74, 47541), (81, 47466), (82, 47454), (92, 47385),

Gene: Thora_55 Start: 48282, Stop: 47602, Start Num: 21
Candidate Starts for Thora_55:
(Start: 20 @48291 has 26 MA's), (Start: 21 @48282 has 141 MA's), (46, 48075), (47, 48072), (49, 48048), (52, 48018), (60, 47892), (64, 47871), (66, 47850), (74, 47760), (81, 47685), (82, 47673), (88, 47646),

Gene: ThreeOh3D2_56 Start: 48502, Stop: 47822, Start Num: 21
Candidate Starts for ThreeOh3D2_56:
(Start: 20 @48511 has 26 MA's), (Start: 21 @48502 has 141 MA's), (46, 48295), (47, 48292), (49, 48268), (52, 48238), (60, 48112), (64, 48091), (66, 48070), (74, 47980), (81, 47905), (82, 47893), (88, 47866),

Gene: Timmi_54 Start: 47985, Stop: 47305, Start Num: 21
Candidate Starts for Timmi_54:
(3, 48237), (4, 48228), (5, 48204), (6, 48174), (9, 48123), (10, 48084), (Start: 20 @47994 has 26 MA's), (Start: 21 @47985 has 141 MA's), (46, 47778), (47, 47775), (49, 47751), (52, 47721), (57, 47643), (60, 47595), (64, 47574), (74, 47463), (78, 47427), (81, 47388), (82, 47376), (88, 47349),

Gene: TomBombadil_55 Start: 48270, Stop: 47590, Start Num: 21
Candidate Starts for TomBombadil_55:
(3, 48522), (4, 48513), (5, 48489), (6, 48459), (9, 48408), (10, 48369), (Start: 20 @48279 has 26 MA's), (Start: 21 @48270 has 141 MA's), (46, 48063), (47, 48060), (49, 48036), (52, 48006), (57, 47928), (60,

47880), (64, 47859), (74, 47748), (78, 47712), (81, 47673), (82, 47661), (88, 47634),

Gene: Tomlarah_56 Start: 48797, Stop: 48117, Start Num: 21
Candidate Starts for Tomlarah_56:
(Start: 20 @48806 has 26 MA's), (Start: 21 @48797 has 141 MA's), (46, 48590), (47, 48587), (49, 48563), (52, 48533), (60, 48407), (64, 48386), (66, 48365), (74, 48275), (81, 48200), (82, 48188), (88, 48161),

Gene: TooFast2Furius_57 Start: 48209, Stop: 47532, Start Num: 21
Candidate Starts for TooFast2Furius_57:
(Start: 20 @48218 has 26 MA's), (Start: 21 @48209 has 141 MA's), (40, 48047), (43, 48032), (47, 47999), (49, 47975), (52, 47945), (57, 47867), (60, 47819), (64, 47798), (66, 47777), (74, 47687), (78, 47651), (81, 47612), (82, 47600), (88, 47573),

Gene: Tootsieroll_66 Start: 42088, Stop: 42765, Start Num: 22
Candidate Starts for Tootsieroll_66:
(Start: 22 @42088 has 25 MA's), (28, 42130), (46, 42289), (47, 42292), (49, 42316), (52, 42346), (57, 42424), (60, 42472), (64, 42493), (74, 42604), (78, 42640), (81, 42679), (82, 42691),

Gene: Toron_74 Start: 45951, Stop: 46631, Start Num: 18
Candidate Starts for Toron_74:
(18, 45951), (28, 46008), (31, 46026), (32, 46035), (41, 46125), (47, 46167), (49, 46191), (52, 46221), (66, 46392), (81, 46554), (82, 46566), (87, 46590), (88, 46593),

Gene: Tracker_10 Start: 5745, Stop: 6419, Start Num: 20
Candidate Starts for Tracker_10:
(8, 5610), (15, 5718), (Start: 20 @5745 has 26 MA's), (45, 5946), (46, 5949), (53, 6006), (56, 6039), (64, 6150), (75, 6267), (85, 6357),

Gene: Triad_55 Start: 47197, Stop: 46517, Start Num: 21
Candidate Starts for Triad_55:
(3, 47449), (4, 47440), (5, 47416), (6, 47386), (9, 47335), (10, 47296), (Start: 20 @47206 has 26 MA's), (Start: 21 @47197 has 141 MA's), (40, 47035), (43, 47020), (47, 46987), (49, 46963), (52, 46933), (57, 46855), (60, 46807), (64, 46786), (66, 46765), (74, 46675), (78, 46639), (81, 46600), (82, 46588), (88, 46561),

Gene: UAch1_54 Start: 48022, Stop: 47345, Start Num: 21
Candidate Starts for UAch1_54:
(3, 48274), (4, 48265), (5, 48241), (6, 48211), (9, 48160), (10, 48121), (Start: 20 @48031 has 26 MA's), (Start: 21 @48022 has 141 MA's), (40, 47860), (43, 47845), (47, 47812), (49, 47788), (52, 47758), (57, 47680), (60, 47632), (64, 47611), (66, 47590), (74, 47500), (78, 47464), (81, 47425), (82, 47413), (88, 47386),

Gene: UncleHowie_54 Start: 47697, Stop: 47020, Start Num: 21
Candidate Starts for UncleHowie_54:
(Start: 20 @47706 has 26 MA's), (Start: 21 @47697 has 141 MA's), (46, 47490), (47, 47487), (49, 47463), (52, 47433), (60, 47307), (64, 47286), (66, 47265), (74, 47175), (78, 47139), (81, 47100), (82, 47088), (88, 47061),

Gene: UncleRicky_65 Start: 42413, Stop: 43090, Start Num: 22
Candidate Starts for UncleRicky_65:
(Start: 22 @42413 has 25 MA's), (28, 42455), (46, 42614), (47, 42617), (49, 42641), (52, 42671), (57, 42749), (60, 42797), (64, 42818), (74, 42929), (78, 42965), (81, 43004), (82, 43016),

Gene: Usavi_55 Start: 48365, Stop: 47685, Start Num: 21
Candidate Starts for Usavi_55:
(Start: 20 @48374 has 26 MA's), (Start: 21 @48365 has 141 MA's), (46, 48158), (47, 48155), (49, 48131), (52, 48101), (60, 47975), (64, 47954), (66, 47933), (74, 47843), (81, 47768), (82, 47756), (88, 47729),

Gene: Vaishali24_53 Start: 47657, Stop: 46980, Start Num: 21
Candidate Starts for Vaishali24_53:
(3, 47909), (4, 47900), (5, 47876), (6, 47846), (9, 47795), (10, 47756), (Start: 20 @47666 has 26 MA's), (Start: 21 @47657 has 141 MA's), (40, 47495), (43, 47480), (47, 47447), (49, 47423), (52, 47393), (57, 47315), (60, 47267), (64, 47246), (66, 47225), (74, 47135), (78, 47099), (81, 47060), (82, 47048), (88, 47021),

Gene: Valjean_54 Start: 47978, Stop: 47301, Start Num: 21
Candidate Starts for Valjean_54:
(Start: 20 @47987 has 26 MA's), (Start: 21 @47978 has 141 MA's), (37, 47849), (40, 47816), (43, 47801), (46, 47771), (47, 47768), (49, 47744), (52, 47714), (57, 47636), (60, 47588), (64, 47567), (66, 47546), (74, 47456), (78, 47420), (81, 47381), (82, 47369), (88, 47342),

Gene: Vaticameos_52 Start: 46488, Stop: 45808, Start Num: 21
Candidate Starts for Vaticameos_52:
(Start: 20 @46497 has 26 MA's), (Start: 21 @46488 has 141 MA's), (46, 46281), (47, 46278), (49, 46254), (52, 46224), (60, 46098), (64, 46077), (66, 46056), (74, 45966), (81, 45891), (82, 45879), (88, 45852),

Gene: Vista_54 Start: 47998, Stop: 47321, Start Num: 21
Candidate Starts for Vista_54:
(3, 48250), (4, 48241), (5, 48217), (6, 48187), (9, 48136), (10, 48097), (Start: 20 @48007 has 26 MA's), (Start: 21 @47998 has 141 MA's), (46, 47791), (47, 47788), (49, 47764), (52, 47734), (60, 47608), (64, 47587), (66, 47566), (74, 47476), (78, 47440), (81, 47401), (82, 47389), (88, 47362),

Gene: Vortex_55 Start: 47980, Stop: 47300, Start Num: 21
Candidate Starts for Vortex_55:
(3, 48232), (4, 48223), (5, 48199), (6, 48169), (9, 48118), (10, 48079), (Start: 20 @47989 has 26 MA's), (Start: 21 @47980 has 141 MA's), (46, 47773), (47, 47770), (49, 47746), (52, 47716), (57, 47638), (60, 47590), (64, 47569), (74, 47458), (78, 47422), (81, 47383), (82, 47371), (88, 47344),

Gene: Waterdiva_55 Start: 48359, Stop: 47679, Start Num: 21
Candidate Starts for Waterdiva_55:
(Start: 20 @48368 has 26 MA's), (Start: 21 @48359 has 141 MA's), (46, 48152), (47, 48149), (49, 48125), (52, 48095), (60, 47969), (64, 47948), (66, 47927), (74, 47837), (81, 47762), (82, 47750), (88, 47723),

Gene: Wee_71 Start: 44456, Stop: 45130, Start Num: 22
Candidate Starts for Wee_71:
(Start: 22 @44456 has 25 MA's), (28, 44498), (46, 44657), (47, 44660), (49, 44684), (52, 44714), (57, 44792), (60, 44840), (64, 44861), (74, 44972), (78, 45008), (81, 45047), (82, 45059),

Gene: Weher20_55 Start: 48803, Stop: 48123, Start Num: 21
Candidate Starts for Weher20_55:
(Start: 20 @48812 has 26 MA's), (Start: 21 @48803 has 141 MA's), (46, 48596), (47, 48593), (49, 48569), (52, 48539), (60, 48413), (64, 48392), (66, 48371), (74, 48281), (81, 48206), (82, 48194), (88,

48167),

Gene: Wheezy_10 Start: 6003, Stop: 6677, Start Num: 20
Candidate Starts for Wheezy_10:
(8, 5868), (15, 5976), (Start: 20 @6003 has 26 MA's), (45, 6204), (46, 6207), (53, 6264), (56, 6297),
(64, 6408), (75, 6525), (85, 6615),

Gene: WillSterrel_67 Start: 43939, Stop: 44616, Start Num: 22
Candidate Starts for WillSterrel_67:
(Start: 22 @43939 has 25 MA's), (28, 43981), (46, 44140), (47, 44143), (49, 44167), (52, 44197), (57,
44275), (60, 44323), (64, 44344), (74, 44455), (78, 44491), (81, 44530), (82, 44542),

Gene: Windsor_55 Start: 48503, Stop: 47823, Start Num: 21
Candidate Starts for Windsor_55:
(Start: 20 @48512 has 26 MA's), (Start: 21 @48503 has 141 MA's), (46, 48296), (47, 48293), (49,
48269), (52, 48239), (60, 48113), (64, 48092), (66, 48071), (74, 47981), (81, 47906), (82, 47894), (88,
47867),

Gene: Xavier_54 Start: 47996, Stop: 47307, Start Num: 20
Candidate Starts for Xavier_54:
(3, 48239), (4, 48230), (5, 48206), (6, 48176), (9, 48125), (10, 48086), (Start: 20 @47996 has 26 MA's),
(Start: 21 @47987 has 141 MA's), (46, 47780), (47, 47777), (49, 47753), (52, 47723), (57, 47645), (60,
47597), (64, 47576), (74, 47465), (78, 47429), (81, 47390), (82, 47378), (88, 47351),

Gene: Zaider_55 Start: 48222, Stop: 47545, Start Num: 21
Candidate Starts for Zaider_55:
(Start: 20 @48231 has 26 MA's), (Start: 21 @48222 has 141 MA's), (37, 48093), (40, 48060), (43,
48045), (46, 48015), (47, 48012), (49, 47988), (52, 47958), (57, 47880), (60, 47832), (64, 47811), (66,
47790), (74, 47700), (78, 47664), (81, 47625), (82, 47613), (88, 47586),

Gene: Zelda_55 Start: 48324, Stop: 47644, Start Num: 21
Candidate Starts for Zelda_55:
(2, 48591), (3, 48576), (4, 48567), (5, 48543), (6, 48513), (9, 48462), (10, 48423), (Start: 20 @48333
has 26 MA's), (Start: 21 @48324 has 141 MA's), (46, 48117), (47, 48114), (49, 48090), (52, 48060),
(60, 47934), (64, 47913), (66, 47892), (74, 47802), (81, 47727), (82, 47715), (88, 47688),

Gene: Zenteno07_58 Start: 47935, Stop: 47234, Start Num: 20
Candidate Starts for Zenteno07_58:
(1, 48472), (13, 48004), (Start: 20 @47935 has 26 MA's), (Start: 22 @47920 has 25 MA's), (26, 47890),
(52, 47668), (56, 47632), (65, 47506), (71, 47437), (82, 47308), (83, 47302), (88, 47281),