Pham 289148

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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 289148 Report

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

Pham number 289148 has 154 members, 26 are drafts.

Phages represented in each track:
• Track 1 : Fowlmouth_23
• Track 2 : MrMiyagi_23
• Track 3 : Cuke_22
• Track 4 : Leopard_38
• Track 5 : Onyinye_39, Aikoy_38
• Track 6 : ThursdayNight_17
• Track 7 : Cassia_19
• Track 8 : Joemato_19, AGrandiflora_19, Lego_19, YesChef_19, Flutur_19, Tutumahutu_19, Tbone_19, Warda_19, Powerpuff_19, Cyan_19, Mudpuppy_19, Simpson_21
• Track 9 : TforTroy_19
• Track 10 : Iter_19, Ascela_19
• Track 11 : Turab_19, Adumb2043_19, Amploria_19, AEgle_19
• Track 12 : Subaru_20, Elezi_19, London_19, Eraser_19, Skelbel_20, Jstan_20, Niobe_19, Asa16_19
• Track 13 : Pixelle_19
• Track 14 : Tuck_20, Community_19
• Track 15 : Lizalica_19
• Track 16 : Berrie_19
• Track 17 : Nitro_19
• Track 18 : Phives_20
• Track 19 : Tian_19, Amyev_19
• Track 20 : Pumpkins_19
• Track 21 : Kaylissa_19, JohnDoe_19
• Track 22 : JuneStar_19, Schaffner_19
• Track 23 : Tallboi_19
• Track 24 : Janeemi_20
• Track 25 : Yang_19
• Track 26 : Maureen_18, IUFootball_18, Liebe_18
• Track 27 : MaGuCo_18
• Track 28 : MiniMommy_17, JasmineDragon_18, ShakeItOph_18
• Track 29 : Emotion_18
• Track 30 : Origami_19, LadyAstra_19
• Track 31 : VroomVroom_18
• Track 32 : Ashes_19, RockScotty_19, Halsey_19, Moss_19
• Track 33 : SpecialK_19
• Track 34 : Mysterium_19, Beaupre_19, Stuu_19, Gumpizza_19, Giorgio_19

- Track 35 : Cappuccino_19, Kalimba_19, Donkey_19, Sabourin_19, Gambol_19, Sooty_19
- Track 36 : Soondubu_18
- Track 37 : Exile_18
- Track 38 : AinMach_18
- Track 39 : Madi_24, BiteSize_24, Terapin_24, Beyoncage_24, Djokovic_24
- Track 40 : Suzy_24
- Track 41 : LilyPad_25
- Track 42 : Sienna_24
- Track 43 : LittleFella_26
- Track 44 : Yikes_30, OtterstedtS21_29, MoiGyank_31, Sampudon_29, Jalebi_28, Rota_28, LavAbarElk_27
- Track 45 : NorManre_30, Sadboi_29, Fulcrum_30, Gibbin_30, Mima20_27, Patos_30, GretelLyn_29, GOATification_30, Ranch_29, Rukungu_29
- Track 46 : BirthdayBoy_30, Zany_28
- Track 47 : Xenia2_29
- Track 48 : ParvusTarda_29, Wojtek_28
- Track 49 : Lambo_29
- Track 50 : Astralis_26, Alyssamiracle_29, Avian_26, Genamy16_29, Rumi_28, Charminar_27, Riduram_28, Jamemuya19_26, RazorC_27, Stormer_28, NovaSharks_28
- Track 51 : DaviePasture_29
- Track 52 : Alephilan_26
- Track 53 : Lila22_28
- Track 54 : DumpTruck_28
- Track 55 : Erutan_29
- Track 56 : Apeppi_26, LuckyLeo_28
- Track 57 : DoobyDoo_28
- Track 58 : Tillicus_28
- Track 59 : JanetJ_20
- Track 60 : EvenBluerMoon_20, PrairieDogTown_20
- Track 61 : Aoka_20
- Track 62 : Scotia_21, NoSwimming_21
- Track 63 : Hereford_29
- Track 64 : Zenon_30, Yelo_29, Send513_29, Candle_29, Weiss13_29, Riparian_29
- Track 65 : MontyDev_29
- Track 66 : Nilo_30
- Track 67 : Papyrus_29
- Track 68 : Rope_29
- Track 69 : pZL12_48c
- Track 70 : LuckyBarnes_26
- Track 71 : Gilgamesh_70

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

The start number called the most often in the published annotations is 14, it was called in 66 of the 128 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AEgle_19, AGrandiflora_19, Adumb2043_19, AinMach_18, Amploria_19, Amyev_19, Asa16_19, Ascela_19, Ashes_19, Beaupre_19, Berrie_19, Candle_29, Cappuccino_19, Cassia_19, Community_19, Cuke_22, Cyan_19, Donkey_19, Elezi_19, Eraser_19, Exile_18, Flutur_19, Fowlmouth_23, Gambol_19, Giorgio_19, Gumpizza_19, Halsey_19, IUFootball_18, Iter_19, Janeemi_20, Joemato_19, JohnDoe_19, Jstan_20, JuneStar_19, Kalimba_19, Kaylissa_19, Lego_19, Liebe_18, Lizalica_19, London_19, LuckyBarnes_26, MaGuCo_18, Maureen_18, MontyDev_29, Moss_19, MrMiyagi_23, Mudpuppy_19, Mysterium_19, Nilo_30, Niobe_19, Nitro_19, Papyrus_29, Phives_20, Pixelle_19, Powerpuff_19, Pumpkins_19, Riparian_29, RockScotty_19, Rope_29, Sabourin_19, Schaffner_19, Send513_29, Simpson_21, Skelbel_20, Soondubu_18, Sooty_19, Stuu_19, Subaru_20, Tallboi_19, Tbone_19, TforTroy_19, Tian_19, Tuck_20, Turab_19, Tutumahutu_19, Warda_19, Weiss13_29, Yang_19, Yelo_29, YesChef_19, Zenon_30, pZL12_48c,

Genes that have the "Most Annotated" start but do not call it:
• SpecialK_19, ThursdayNight_17,

Genes that do not have the "Most Annotated" start:
• Aikoy_38, Alephilan_26, Alyssamiracle_29, Aoka_20, Apeppi_26, Astralis_26, Avian_26, Beyoncage_24, BirthdayBoy_30, BiteSize_24, Charminar_27, DaviePasture_29, Djokovic_24, DoobyDoo_28, DumpTruck_28, Emotion_18, Erutan_29, EvenBluerMoon_20, Fulcrum_30, GOATification_30, Genamy16_29, Gibbin_30, Gilgamesh_70, GretelLyn_29, Hereford_29, Jalebi_28, Jamemuya19_26, JanetJ_20, JasmineDragon_18, LadyAstra_19, Lambo_29, LavAbarElk_27, Leopard_38, Lila22_28, LilyPad_25, LittleFella_26, LuckyLeo_28, Madi_24, Mima20_27, MiniMommy_17, MoiGyank_31, NoSwimming_21, NorManre_30, NovaSharks_28, Onyinye_39, Origami_19, OtterstedtS21_29, ParvusTarda_29, Patos_30, PrairieDogTown_20, Ranch_29, RazorC_27, Riduram_28, Rota_28, Rukungu_29, Rumi_28, Sadboi_29, Sampudon_29, Scotia_21, ShakeItOph_18, Sienna_24, Stormer_28, Suzy_24, Terapin_24, Tillicus_28, VroomVroom_18, Wojtek_28, Xenia2_29, Yikes_30, Zany_28,

Summary by start number:

Start 10:
• Found in 1 of 154 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 128
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gilgamesh_70 (singleton),

Start 12:
• Found in 3 of 154 (1.9%) of genes in pham
• Manual Annotations of this start: 3 of 128
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aikoy_38 (AE), Leopard_38 (AE), Onyinye_39 (AE),

Start 14:
• Found in 84 of 154 (54.5%) of genes in pham
• Manual Annotations of this start: 66 of 128
• Called 97.6% of time when present
• Phage (with cluster) where this start called: AEgle_19 (AZ1), AGrandiflora_19 (AZ1), Adumb2043_19 (AZ1), AinMach_18 (AZ7), Amploria_19 (AZ1), Amyev_19 (AZ1),

Asa16_19 (AZ1), Ascela_19 (AZ1), Ashes_19 (AZ5), Beaupre_19 (AZ5), Berrie_19 (AZ1), Candle_29 (R), Cappuccino_19 (AZ5), Cassia_19 (AZ1), Community_19 (AZ1), Cuke_22 (AC), Cyan_19 (AZ1), Donkey_19 (AZ5), Elezi_19 (AZ1), Eraser_19 (AZ1), Exile_18 (AZ6), Flutur_19 (AZ), Fowlmouth_23 (AC), Gambol_19 (AZ5), Giorgio_19 (AZ5), Gumpizza_19 (AZ5), Halsey_19 (AZ5), IUFootball_18 (AZ2), Iter_19 (AZ1), Janeemi_20 (AZ1), Joemato_19 (AZ1), JohnDoe_19 (AZ1), Jstan_20 (AZ1), JuneStar_19 (AZ1), Kalimba_19 (AZ5), Kaylissa_19 (AZ1), Lego_19 (AZ1), Liebe_18 (AZ2), Lizalica_19 (AZ1), London_19 (AZ1), LuckyBarnes_26 (singleton), MaGuCo_18 (AZ2), Maureen_18 (AZ2), MontyDev_29 (R), Moss_19 (AZ5), MrMiyagi_23 (AC), Mudpuppy_19 (AZ1), Mysterium_19 (AZ5), Nilo_30 (R), Niobe_19 (AZ1), Nitro_19 (AZ1), Papyrus_29 (R), Phives_20 (AZ1), Pixelle_19 (AZ1), Powerpuff_19 (AZ1), Pumpkins_19 (AZ1), Riparian_29 (R), RockScotty_19 (AZ5), Rope_29 (R), Sabourin_19 (AZ5), Schaffner_19 (AZ1), Send513_29 (R), Simpson_21 (AZ1), Skelbel_20 (AZ1), Soondubu_18 (AZ6), Sooty_19 (AZ5), Stuu_19 (AZ5), Subaru_20 (AZ1), Tallboi_19 (AZ1), Tbone_19 (AZ1), TforTroy_19 (AZ1), Tian_19 (AZ1), Tuck_20 (AZ1), Turab_19 (AZ1), Tutumahutu_19 (AZ1), Warda_19 (AZ1), Weiss13_29 (R), Yang_19 (AZ1), Yelo_29 (R), YesChef_19 (AZ1), Zenon_30 (R), pZL12_48c (singleton),

Start 15:
• Found in 14 of 154 (9.1%) of genes in pham
• Manual Annotations of this start: 11 of 128
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aoka_20 (FO), Emotion_18 (AZ4), EvenBluerMoon_20 (FO), Hereford_29 (FO), JanetJ_20 (FO), JasmineDragon_18 (AZ4), LadyAstra_19 (AZ4), MiniMommy_17 (AZ4), NoSwimming_21 (FO), Origami_19 (AZ4), PrairieDogTown_20 (FO), Scotia_21 (FO), ShakeItOph_18 (AZ4), VroomVroom_18 (AZ4),

Start 16:
• Found in 52 of 154 (33.8%) of genes in pham
• Manual Annotations of this start: 45 of 128
• Called 98.1% of time when present
• Phage (with cluster) where this start called: Alephilan_26 (DV), Alyssamiracle_29 (DV), Apeppi_26 (DV), Astralis_26 (DV), Avian_26 (DV), Beyoncage_24 (DG1), BirthdayBoy_30 (DV), BiteSize_24 (DG1), Charminar_27 (DV), DaviePasture_29 (DV), Djokovic_24 (DG1), DoobyDoo_28 (DV), DumpTruck_28 (DV), Erutan_29 (DV), Fulcrum_30 (DV), GOATification_30 (DV), Genamy16_29 (DV), Gibbin_30 (DV), GretelLyn_29 (DV), Jalebi_28 (DV), Jamemuya19_26 (DV), Lambo_29 (DV), LavAbarElk_27 (DV), LilyPad_25 (DG1), LittleFella_26 (DG2), LuckyLeo_28 (DV), Madi_24 (DG1), Mima20_27 (DV), MoiGyank_31 (DV), NorManre_30 (DV), NovaSharks_28 (DV), OtterstedtS21_29 (DV), ParvusTarda_29 (DV), Patos_30 (DV), Ranch_29 (DV), RazorC_27 (DV), Riduram_28 (DV), Rota_28 (DV), Rukungu_29 (DV), Rumi_28 (DV), Sadboi_29 (DV), Sampudon_29 (DV), Sienna_24 (DG1), Stormer_28 (DV), Suzy_24 (DG1), Terapin_24 (DG1), Tillicus_28 (DV), Wojtek_28 (DV), Xenia2_29 (DV), Yikes_30 (DV), Zany_28 (DV),

Start 20:
• Found in 46 of 154 (29.9%) of genes in pham
• Manual Annotations of this start: 1 of 128
• Called 2.2% of time when present
• Phage (with cluster) where this start called: Lila22_28 (DV),

Start 24:
• Found in 17 of 154 (11.0%) of genes in pham
• Manual Annotations of this start: 1 of 128
• Called 5.9% of time when present
• Phage (with cluster) where this start called: SpecialK_19 (AZ5),

Start 36:
• Found in 53 of 154 (34.4%) of genes in pham
• No Manual Annotations of this start.
• Called 1.9% of time when present
• Phage (with cluster) where this start called: ThursdayNight_17 (AZ),

Summary by clusters:

There are 15 clusters represented in this pham: singleton, AZ, AE, AC, DG2, AZ2, DG1, DV, AZ1, R, AZ7, AZ4, AZ5, AZ6, FO,

Info for manual annotations of cluster AC:
•Start number 14 was manually annotated 3 times for cluster AC.

Info for manual annotations of cluster AE:
•Start number 12 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster AZ1:
•Start number 14 was manually annotated 34 times for cluster AZ1.

Info for manual annotations of cluster AZ2:
•Start number 14 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ4:
•Start number 15 was manually annotated 5 times for cluster AZ4.

Info for manual annotations of cluster AZ5:
•Start number 14 was manually annotated 15 times for cluster AZ5.
•Start number 24 was manually annotated 1 time for cluster AZ5.

Info for manual annotations of cluster AZ6:
•Start number 14 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster DG1:
•Start number 16 was manually annotated 8 times for cluster DG1.

Info for manual annotations of cluster DG2:
•Start number 16 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DV:
•Start number 16 was manually annotated 36 times for cluster DV.
•Start number 20 was manually annotated 1 time for cluster DV.

Info for manual annotations of cluster FO:
•Start number 15 was manually annotated 6 times for cluster FO.

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

Gene Information:
Gene: AEgle_19 Start: 14931, Stop: 16052, Start Num: 14
Candidate Starts for AEgle_19:
(Start: 14 @14931 has 66 MA's), (25, 14991), (36, 15054), (38, 15075), (72, 15339), (90, 15423), (136, 15783), (138, 15801), (145, 15861),

Gene: AGrandiflora_19 Start: 14916, Stop: 16037, Start Num: 14
Candidate Starts for AGrandiflora_19:
(Start: 14 @14916 has 66 MA's), (25, 14976), (36, 15039), (38, 15060), (67, 15273), (72, 15324), (73, 15330), (105, 15552), (136, 15768), (138, 15786), (145, 15846),

Gene: Adumb2043_19 Start: 14930, Stop: 16051, Start Num: 14
Candidate Starts for Adumb2043_19:
(Start: 14 @14930 has 66 MA's), (25, 14990), (36, 15053), (38, 15074), (72, 15338), (90, 15422), (136, 15782), (138, 15800), (145, 15860),

Gene: Aikoy_38 Start: 28234, Stop: 29478, Start Num: 12
Candidate Starts for Aikoy_38:
(7, 28186), (9, 28222), (Start: 12 @28234 has 3 MA's), (28, 28333), (32, 28351), (44, 28468), (53, 28537), (57, 28570), (58, 28579), (61, 28606), (69, 28639), (83, 28714), (95, 28810), (98, 28846), (106, 28900), (109, 28921), (112, 28939), (113, 28945), (114, 28948), (116, 28960), (133, 29092), (134, 29095), (152, 29257), (154, 29269), (156, 29278), (170, 29413), (171, 29455),

Gene: AinMach_18 Start: 14089, Stop: 15219, Start Num: 14
Candidate Starts for AinMach_18:
(Start: 14 @14089 has 66 MA's), (25, 14158), (51, 14341), (58, 14404), (75, 14509), (76, 14524), (99, 14692), (114, 14788), (117, 14803), (118, 14806), (121, 14818), (126, 14854), (130, 14884), (132, 14938), (135, 14947), (162, 15163), (163, 15190),

Gene: Alephilan_26 Start: 24820, Stop: 25944, Start Num: 16
Candidate Starts for Alephilan_26:
(Start: 16 @24820 has 45 MA's), (18, 24826), (Start: 20 @24832 has 1 MA's), (28, 24877), (33, 24901), (41, 24988), (49, 25045), (55, 25090), (59, 25132), (64, 25156), (83, 25258), (94, 25333), (96, 25363), (106, 25444), (111, 25480), (132, 25633), (144, 25735), (150, 25783), (154, 25813),

Gene: Alyssamiracle_29 Start: 23630, Stop: 24754, Start Num: 16
Candidate Starts for Alyssamiracle_29:
(Start: 16 @23630 has 45 MA's), (18, 23636), (Start: 20 @23642 has 1 MA's), (28, 23687), (33, 23711), (41, 23798), (49, 23855), (55, 23900), (59, 23942), (64, 23966), (83, 24068), (94, 24143), (96, 24173), (106, 24254), (111, 24290), (132, 24443), (137, 24476), (154, 24623), (165, 24704),

Gene: Amploria_19 Start: 14930, Stop: 16051, Start Num: 14
Candidate Starts for Amploria_19:
(Start: 14 @14930 has 66 MA's), (25, 14990), (36, 15053), (38, 15074), (72, 15338), (90, 15422), (136, 15782), (138, 15800), (145, 15860),

Gene: Amyev_19 Start: 14951, Stop: 16393, Start Num: 14
Candidate Starts for Amyev_19:
(Start: 14 @14951 has 66 MA's), (25, 15011), (27, 15017), (36, 15074), (38, 15095), (66, 15305), (71, 15353), (77, 15473), (88, 15692), (125, 16022), (136, 16124), (138, 16142), (166, 16361),

Gene: Aoka_20 Start: 16034, Stop: 17083, Start Num: 15
Candidate Starts for Aoka_20:
(Start: 15 @16034 has 11 MA's), (34, 16139), (56, 16304), (66, 16370), (122, 16700), (128, 16736), (163, 17057),

Gene: Apeppi_26 Start: 24963, Stop: 26087, Start Num: 16
Candidate Starts for Apeppi_26:
(Start: 16 @24963 has 45 MA's), (18, 24969), (28, 25020), (33, 25044), (41, 25131), (49, 25188), (55, 25233), (59, 25275), (62, 25296), (64, 25299), (71, 25362), (83, 25401), (85, 25404), (94, 25476), (96, 25506), (106, 25587), (111, 25623), (132, 25776), (154, 25956),

Gene: Asa16_19 Start: 14900, Stop: 16021, Start Num: 14
Candidate Starts for Asa16_19:
(Start: 14 @14900 has 66 MA's), (25, 14960), (27, 14966), (36, 15023), (38, 15044), (72, 15308), (138, 15770),

Gene: Ascela_19 Start: 14928, Stop: 16049, Start Num: 14
Candidate Starts for Ascela_19:
(Start: 14 @14928 has 66 MA's), (36, 15051), (38, 15072), (65, 15276), (73, 15342), (138, 15798), (145, 15858),

Gene: Ashes_19 Start: 14619, Stop: 16067, Start Num: 14
Candidate Starts for Ashes_19:
(Start: 14 @14619 has 66 MA's), (Start: 24 @14673 has 1 MA's), (72, 15027), (73, 15033), (104, 15579), (113, 15630), (140, 15825),

Gene: Astralis_26 Start: 23220, Stop: 24344, Start Num: 16
Candidate Starts for Astralis_26:
(Start: 16 @23220 has 45 MA's), (18, 23226), (Start: 20 @23232 has 1 MA's), (28, 23277), (33, 23301), (41, 23388), (49, 23445), (55, 23490), (59, 23532), (64, 23556), (83, 23658), (94, 23733), (96, 23763), (106, 23844), (111, 23880), (132, 24033), (137, 24066), (154, 24213), (165, 24294),

Gene: Avian_26 Start: 23612, Stop: 24736, Start Num: 16
Candidate Starts for Avian_26:
(Start: 16 @23612 has 45 MA's), (18, 23618), (Start: 20 @23624 has 1 MA's), (28, 23669), (33, 23693), (41, 23780), (49, 23837), (55, 23882), (59, 23924), (64, 23948), (83, 24050), (94, 24125), (96, 24155), (106, 24236), (111, 24272), (132, 24425), (137, 24458), (154, 24605), (165, 24686),

Gene: Beaupre_19 Start: 14620, Stop: 16068, Start Num: 14
Candidate Starts for Beaupre_19:
(Start: 14 @14620 has 66 MA's), (Start: 24 @14674 has 1 MA's), (70, 14998), (72, 15028), (104, 15580), (113, 15631), (140, 15826),

Gene: Berrie_19 Start: 15065, Stop: 16186, Start Num: 14
Candidate Starts for Berrie_19:
(Start: 14 @15065 has 66 MA's), (25, 15125), (27, 15131), (36, 15188), (72, 15473), (73, 15479), (138, 15935), (145, 15995),

Gene: Beyoncage_24 Start: 20204, Stop: 21337, Start Num: 16
Candidate Starts for Beyoncage_24:
(Start: 16 @20204 has 45 MA's), (36, 20321), (38, 20342), (40, 20354), (41, 20375), (43, 20384), (46, 20417), (64, 20546), (72, 20615), (97, 20765), (106, 20834), (110, 20858), (119, 20903), (123, 20921), (125, 20945), (129, 20975), (146, 21131), (148, 21137), (154, 21203), (155, 21209), (160, 21242), (164, 21281),

Gene: BirthdayBoy_30 Start: 25673, Stop: 26797, Start Num: 16
Candidate Starts for BirthdayBoy_30:
(Start: 16 @25673 has 45 MA's), (18, 25679), (Start: 20 @25685 has 1 MA's), (28, 25730), (33, 25754), (41, 25841), (49, 25898), (55, 25943), (59, 25985), (64, 26009), (71, 26072), (83, 26111), (94, 26186), (96, 26216), (106, 26297), (111, 26333), (132, 26486), (154, 26666), (165, 26747),

Gene: BiteSize_24 Start: 20204, Stop: 21337, Start Num: 16
Candidate Starts for BiteSize_24:
(Start: 16 @20204 has 45 MA's), (36, 20321), (38, 20342), (40, 20354), (41, 20375), (43, 20384), (46, 20417), (64, 20546), (72, 20615), (97, 20765), (106, 20834), (110, 20858), (119, 20903), (123, 20921), (125, 20945), (129, 20975), (146, 21131), (148, 21137), (154, 21203), (155, 21209), (160, 21242), (164, 21281),

Gene: Candle_29 Start: 23449, Stop: 24636, Start Num: 14
Candidate Starts for Candle_29:
(5, 23344), (6, 23350), (Start: 14 @23449 has 66 MA's), (19, 23476), (Start: 20 @23479 has 1 MA's), (29, 23524), (31, 23536), (33, 23545), (49, 23710), (64, 23821), (67, 23839), (74, 23917), (78, 23926), (83, 23941), (111, 24163), (114, 24175), (132, 24316), (133, 24319), (145, 24424), (150, 24469), (154, 24499), (158, 24523), (159, 24535), (160, 24538), (166, 24586), (169, 24625),

Gene: Cappuccino_19 Start: 14527, Stop: 15975, Start Num: 14
Candidate Starts for Cappuccino_19:
(Start: 14 @14527 has 66 MA's), (Start: 24 @14581 has 1 MA's), (70, 14905), (72, 14935), (104, 15487), (140, 15733),

Gene: Cassia_19 Start: 15026, Stop: 16147, Start Num: 14
Candidate Starts for Cassia_19:
(Start: 14 @15026 has 66 MA's), (37, 15161), (38, 15170), (49, 15260), (72, 15434), (138, 15896),

Gene: Charminar_27 Start: 23223, Stop: 24347, Start Num: 16
Candidate Starts for Charminar_27:
(Start: 16 @23223 has 45 MA's), (18, 23229), (Start: 20 @23235 has 1 MA's), (28, 23280), (33, 23304), (41, 23391), (49, 23448), (55, 23493), (59, 23535), (64, 23559), (83, 23661), (94, 23736), (96, 23766), (106, 23847), (111, 23883), (132, 24036), (137, 24069), (154, 24216), (165, 24297),

Gene: Community_19 Start: 16147, Stop: 17589, Start Num: 14
Candidate Starts for Community_19:
(Start: 14 @16147 has 66 MA's), (25, 16207), (27, 16213), (36, 16270), (66, 16501), (73, 16561), (86, 16855), (87, 16876), (138, 17338), (147, 17404),

Gene: Cuke_22 Start: 19244, Stop: 20422, Start Num: 14
Candidate Starts for Cuke_22:
(13, 19232), (Start: 14 @19244 has 66 MA's), (19, 19271), (21, 19283), (23, 19298), (31, 19331), (39, 19400), (49, 19505), (53, 19541), (83, 19718), (96, 19823), (111, 19940), (114, 19952), (133, 20096), (154, 20273), (160, 20312), (161, 20315), (163, 20345), (166, 20360),

Gene: Cyan_19 Start: 14919, Stop: 16040, Start Num: 14
Candidate Starts for Cyan_19:
(Start: 14 @14919 has 66 MA's), (25, 14979), (36, 15042), (38, 15063), (67, 15276), (72, 15327), (73, 15333), (105, 15555), (136, 15771), (138, 15789), (145, 15849),

Gene: DaviePasture_29 Start: 25439, Stop: 26563, Start Num: 16
Candidate Starts for DaviePasture_29:
(Start: 16 @25439 has 45 MA's), (18, 25445), (Start: 20 @25451 has 1 MA's), (28, 25496), (33, 25520), (41, 25607), (49, 25664), (55, 25709), (62, 25772), (64, 25775), (71, 25838), (83, 25877), (85, 25880), (94, 25952), (96, 25982), (106, 26063), (111, 26099), (132, 26252), (142, 26333), (144, 26354), (154, 26432), (165, 26513),

Gene: Djokovic_24 Start: 20204, Stop: 21337, Start Num: 16
Candidate Starts for Djokovic_24:
(Start: 16 @20204 has 45 MA's), (36, 20321), (38, 20342), (40, 20354), (41, 20375), (43, 20384), (46, 20417), (64, 20546), (72, 20615), (97, 20765), (106, 20834), (110, 20858), (119, 20903), (123, 20921), (125, 20945), (129, 20975), (146, 21131), (148, 21137), (154, 21203), (155, 21209), (160, 21242), (164, 21281),

Gene: Donkey_19 Start: 14527, Stop: 15975, Start Num: 14
Candidate Starts for Donkey_19:
(Start: 14 @14527 has 66 MA's), (Start: 24 @14581 has 1 MA's), (70, 14905), (72, 14935), (104, 15487), (140, 15733),

Gene: DoobyDoo_28 Start: 24595, Stop: 25719, Start Num: 16
Candidate Starts for DoobyDoo_28:
(Start: 16 @24595 has 45 MA's), (18, 24601), (Start: 20 @24607 has 1 MA's), (28, 24652), (33, 24676), (41, 24763), (49, 24820), (55, 24865), (59, 24907), (64, 24931), (71, 24994), (83, 25033), (94, 25108), (96, 25138), (111, 25255), (132, 25408), (142, 25489), (144, 25510), (154, 25588), (165, 25669),

Gene: DumpTruck_28 Start: 24905, Stop: 26032, Start Num: 16
Candidate Starts for DumpTruck_28:
(Start: 16 @24905 has 45 MA's), (33, 24986), (44, 25097), (49, 25130), (55, 25175), (59, 25217), (64, 25241), (71, 25304), (83, 25343), (100, 25481), (107, 25541), (108, 25544), (111, 25565), (117, 25592), (126, 25643), (132, 25718), (150, 25868), (154, 25898), (157, 25916), (164, 25973),

Gene: Elezi_19 Start: 14901, Stop: 16022, Start Num: 14
Candidate Starts for Elezi_19:
(Start: 14 @14901 has 66 MA's), (25, 14961), (27, 14967), (36, 15024), (38, 15045), (72, 15309), (138, 15771),

Gene: Emotion_18 Start: 13147, Stop: 14427, Start Num: 15
Candidate Starts for Emotion_18:
(Start: 15 @13147 has 11 MA's), (38, 13297), (99, 13915), (113, 14008), (130, 14107),

Gene: Eraser_19 Start: 14901, Stop: 16022, Start Num: 14
Candidate Starts for Eraser_19:
(Start: 14 @14901 has 66 MA's), (25, 14961), (27, 14967), (36, 15024), (38, 15045), (72, 15309), (138, 15771),

Gene: Erutan_29 Start: 25117, Stop: 26241, Start Num: 16
Candidate Starts for Erutan_29:

(Start: 16 @25117 has 45 MA's), (18, 25123), (28, 25174), (33, 25198), (41, 25285), (49, 25342), (55, 25387), (59, 25429), (64, 25453), (83, 25555), (94, 25630), (96, 25660), (106, 25741), (111, 25777), (132, 25930), (154, 26110), (165, 26191),

Gene: EvenBluerMoon_20 Start: 16069, Stop: 17118, Start Num: 15
Candidate Starts for EvenBluerMoon_20:
(Start: 15 @16069 has 11 MA's), (34, 16174), (56, 16339), (66, 16405), (122, 16735), (128, 16771), (163, 17092),

Gene: Exile_18 Start: 15565, Stop: 16650, Start Num: 14
Candidate Starts for Exile_18:
(Start: 14 @15565 has 66 MA's), (22, 15619), (58, 15877), (65, 15919), (102, 16138), (130, 16315), (132, 16360), (139, 16408), (162, 16585), (163, 16612), (168, 16642),

Gene: Flutur_19 Start: 14919, Stop: 16040, Start Num: 14
Candidate Starts for Flutur_19:
(Start: 14 @14919 has 66 MA's), (25, 14979), (36, 15042), (38, 15063), (67, 15276), (72, 15327), (73, 15333), (105, 15555), (136, 15771), (138, 15789), (145, 15849),

Gene: Fowlmouth_23 Start: 19374, Stop: 20546, Start Num: 14
Candidate Starts for Fowlmouth_23:
(13, 19362), (Start: 14 @19374 has 66 MA's), (26, 19443), (32, 19464), (49, 19635), (53, 19671), (67, 19764), (73, 19821), (83, 19848), (89, 19881), (93, 19917), (96, 19953), (109, 20055), (111, 20070), (133, 20226), (154, 20403), (156, 20412), (157, 20421), (160, 20442), (161, 20445), (166, 20490),

Gene: Fulcrum_30 Start: 25641, Stop: 26765, Start Num: 16
Candidate Starts for Fulcrum_30:
(Start: 16 @25641 has 45 MA's), (18, 25647), (Start: 20 @25653 has 1 MA's), (28, 25698), (33, 25722), (41, 25809), (49, 25866), (55, 25911), (59, 25953), (64, 25977), (71, 26040), (83, 26079), (94, 26154), (96, 26184), (106, 26265), (111, 26301), (132, 26454), (142, 26535), (144, 26556), (154, 26634), (165, 26715),

Gene: GOATification_30 Start: 25641, Stop: 26765, Start Num: 16
Candidate Starts for GOATification_30:
(Start: 16 @25641 has 45 MA's), (18, 25647), (Start: 20 @25653 has 1 MA's), (28, 25698), (33, 25722), (41, 25809), (49, 25866), (55, 25911), (59, 25953), (64, 25977), (71, 26040), (83, 26079), (94, 26154), (96, 26184), (106, 26265), (111, 26301), (132, 26454), (142, 26535), (144, 26556), (154, 26634), (165, 26715),

Gene: Gambol_19 Start: 14527, Stop: 15975, Start Num: 14
Candidate Starts for Gambol_19:
(Start: 14 @14527 has 66 MA's), (Start: 24 @14581 has 1 MA's), (70, 14905), (72, 14935), (104, 15487), (140, 15733),

Gene: Genamy16_29 Start: 23630, Stop: 24754, Start Num: 16
Candidate Starts for Genamy16_29:
(Start: 16 @23630 has 45 MA's), (18, 23636), (Start: 20 @23642 has 1 MA's), (28, 23687), (33, 23711), (41, 23798), (49, 23855), (55, 23900), (59, 23942), (64, 23966), (83, 24068), (94, 24143), (96, 24173), (106, 24254), (111, 24290), (132, 24443), (137, 24476), (154, 24623), (165, 24704),

Gene: Gibbin_30 Start: 25722, Stop: 26846, Start Num: 16
Candidate Starts for Gibbin_30:

(Start: 16 @25722 has 45 MA's), (18, 25728), (Start: 20 @25734 has 1 MA's), (28, 25779), (33, 25803), (41, 25890), (49, 25947), (55, 25992), (59, 26034), (64, 26058), (71, 26121), (83, 26160), (94, 26235), (96, 26265), (106, 26346), (111, 26382), (132, 26535), (142, 26616), (144, 26637), (154, 26715), (165, 26796),

Gene: Gilgamesh_70 Start: 64726, Stop: 65949, Start Num: 10
Candidate Starts for Gilgamesh_70:
(Start: 10 @64726 has 1 MA's), (38, 64900), (60, 65080), (82, 65218), (105, 65470), (123, 65560), (126, 65587), (127, 65590), (130, 65617), (132, 65662), (133, 65665), (153, 65833), (154, 65839), (158, 65863), (165, 65920),

Gene: Giorgio_19 Start: 14627, Stop: 16075, Start Num: 14
Candidate Starts for Giorgio_19:
(Start: 14 @14627 has 66 MA's), (Start: 24 @14681 has 1 MA's), (70, 15005), (72, 15035), (104, 15587), (113, 15638), (140, 15833),

Gene: GretelLyn_29 Start: 25984, Stop: 27108, Start Num: 16
Candidate Starts for GretelLyn_29:
(Start: 16 @25984 has 45 MA's), (18, 25990), (Start: 20 @25996 has 1 MA's), (28, 26041), (33, 26065), (41, 26152), (49, 26209), (55, 26254), (59, 26296), (64, 26320), (71, 26383), (83, 26422), (94, 26497), (96, 26527), (106, 26608), (111, 26644), (132, 26797), (142, 26878), (144, 26899), (154, 26977), (165, 27058),

Gene: Gumpizza_19 Start: 14620, Stop: 16068, Start Num: 14
Candidate Starts for Gumpizza_19:
(Start: 14 @14620 has 66 MA's), (Start: 24 @14674 has 1 MA's), (70, 14998), (72, 15028), (104, 15580), (113, 15631), (140, 15826),

Gene: Halsey_19 Start: 14619, Stop: 16067, Start Num: 14
Candidate Starts for Halsey_19:
(Start: 14 @14619 has 66 MA's), (Start: 24 @14673 has 1 MA's), (72, 15027), (73, 15033), (104, 15579), (113, 15630), (140, 15825),

Gene: Hereford_29 Start: 16193, Stop: 17242, Start Num: 15
Candidate Starts for Hereford_29:
(Start: 15 @16193 has 11 MA's), (56, 16463), (66, 16529), (122, 16859), (128, 16895), (163, 17216),

Gene: IUFootball_18 Start: 13443, Stop: 14564, Start Num: 14
Candidate Starts for IUFootball_18:
(Start: 14 @13443 has 66 MA's), (28, 13512), (35, 13554), (36, 13566), (38, 13587), (72, 13851), (90, 13935), (116, 14142), (120, 14154), (138, 14313), (145, 14373), (151, 14430), (156, 14457), (157, 14466),

Gene: Iter_19 Start: 14928, Stop: 16049, Start Num: 14
Candidate Starts for Iter_19:
(Start: 14 @14928 has 66 MA's), (36, 15051), (38, 15072), (65, 15276), (73, 15342), (138, 15798), (145, 15858),

Gene: Jalebi_28 Start: 26151, Stop: 27275, Start Num: 16
Candidate Starts for Jalebi_28:
(Start: 16 @26151 has 45 MA's), (18, 26157), (Start: 20 @26163 has 1 MA's), (28, 26208), (33, 26232), (41, 26319), (49, 26376), (55, 26421), (59, 26463), (83, 26589), (94, 26664), (96, 26694), (106, 26775), (111, 26811), (132, 26964), (142, 27045), (144, 27066), (154, 27144), (165, 27225),

Gene: Jamemuya19_26 Start: 23220, Stop: 24344, Start Num: 16
Candidate Starts for Jamemuya19_26:
(Start: 16 @23220 has 45 MA's), (18, 23226), (Start: 20 @23232 has 1 MA's), (28, 23277), (33, 23301),
(41, 23388), (49, 23445), (55, 23490), (59, 23532), (64, 23556), (83, 23658), (94, 23733), (96, 23763),
(106, 23844), (111, 23880), (132, 24033), (137, 24066), (154, 24213), (165, 24294),

Gene: Janeemi_20 Start: 16175, Stop: 17617, Start Num: 14
Candidate Starts for Janeemi_20:
(Start: 14 @16175 has 66 MA's), (25, 16235), (36, 16298), (66, 16529), (73, 16589), (138, 17366),
(150, 17471),

Gene: JanetJ_20 Start: 15852, Stop: 16901, Start Num: 15
Candidate Starts for JanetJ_20:
(Start: 15 @15852 has 11 MA's), (17, 15870), (31, 15930), (56, 16122), (66, 16188), (122, 16518),
(128, 16554), (163, 16875), (164, 16881),

Gene: JasmineDragon_18 Start: 13074, Stop: 14306, Start Num: 15
Candidate Starts for JasmineDragon_18:
(Start: 15 @13074 has 11 MA's), (41, 13269), (45, 13293), (81, 13644), (99, 13800), (113, 13890),
(130, 13989), (148, 14145), (157, 14226),

Gene: Joemato_19 Start: 14919, Stop: 16040, Start Num: 14
Candidate Starts for Joemato_19:
(Start: 14 @14919 has 66 MA's), (25, 14979), (36, 15042), (38, 15063), (67, 15276), (72, 15327), (73,
15333), (105, 15555), (136, 15771), (138, 15789), (145, 15849),

Gene: JohnDoe_19 Start: 14914, Stop: 16035, Start Num: 14
Candidate Starts for JohnDoe_19:
(Start: 14 @14914 has 66 MA's), (25, 14974), (36, 15037), (38, 15058), (67, 15271), (72, 15322), (73,
15328), (105, 15550), (138, 15784), (145, 15844),

Gene: Jstan_20 Start: 14901, Stop: 16022, Start Num: 14
Candidate Starts for Jstan_20:
(Start: 14 @14901 has 66 MA's), (25, 14961), (27, 14967), (36, 15024), (38, 15045), (72, 15309), (138,
15771),

Gene: JuneStar_19 Start: 15024, Stop: 16145, Start Num: 14
Candidate Starts for JuneStar_19:
(Start: 14 @15024 has 66 MA's), (38, 15168), (49, 15258), (73, 15438), (138, 15894), (165, 16110),

Gene: Kalimba_19 Start: 14528, Stop: 15976, Start Num: 14
Candidate Starts for Kalimba_19:
(Start: 14 @14528 has 66 MA's), (Start: 24 @14582 has 1 MA's), (70, 14906), (72, 14936), (104,
15488), (140, 15734),

Gene: Kaylissa_19 Start: 14920, Stop: 16041, Start Num: 14
Candidate Starts for Kaylissa_19:
(Start: 14 @14920 has 66 MA's), (25, 14980), (36, 15043), (38, 15064), (67, 15277), (72, 15328), (73,
15334), (105, 15556), (138, 15790), (145, 15850),

Gene: LadyAstra_19 Start: 13076, Stop: 14311, Start Num: 15
Candidate Starts for LadyAstra_19:

(4, 12755), (Start: 15 @13076 has 11 MA's), (41, 13271), (45, 13295), (81, 13646), (99, 13802), (113, 13895), (130, 13994), (148, 14150), (157, 14231),

Gene: Lambo_29 Start: 25656, Stop: 26780, Start Num: 16
Candidate Starts for Lambo_29:
(Start: 16 @25656 has 45 MA's), (18, 25662), (28, 25713), (33, 25737), (41, 25824), (49, 25881), (55, 25926), (59, 25968), (64, 25992), (71, 26055), (83, 26094), (94, 26169), (96, 26199), (106, 26280), (111, 26316), (132, 26469), (154, 26649),

Gene: LavAbarElk_27 Start: 24090, Stop: 25214, Start Num: 16
Candidate Starts for LavAbarElk_27:
(Start: 16 @24090 has 45 MA's), (18, 24096), (Start: 20 @24102 has 1 MA's), (28, 24147), (33, 24171), (41, 24258), (49, 24315), (55, 24360), (59, 24402), (83, 24528), (94, 24603), (96, 24633), (106, 24714), (111, 24750), (132, 24903), (142, 24984), (144, 25005), (154, 25083), (165, 25164),

Gene: Lego_19 Start: 14919, Stop: 16040, Start Num: 14
Candidate Starts for Lego_19:
(Start: 14 @14919 has 66 MA's), (25, 14979), (36, 15042), (38, 15063), (67, 15276), (72, 15327), (73, 15333), (105, 15555), (136, 15771), (138, 15789), (145, 15849),

Gene: Leopard_38 Start: 28522, Stop: 29766, Start Num: 12
Candidate Starts for Leopard_38:
(7, 28474), (9, 28510), (Start: 12 @28522 has 3 MA's), (28, 28621), (32, 28639), (44, 28756), (53, 28825), (57, 28858), (58, 28867), (61, 28894), (67, 28918), (69, 28927), (83, 29002), (95, 29098), (98, 29134), (106, 29188), (109, 29209), (112, 29227), (113, 29233), (114, 29236), (116, 29248), (133, 29380), (134, 29383), (152, 29545), (154, 29557), (156, 29566), (170, 29701), (171, 29743),

Gene: Liebe_18 Start: 13443, Stop: 14564, Start Num: 14
Candidate Starts for Liebe_18:
(Start: 14 @13443 has 66 MA's), (28, 13512), (35, 13554), (36, 13566), (38, 13587), (72, 13851), (90, 13935), (116, 14142), (120, 14154), (138, 14313), (145, 14373), (151, 14430), (156, 14457), (157, 14466),

Gene: Lila22_28 Start: 25623, Stop: 26735, Start Num: 20
Candidate Starts for Lila22_28:
(Start: 16 @25611 has 45 MA's), (18, 25617), (Start: 20 @25623 has 1 MA's), (28, 25668), (33, 25692), (41, 25779), (49, 25836), (55, 25881), (59, 25923), (64, 25947), (71, 26010), (83, 26049), (94, 26124), (96, 26154), (106, 26235), (111, 26271), (132, 26424), (142, 26505), (144, 26526), (154, 26604),

Gene: LilyPad_25 Start: 20787, Stop: 21920, Start Num: 16
Candidate Starts for LilyPad_25:
(Start: 16 @20787 has 45 MA's), (25, 20838), (28, 20847), (32, 20865), (36, 20904), (38, 20925), (46, 21000), (54, 21060), (64, 21129), (72, 21198), (119, 21486), (123, 21504), (127, 21534), (129, 21558), (132, 21606), (148, 21720), (154, 21786), (155, 21792), (160, 21825), (162, 21831), (164, 21864), (167, 21879),

Gene: LittleFella_26 Start: 22663, Stop: 23796, Start Num: 16
Candidate Starts for LittleFella_26:
(Start: 16 @22663 has 45 MA's), (27, 22720), (28, 22723), (38, 22801), (43, 22843), (47, 22879), (59, 22981), (64, 23005), (66, 23020), (72, 23074), (73, 23080), (92, 23167), (101, 23251), (116, 23353), (119, 23362), (123, 23380), (124, 23386), (129, 23434), (132, 23482), (142, 23563), (146, 23590), (148, 23596), (154, 23662), (155, 23668), (160, 23701), (162, 23707), (164, 23740), (165, 23746), (167, 23755),

Gene: Lizalica_19 Start: 14904, Stop: 16025, Start Num: 14
Candidate Starts for Lizalica_19:
(Start: 14 @14904 has 66 MA's), (25, 14964), (36, 15027), (38, 15048), (72, 15312), (73, 15318), (136, 15756), (138, 15774), (145, 15834),

Gene: London_19 Start: 14901, Stop: 16022, Start Num: 14
Candidate Starts for London_19:
(Start: 14 @14901 has 66 MA's), (25, 14961), (27, 14967), (36, 15024), (38, 15045), (72, 15309), (138, 15771),

Gene: LuckyBarnes_26 Start: 21950, Stop: 23038, Start Num: 14
Candidate Starts for LuckyBarnes_26:
(Start: 14 @21950 has 66 MA's), (30, 22034), (33, 22049), (59, 22274), (79, 22403), (80, 22415), (96, 22487), (98, 22514), (113, 22607), (122, 22646), (125, 22673), (127, 22679), (130, 22706), (141, 22805), (147, 22859), (149, 22883), (159, 22964),

Gene: LuckyLeo_28 Start: 24963, Stop: 26087, Start Num: 16
Candidate Starts for LuckyLeo_28:
(Start: 16 @24963 has 45 MA's), (18, 24969), (28, 25020), (33, 25044), (41, 25131), (49, 25188), (55, 25233), (59, 25275), (62, 25296), (64, 25299), (71, 25362), (83, 25401), (85, 25404), (94, 25476), (96, 25506), (106, 25587), (111, 25623), (132, 25776), (154, 25956),

Gene: MaGuCo_18 Start: 13377, Stop: 14498, Start Num: 14
Candidate Starts for MaGuCo_18:
(Start: 14 @13377 has 66 MA's), (36, 13500), (38, 13521), (73, 13791), (90, 13869), (116, 14076), (120, 14088), (136, 14229), (138, 14247), (145, 14307), (151, 14364), (156, 14391), (157, 14400),

Gene: Madi_24 Start: 20204, Stop: 21337, Start Num: 16
Candidate Starts for Madi_24:
(Start: 16 @20204 has 45 MA's), (36, 20321), (38, 20342), (40, 20354), (41, 20375), (43, 20384), (46, 20417), (64, 20546), (72, 20615), (97, 20765), (106, 20834), (110, 20858), (119, 20903), (123, 20921), (125, 20945), (129, 20975), (146, 21131), (148, 21137), (154, 21203), (155, 21209), (160, 21242), (164, 21281),

Gene: Maureen_18 Start: 13443, Stop: 14564, Start Num: 14
Candidate Starts for Maureen_18:
(Start: 14 @13443 has 66 MA's), (28, 13512), (35, 13554), (36, 13566), (38, 13587), (72, 13851), (90, 13935), (116, 14142), (120, 14154), (138, 14313), (145, 14373), (151, 14430), (156, 14457), (157, 14466),

Gene: Mima20_27 Start: 25340, Stop: 26464, Start Num: 16
Candidate Starts for Mima20_27:
(Start: 16 @25340 has 45 MA's), (18, 25346), (Start: 20 @25352 has 1 MA's), (28, 25397), (33, 25421), (41, 25508), (49, 25565), (55, 25610), (59, 25652), (64, 25676), (71, 25739), (83, 25778), (94, 25853), (96, 25883), (106, 25964), (111, 26000), (132, 26153), (142, 26234), (144, 26255), (154, 26333), (165, 26414),

Gene: MiniMommy_17 Start: 13075, Stop: 14307, Start Num: 15
Candidate Starts for MiniMommy_17:
(Start: 15 @13075 has 11 MA's), (41, 13270), (45, 13294), (81, 13645), (99, 13801), (113, 13891), (130, 13990), (148, 14146), (157, 14227),

Gene: MoiGyank_31 Start: 26021, Stop: 27145, Start Num: 16
Candidate Starts for MoiGyank_31:
(Start: 16 @26021 has 45 MA's), (18, 26027), (Start: 20 @26033 has 1 MA's), (28, 26078), (33, 26102), (41, 26189), (49, 26246), (55, 26291), (59, 26333), (83, 26459), (94, 26534), (96, 26564), (106, 26645), (111, 26681), (132, 26834), (142, 26915), (144, 26936), (154, 27014), (165, 27095),

Gene: MontyDev_29 Start: 23090, Stop: 24277, Start Num: 14
Candidate Starts for MontyDev_29:
(5, 22985), (6, 22991), (Start: 14 @23090 has 66 MA's), (19, 23117), (Start: 20 @23120 has 1 MA's), (29, 23165), (31, 23177), (33, 23186), (64, 23462), (67, 23480), (74, 23558), (78, 23567), (83, 23582), (111, 23804), (114, 23816), (132, 23957), (133, 23960), (145, 24065), (150, 24110), (154, 24140), (158, 24164), (159, 24176), (160, 24179), (166, 24227), (169, 24266),

Gene: Moss_19 Start: 14619, Stop: 16067, Start Num: 14
Candidate Starts for Moss_19:
(Start: 14 @14619 has 66 MA's), (Start: 24 @14673 has 1 MA's), (72, 15027), (73, 15033), (104, 15579), (113, 15630), (140, 15825),

Gene: MrMiyagi_23 Start: 19394, Stop: 20566, Start Num: 14
Candidate Starts for MrMiyagi_23:
(13, 19382), (Start: 14 @19394 has 66 MA's), (23, 19448), (26, 19463), (32, 19484), (49, 19655), (53, 19691), (67, 19784), (73, 19841), (83, 19868), (89, 19901), (93, 19937), (96, 19973), (109, 20075), (111, 20090), (133, 20246), (154, 20423), (156, 20432), (157, 20441), (160, 20462), (161, 20465), (166, 20510),

Gene: Mudpuppy_19 Start: 14918, Stop: 16039, Start Num: 14
Candidate Starts for Mudpuppy_19:
(Start: 14 @14918 has 66 MA's), (25, 14978), (36, 15041), (38, 15062), (67, 15275), (72, 15326), (73, 15332), (105, 15554), (136, 15770), (138, 15788), (145, 15848),

Gene: Mysterium_19 Start: 14620, Stop: 16068, Start Num: 14
Candidate Starts for Mysterium_19:
(Start: 14 @14620 has 66 MA's), (Start: 24 @14674 has 1 MA's), (70, 14998), (72, 15028), (104, 15580), (113, 15631), (140, 15826),

Gene: Nilo_30 Start: 23446, Stop: 24633, Start Num: 14
Candidate Starts for Nilo_30:
(5, 23341), (6, 23347), (8, 23386), (Start: 14 @23446 has 66 MA's), (19, 23473), (Start: 20 @23476 has 1 MA's), (29, 23521), (31, 23533), (33, 23542), (49, 23707), (64, 23818), (67, 23836), (74, 23914), (78, 23923), (83, 23938), (111, 24160), (114, 24172), (132, 24313), (133, 24316), (145, 24421), (150, 24466), (154, 24496), (158, 24520), (159, 24532), (160, 24535), (166, 24583), (169, 24622),

Gene: Niobe_19 Start: 14901, Stop: 16022, Start Num: 14
Candidate Starts for Niobe_19:
(Start: 14 @14901 has 66 MA's), (25, 14961), (27, 14967), (36, 15024), (38, 15045), (72, 15309), (138, 15771),

Gene: Nitro_19 Start: 14929, Stop: 16050, Start Num: 14
Candidate Starts for Nitro_19:
(Start: 14 @14929 has 66 MA's), (25, 14989), (36, 15052), (38, 15073), (73, 15343), (91, 15430), (138, 15799),

Gene: NoSwimming_21 Start: 16995, Stop: 18044, Start Num: 15

Candidate Starts for NoSwimming_21:
(2, 16623), (11, 16965), (Start: 15 @16995 has 11 MA's), (17, 17013), (42, 17169), (48, 17196), (54, 17244), (56, 17265), (66, 17331), (81, 17412), (115, 17637), (122, 17661), (126, 17691), (128, 17697), (131, 17739), (143, 17856), (156, 17958), (163, 18018), (164, 18024),

Gene: NorManre_30 Start: 25228, Stop: 26352, Start Num: 16
Candidate Starts for NorManre_30:
(Start: 16 @25228 has 45 MA's), (18, 25234), (Start: 20 @25240 has 1 MA's), (28, 25285), (33, 25309), (41, 25396), (49, 25453), (55, 25498), (59, 25540), (64, 25564), (71, 25627), (83, 25666), (94, 25741), (96, 25771), (106, 25852), (111, 25888), (132, 26041), (142, 26122), (144, 26143), (154, 26221), (165, 26302),

Gene: NovaSharks_28 Start: 23220, Stop: 24344, Start Num: 16
Candidate Starts for NovaSharks_28:
(Start: 16 @23220 has 45 MA's), (18, 23226), (Start: 20 @23232 has 1 MA's), (28, 23277), (33, 23301), (41, 23388), (49, 23445), (55, 23490), (59, 23532), (64, 23556), (83, 23658), (94, 23733), (96, 23763), (106, 23844), (111, 23880), (132, 24033), (137, 24066), (154, 24213), (165, 24294),

Gene: Onyinye_39 Start: 28401, Stop: 29645, Start Num: 12
Candidate Starts for Onyinye_39:
(7, 28353), (9, 28389), (Start: 12 @28401 has 3 MA's), (28, 28500), (32, 28518), (44, 28635), (53, 28704), (57, 28737), (58, 28746), (61, 28773), (69, 28806), (83, 28881), (95, 28977), (98, 29013), (106, 29067), (109, 29088), (112, 29106), (113, 29112), (114, 29115), (116, 29127), (133, 29259), (134, 29262), (152, 29424), (154, 29436), (156, 29445), (170, 29580), (171, 29622),

Gene: Origami_19 Start: 13076, Stop: 14311, Start Num: 15
Candidate Starts for Origami_19:
(4, 12755), (Start: 15 @13076 has 11 MA's), (41, 13271), (45, 13295), (81, 13646), (99, 13802), (113, 13895), (130, 13994), (148, 14150), (157, 14231),

Gene: OtterstedtS21_29 Start: 25306, Stop: 26430, Start Num: 16
Candidate Starts for OtterstedtS21_29:
(Start: 16 @25306 has 45 MA's), (18, 25312), (Start: 20 @25318 has 1 MA's), (28, 25363), (33, 25387), (41, 25474), (49, 25531), (55, 25576), (59, 25618), (83, 25744), (94, 25819), (96, 25849), (106, 25930), (111, 25966), (132, 26119), (142, 26200), (144, 26221), (154, 26299), (165, 26380),

Gene: Papyrus_29 Start: 23111, Stop: 24298, Start Num: 14
Candidate Starts for Papyrus_29:
(5, 23006), (6, 23012), (Start: 14 @23111 has 66 MA's), (19, 23138), (Start: 20 @23141 has 1 MA's), (29, 23186), (31, 23198), (33, 23207), (64, 23483), (67, 23501), (74, 23579), (78, 23588), (83, 23603), (85, 23606), (111, 23825), (114, 23837), (132, 23978), (133, 23981), (145, 24086), (150, 24131), (154, 24161), (158, 24185), (159, 24197), (160, 24200), (166, 24248), (169, 24287),

Gene: ParvusTarda_29 Start: 24788, Stop: 25912, Start Num: 16
Candidate Starts for ParvusTarda_29:
(Start: 16 @24788 has 45 MA's), (18, 24794), (Start: 20 @24800 has 1 MA's), (28, 24845), (33, 24869), (41, 24956), (49, 25013), (55, 25058), (59, 25100), (64, 25124), (71, 25187), (83, 25226), (94, 25301), (96, 25331), (106, 25412), (111, 25448), (117, 25475), (132, 25601), (154, 25781),

Gene: Patos_30 Start: 25228, Stop: 26352, Start Num: 16
Candidate Starts for Patos_30:
(Start: 16 @25228 has 45 MA's), (18, 25234), (Start: 20 @25240 has 1 MA's), (28, 25285), (33, 25309), (41, 25396), (49, 25453), (55, 25498), (59, 25540), (64, 25564), (71, 25627), (83, 25666), (94, 25741),

(96, 25771), (106, 25852), (111, 25888), (132, 26041), (142, 26122), (144, 26143), (154, 26221), (165, 26302),

Gene: Phives_20 Start: 16011, Stop: 17453, Start Num: 14
Candidate Starts for Phives_20:
(Start: 14 @16011 has 66 MA's), (25, 16071), (27, 16077), (36, 16134), (38, 16155), (50, 16248), (66, 16365), (71, 16413), (77, 16533), (88, 16752), (125, 17082), (136, 17184), (138, 17202), (166, 17421),

Gene: Pixelle_19 Start: 14954, Stop: 16396, Start Num: 14
Candidate Starts for Pixelle_19:
(Start: 14 @14954 has 66 MA's), (25, 15014), (27, 15020), (36, 15077), (66, 15308), (71, 15356), (72, 15362), (77, 15476), (88, 15695), (125, 16025), (136, 16127), (138, 16145), (166, 16364),

Gene: Powerpuff_19 Start: 14970, Stop: 16091, Start Num: 14
Candidate Starts for Powerpuff_19:
(Start: 14 @14970 has 66 MA's), (25, 15030), (36, 15093), (38, 15114), (67, 15327), (72, 15378), (73, 15384), (105, 15606), (136, 15822), (138, 15840), (145, 15900),

Gene: PrairieDogTown_20 Start: 16071, Stop: 17120, Start Num: 15
Candidate Starts for PrairieDogTown_20:
(Start: 15 @16071 has 11 MA's), (34, 16176), (56, 16341), (66, 16407), (122, 16737), (128, 16773), (163, 17094),

Gene: Pumpkins_19 Start: 15036, Stop: 16157, Start Num: 14
Candidate Starts for Pumpkins_19:
(1, 14664), (3, 14709), (Start: 14 @15036 has 66 MA's), (37, 15171), (38, 15180), (49, 15270), (72, 15444), (73, 15450), (138, 15906),

Gene: Ranch_29 Start: 24142, Stop: 25266, Start Num: 16
Candidate Starts for Ranch_29:
(Start: 16 @24142 has 45 MA's), (18, 24148), (Start: 20 @24154 has 1 MA's), (28, 24199), (33, 24223), (41, 24310), (49, 24367), (55, 24412), (59, 24454), (64, 24478), (71, 24541), (83, 24580), (94, 24655), (96, 24685), (106, 24766), (111, 24802), (132, 24955), (142, 25036), (144, 25057), (154, 25135), (165, 25216),

Gene: RazorC_27 Start: 23612, Stop: 24736, Start Num: 16
Candidate Starts for RazorC_27:
(Start: 16 @23612 has 45 MA's), (18, 23618), (Start: 20 @23624 has 1 MA's), (28, 23669), (33, 23693), (41, 23780), (49, 23837), (55, 23882), (59, 23924), (64, 23948), (83, 24050), (94, 24125), (96, 24155), (106, 24236), (111, 24272), (132, 24425), (137, 24458), (154, 24605), (165, 24686),

Gene: Riduram_28 Start: 23190, Stop: 24314, Start Num: 16
Candidate Starts for Riduram_28:
(Start: 16 @23190 has 45 MA's), (18, 23196), (Start: 20 @23202 has 1 MA's), (28, 23247), (33, 23271), (41, 23358), (49, 23415), (55, 23460), (59, 23502), (64, 23526), (83, 23628), (94, 23703), (96, 23733), (106, 23814), (111, 23850), (132, 24003), (137, 24036), (154, 24183), (165, 24264),

Gene: Riparian_29 Start: 22907, Stop: 24094, Start Num: 14
Candidate Starts for Riparian_29:
(5, 22802), (6, 22808), (Start: 14 @22907 has 66 MA's), (19, 22934), (Start: 20 @22937 has 1 MA's), (29, 22982), (31, 22994), (33, 23003), (49, 23168), (64, 23279), (67, 23297), (74, 23375), (78, 23384), (83, 23399), (111, 23621), (114, 23633), (132, 23774), (133, 23777), (145, 23882), (150, 23927), (154, 23957), (158, 23981), (159, 23993), (160, 23996), (166, 24044), (169, 24083),

Gene: RockScotty_19 Start: 14619, Stop: 16067, Start Num: 14
Candidate Starts for RockScotty_19:
(Start: 14 @14619 has 66 MA's), (Start: 24 @14673 has 1 MA's), (72, 15027), (73, 15033), (104, 15579), (113, 15630), (140, 15825),

Gene: Rope_29 Start: 23093, Stop: 24280, Start Num: 14
Candidate Starts for Rope_29:
(5, 22988), (6, 22994), (Start: 14 @23093 has 66 MA's), (19, 23120), (Start: 20 @23123 has 1 MA's), (29, 23168), (31, 23180), (33, 23189), (49, 23354), (64, 23465), (67, 23483), (74, 23561), (78, 23570), (83, 23585), (85, 23588), (111, 23807), (114, 23819), (132, 23960), (133, 23963), (145, 24068), (150, 24113), (154, 24143), (158, 24167), (159, 24179), (160, 24182), (166, 24230), (169, 24269),

Gene: Rota_28 Start: 25495, Stop: 26619, Start Num: 16
Candidate Starts for Rota_28:
(Start: 16 @25495 has 45 MA's), (18, 25501), (Start: 20 @25507 has 1 MA's), (28, 25552), (33, 25576), (41, 25663), (49, 25720), (55, 25765), (59, 25807), (83, 25933), (94, 26008), (96, 26038), (106, 26119), (111, 26155), (132, 26308), (142, 26389), (144, 26410), (154, 26488), (165, 26569),

Gene: Rukungu_29 Start: 25844, Stop: 26968, Start Num: 16
Candidate Starts for Rukungu_29:
(Start: 16 @25844 has 45 MA's), (18, 25850), (Start: 20 @25856 has 1 MA's), (28, 25901), (33, 25925), (41, 26012), (49, 26069), (55, 26114), (59, 26156), (64, 26180), (71, 26243), (83, 26282), (94, 26357), (96, 26387), (106, 26468), (111, 26504), (132, 26657), (142, 26738), (144, 26759), (154, 26837), (165, 26918),

Gene: Rumi_28 Start: 23223, Stop: 24347, Start Num: 16
Candidate Starts for Rumi_28:
(Start: 16 @23223 has 45 MA's), (18, 23229), (Start: 20 @23235 has 1 MA's), (28, 23280), (33, 23304), (41, 23391), (49, 23448), (55, 23493), (59, 23535), (64, 23559), (83, 23661), (94, 23736), (96, 23766), (106, 23847), (111, 23883), (132, 24036), (137, 24069), (154, 24216), (165, 24297),

Gene: Sabourin_19 Start: 14526, Stop: 15974, Start Num: 14
Candidate Starts for Sabourin_19:
(Start: 14 @14526 has 66 MA's), (Start: 24 @14580 has 1 MA's), (70, 14904), (72, 14934), (104, 15486), (140, 15732),

Gene: Sadboi_29 Start: 25984, Stop: 27108, Start Num: 16
Candidate Starts for Sadboi_29:
(Start: 16 @25984 has 45 MA's), (18, 25990), (Start: 20 @25996 has 1 MA's), (28, 26041), (33, 26065), (41, 26152), (49, 26209), (55, 26254), (59, 26296), (64, 26320), (71, 26383), (83, 26422), (94, 26497), (96, 26527), (106, 26608), (111, 26644), (132, 26797), (142, 26878), (144, 26899), (154, 26977), (165, 27058),

Gene: Sampudon_29 Start: 26151, Stop: 27275, Start Num: 16
Candidate Starts for Sampudon_29:
(Start: 16 @26151 has 45 MA's), (18, 26157), (Start: 20 @26163 has 1 MA's), (28, 26208), (33, 26232), (41, 26319), (49, 26376), (55, 26421), (59, 26463), (83, 26589), (94, 26664), (96, 26694), (106, 26775), (111, 26811), (132, 26964), (142, 27045), (144, 27066), (154, 27144), (165, 27225),

Gene: Schaffner_19 Start: 15023, Stop: 16144, Start Num: 14
Candidate Starts for Schaffner_19:
(Start: 14 @15023 has 66 MA's), (38, 15167), (49, 15257), (73, 15437), (138, 15893), (165, 16109),

Gene: Scotia_21 Start: 16995, Stop: 18044, Start Num: 15
Candidate Starts for Scotia_21:
(2, 16623), (11, 16965), (Start: 15 @16995 has 11 MA's), (17, 17013), (42, 17169), (48, 17196), (54, 17244), (56, 17265), (66, 17331), (81, 17412), (115, 17637), (122, 17661), (126, 17691), (128, 17697), (131, 17739), (143, 17856), (156, 17958), (163, 18018), (164, 18024),

Gene: Send513_29 Start: 23449, Stop: 24636, Start Num: 14
Candidate Starts for Send513_29:
(5, 23344), (6, 23350), (Start: 14 @23449 has 66 MA's), (19, 23476), (Start: 20 @23479 has 1 MA's), (29, 23524), (31, 23536), (33, 23545), (49, 23710), (64, 23821), (67, 23839), (74, 23917), (78, 23926), (83, 23941), (111, 24163), (114, 24175), (132, 24316), (133, 24319), (145, 24424), (150, 24469), (154, 24499), (158, 24523), (159, 24535), (160, 24538), (166, 24586), (169, 24625),

Gene: ShakeItOph_18 Start: 13074, Stop: 14306, Start Num: 15
Candidate Starts for ShakeItOph_18:
(Start: 15 @13074 has 11 MA's), (41, 13269), (45, 13293), (81, 13644), (99, 13800), (113, 13890), (130, 13989), (148, 14145), (157, 14226),

Gene: Sienna_24 Start: 20204, Stop: 21337, Start Num: 16
Candidate Starts for Sienna_24:
(Start: 16 @20204 has 45 MA's), (36, 20321), (38, 20342), (40, 20354), (41, 20375), (43, 20384), (46, 20417), (72, 20615), (97, 20765), (110, 20858), (119, 20903), (123, 20921), (127, 20951), (129, 20975), (146, 21131), (148, 21137), (150, 21173), (154, 21203), (155, 21209), (160, 21242), (164, 21281),

Gene: Simpson_21 Start: 14919, Stop: 16040, Start Num: 14
Candidate Starts for Simpson_21:
(Start: 14 @14919 has 66 MA's), (25, 14979), (36, 15042), (38, 15063), (67, 15276), (72, 15327), (73, 15333), (105, 15555), (136, 15771), (138, 15789), (145, 15849),

Gene: Skelbel_20 Start: 14901, Stop: 16022, Start Num: 14
Candidate Starts for Skelbel_20:
(Start: 14 @14901 has 66 MA's), (25, 14961), (27, 14967), (36, 15024), (38, 15045), (72, 15309), (138, 15771),

Gene: Soondubu_18 Start: 15573, Stop: 16658, Start Num: 14
Candidate Starts for Soondubu_18:
(Start: 14 @15573 has 66 MA's), (22, 15627), (58, 15885), (102, 16146), (130, 16323), (132, 16368), (162, 16593), (163, 16620), (168, 16650),

Gene: Sooty_19 Start: 14529, Stop: 15977, Start Num: 14
Candidate Starts for Sooty_19:
(Start: 14 @14529 has 66 MA's), (Start: 24 @14583 has 1 MA's), (70, 14907), (72, 14937), (104, 15489), (140, 15735),

Gene: SpecialK_19 Start: 14580, Stop: 15974, Start Num: 24
Candidate Starts for SpecialK_19:
(Start: 14 @14526 has 66 MA's), (Start: 24 @14580 has 1 MA's), (72, 14934), (73, 14940), (104, 15486), (113, 15537), (140, 15732),

Gene: Stormer_28 Start: 23223, Stop: 24347, Start Num: 16
Candidate Starts for Stormer_28:

(Start: 16 @23223 has 45 MA's), (18, 23229), (Start: 20 @23235 has 1 MA's), (28, 23280), (33, 23304), (41, 23391), (49, 23448), (55, 23493), (59, 23535), (64, 23559), (83, 23661), (94, 23736), (96, 23766), (106, 23847), (111, 23883), (132, 24036), (137, 24069), (154, 24216), (165, 24297),

Gene: Stuu_19 Start: 14619, Stop: 16067, Start Num: 14
Candidate Starts for Stuu_19:
(Start: 14 @14619 has 66 MA's), (Start: 24 @14673 has 1 MA's), (70, 14997), (72, 15027), (104, 15579), (113, 15630), (140, 15825),

Gene: Subaru_20 Start: 14901, Stop: 16022, Start Num: 14
Candidate Starts for Subaru_20:
(Start: 14 @14901 has 66 MA's), (25, 14961), (27, 14967), (36, 15024), (38, 15045), (72, 15309), (138, 15771),

Gene: Suzy_24 Start: 21365, Stop: 22498, Start Num: 16
Candidate Starts for Suzy_24:
(Start: 16 @21365 has 45 MA's), (36, 21482), (38, 21503), (41, 21536), (43, 21545), (64, 21707), (97, 21926), (106, 21995), (116, 22055), (119, 22064), (123, 22082), (125, 22106), (129, 22136), (146, 22292), (148, 22298), (154, 22364), (155, 22370), (160, 22403), (164, 22442), (167, 22457),

Gene: Tallboi_19 Start: 14933, Stop: 16054, Start Num: 14
Candidate Starts for Tallboi_19:
(Start: 14 @14933 has 66 MA's), (25, 14993), (27, 14999), (36, 15056), (38, 15077), (50, 15170), (72, 15341), (73, 15347), (105, 15569), (136, 15785), (138, 15803),

Gene: Tbone_19 Start: 14923, Stop: 16044, Start Num: 14
Candidate Starts for Tbone_19:
(Start: 14 @14923 has 66 MA's), (25, 14983), (36, 15046), (38, 15067), (67, 15280), (72, 15331), (73, 15337), (105, 15559), (136, 15775), (138, 15793), (145, 15853),

Gene: Terapin_24 Start: 20204, Stop: 21337, Start Num: 16
Candidate Starts for Terapin_24:
(Start: 16 @20204 has 45 MA's), (36, 20321), (38, 20342), (40, 20354), (41, 20375), (43, 20384), (46, 20417), (64, 20546), (72, 20615), (97, 20765), (106, 20834), (110, 20858), (119, 20903), (123, 20921), (125, 20945), (129, 20975), (146, 21131), (148, 21137), (154, 21203), (155, 21209), (160, 21242), (164, 21281),

Gene: TforTroy_19 Start: 15054, Stop: 16175, Start Num: 14
Candidate Starts for TforTroy_19:
(Start: 14 @15054 has 66 MA's), (37, 15189), (38, 15198), (49, 15288), (72, 15462), (73, 15468), (84, 15501), (138, 15924),

Gene: ThursdayNight_17 Start: 13779, Stop: 14744, Start Num: 36
Candidate Starts for ThursdayNight_17:
(Start: 14 @13656 has 66 MA's), (Start: 24 @13710 has 1 MA's), (36, 13779), (120, 14334), (136, 14475), (138, 14493),

Gene: Tian_19 Start: 14951, Stop: 16393, Start Num: 14
Candidate Starts for Tian_19:
(Start: 14 @14951 has 66 MA's), (25, 15011), (27, 15017), (36, 15074), (38, 15095), (66, 15305), (71, 15353), (77, 15473), (88, 15692), (125, 16022), (136, 16124), (138, 16142), (166, 16361),

Gene: Tillicus_28 Start: 24557, Stop: 25681, Start Num: 16

Candidate Starts for Tillicus_28:
(Start: 16 @24557 has 45 MA's), (18, 24563), (28, 24614), (33, 24638), (41, 24725), (49, 24782), (55, 24827), (59, 24869), (62, 24890), (64, 24893), (71, 24956), (83, 24995), (85, 24998), (94, 25070), (96, 25100), (106, 25181), (111, 25217), (132, 25370), (144, 25472), (146, 25478), (154, 25550),

Gene: Tuck_20 Start: 16127, Stop: 17569, Start Num: 14
Candidate Starts for Tuck_20:
(Start: 14 @16127 has 66 MA's), (25, 16187), (27, 16193), (36, 16250), (66, 16481), (73, 16541), (86, 16835), (87, 16856), (138, 17318), (147, 17384),

Gene: Turab_19 Start: 14930, Stop: 16051, Start Num: 14
Candidate Starts for Turab_19:
(Start: 14 @14930 has 66 MA's), (25, 14990), (36, 15053), (38, 15074), (72, 15338), (90, 15422), (136, 15782), (138, 15800), (145, 15860),

Gene: Tutumahutu_19 Start: 14970, Stop: 16091, Start Num: 14
Candidate Starts for Tutumahutu_19:
(Start: 14 @14970 has 66 MA's), (25, 15030), (36, 15093), (38, 15114), (67, 15327), (72, 15378), (73, 15384), (105, 15606), (136, 15822), (138, 15840), (145, 15900),

Gene: VroomVroom_18 Start: 13087, Stop: 14322, Start Num: 15
Candidate Starts for VroomVroom_18:
(Start: 15 @13087 has 11 MA's), (41, 13282), (45, 13306), (74, 13528), (81, 13657), (99, 13813), (113, 13906), (130, 14005), (148, 14161), (157, 14242),

Gene: Warda_19 Start: 14915, Stop: 16036, Start Num: 14
Candidate Starts for Warda_19:
(Start: 14 @14915 has 66 MA's), (25, 14975), (36, 15038), (38, 15059), (67, 15272), (72, 15323), (73, 15329), (105, 15551), (136, 15767), (138, 15785), (145, 15845),

Gene: Weiss13_29 Start: 23139, Stop: 24326, Start Num: 14
Candidate Starts for Weiss13_29:
(5, 23034), (6, 23040), (Start: 14 @23139 has 66 MA's), (19, 23166), (Start: 20 @23169 has 1 MA's), (29, 23214), (31, 23226), (33, 23235), (49, 23400), (64, 23511), (67, 23529), (74, 23607), (78, 23616), (83, 23631), (111, 23853), (114, 23865), (132, 24006), (133, 24009), (145, 24114), (150, 24159), (154, 24189), (158, 24213), (159, 24225), (160, 24228), (166, 24276), (169, 24315),

Gene: Wojtek_28 Start: 24861, Stop: 25985, Start Num: 16
Candidate Starts for Wojtek_28:
(Start: 16 @24861 has 45 MA's), (18, 24867), (Start: 20 @24873 has 1 MA's), (28, 24918), (33, 24942), (41, 25029), (49, 25086), (55, 25131), (59, 25173), (64, 25197), (71, 25260), (83, 25299), (94, 25374), (96, 25404), (106, 25485), (111, 25521), (117, 25548), (132, 25674), (154, 25854),

Gene: Xenia2_29 Start: 24947, Stop: 26074, Start Num: 16
Candidate Starts for Xenia2_29:
(Start: 16 @24947 has 45 MA's), (44, 25139), (49, 25172), (53, 25208), (55, 25217), (59, 25259), (73, 25358), (83, 25385), (85, 25388), (103, 25538), (107, 25583), (108, 25586), (111, 25607), (126, 25685), (132, 25760), (150, 25910), (154, 25940), (158, 25964), (164, 26015),

Gene: Yang_19 Start: 15026, Stop: 16147, Start Num: 14
Candidate Starts for Yang_19:
(Start: 14 @15026 has 66 MA's), (38, 15170), (49, 15260), (68, 15386), (136, 15878), (138, 15896), (165, 16112),

Gene: Yelo_29 Start: 23432, Stop: 24619, Start Num: 14
Candidate Starts for Yelo_29:
(5, 23327), (6, 23333), (Start: 14 @23432 has 66 MA's), (19, 23459), (Start: 20 @23462 has 1 MA's),
(29, 23507), (31, 23519), (33, 23528), (49, 23693), (64, 23804), (67, 23822), (74, 23900), (78, 23909),
(83, 23924), (111, 24146), (114, 24158), (132, 24299), (133, 24302), (145, 24407), (150, 24452), (154,
24482), (158, 24506), (159, 24518), (160, 24521), (166, 24569), (169, 24608),

Gene: YesChef_19 Start: 14970, Stop: 16091, Start Num: 14
Candidate Starts for YesChef_19:
(Start: 14 @14970 has 66 MA's), (25, 15030), (36, 15093), (38, 15114), (67, 15327), (72, 15378), (73,
15384), (105, 15606), (136, 15822), (138, 15840), (145, 15900),

Gene: Yikes_30 Start: 26236, Stop: 27360, Start Num: 16
Candidate Starts for Yikes_30:
(Start: 16 @26236 has 45 MA's), (18, 26242), (Start: 20 @26248 has 1 MA's), (28, 26293), (33, 26317),
(41, 26404), (49, 26461), (55, 26506), (59, 26548), (83, 26674), (94, 26749), (96, 26779), (106, 26860),
(111, 26896), (132, 27049), (142, 27130), (144, 27151), (154, 27229), (165, 27310),

Gene: Zany_28 Start: 25757, Stop: 26881, Start Num: 16
Candidate Starts for Zany_28:
(Start: 16 @25757 has 45 MA's), (18, 25763), (Start: 20 @25769 has 1 MA's), (28, 25814), (33, 25838),
(41, 25925), (49, 25982), (55, 26027), (59, 26069), (64, 26093), (71, 26156), (83, 26195), (94, 26270),
(96, 26300), (106, 26381), (111, 26417), (132, 26570), (154, 26750), (165, 26831),

Gene: Zenon_30 Start: 23451, Stop: 24638, Start Num: 14
Candidate Starts for Zenon_30:
(5, 23346), (6, 23352), (Start: 14 @23451 has 66 MA's), (19, 23478), (Start: 20 @23481 has 1 MA's),
(29, 23526), (31, 23538), (33, 23547), (49, 23712), (64, 23823), (67, 23841), (74, 23919), (78, 23928),
(83, 23943), (111, 24165), (114, 24177), (132, 24318), (133, 24321), (145, 24426), (150, 24471), (154,
24501), (158, 24525), (159, 24537), (160, 24540), (166, 24588), (169, 24627),

Gene: pZL12_48c Start: 37533, Stop: 36430, Start Num: 14
Candidate Starts for pZL12_48c:
(Start: 14 @37533 has 66 MA's), (36, 37407), (49, 37308), (52, 37293), (63, 37194), (104, 36936),
(115, 36876), (122, 36846), (151, 36582),