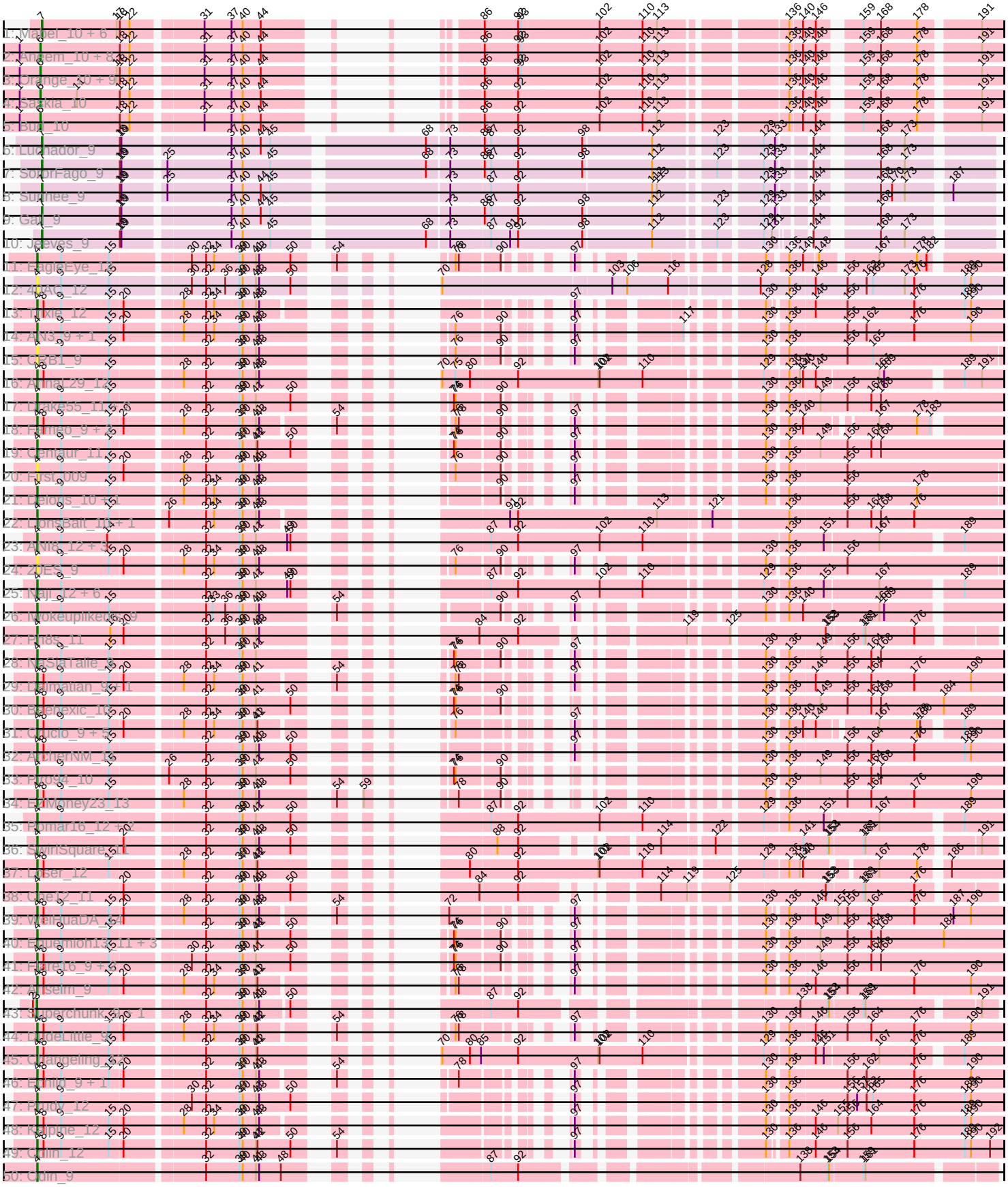
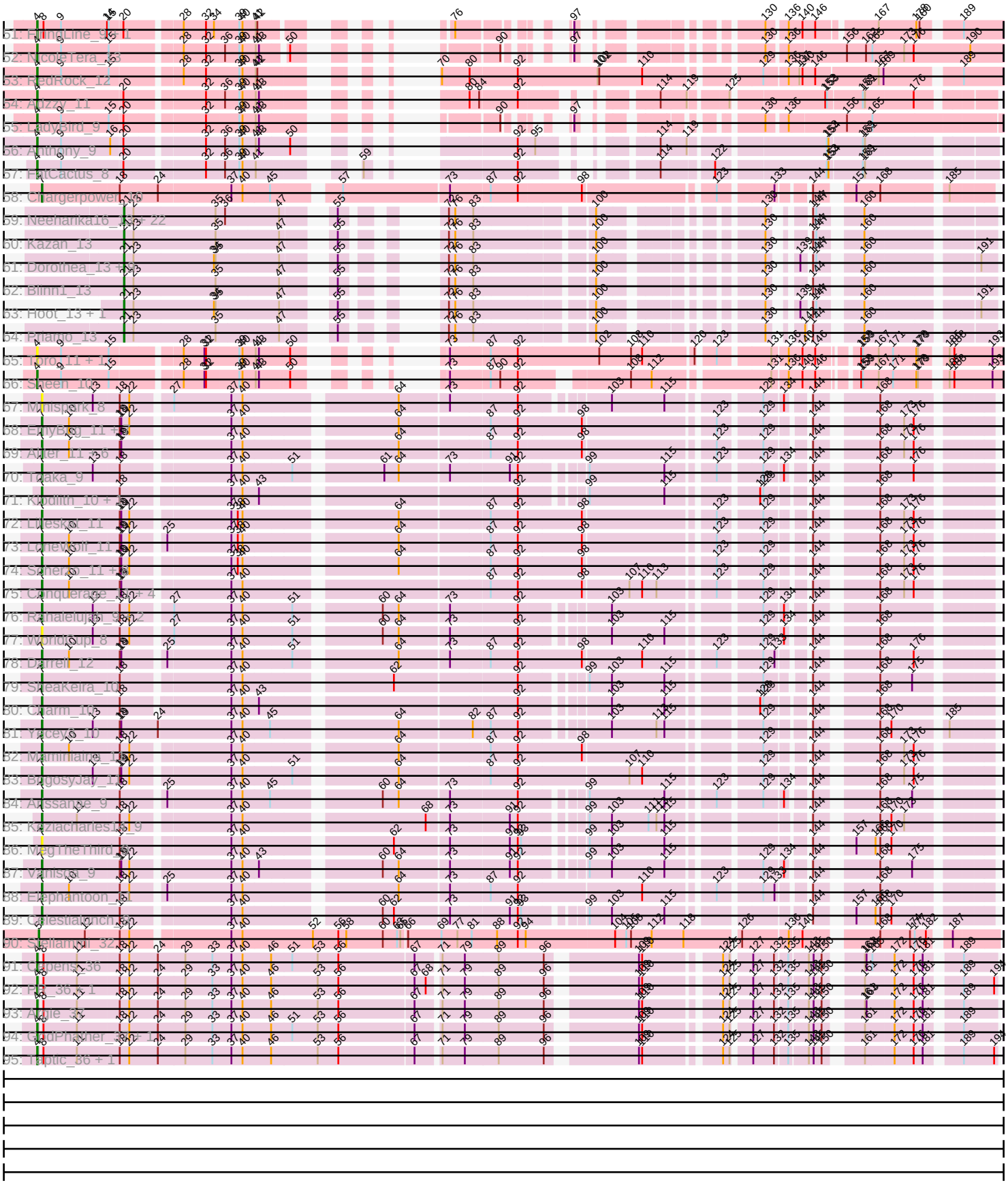
Pham 347255



Pham 347255



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 347255 Report

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

Pham number 347255 has 214 members, 14 are drafts.

Phages represented in each track:
• Track 1 : Mabel_10, Jabith_10, Insomnia_10, TinyTimmy_10, Lucivia_10, Ebony_10, Kimba_10
• Track 2 : Aneem_10, Bowtie_10, Munch_10, MaCh_10, Bachome_10, Joselito_10, Gilberta_10, Flaverint_10, Timothy_10
• Track 3 : Orange_10, Mulciber_10, Wolpertinger_9, Salz_10, Sham4_10, Snape_10, Hutc2_10, Petersenfast_10, Et2Brutus_9, Fibonacci_10
• Track 4 : Saskia_10
• Track 5 : Bud_10
• Track 6 : Luchador_9
• Track 7 : SororFago_9
• Track 8 : Sunhee_9
• Track 9 : Gail_9
• Track 10 : Jeeves_9
• Track 11 : EagleEye_12
• Track 12 : 40AC_12
• Track 13 : Trixie_12
• Track 14 : AN3_9, VA6_9
• Track 15 : CRB1_9
• Track 16 : AnnaL29_12
• Track 17 : Drake55_11, HarryHoudini_11, Terrific_11
• Track 18 : Fameo_9, Heffalump_11, QueenB2_9
• Track 19 : Centaur_11
• Track 20 : First_009
• Track 21 : Deloris_10, BengiVuitton_10
• Track 22 : LionsBait_10, HippoHollow_10
• Track 23 : ANI8_12, AN9_12, VC3_12, C3_07
• Track 24 : 20ES_9
• Track 25 : Naji_12, Duplo_12, D32_12, D29_10, StarStuff_12, Travvers_12, Tomathan_12
• Track 26 : Iwokeuplikedis_9
• Track 27 : Ph8s_11
• Track 28 : NaSiaTalie_9
• Track 29 : Dalmatian_9, Retro23_9
• Track 30 : Baehexic_10
• Track 31 : Crucio_9, SnapTap_9, SweetiePie_9, SemperFi_11, Power_9, Georgie2_9
• Track 32 : ArcherNM_11

• Track 33 : Piro94_10
• Track 34 : EZMoney23_13
• Track 35 : Pomar16_12, Kerberos_12, DBQu4n_12
• Track 36 : SwirlSquare_11
• Track 37 : Loser_12
• Track 38 : Che12_11
• Track 39 : WeiHuaDA_14
• Track 40 : Equemioh13_11, WideWale_11, Gratitude_11, Updawg_11
• Track 41 : Flare16_9, Sknot_9, MiculUcigas_9
• Track 42 : Anselm_9
• Track 43 : Superchunk_9, Caraxes_9
• Track 44 : DudeLittle_9
• Track 45 : Changeling_12
• Track 46 : Echild_9, Benvolio_9
• Track 47 : Prudy_12
• Track 48 : Kalpine_12
• Track 49 : Colin_12
• Track 50 : Odin_9
• Track 51 : FiringLine_9, QueenBeesly_9
• Track 52 : NicoleTera_13
• Track 53 : RedRock_12
• Track 54 : Adzzy_11
• Track 55 : LadyBird_9
• Track 56 : Anthony_9
• Track 57 : FatCactus_8
• Track 58 : Chargerpower_10
• Track 59 : Neeharika16_13, JewelBug_13, Pmask_13, Indra_13, Hexamo_13, Imbriano_13, Roksolana_13, Jordennis_13, Helmet_13, BABullseye_13, DelvinSonDorr_12, Polyphemus_13, Artemis2UCLA_13, Cookiedough_13, Isiphiwo_13, SuperAwesome_13, Koko_13, SuperCallie99_13, Newrala_13, Temprado_13, EricB_13, Tucker_13, Garak_14
• Track 60 : Kazan_13
• Track 61 : Dorothea_13, VohminGhazi_13, Chartreuse_13, DaVinci_13, GreedyLawyer_13, McFly_13, Candra_13, Kipper29_13, SmellyB_13, BennyP_13
• Track 62 : Blinn1_13
• Track 63 : Hoot_13, CloudWang3_13
• Track 64 : Priamo_13
• Track 65 : Toro_11, FlyCatcher_12
• Track 66 : Sheen_10
• Track 67 : Minispark_8
• Track 68 : EmyBug_11, Ayanochan_11, Fayely_11, ExplosioNervosa_11, Phonnegut_11, Pioneer_11, Beemo_11, Qobbit_11
• Track 69 : Aliter_11, HortumSL17_11, Catalina_11, Phaeder_11, Tubs_11, Myxus_11, PackMan_11
• Track 70 : Toaka_9
• Track 71 : Klodlith_10, DreamTeam1_10
• Track 72 : Lilleskat_11
• Track 73 : LoneWolf_11
• Track 74 : Scherzo_11, Jiawan_11, Onglai_10, Sachima_11, RyeScarlet_11, Hanray_11, EdogawaKiddo_11, Ugenie5_8, Holex_11
• Track 75 : Conquerage_11, Alma_11, Spouty_11, Priya_11, Eidsmoe_11
• Track 76 : Rahalelujah_9, CogOmlette_8, Bellris_9
• Track 77 : WorldCup_8

• Track 78 : Darrell_12
• Track 79 : SheaKeira_10
• Track 80 : Charm_10
• Track 81 : Yecey3_10
• Track 82 : Maminiaina_11
• Track 83 : BogosyJay_11
• Track 84 : Arissanae_9
• Track 85 : Keziacharles14_9
• Track 86 : MegTheThird_9
• Track 87 : Vanisoa_9
• Track 88 : Elephantoon_11
• Track 89 : Celestialunch_9
• Track 90 : Stellammi_32
• Track 91 : Cepens_36
• Track 92 : PR_36, D12_35
• Track 93 : Argie_37
• Track 94 : GodPhather_37, Jeon_36
• Track 95 : Taptic_36, Megabear_36

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

The start number called the most often in the published annotations is 4, it was called in 81 of the 200 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 20ES_9, 40AC_12, AN3_9, AN9_12, ANI8_12, Adzzy_11, AnnaL29_12, Anselm_9, Anthony_9, ArcherNM_11, Argie_37, Baehexic_10, BengiVuitton_10, Benvolio_9, C3_07, CRB1_9, Centaur_11, Cepens_36, Changeling_12, Che12_11, Colin_12, Crucio_9, D12_35, D29_10, D32_12, DBQu4n_12, Dalmatian_9, Deloris_10, Drake55_11, DudeLittle_9, Duplo_12, EZMoney23_13, EagleEye_12, Echild_9, Equemioh13_11, Fameo_9, FatCactus_8, FiringLine_9, First_009, Flare16_9, FlyCatcher_12, Georgie2_9, GodPhather_37, Gratitude_11, HarryHoudini_11, Heffalump_11, HippoHollow_10, Iwokeuplikedis_9, Jeon_36, Kalpine_12, Kerberos_12, LadyBird_9, LionsBait_10, Loser_12, Megabear_36, MiculUcigas_9, NaSiaTalie_9, Naji_12, NicoleTera_13, Odin_9, PR_36, Ph8s_11, Piro94_10, Pomar16_12, Power_9, Prudy_12, QueenB2_9, QueenBeesly_9, RedRock_12, Retro23_9, SemperFi_11, Sheen_10, Sknot_9, SnapTap_9, StarStuff_12, SweetiePie_9, SwirlSquare_11, Taptic_36, Terrific_11, Tomathan_12, Toro_11, Travvers_12, Trixie_12, Updawg_11, VA6_9, VC3_12, WeiHuaDA_14, WideWale_11,

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

Genes that do not have the "Most Annotated" start:
• Aliter_11, Alma_11, Aneem_10, Arissanae_9, Artemis2UCLA_13, Ayanochan_11, BABullseye_13, Bachome_10, Beemo_11, Bellris_9, BennyP_13, Blinn1_13, BogosyJay_11, Bowtie_10, Bud_10, Candra_13, Caraxes_9, Catalina_11, Celestialunch_9, Chargerpower_10, Charm_10, Chartreuse_13, CloudWang3_13, CogOmlette_8, Conquerage_11, Cookiedough_13, DaVinci_13, Darrell_12,

DelvinSonDorr_12, Dorothea_13, DreamTeam1_10, Ebony_10, EdogawaKiddo_11, Eidsmoe_11, Elephantoon_11, EmyBug_11, EricB_13, Et2Brutus_9, ExplosioNervosa_11, Fayely_11, Fibonacci_10, Flaverint_10, Gail_9, Garak_14, Gilberta_10, GreedyLawyer_13, Hanray_11, Helmet_13, Hexamo_13, Holex_11, Hoot_13, HortumSL17_11, Hutc2_10, Imbriano_13, Indra_13, Insomnia_10, Isiphiwo_13, Jabith_10, Jeeves_9, JewelBug_13, Jiawan_11, Jordennis_13, Joselito_10, Kazan_13, Keziacharles14_9, Kimba_10, Kipper29_13, Klodlith_10, Koko_13, Lilleskat_11, LoneWolf_11, Luchador_9, Lucivia_10, MaCh_10, Mabel_10, Maminiaina_11, McFly_13, MegTheThird_9, Minispark_8, Mulciber_10, Munch_10, Myxus_11, Neeharika16_13, Newrala_13, Onglai_10, Orange_10, PackMan_11, Petersenfast_10, Phaeder_11, Phonnegut_11, Pioneer_11, Pmask_13, Polyphemus_13, Priamo_13, Priya_11, Qobbit_11, Rahalelujah_9, Roksolana_13, RyeScarlet_11, Sachima_11, Salz_10, Saskia_10, Scherzo_11, Sham4_10, SheaKeira_10, SmellyB_13, Snape_10, SororFago_9, Spouty_11, Stellammi_32, Sunhee_9, SuperAwesome_13, SuperCallie99_13, Superchunk_9, Temprado_13, Timothy_10, TinyTimmy_10, Toaka_9, Tubs_11, Tucker_13, Ugenie5_8, Vanisoa_9, VohminGhazi_13, Wolpertinger_9, WorldCup_8, Yecey3_10,

Summary by start number:

Start 3:
• Found in 2 of 214 (0.9%) of genes in pham
• Manual Annotations of this start: 2 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Caraxes_9 (A2), Superchunk_9 (A2),

Start 4:
• Found in 88 of 214 (41.1%) of genes in pham
• Manual Annotations of this start: 81 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 20ES_9 (A2), 40AC_12 (A17), AN3_9 (A2), AN9_12 (A2), ANI8_12 (A2), Adzzy_11 (A2), AnnaL29_12 (A2), Anselm_9 (A2), Anthony_9 (A20), ArcherNM_11 (A2), Argie_37 (W), Baehexic_10 (A2), BengiVuitton_10 (A2), Benvolio_9 (A2), C3_07 (A2), CRB1_9 (A2), Centaur_11 (A2), Cepens_36 (W), Changeling_12 (A2), Che12_11 (A2), Colin_12 (A2), Crucio_9 (A2), D12_35 (W), D29_10 (A2), D32_12 (A2), DBQu4n_12 (A2), Dalmatian_9 (A2), Deloris_10 (A2), Drake55_11 (A2), DudeLittle_9 (A2), Duplo_12 (A2), EZMoney23_13 (A2), EagleEye_12 (A16), Echild_9 (A2), Equemioh13_11 (A2), Fameo_9 (A2), FatCactus_8 (A20), FiringLine_9 (A2), First_009 (A2), Flare16_9 (A2), FlyCatcher_12 (A7), Georgie2_9 (A2), GodPhather_37 (W), Gratitude_11 (A2), HarryHoudini_11 (A2), Heffalump_11 (A2), HippoHollow_10 (A2), Iwokeuplikedis_9 (A2), Jeon_36 (W), Kalpine_12 (A2), Kerberos_12 (A2), LadyBird_9 (A2), LionsBait_10 (A2), Loser_12 (A2), Megabear_36 (W), MiculUcigas_9 (A2), NaSiaTalie_9 (A2), Naji_12 (A2), NicoleTera_13 (A2), Odin_9 (A2), PR_36 (W), Ph8s_11 (A2), Piro94_10 (A2), Pomar16_12 (A2), Power_9 (A2), Prudy_12 (A2), QueenB2_9 (A2), QueenBeesly_9 (A2), RedRock_12 (A2), Retro23_9 (A2), SemperFi_11 (A2), Sheen_10 (A7), Sknot_9 (A2), SnapTap_9 (A2), StarStuff_12 (A2), SweetiePie_9 (A2), SwirlSquare_11 (A2), Taptic_36 (W), Terrific_11 (A2), Tomathan_12 (A2), Toro_11 (A7), Travvers_12 (A2), Trixie_12 (A2), Updawg_11 (A2), VA6_9 (A2), VC3_12 (A2), WeiHuaDA_14 (A2), WideWale_11 (A2),

Start 5:
• Found in 1 of 214 (0.5%) of genes in pham

• Manual Annotations of this start: 1 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Stellammi_32 (UNK),

Start 6:
• Found in 21 of 214 (9.8%) of genes in pham
• Manual Annotations of this start: 21 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aneem_10 (A11), Bachome_10 (A11), Bowtie_10 (A11), Bud_10 (A11), Et2Brutus_9 (A11), Fibonacci_10 (A11), Flaverint_10 (A11), Gilberta_10 (A11), Hutc2_10 (A11), Joselito_10 (A11), MaCh_10 (A11), Mulciber_10 (A11), Munch_10 (A11), Orange_10 (A11), Petersenfast_10 (A11), Salz_10 (A11), Saskia_10 (A11), Sham4_10 (A11), Snape_10 (A11), Timothy_10 (A11), Wolpertinger_9 (A11),

Start 7:
• Found in 64 of 214 (29.9%) of genes in pham
• Manual Annotations of this start: 59 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aliter_11 (A9), Alma_11 (A9), Arissanae_9 (A9), Ayanochan_11 (A9), Beemo_11 (A9), Bellris_9 (A9), BogosyJay_11 (A9), Catalina_11 (A9), Celestialunch_9 (A9), Chargerpower_10 (A22), Charm_10 (A9), CogOmlette_8 (A9), Conquerage_11 (A9), Darrell_12 (A9), DreamTeam1_10 (A9), Ebony_10 (A11), EdogawaKiddo_11 (A9), Eidsmoe_11 (A9), Elephantoon_11 (A9), EmyBug_11 (A9), ExplosioNervosa_11 (A9), Fayely_11 (A9), Gail_9 (A14), Hanray_11 (A9), Holex_11 (A9), HortumSL17_11 (A9), Insomnia_10 (A11), Jabith_10 (A11), Jeeves_9 (A14), Jiawan_11 (A9), Keziacharles14_9 (A9), Kimba_10 (A11), Klodlith_10 (A9), Lilleskat_11 (A9), LoneWolf_11 (A9), Luchador_9 (A14), Lucivia_10 (A11), Mabel_10 (A11), Maminiaina_11 (A9), MegTheThird_9 (A9), Minispark_8 (A9), Myxus_11 (A9), Onglai_10 (A9), PackMan_11 (A9), Phaeder_11 (A9), Phonnegut_11 (A9), Pioneer_11 (A9), Priya_11 (A9), Qobbit_11 (A9), Rahalelujah_9 (A9), RyeScarlet_11 (A9), Sachima_11 (A9), Scherzo_11 (A9), SheaKeira_10 (A9), SororFago_9 (A14), Spouty_11 (A9), Sunhee_9 (A14), TinyTimmy_10 (A11), Toaka_9 (A9), Tubs_11 (A9), Ugenie5_8 (A9), Vanisoa_9 (A9), WorldCup_8 (A9), Yecey3_10 (A9),

Start 21:
• Found in 38 of 214 (17.8%) of genes in pham
• Manual Annotations of this start: 36 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artemis2UCLA_13 (A6), BABullseye_13 (A6), BennyP_13 (A6), Blinn1_13 (A6), Candra_13 (A6), Chartreuse_13 (A6), CloudWang3_13 (A6), Cookiedough_13 (A6), DaVinci_13 (A6), DelvinSonDorr_12 (A6), Dorothea_13 (A6), EricB_13 (A6), Garak_14 (A6), GreedyLawyer_13 (A6), Helmet_13 (A6), Hexamo_13 (A6), Hoot_13 (A6), Imbriano_13 (A6), Indra_13 (A6), Isiphiwo_13 (A6), JewelBug_13 (A6), Jordennis_13 (A6), Kazan_13 (A6), Kipper29_13 (A6), Koko_13 (A6), McFly_13 (A6), Neeharika16_13 (A6), Newrala_13 (A6), Pmask_13 (A6), Polyphemus_13 (A6), Priamo_13 (A6), Roksolana_13 (A6), SmellyB_13 (A6), SuperAwesome_13 (A6), SuperCallie99_13 (A6), Temprado_13 (A6), Tucker_13 (A6), VohminGhazi_13 (A6),

Summary by clusters:

There are 12 clusters represented in this pham: A20, A14, A17, A16, A11, A7, A22, A2, W, A6, A9, UNK,

Info for manual annotations of cluster A11:
•Start number 6 was manually annotated 21 times for cluster A11.
•Start number 7 was manually annotated 7 times for cluster A11.

Info for manual annotations of cluster A14:
•Start number 7 was manually annotated 5 times for cluster A14.

Info for manual annotations of cluster A16:
•Start number 4 was manually annotated 1 time for cluster A16.

Info for manual annotations of cluster A2:
•Start number 3 was manually annotated 2 times for cluster A2.
•Start number 4 was manually annotated 69 times for cluster A2.

Info for manual annotations of cluster A20:
•Start number 4 was manually annotated 2 times for cluster A20.

Info for manual annotations of cluster A22:
•Start number 7 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A6:
•Start number 21 was manually annotated 36 times for cluster A6.

Info for manual annotations of cluster A7:
•Start number 4 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A9:
•Start number 7 was manually annotated 46 times for cluster A9.

Info for manual annotations of cluster UNK:
•Start number 5 was manually annotated 1 time for cluster UNK.

Info for manual annotations of cluster W:
•Start number 4 was manually annotated 8 times for cluster W.

Gene Information:

Gene: 20ES_9 Start: 4690, Stop: 5988, Start Num: 4
Candidate Starts for 20ES_9:
(Start: 4 @4690 has 81 MA's), (9, 4735), (15, 4822), (20, 4846), (28, 4939), (32, 4981), (34, 4996), (39, 5041), (40, 5047), (41, 5068), (43, 5074), (76, 5230), (90, 5302), (97, 5350), (130, 5569), (136, 5602), (156, 5707),

Gene: 40AC_12 Start: 6575, Stop: 8080, Start Num: 4
Candidate Starts for 40AC_12:
(Start: 4 @6575 has 81 MA's), (9, 6620), (15, 6707), (30, 6839), (32, 6866), (36, 6899), (39, 6926), (40, 6932), (41, 6953), (43, 6959), (50, 7016), (70, 7100), (103, 7397), (106, 7421), (116, 7496), (128,

7637), (136, 7688), (146, 7733), (156, 7793), (162, 7829), (165, 7841), (173, 7901), (176, 7919), (189, 8009), (190, 8021),

Gene: AN3_9 Start: 4672, Stop: 5973, Start Num: 4
Candidate Starts for AN3_9:
(Start: 4 @4672 has 81 MA's), (9, 4717), (15, 4804), (20, 4828), (28, 4921), (32, 4963), (34, 4978), (39, 5023), (40, 5029), (41, 5050), (43, 5056), (76, 5212), (90, 5284), (97, 5332), (117, 5455), (130, 5551), (136, 5584), (156, 5689), (162, 5725), (176, 5815), (190, 5917),

Gene: AN9_12 Start: 4696, Stop: 6177, Start Num: 4
Candidate Starts for AN9_12:
(Start: 4 @4696 has 81 MA's), (9, 4741), (14, 4825), (32, 4987), (39, 5047), (40, 5053), (41, 5074), (49, 5128), (50, 5134), (87, 5302), (92, 5353), (102, 5503), (110, 5584), (136, 5815), (151, 5878), (167, 5977), (189, 6106),

Gene: ANI8_12 Start: 4696, Stop: 6177, Start Num: 4
Candidate Starts for ANI8_12:
(Start: 4 @4696 has 81 MA's), (9, 4741), (14, 4825), (32, 4987), (39, 5047), (40, 5053), (41, 5074), (49, 5128), (50, 5134), (87, 5302), (92, 5353), (102, 5503), (110, 5584), (136, 5815), (151, 5878), (167, 5977), (189, 6106),

Gene: Adzzy_11 Start: 4473, Stop: 5846, Start Num: 4
Candidate Starts for Adzzy_11:
(Start: 4 @4473 has 81 MA's), (20, 4629), (32, 4764), (36, 4797), (39, 4824), (40, 4830), (41, 4851), (43, 4857), (80, 5043), (84, 5061), (92, 5130), (114, 5292), (119, 5340), (125, 5403), (152, 5565), (153, 5568), (159, 5631), (161, 5634), (176, 5721),

Gene: Aliter_11 Start: 6074, Stop: 7654, Start Num: 7
Candidate Starts for Aliter_11:
(Start: 7 @6074 has 59 MA's), (10, 6125), (18, 6215), (19, 6218), (37, 6404), (40, 6425), (64, 6686), (87, 6848), (92, 6899), (98, 7016), (123, 7241), (129, 7313), (144, 7373), (168, 7469), (173, 7514), (176, 7532),

Gene: Alma_11 Start: 6153, Stop: 7733, Start Num: 7
Candidate Starts for Alma_11:
(Start: 7 @6153 has 59 MA's), (10, 6204), (18, 6294), (19, 6297), (37, 6483), (40, 6504), (87, 6927), (92, 6978), (98, 7095), (107, 7179), (110, 7203), (113, 7230), (123, 7320), (129, 7392), (144, 7452), (168, 7548), (173, 7593), (176, 7611),

Gene: Aneem_10 Start: 6224, Stop: 7624, Start Num: 6
Candidate Starts for Aneem_10:
(1, 6185), (Start: 6 @6224 has 21 MA's), (18, 6371), (22, 6389), (31, 6509), (37, 6560), (40, 6581), (44, 6614), (86, 6761), (92, 6824), (93, 6830), (102, 6974), (110, 7055), (113, 7082), (136, 7286), (140, 7307), (146, 7331), (159, 7391), (168, 7424), (178, 7490), (191, 7586),

Gene: AnnaL29_12 Start: 6416, Stop: 7891, Start Num: 4
Candidate Starts for AnnaL29_12:
(Start: 4 @6416 has 81 MA's), (8, 6428), (15, 6548), (28, 6665), (32, 6707), (39, 6767), (40, 6773), (41, 6794), (43, 6800), (70, 6932), (75, 6953), (80, 6980), (92, 7067), (101, 7214), (102, 7217), (110, 7298), (129, 7487), (136, 7529), (137, 7547), (140, 7553), (146, 7577), (167, 7691), (169, 7700), (189, 7820), (191, 7853),

Gene: Anselm_9 Start: 4805, Stop: 6097, Start Num: 4

Candidate Starts for Anselm_9:
(Start: 4 @4805 has 81 MA's), (8, 4817), (9, 4850), (15, 4937), (20, 4961), (28, 5054), (32, 5096), (34, 5111), (39, 5156), (40, 5162), (41, 5183), (42, 5186), (76, 5333), (78, 5339), (97, 5453), (130, 5672), (136, 5705), (146, 5750), (156, 5810), (176, 5936), (190, 6038),

Gene: Anthony_9 Start: 3885, Stop: 5264, Start Num: 4
Candidate Starts for Anthony_9:
(Start: 4 @3885 has 81 MA's), (9, 3930), (16, 4020), (20, 4041), (32, 4176), (36, 4209), (39, 4236), (40, 4242), (41, 4263), (43, 4269), (50, 4323), (92, 4542), (95, 4572), (114, 4704), (119, 4752), (153, 4983), (154, 4986), (159, 5046), (161, 5049),

Gene: ArcherNM_11 Start: 6513, Stop: 7808, Start Num: 4
Candidate Starts for ArcherNM_11:
(Start: 4 @6513 has 81 MA's), (8, 6525), (15, 6645), (32, 6804), (39, 6864), (40, 6870), (41, 6891), (43, 6897), (50, 6945), (97, 7167), (130, 7386), (136, 7419), (156, 7524), (164, 7569), (176, 7650), (189, 7740), (190, 7752),

Gene: Argie_37 Start: 36368, Stop: 37990, Start Num: 4
Candidate Starts for Argie_37:
(Start: 4 @36368 has 81 MA's), (8, 36374), (11, 36437), (18, 36515), (22, 36533), (24, 36587), (29, 36635), (33, 36686), (37, 36722), (40, 36743), (46, 36797), (53, 36884), (56, 36923), (67, 37061), (71, 37100), (79, 37142), (89, 37205), (96, 37289), (109, 37436), (110, 37442), (124, 37568), (125, 37580), (127, 37610), (132, 37649), (135, 37670), (143, 37703), (145, 37712), (150, 37727), (161, 37775), (163, 37778), (172, 37826), (176, 37862), (181, 37877), (189, 37928),

Gene: Arissanae_9 Start: 4305, Stop: 5855, Start Num: 7
Candidate Starts for Arissanae_9:
(Start: 7 @4305 has 59 MA's), (18, 4446), (25, 4518), (37, 4635), (40, 4656), (45, 4707), (60, 4887), (64, 4917), (73, 5007), (92, 5130), (99, 5226), (115, 5367), (123, 5442), (129, 5514), (134, 5544), (144, 5574), (168, 5670), (175, 5730),

Gene: Artemis2UCLA_13 Start: 5737, Stop: 6948, Start Num: 21
Candidate Starts for Artemis2UCLA_13:
(Start: 21 @5737 has 36 MA's), (23, 5755), (35, 5905), (36, 5920), (47, 6016), (55, 6079), (72, 6163), (76, 6175), (83, 6208), (100, 6409), (130, 6628), (144, 6667), (147, 6673), (160, 6736),

Gene: Ayanochan_11 Start: 6179, Stop: 7759, Start Num: 7
Candidate Starts for Ayanochan_11:
(Start: 7 @6179 has 59 MA's), (10, 6230), (18, 6320), (19, 6323), (22, 6338), (37, 6509), (40, 6530), (64, 6791), (87, 6953), (92, 7004), (98, 7121), (123, 7346), (129, 7418), (144, 7478), (168, 7574), (173, 7619), (176, 7637),

Gene: BABullseye_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for BABullseye_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Bachome_10 Start: 6221, Stop: 7621, Start Num: 6
Candidate Starts for Bachome_10:
(1, 6182), (Start: 6 @6221 has 21 MA's), (18, 6368), (22, 6386), (31, 6506), (37, 6557), (40, 6578), (44, 6611), (86, 6758), (92, 6821), (93, 6827), (102, 6971), (110, 7052), (113, 7079), (136, 7283), (140, 7304), (146, 7328), (159, 7388), (168, 7421), (178, 7487), (191, 7583),

Gene: Baehexic_10 Start: 5209, Stop: 6513, Start Num: 4
Candidate Starts for Baehexic_10:
(Start: 4 @5209 has 81 MA's), (8, 5221), (9, 5254), (15, 5341), (32, 5500), (39, 5560), (40, 5566), (41, 5587), (50, 5647), (74, 5746), (76, 5749), (90, 5821), (130, 6088), (136, 6121), (149, 6175), (156, 6226), (164, 6271), (168, 6289), (184, 6406),

Gene: Beemo_11 Start: 6180, Stop: 7760, Start Num: 7
Candidate Starts for Beemo_11:
(Start: 7 @6180 has 59 MA's), (10, 6231), (18, 6321), (19, 6324), (22, 6339), (37, 6510), (40, 6531), (64, 6792), (87, 6954), (92, 7005), (98, 7122), (123, 7347), (129, 7419), (144, 7479), (168, 7575), (173, 7620), (176, 7638),

Gene: Bellris_9 Start: 4273, Stop: 5823, Start Num: 7
Candidate Starts for Bellris_9:
(Start: 7 @4273 has 59 MA's), (13, 4366), (18, 4414), (22, 4432), (27, 4495), (37, 4603), (40, 4624), (51, 4714), (60, 4855), (64, 4885), (73, 4975), (92, 5098), (103, 5236), (129, 5482), (134, 5512), (144, 5542), (168, 5638),

Gene: BengiVuitton_10 Start: 5133, Stop: 6422, Start Num: 4
Candidate Starts for BengiVuitton_10:
(Start: 4 @5133 has 81 MA's), (9, 5178), (15, 5265), (28, 5382), (32, 5424), (34, 5439), (39, 5484), (40, 5490), (41, 5511), (43, 5517), (90, 5742), (97, 5790), (130, 6009), (136, 6042), (156, 6147), (178, 6276),

Gene: BennyP_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for BennyP_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (34, 6019), (35, 6022), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (139, 6772), (144, 6784), (147, 6790), (160, 6853), (191, 7036),

Gene: Benvolio_9 Start: 4797, Stop: 6086, Start Num: 4
Candidate Starts for Benvolio_9:
(Start: 4 @4797 has 81 MA's), (8, 4809), (9, 4842), (15, 4929), (20, 4953), (32, 5088), (39, 5148), (40, 5154), (41, 5175), (43, 5181), (54, 5265), (78, 5331), (97, 5445), (130, 5664), (136, 5697), (156, 5802), (162, 5838), (176, 5928), (190, 6030),

Gene: Blinn1_13 Start: 5887, Stop: 7098, Start Num: 21
Candidate Starts for Blinn1_13:
(Start: 21 @5887 has 36 MA's), (23, 5905), (35, 6055), (47, 6166), (55, 6229), (72, 6313), (76, 6325), (83, 6358), (100, 6559), (130, 6778), (144, 6817), (160, 6886),

Gene: BogosyJay_11 Start: 5937, Stop: 7517, Start Num: 7
Candidate Starts for BogosyJay_11:
(Start: 7 @5937 has 59 MA's), (13, 6030), (18, 6078), (19, 6081), (22, 6096), (37, 6267), (40, 6288), (51, 6378), (64, 6549), (87, 6711), (92, 6762), (107, 6963), (110, 6987), (129, 7176), (144, 7236), (168, 7332), (173, 7377), (176, 7395),

Gene: Bowtie_10 Start: 6224, Stop: 7624, Start Num: 6
Candidate Starts for Bowtie_10:
(1, 6185), (Start: 6 @6224 has 21 MA's), (18, 6371), (22, 6389), (31, 6509), (37, 6560), (40, 6581), (44, 6614), (86, 6761), (92, 6824), (93, 6830), (102, 6974), (110, 7055), (113, 7082), (136, 7286), (140, 7307), (146, 7331), (159, 7391), (168, 7424), (178, 7490), (191, 7586),

Gene: Bud_10 Start: 6230, Stop: 7630, Start Num: 6
Candidate Starts for Bud_10:
(1, 6191), (Start: 6 @6230 has 21 MA's), (18, 6377), (22, 6395), (31, 6515), (37, 6566), (40, 6587), (44, 6620), (86, 6767), (92, 6830), (102, 6980), (110, 7061), (113, 7088), (136, 7292), (140, 7313), (146, 7337), (159, 7397), (168, 7430), (178, 7496), (191, 7592),

Gene: C3_07 Start: 4696, Stop: 6177, Start Num: 4
Candidate Starts for C3_07:
(Start: 4 @4696 has 81 MA's), (9, 4741), (14, 4825), (32, 4987), (39, 5047), (40, 5053), (41, 5074), (49, 5128), (50, 5134), (87, 5302), (92, 5353), (102, 5503), (110, 5584), (136, 5815), (151, 5878), (167, 5977), (189, 6106),

Gene: CRB1_9 Start: 4679, Stop: 5974, Start Num: 4
Candidate Starts for CRB1_9:
(Start: 4 @4679 has 81 MA's), (9, 4724), (15, 4811), (32, 4970), (39, 5030), (40, 5036), (41, 5057), (43, 5063), (76, 5219), (90, 5291), (97, 5339), (130, 5558), (136, 5591), (156, 5696), (165, 5744),

Gene: Candra_13 Start: 5887, Stop: 7098, Start Num: 21
Candidate Starts for Candra_13:
(Start: 21 @5887 has 36 MA's), (23, 5905), (34, 6052), (35, 6055), (47, 6166), (55, 6229), (72, 6313), (76, 6325), (83, 6358), (100, 6559), (130, 6778), (139, 6805), (144, 6817), (147, 6823), (160, 6886), (191, 7069),

Gene: Caraxes_9 Start: 4337, Stop: 5746, Start Num: 3
Candidate Starts for Caraxes_9:
(2, 4331), (Start: 3 @4337 has 2 MA's), (32, 4628), (39, 4688), (40, 4694), (41, 4715), (43, 4721), (50, 4769), (87, 4937), (92, 4988), (138, 5417), (153, 5468), (154, 5471), (159, 5531), (161, 5534), (191, 5717),

Gene: Catalina_11 Start: 6147, Stop: 7727, Start Num: 7
Candidate Starts for Catalina_11:
(Start: 7 @6147 has 59 MA's), (10, 6198), (18, 6288), (19, 6291), (37, 6477), (40, 6498), (64, 6759), (87, 6921), (92, 6972), (98, 7089), (123, 7314), (129, 7386), (144, 7446), (168, 7542), (173, 7587), (176, 7605),

Gene: Celestialunch_9 Start: 4281, Stop: 5834, Start Num: 7
Candidate Starts for Celestialunch_9:
(Start: 7 @4281 has 59 MA's), (18, 4422), (37, 4611), (40, 4632), (60, 4863), (62, 4884), (73, 4983), (91, 5091), (92, 5106), (93, 5112), (99, 5202), (103, 5244), (115, 5343), (144, 5553), (157, 5604), (166, 5640), (168, 5649), (170, 5670),

Gene: Centaur_11 Start: 5188, Stop: 6492, Start Num: 4
Candidate Starts for Centaur_11:
(Start: 4 @5188 has 81 MA's), (9, 5233), (15, 5320), (32, 5479), (39, 5539), (40, 5545), (41, 5566), (42, 5569), (50, 5626), (74, 5725), (76, 5728), (90, 5800), (97, 5848), (130, 6067), (136, 6100), (149, 6154), (156, 6205), (164, 6250), (168, 6268),

Gene: Cepens_36 Start: 36083, Stop: 37705, Start Num: 4
Candidate Starts for Cepens_36:
(Start: 4 @36083 has 81 MA's), (8, 36089), (11, 36152), (18, 36230), (22, 36248), (24, 36302), (29, 36350), (33, 36401), (37, 36437), (40, 36458), (46, 36512), (51, 36551), (53, 36599), (56, 36638), (67, 36776), (71, 36815), (79, 36857), (89, 36920), (96, 37004), (109, 37151), (110, 37157), (124, 37283), (125, 37295), (127, 37325), (132, 37364), (135, 37385), (143, 37418), (145, 37427), (150, 37442),

(161, 37490), (163, 37493), (165, 37502), (172, 37541), (176, 37577), (181, 37592), (189, 37643),

Gene: Changeling_12 Start: 6426, Stop: 7901, Start Num: 4
Candidate Starts for Changeling_12:
(Start: 4 @6426 has 81 MA's), (8, 6438), (15, 6558), (32, 6717), (39, 6777), (40, 6783), (41, 6804), (42, 6807), (70, 6942), (80, 6990), (85, 7011), (92, 7077), (101, 7224), (102, 7227), (110, 7308), (129, 7497), (136, 7539), (146, 7587), (151, 7602), (167, 7701), (176, 7764), (189, 7830),

Gene: Chargerpower_10 Start: 4583, Stop: 6187, Start Num: 7
Candidate Starts for Chargerpower_10:
(Start: 7 @4583 has 59 MA's), (18, 4724), (24, 4796), (37, 4931), (40, 4952), (45, 5003), (57, 5108), (73, 5303), (87, 5375), (92, 5426), (98, 5543), (123, 5768), (133, 5861), (144, 5906), (157, 5957), (168, 6002), (185, 6110),

Gene: Charm_10 Start: 4360, Stop: 5916, Start Num: 7
Candidate Starts for Charm_10:
(Start: 7 @4360 has 59 MA's), (18, 4501), (37, 4690), (40, 4711), (43, 4741), (92, 5185), (103, 5323), (115, 5422), (128, 5563), (129, 5569), (144, 5635), (168, 5731),

Gene: Chartreuse_13 Start: 5801, Stop: 7012, Start Num: 21
Candidate Starts for Chartreuse_13:
(Start: 21 @5801 has 36 MA's), (23, 5819), (34, 5966), (35, 5969), (47, 6080), (55, 6143), (72, 6227), (76, 6239), (83, 6272), (100, 6473), (130, 6692), (139, 6719), (144, 6731), (147, 6737), (160, 6800), (191, 6983),

Gene: Che12_11 Start: 4473, Stop: 5840, Start Num: 4
Candidate Starts for Che12_11:
(Start: 4 @4473 has 81 MA's), (20, 4629), (32, 4764), (39, 4824), (40, 4830), (41, 4851), (43, 4857), (50, 4905), (84, 5055), (92, 5124), (114, 5286), (119, 5334), (125, 5397), (152, 5559), (153, 5562), (159, 5625), (161, 5628), (176, 5715),

Gene: CloudWang3_13 Start: 5832, Stop: 7043, Start Num: 21
Candidate Starts for CloudWang3_13:
(Start: 21 @5832 has 36 MA's), (23, 5850), (34, 5997), (35, 6000), (47, 6111), (55, 6174), (72, 6258), (76, 6270), (83, 6303), (100, 6504), (130, 6723), (139, 6750), (144, 6762), (147, 6768), (160, 6831), (191, 7014),

Gene: CogOmlette_8 Start: 4273, Stop: 5823, Start Num: 7
Candidate Starts for CogOmlette_8:
(Start: 7 @4273 has 59 MA's), (13, 4366), (18, 4414), (22, 4432), (27, 4495), (37, 4603), (40, 4624), (51, 4714), (60, 4855), (64, 4885), (73, 4975), (92, 5098), (103, 5236), (129, 5482), (134, 5512), (144, 5542), (168, 5638),

Gene: Colin_12 Start: 6391, Stop: 7695, Start Num: 4
Candidate Starts for Colin_12:
(Start: 4 @6391 has 81 MA's), (8, 6403), (9, 6436), (15, 6523), (20, 6547), (32, 6682), (39, 6742), (40, 6748), (41, 6769), (42, 6772), (50, 6829), (54, 6868), (97, 7057), (130, 7276), (136, 7303), (146, 7348), (156, 7408), (176, 7534), (189, 7624), (190, 7636), (192, 7672),

Gene: Conquerage_11 Start: 6176, Stop: 7756, Start Num: 7
Candidate Starts for Conquerage_11:
(Start: 7 @6176 has 59 MA's), (10, 6227), (18, 6317), (19, 6320), (37, 6506), (40, 6527), (87, 6950), (92, 7001), (98, 7118), (107, 7202), (110, 7226), (113, 7253), (123, 7343), (129, 7415), (144, 7475),

(168, 7571), (173, 7616), (176, 7634),

Gene: Cookiedough_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Cookiedough_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Crucio_9 Start: 4694, Stop: 5941, Start Num: 4
Candidate Starts for Crucio_9:
(Start: 4 @4694 has 81 MA's), (8, 4706), (9, 4739), (15, 4826), (20, 4850), (28, 4943), (32, 4985), (34, 5000), (39, 5045), (40, 5051), (41, 5072), (42, 5075), (76, 5222), (97, 5342), (130, 5561), (136, 5591), (140, 5615), (146, 5639), (167, 5738), (178, 5804), (180, 5810), (189, 5867),

Gene: D12_35 Start: 36653, Stop: 38275, Start Num: 4
Candidate Starts for D12_35:
(Start: 4 @36653 has 81 MA's), (8, 36659), (11, 36722), (18, 36800), (22, 36818), (24, 36872), (29, 36920), (33, 36971), (37, 37007), (40, 37028), (46, 37082), (53, 37169), (56, 37208), (67, 37346), (68, 37367), (71, 37385), (79, 37427), (89, 37490), (96, 37574), (109, 37721), (110, 37727), (124, 37853), (125, 37865), (127, 37895), (132, 37934), (135, 37955), (143, 37988), (145, 37997), (150, 38012), (161, 38060), (172, 38111), (176, 38147), (181, 38162), (189, 38213), (194, 38270),

Gene: D29_10 Start: 4697, Stop: 6178, Start Num: 4
Candidate Starts for D29_10:
(Start: 4 @4697 has 81 MA's), (9, 4742), (32, 4988), (39, 5048), (40, 5054), (41, 5075), (49, 5129), (50, 5135), (87, 5303), (92, 5354), (102, 5504), (110, 5585), (129, 5774), (136, 5816), (151, 5879), (167, 5978), (189, 6107),

Gene: D32_12 Start: 4697, Stop: 6178, Start Num: 4
Candidate Starts for D32_12:
(Start: 4 @4697 has 81 MA's), (9, 4742), (32, 4988), (39, 5048), (40, 5054), (41, 5075), (49, 5129), (50, 5135), (87, 5303), (92, 5354), (102, 5504), (110, 5585), (129, 5774), (136, 5816), (151, 5879), (167, 5978), (189, 6107),

Gene: DBQu4n_12 Start: 4697, Stop: 6178, Start Num: 4
Candidate Starts for DBQu4n_12:
(Start: 4 @4697 has 81 MA's), (9, 4742), (32, 4988), (39, 5048), (40, 5054), (41, 5075), (50, 5135), (87, 5303), (92, 5354), (102, 5504), (110, 5585), (129, 5774), (136, 5816), (151, 5879), (167, 5978), (189, 6107),

Gene: DaVinci_13 Start: 5855, Stop: 7066, Start Num: 21
Candidate Starts for DaVinci_13:
(Start: 21 @5855 has 36 MA's), (23, 5873), (34, 6020), (35, 6023), (47, 6134), (55, 6197), (72, 6281), (76, 6293), (83, 6326), (100, 6527), (130, 6746), (139, 6773), (144, 6785), (147, 6791), (160, 6854), (191, 7037),

Gene: Dalmatian_9 Start: 4796, Stop: 6088, Start Num: 4
Candidate Starts for Dalmatian_9:
(Start: 4 @4796 has 81 MA's), (8, 4808), (9, 4841), (15, 4928), (20, 4952), (28, 5045), (32, 5087), (34, 5102), (39, 5147), (40, 5153), (41, 5174), (54, 5264), (76, 5324), (78, 5330), (97, 5444), (130, 5663), (136, 5696), (146, 5741), (156, 5801), (164, 5846), (176, 5927), (190, 6029),

Gene: Darrell_12 Start: 6369, Stop: 7949, Start Num: 7
Candidate Starts for Darrell_12:

(Start: 7 @6369 has 59 MA's), (10, 6420), (18, 6510), (19, 6513), (25, 6582), (37, 6699), (40, 6720), (51, 6810), (64, 6981), (73, 7071), (87, 7143), (92, 7194), (98, 7311), (110, 7419), (123, 7536), (129, 7608), (133, 7629), (144, 7668), (168, 7764), (176, 7827),

Gene: Deloris_10 Start: 5133, Stop: 6422, Start Num: 4
Candidate Starts for Deloris_10:
(Start: 4 @5133 has 81 MA's), (9, 5178), (15, 5265), (28, 5382), (32, 5424), (34, 5439), (39, 5484), (40, 5490), (41, 5511), (43, 5517), (90, 5742), (97, 5790), (130, 6009), (136, 6042), (156, 6147), (178, 6276),

Gene: DelvinSonDorr_12 Start: 5855, Stop: 7066, Start Num: 21
Candidate Starts for DelvinSonDorr_12:
(Start: 21 @5855 has 36 MA's), (23, 5873), (35, 6023), (36, 6038), (47, 6134), (55, 6197), (72, 6281), (76, 6293), (83, 6326), (100, 6527), (130, 6746), (144, 6785), (147, 6791), (160, 6854),

Gene: Dorothea_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Dorothea_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (34, 6019), (35, 6022), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (139, 6772), (144, 6784), (147, 6790), (160, 6853), (191, 7036),

Gene: Drake55_11 Start: 5205, Stop: 6509, Start Num: 4
Candidate Starts for Drake55_11:
(Start: 4 @5205 has 81 MA's), (9, 5250), (15, 5337), (32, 5496), (39, 5556), (40, 5562), (41, 5583), (50, 5643), (74, 5742), (76, 5745), (90, 5817), (130, 6084), (136, 6117), (149, 6171), (156, 6222), (164, 6267), (168, 6285),

Gene: DreamTeam1_10 Start: 4360, Stop: 5916, Start Num: 7
Candidate Starts for DreamTeam1_10:
(Start: 7 @4360 has 59 MA's), (18, 4501), (37, 4690), (40, 4711), (43, 4741), (92, 5185), (99, 5281), (115, 5422), (128, 5563), (129, 5569), (144, 5635), (168, 5731),

Gene: DudeLittle_9 Start: 4798, Stop: 6090, Start Num: 4
Candidate Starts for DudeLittle_9:
(Start: 4 @4798 has 81 MA's), (8, 4810), (9, 4843), (15, 4930), (20, 4954), (28, 5047), (32, 5089), (34, 5104), (39, 5149), (40, 5155), (41, 5176), (42, 5179), (54, 5266), (76, 5326), (78, 5332), (97, 5446), (130, 5665), (136, 5698), (146, 5743), (156, 5803), (164, 5848), (176, 5929), (190, 6031),

Gene: Duplo_12 Start: 4738, Stop: 6219, Start Num: 4
Candidate Starts for Duplo_12:
(Start: 4 @4738 has 81 MA's), (9, 4783), (32, 5029), (39, 5089), (40, 5095), (41, 5116), (49, 5170), (50, 5176), (87, 5344), (92, 5395), (102, 5545), (110, 5626), (129, 5815), (136, 5857), (151, 5920), (167, 6019), (189, 6148),

Gene: EZMoney23_13 Start: 6684, Stop: 7985, Start Num: 4
Candidate Starts for EZMoney23_13:
(Start: 4 @6684 has 81 MA's), (8, 6696), (9, 6729), (15, 6816), (28, 6933), (32, 6975), (39, 7035), (40, 7041), (41, 7062), (43, 7068), (54, 7161), (59, 7182), (78, 7230), (90, 7296), (130, 7563), (136, 7596), (156, 7701), (164, 7746), (176, 7827), (190, 7929),

Gene: EagleEye_12 Start: 5895, Stop: 7142, Start Num: 4
Candidate Starts for EagleEye_12:

(Start: 4 @5895 has 81 MA's), (9, 5940), (15, 6027), (30, 6159), (32, 6186), (34, 6201), (39, 6246), (40, 6252), (41, 6273), (43, 6279), (50, 6333), (54, 6372), (76, 6435), (78, 6441), (90, 6507), (97, 6555), (130, 6774), (136, 6801), (140, 6825), (148, 6849), (167, 6942), (178, 7008), (182, 7026),

Gene: Ebony_10 Start: 6285, Stop: 7682, Start Num: 7
Candidate Starts for Ebony_10:
(Start: 7 @6285 has 59 MA's), (17, 6423), (18, 6429), (22, 6447), (31, 6567), (37, 6618), (40, 6639), (44, 6672), (86, 6819), (92, 6882), (93, 6888), (102, 7032), (110, 7113), (113, 7140), (136, 7344), (140, 7365), (146, 7389), (159, 7449), (168, 7482), (178, 7548), (191, 7644),

Gene: Echild_9 Start: 4797, Stop: 6086, Start Num: 4
Candidate Starts for Echild_9:
(Start: 4 @4797 has 81 MA's), (8, 4809), (9, 4842), (15, 4929), (20, 4953), (32, 5088), (39, 5148), (40, 5154), (41, 5175), (43, 5181), (54, 5265), (78, 5331), (97, 5445), (130, 5664), (136, 5697), (156, 5802), (162, 5838), (176, 5928), (190, 6030),

Gene: EdogawaKiddo_11 Start: 6146, Stop: 7726, Start Num: 7
Candidate Starts for EdogawaKiddo_11:
(Start: 7 @6146 has 59 MA's), (10, 6197), (18, 6287), (19, 6290), (22, 6305), (37, 6476), (38, 6488), (40, 6497), (64, 6758), (87, 6920), (92, 6971), (98, 7088), (123, 7313), (129, 7385), (144, 7445), (168, 7541), (173, 7586), (176, 7604),

Gene: Eidsmoe_11 Start: 6176, Stop: 7756, Start Num: 7
Candidate Starts for Eidsmoe_11:
(Start: 7 @6176 has 59 MA's), (10, 6227), (18, 6317), (19, 6320), (37, 6506), (40, 6527), (87, 6950), (92, 7001), (98, 7118), (107, 7202), (110, 7226), (113, 7253), (123, 7343), (129, 7415), (144, 7475), (168, 7571), (173, 7616), (176, 7634),

Gene: Elephantoon_11 Start: 5798, Stop: 7378, Start Num: 7
Candidate Starts for Elephantoon_11:
(Start: 7 @5798 has 59 MA's), (10, 5849), (18, 5939), (22, 5957), (25, 6011), (37, 6128), (40, 6149), (64, 6410), (73, 6500), (87, 6572), (92, 6623), (110, 6848), (123, 6965), (129, 7037), (133, 7058), (144, 7097), (168, 7193),

Gene: EmyBug_11 Start: 6176, Stop: 7756, Start Num: 7
Candidate Starts for EmyBug_11:
(Start: 7 @6176 has 59 MA's), (10, 6227), (18, 6317), (19, 6320), (22, 6335), (37, 6506), (40, 6527), (64, 6788), (87, 6950), (92, 7001), (98, 7118), (123, 7343), (129, 7415), (144, 7475), (168, 7571), (173, 7616), (176, 7634),

Gene: Equemioh13_11 Start: 5191, Stop: 6495, Start Num: 4
Candidate Starts for Equemioh13_11:
(Start: 4 @5191 has 81 MA's), (9, 5236), (15, 5323), (32, 5482), (39, 5542), (40, 5548), (41, 5569), (42, 5572), (50, 5629), (74, 5728), (76, 5731), (90, 5803), (97, 5851), (130, 6070), (136, 6103), (149, 6157), (156, 6208), (164, 6253), (168, 6271), (184, 6388),

Gene: EricB_13 Start: 5855, Stop: 7066, Start Num: 21
Candidate Starts for EricB_13:
(Start: 21 @5855 has 36 MA's), (23, 5873), (35, 6023), (36, 6038), (47, 6134), (55, 6197), (72, 6281), (76, 6293), (83, 6326), (100, 6527), (130, 6746), (144, 6785), (147, 6791), (160, 6854),

Gene: Et2Brutus_9 Start: 6227, Stop: 7627, Start Num: 6
Candidate Starts for Et2Brutus_9:

(1, 6188), (Start: 6 @6227 has 21 MA's), (17, 6368), (18, 6374), (22, 6392), (31, 6512), (37, 6563), (40, 6584), (44, 6617), (86, 6764), (92, 6827), (93, 6833), (102, 6977), (110, 7058), (113, 7085), (136, 7289), (140, 7310), (146, 7334), (159, 7394), (168, 7427), (178, 7493), (191, 7589),

Gene: ExplosioNervosa_11 Start: 6179, Stop: 7759, Start Num: 7
Candidate Starts for ExplosioNervosa_11:
(Start: 7 @6179 has 59 MA's), (10, 6230), (18, 6320), (19, 6323), (22, 6338), (37, 6509), (40, 6530), (64, 6791), (87, 6953), (92, 7004), (98, 7121), (123, 7346), (129, 7418), (144, 7478), (168, 7574), (173, 7619), (176, 7637),

Gene: Fameo_9 Start: 4800, Stop: 6035, Start Num: 4
Candidate Starts for Fameo_9:
(Start: 4 @4800 has 81 MA's), (8, 4812), (9, 4845), (15, 4932), (20, 4956), (28, 5049), (32, 5091), (39, 5151), (40, 5157), (41, 5178), (43, 5184), (54, 5268), (76, 5328), (78, 5334), (90, 5400), (97, 5448), (130, 5667), (136, 5697), (140, 5721), (167, 5835), (178, 5901), (183, 5925),

Gene: FatCactus_8 Start: 3796, Stop: 5175, Start Num: 4
Candidate Starts for FatCactus_8:
(Start: 4 @3796 has 81 MA's), (9, 3841), (20, 3952), (32, 4087), (36, 4120), (39, 4147), (40, 4153), (41, 4174), (59, 4294), (92, 4453), (114, 4615), (122, 4702), (153, 4894), (154, 4897), (159, 4957), (161, 4960),

Gene: Fayely_11 Start: 6179, Stop: 7759, Start Num: 7
Candidate Starts for Fayely_11:
(Start: 7 @6179 has 59 MA's), (10, 6230), (18, 6320), (19, 6323), (22, 6338), (37, 6509), (40, 6530), (64, 6791), (87, 6953), (92, 7004), (98, 7121), (123, 7346), (129, 7418), (144, 7478), (168, 7574), (173, 7619), (176, 7637),

Gene: Fibonacci_10 Start: 6227, Stop: 7627, Start Num: 6
Candidate Starts for Fibonacci_10:
(1, 6188), (Start: 6 @6227 has 21 MA's), (17, 6368), (18, 6374), (22, 6392), (31, 6512), (37, 6563), (40, 6584), (44, 6617), (86, 6764), (92, 6827), (93, 6833), (102, 6977), (110, 7058), (113, 7085), (136, 7289), (140, 7310), (146, 7334), (159, 7394), (168, 7427), (178, 7493), (191, 7589),

Gene: FiringLine_9 Start: 4694, Stop: 5941, Start Num: 4
Candidate Starts for FiringLine_9:
(Start: 4 @4694 has 81 MA's), (8, 4706), (9, 4739), (14, 4823), (15, 4826), (20, 4850), (28, 4943), (32, 4985), (34, 5000), (39, 5045), (40, 5051), (41, 5072), (42, 5075), (76, 5222), (97, 5342), (130, 5561), (136, 5591), (140, 5615), (146, 5639), (167, 5738), (178, 5804), (180, 5810), (189, 5867),

Gene: First_009 Start: 4690, Stop: 5988, Start Num: 4
Candidate Starts for First_009:
(Start: 4 @4690 has 81 MA's), (9, 4735), (15, 4822), (20, 4846), (28, 4939), (32, 4981), (39, 5041), (40, 5047), (41, 5068), (43, 5074), (76, 5230), (90, 5302), (97, 5350), (130, 5569), (136, 5602), (156, 5707),

Gene: Flare16_9 Start: 4749, Stop: 6053, Start Num: 4
Candidate Starts for Flare16_9:
(Start: 4 @4749 has 81 MA's), (8, 4761), (9, 4794), (15, 4881), (30, 5013), (32, 5040), (39, 5100), (40, 5106), (41, 5127), (50, 5187), (74, 5286), (76, 5289), (90, 5361), (97, 5409), (130, 5628), (136, 5661), (149, 5715), (156, 5766), (164, 5811), (168, 5829),

Gene: Flaverint_10 Start: 6224, Stop: 7624, Start Num: 6
Candidate Starts for Flaverint_10:

(1, 6185), (Start: 6 @6224 has 21 MA's), (18, 6371), (22, 6389), (31, 6509), (37, 6560), (40, 6581), (44, 6614), (86, 6761), (92, 6824), (93, 6830), (102, 6974), (110, 7055), (113, 7082), (136, 7286), (140, 7307), (146, 7331), (159, 7391), (168, 7424), (178, 7490), (191, 7586),

Gene: FlyCatcher_12 Start: 5649, Stop: 7097, Start Num: 4
Candidate Starts for FlyCatcher_12:
(Start: 4 @5649 has 81 MA's), (9, 5694), (15, 5781), (28, 5898), (31, 5937), (32, 5940), (39, 6000), (40, 6006), (41, 6027), (43, 6033), (50, 6081), (73, 6174), (87, 6246), (92, 6297), (102, 6447), (108, 6507), (110, 6528), (120, 6618), (123, 6645), (131, 6732), (136, 6759), (140, 6780), (146, 6804), (158, 6864), (159, 6867), (167, 6897), (171, 6921), (178, 6963), (179, 6966), (185, 7002), (188, 7008), (193, 7080),

Gene: Gail_9 Start: 4567, Stop: 6147, Start Num: 7
Candidate Starts for Gail_9:
(Start: 7 @4567 has 59 MA's), (18, 4708), (19, 4711), (37, 4897), (40, 4918), (44, 4951), (45, 4969), (73, 5269), (86, 5329), (87, 5341), (92, 5392), (98, 5509), (112, 5635), (123, 5734), (129, 5806), (133, 5827), (144, 5869), (168, 5965),

Gene: Garak_14 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Garak_14:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Georgie2_9 Start: 4695, Stop: 5942, Start Num: 4
Candidate Starts for Georgie2_9:
(Start: 4 @4695 has 81 MA's), (8, 4707), (9, 4740), (15, 4827), (20, 4851), (28, 4944), (32, 4986), (34, 5001), (39, 5046), (40, 5052), (41, 5073), (42, 5076), (76, 5223), (97, 5343), (130, 5562), (136, 5592), (140, 5616), (146, 5640), (167, 5739), (178, 5805), (180, 5811), (189, 5868),

Gene: Gilberta_10 Start: 6221, Stop: 7621, Start Num: 6
Candidate Starts for Gilberta_10:
(1, 6182), (Start: 6 @6221 has 21 MA's), (18, 6368), (22, 6386), (31, 6506), (37, 6557), (40, 6578), (44, 6611), (86, 6758), (92, 6821), (93, 6827), (102, 6971), (110, 7052), (113, 7079), (136, 7283), (140, 7304), (146, 7328), (159, 7388), (168, 7421), (178, 7487), (191, 7583),

Gene: GodPhather_37 Start: 36847, Stop: 38469, Start Num: 4
Candidate Starts for GodPhather_37:
(Start: 4 @36847 has 81 MA's), (8, 36853), (11, 36916), (18, 36994), (22, 37012), (24, 37066), (29, 37114), (33, 37165), (37, 37201), (40, 37222), (46, 37276), (51, 37315), (53, 37363), (56, 37402), (67, 37540), (71, 37579), (79, 37621), (89, 37684), (96, 37768), (109, 37915), (110, 37921), (124, 38047), (125, 38059), (127, 38089), (132, 38128), (135, 38149), (143, 38182), (145, 38191), (150, 38206), (161, 38254), (172, 38305), (176, 38341), (181, 38356), (189, 38407),

Gene: Gratitude_11 Start: 5191, Stop: 6495, Start Num: 4
Candidate Starts for Gratitude_11:
(Start: 4 @5191 has 81 MA's), (9, 5236), (15, 5323), (32, 5482), (39, 5542), (40, 5548), (41, 5569), (42, 5572), (50, 5629), (74, 5728), (76, 5731), (90, 5803), (97, 5851), (130, 6070), (136, 6103), (149, 6157), (156, 6208), (164, 6253), (168, 6271), (184, 6388),

Gene: GreedyLawyer_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for GreedyLawyer_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (34, 6019), (35, 6022), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (139, 6772), (144, 6784), (147, 6790), (160, 6853), (191, 7036),

Gene: Hanray_11 Start: 6182, Stop: 7762, Start Num: 7
Candidate Starts for Hanray_11:
(Start: 7 @6182 has 59 MA's), (10, 6233), (18, 6323), (19, 6326), (22, 6341), (37, 6512), (38, 6524), (40, 6533), (64, 6794), (87, 6956), (92, 7007), (98, 7124), (123, 7349), (129, 7421), (144, 7481), (168, 7577), (173, 7622), (176, 7640),

Gene: HarryHoudini_11 Start: 5205, Stop: 6509, Start Num: 4
Candidate Starts for HarryHoudini_11:
(Start: 4 @5205 has 81 MA's), (9, 5250), (15, 5337), (32, 5496), (39, 5556), (40, 5562), (41, 5583), (50, 5643), (74, 5742), (76, 5745), (90, 5817), (130, 6084), (136, 6117), (149, 6171), (156, 6222), (164, 6267), (168, 6285),

Gene: Heffalump_11 Start: 6599, Stop: 7834, Start Num: 4
Candidate Starts for Heffalump_11:
(Start: 4 @6599 has 81 MA's), (8, 6611), (9, 6644), (15, 6731), (20, 6755), (28, 6848), (32, 6890), (39, 6950), (40, 6956), (41, 6977), (43, 6983), (54, 7067), (76, 7127), (78, 7133), (90, 7199), (97, 7247), (130, 7466), (136, 7496), (140, 7520), (167, 7634), (178, 7700), (183, 7724),

Gene: Helmet_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Helmet_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Hexamo_13 Start: 5809, Stop: 7020, Start Num: 21
Candidate Starts for Hexamo_13:
(Start: 21 @5809 has 36 MA's), (23, 5827), (35, 5977), (36, 5992), (47, 6088), (55, 6151), (72, 6235), (76, 6247), (83, 6280), (100, 6481), (130, 6700), (144, 6739), (147, 6745), (160, 6808),

Gene: HippoHollow_10 Start: 6245, Stop: 7762, Start Num: 4
Candidate Starts for HippoHollow_10:
(Start: 4 @6245 has 81 MA's), (9, 6290), (15, 6377), (26, 6470), (32, 6536), (34, 6551), (39, 6596), (40, 6602), (41, 6623), (43, 6629), (91, 6878), (92, 6893), (113, 7151), (121, 7241), (136, 7370), (156, 7475), (164, 7520), (168, 7538), (176, 7601),

Gene: Holex_11 Start: 6182, Stop: 7762, Start Num: 7
Candidate Starts for Holex_11:
(Start: 7 @6182 has 59 MA's), (10, 6233), (18, 6323), (19, 6326), (22, 6341), (37, 6512), (38, 6524), (40, 6533), (64, 6794), (87, 6956), (92, 7007), (98, 7124), (123, 7349), (129, 7421), (144, 7481), (168, 7577), (173, 7622), (176, 7640),

Gene: Hoot_13 Start: 5833, Stop: 7044, Start Num: 21
Candidate Starts for Hoot_13:
(Start: 21 @5833 has 36 MA's), (23, 5851), (34, 5998), (35, 6001), (47, 6112), (55, 6175), (72, 6259), (76, 6271), (83, 6304), (100, 6505), (130, 6724), (139, 6751), (144, 6763), (147, 6769), (160, 6832), (191, 7015),

Gene: HortumSL17_11 Start: 6146, Stop: 7726, Start Num: 7
Candidate Starts for HortumSL17_11:
(Start: 7 @6146 has 59 MA's), (10, 6197), (18, 6287), (19, 6290), (37, 6476), (40, 6497), (64, 6758), (87, 6920), (92, 6971), (98, 7088), (123, 7313), (129, 7385), (144, 7445), (168, 7541), (173, 7586), (176, 7604),

Gene: Hutc2_10 Start: 6227, Stop: 7627, Start Num: 6
Candidate Starts for Hutc2_10:
(1, 6188), (Start: 6 @6227 has 21 MA's), (17, 6368), (18, 6374), (22, 6392), (31, 6512), (37, 6563), (40, 6584), (44, 6617), (86, 6764), (92, 6827), (93, 6833), (102, 6977), (110, 7058), (113, 7085), (136, 7289), (140, 7310), (146, 7334), (159, 7394), (168, 7427), (178, 7493), (191, 7589),

Gene: Imbriano_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Imbriano_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Indra_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Indra_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Insomnia_10 Start: 6279, Stop: 7676, Start Num: 7
Candidate Starts for Insomnia_10:
(Start: 7 @6279 has 59 MA's), (17, 6417), (18, 6423), (22, 6441), (31, 6561), (37, 6612), (40, 6633), (44, 6666), (86, 6813), (92, 6876), (93, 6882), (102, 7026), (110, 7107), (113, 7134), (136, 7338), (140, 7359), (146, 7383), (159, 7443), (168, 7476), (178, 7542), (191, 7638),

Gene: Isiphiwo_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Isiphiwo_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Iwokeuplikedis_9 Start: 4489, Stop: 5760, Start Num: 4
Candidate Starts for Iwokeuplikedis_9:
(Start: 4 @4489 has 81 MA's), (9, 4534), (15, 4621), (32, 4780), (33, 4792), (36, 4813), (39, 4840), (40, 4846), (41, 4867), (43, 4873), (54, 4966), (90, 5098), (97, 5146), (130, 5365), (136, 5398), (140, 5422), (167, 5560), (169, 5569),

Gene: Jabith_10 Start: 6279, Stop: 7676, Start Num: 7
Candidate Starts for Jabith_10:
(Start: 7 @6279 has 59 MA's), (17, 6417), (18, 6423), (22, 6441), (31, 6561), (37, 6612), (40, 6633), (44, 6666), (86, 6813), (92, 6876), (93, 6882), (102, 7026), (110, 7107), (113, 7134), (136, 7338), (140, 7359), (146, 7383), (159, 7443), (168, 7476), (178, 7542), (191, 7638),

Gene: Jeeves_9 Start: 4583, Stop: 6160, Start Num: 7
Candidate Starts for Jeeves_9:
(Start: 7 @4583 has 59 MA's), (18, 4724), (19, 4727), (37, 4913), (40, 4934), (45, 4985), (68, 5246), (73, 5285), (87, 5357), (91, 5393), (92, 5408), (98, 5525), (112, 5651), (123, 5750), (129, 5822), (131, 5837), (144, 5882), (168, 5978), (173, 6023),

Gene: Jeon_36 Start: 36589, Stop: 38211, Start Num: 4
Candidate Starts for Jeon_36:
(Start: 4 @36589 has 81 MA's), (8, 36595), (11, 36658), (18, 36736), (22, 36754), (24, 36808), (29, 36856), (33, 36907), (37, 36943), (40, 36964), (46, 37018), (51, 37057), (53, 37105), (56, 37144), (67, 37282), (71, 37321), (79, 37363), (89, 37426), (96, 37510), (109, 37657), (110, 37663), (124, 37789), (125, 37801), (127, 37831), (132, 37870), (135, 37891), (143, 37924), (145, 37933), (150, 37948), (161, 37996), (172, 38047), (176, 38083), (181, 38098), (189, 38149),

Gene: JewelBug_13 Start: 5855, Stop: 7066, Start Num: 21
Candidate Starts for JewelBug_13:
(Start: 21 @5855 has 36 MA's), (23, 5873), (35, 6023), (36, 6038), (47, 6134), (55, 6197), (72, 6281), (76, 6293), (83, 6326), (100, 6527), (130, 6746), (144, 6785), (147, 6791), (160, 6854),

Gene: Jiawan_11 Start: 6182, Stop: 7762, Start Num: 7
Candidate Starts for Jiawan_11:
(Start: 7 @6182 has 59 MA's), (10, 6233), (18, 6323), (19, 6326), (22, 6341), (37, 6512), (38, 6524), (40, 6533), (64, 6794), (87, 6956), (92, 7007), (98, 7124), (123, 7349), (129, 7421), (144, 7481), (168, 7577), (173, 7622), (176, 7640),

Gene: Jordennis_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Jordennis_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Joselito_10 Start: 6224, Stop: 7624, Start Num: 6
Candidate Starts for Joselito_10:
(1, 6185), (Start: 6 @6224 has 21 MA's), (18, 6371), (22, 6389), (31, 6509), (37, 6560), (40, 6581), (44, 6614), (86, 6761), (92, 6824), (93, 6830), (102, 6974), (110, 7055), (113, 7082), (136, 7286), (140, 7307), (146, 7331), (159, 7391), (168, 7424), (178, 7490), (191, 7586),

Gene: Kalpine_12 Start: 6504, Stop: 7799, Start Num: 4
Candidate Starts for Kalpine_12:
(Start: 4 @6504 has 81 MA's), (8, 6516), (9, 6549), (15, 6636), (20, 6660), (28, 6753), (32, 6795), (34, 6810), (39, 6855), (40, 6861), (41, 6882), (43, 6888), (97, 7161), (130, 7380), (136, 7407), (146, 7452), (155, 7494), (156, 7512), (164, 7557), (176, 7638), (189, 7728), (190, 7740),

Gene: Kazan_13 Start: 5860, Stop: 7071, Start Num: 21
Candidate Starts for Kazan_13:
(Start: 21 @5860 has 36 MA's), (23, 5878), (35, 6028), (47, 6139), (55, 6202), (72, 6286), (76, 6298), (83, 6331), (100, 6532), (130, 6751), (144, 6790), (147, 6796), (160, 6859),

Gene: Kerberos_12 Start: 4697, Stop: 6178, Start Num: 4
Candidate Starts for Kerberos_12:
(Start: 4 @4697 has 81 MA's), (9, 4742), (32, 4988), (39, 5048), (40, 5054), (41, 5075), (50, 5135), (87, 5303), (92, 5354), (102, 5504), (110, 5585), (129, 5774), (136, 5816), (151, 5879), (167, 5978), (189, 6107),

Gene: Keziacharles14_9 Start: 4347, Stop: 5900, Start Num: 7
Candidate Starts for Keziacharles14_9:
(Start: 7 @4347 has 59 MA's), (11, 4413), (18, 4488), (22, 4506), (37, 4677), (40, 4698), (68, 5010), (73, 5049), (91, 5157), (92, 5172), (99, 5268), (103, 5310), (111, 5379), (113, 5394), (115, 5409), (144, 5619), (168, 5715), (170, 5736), (173, 5760),

Gene: Kimba_10 Start: 6279, Stop: 7676, Start Num: 7
Candidate Starts for Kimba_10:
(Start: 7 @6279 has 59 MA's), (17, 6417), (18, 6423), (22, 6441), (31, 6561), (37, 6612), (40, 6633), (44, 6666), (86, 6813), (92, 6876), (93, 6882), (102, 7026), (110, 7107), (113, 7134), (136, 7338), (140, 7359), (146, 7383), (159, 7443), (168, 7476), (178, 7542), (191, 7638),

Gene: Kipper29_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Kipper29_13:

(Start: 21 @5854 has 36 MA's), (23, 5872), (34, 6019), (35, 6022), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (139, 6772), (144, 6784), (147, 6790), (160, 6853), (191, 7036),

Gene: Klodlith_10 Start: 4360, Stop: 5916, Start Num: 7
Candidate Starts for Klodlith_10:
(Start: 7 @4360 has 59 MA's), (18, 4501), (37, 4690), (40, 4711), (43, 4741), (92, 5185), (99, 5281), (115, 5422), (128, 5563), (129, 5569), (144, 5635), (168, 5731),

Gene: Koko_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Koko_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: LadyBird_9 Start: 4681, Stop: 5976, Start Num: 4
Candidate Starts for LadyBird_9:
(Start: 4 @4681 has 81 MA's), (9, 4726), (15, 4813), (20, 4837), (32, 4972), (39, 5032), (40, 5038), (41, 5059), (43, 5065), (90, 5293), (97, 5341), (130, 5560), (136, 5593), (156, 5698), (165, 5746),

Gene: Lilleskat_11 Start: 6146, Stop: 7726, Start Num: 7
Candidate Starts for Lilleskat_11:
(Start: 7 @6146 has 59 MA's), (18, 6287), (19, 6290), (22, 6305), (37, 6476), (38, 6488), (40, 6497), (64, 6758), (87, 6920), (92, 6971), (98, 7088), (123, 7313), (129, 7385), (144, 7445), (168, 7541), (173, 7586), (176, 7604),

Gene: LionsBait_10 Start: 6239, Stop: 7756, Start Num: 4
Candidate Starts for LionsBait_10:
(Start: 4 @6239 has 81 MA's), (9, 6284), (15, 6371), (26, 6464), (32, 6530), (34, 6545), (39, 6590), (40, 6596), (41, 6617), (43, 6623), (91, 6872), (92, 6887), (113, 7145), (121, 7235), (136, 7364), (156, 7469), (164, 7514), (168, 7532), (176, 7595),

Gene: LoneWolf_11 Start: 5993, Stop: 7573, Start Num: 7
Candidate Starts for LoneWolf_11:
(Start: 7 @5993 has 59 MA's), (10, 6044), (18, 6134), (19, 6137), (22, 6152), (25, 6206), (37, 6323), (38, 6335), (40, 6344), (64, 6605), (87, 6767), (92, 6818), (98, 6935), (123, 7160), (129, 7232), (144, 7292), (168, 7388), (173, 7433), (176, 7451),

Gene: Loser_12 Start: 6404, Stop: 7858, Start Num: 4
Candidate Starts for Loser_12:
(Start: 4 @6404 has 81 MA's), (8, 6416), (15, 6536), (28, 6653), (32, 6695), (39, 6755), (40, 6761), (41, 6782), (42, 6785), (80, 6968), (92, 7055), (101, 7202), (102, 7205), (110, 7286), (129, 7475), (136, 7517), (137, 7535), (140, 7541), (167, 7658), (178, 7724), (186, 7763),

Gene: Luchador_9 Start: 4568, Stop: 6148, Start Num: 7
Candidate Starts for Luchador_9:
(Start: 7 @4568 has 59 MA's), (18, 4709), (19, 4712), (37, 4898), (40, 4919), (44, 4952), (45, 4970), (68, 5231), (73, 5270), (86, 5330), (87, 5342), (92, 5393), (98, 5510), (112, 5636), (123, 5735), (129, 5807), (133, 5828), (144, 5870), (168, 5966), (173, 6011),

Gene: Lucivia_10 Start: 6276, Stop: 7673, Start Num: 7
Candidate Starts for Lucivia_10:
(Start: 7 @6276 has 59 MA's), (17, 6414), (18, 6420), (22, 6438), (31, 6558), (37, 6609), (40, 6630), (44, 6663), (86, 6810), (92, 6873), (93, 6879), (102, 7023), (110, 7104), (113, 7131), (136, 7335), (140,

7356), (146, 7380), (159, 7440), (168, 7473), (178, 7539), (191, 7635),

Gene: MaCh_10 Start: 6221, Stop: 7621, Start Num: 6
Candidate Starts for MaCh_10:
(1, 6182), (Start: 6 @6221 has 21 MA's), (18, 6368), (22, 6386), (31, 6506), (37, 6557), (40, 6578), (44, 6611), (86, 6758), (92, 6821), (93, 6827), (102, 6971), (110, 7052), (113, 7079), (136, 7283), (140, 7304), (146, 7328), (159, 7388), (168, 7421), (178, 7487), (191, 7583),

Gene: Mabel_10 Start: 6291, Stop: 7688, Start Num: 7
Candidate Starts for Mabel_10:
(Start: 7 @6291 has 59 MA's), (17, 6429), (18, 6435), (22, 6453), (31, 6573), (37, 6624), (40, 6645), (44, 6678), (86, 6825), (92, 6888), (93, 6894), (102, 7038), (110, 7119), (113, 7146), (136, 7350), (140, 7371), (146, 7395), (159, 7455), (168, 7488), (178, 7554), (191, 7650),

Gene: Maminiaina_11 Start: 5916, Stop: 7496, Start Num: 7
Candidate Starts for Maminiaina_11:
(Start: 7 @5916 has 59 MA's), (10, 5967), (18, 6057), (22, 6075), (37, 6246), (40, 6267), (64, 6528), (87, 6690), (92, 6741), (98, 6858), (129, 7155), (144, 7215), (168, 7311), (173, 7356), (176, 7374),

Gene: McFly_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for McFly_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (34, 6019), (35, 6022), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (139, 6772), (144, 6784), (147, 6790), (160, 6853), (191, 7036),

Gene: MegTheThird_9 Start: 4281, Stop: 5834, Start Num: 7
Candidate Starts for MegTheThird_9:
(Start: 7 @4281 has 59 MA's), (18, 4422), (37, 4611), (40, 4632), (62, 4884), (73, 4983), (91, 5091), (92, 5106), (93, 5112), (99, 5202), (103, 5244), (115, 5343), (144, 5553), (157, 5604), (166, 5640), (168, 5649), (170, 5670),

Gene: Megabear_36 Start: 36026, Stop: 37648, Start Num: 4
Candidate Starts for Megabear_36:
(Start: 4 @36026 has 81 MA's), (8, 36032), (11, 36095), (18, 36173), (22, 36191), (24, 36245), (29, 36293), (33, 36344), (37, 36380), (40, 36401), (46, 36455), (53, 36542), (56, 36581), (67, 36719), (71, 36758), (79, 36800), (89, 36863), (96, 36947), (109, 37094), (110, 37100), (124, 37226), (125, 37238), (127, 37268), (132, 37307), (135, 37328), (143, 37361), (145, 37370), (150, 37385), (161, 37433), (172, 37484), (176, 37520), (181, 37535), (189, 37586), (194, 37643),

Gene: MiculUcigas_9 Start: 4749, Stop: 6053, Start Num: 4
Candidate Starts for MiculUcigas_9:
(Start: 4 @4749 has 81 MA's), (8, 4761), (9, 4794), (15, 4881), (30, 5013), (32, 5040), (39, 5100), (40, 5106), (41, 5127), (50, 5187), (74, 5286), (76, 5289), (90, 5361), (97, 5409), (130, 5628), (136, 5661), (149, 5715), (156, 5766), (164, 5811), (168, 5829),

Gene: Minispark_8 Start: 4273, Stop: 5823, Start Num: 7
Candidate Starts for Minispark_8:
(Start: 7 @4273 has 59 MA's), (13, 4366), (18, 4414), (22, 4432), (27, 4495), (37, 4603), (40, 4624), (64, 4885), (73, 4975), (92, 5098), (103, 5236), (115, 5335), (129, 5482), (134, 5512), (144, 5542), (168, 5638),

Gene: Mulciber_10 Start: 6227, Stop: 7627, Start Num: 6
Candidate Starts for Mulciber_10:

(1, 6188), (Start: 6 @6227 has 21 MA's), (17, 6368), (18, 6374), (22, 6392), (31, 6512), (37, 6563), (40, 6584), (44, 6617), (86, 6764), (92, 6827), (93, 6833), (102, 6977), (110, 7058), (113, 7085), (136, 7289), (140, 7310), (146, 7334), (159, 7394), (168, 7427), (178, 7493), (191, 7589),

Gene: Munch_10 Start: 6224, Stop: 7624, Start Num: 6
Candidate Starts for Munch_10:
(1, 6185), (Start: 6 @6224 has 21 MA's), (18, 6371), (22, 6389), (31, 6509), (37, 6560), (40, 6581), (44, 6614), (86, 6761), (92, 6824), (93, 6830), (102, 6974), (110, 7055), (113, 7082), (136, 7286), (140, 7307), (146, 7331), (159, 7391), (168, 7424), (178, 7490), (191, 7586),

Gene: Myxus_11 Start: 6146, Stop: 7726, Start Num: 7
Candidate Starts for Myxus_11:
(Start: 7 @6146 has 59 MA's), (10, 6197), (18, 6287), (19, 6290), (37, 6476), (40, 6497), (64, 6758), (87, 6920), (92, 6971), (98, 7088), (123, 7313), (129, 7385), (144, 7445), (168, 7541), (173, 7586), (176, 7604),

Gene: NaSiaTalie_9 Start: 4749, Stop: 6050, Start Num: 4
Candidate Starts for NaSiaTalie_9:
(Start: 4 @4749 has 81 MA's), (9, 4794), (15, 4881), (32, 5040), (39, 5100), (40, 5106), (41, 5127), (74, 5283), (76, 5286), (90, 5358), (97, 5406), (130, 5625), (136, 5658), (149, 5712), (156, 5763), (164, 5808), (168, 5826),

Gene: Naji_12 Start: 4697, Stop: 6178, Start Num: 4
Candidate Starts for Naji_12:
(Start: 4 @4697 has 81 MA's), (9, 4742), (32, 4988), (39, 5048), (40, 5054), (41, 5075), (49, 5129), (50, 5135), (87, 5303), (92, 5354), (102, 5504), (110, 5585), (129, 5774), (136, 5816), (151, 5879), (167, 5978), (189, 6107),

Gene: Neeharika16_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Neeharika16_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Newrala_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Newrala_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: NicoleTera_13 Start: 6467, Stop: 7756, Start Num: 4
Candidate Starts for NicoleTera_13:
(Start: 4 @6467 has 81 MA's), (9, 6512), (15, 6599), (28, 6716), (32, 6758), (36, 6791), (39, 6818), (40, 6824), (41, 6845), (43, 6851), (50, 6893), (90, 7064), (97, 7112), (130, 7331), (136, 7364), (156, 7469), (162, 7505), (165, 7517), (173, 7577), (176, 7595), (190, 7697),

Gene: Odin_9 Start: 4473, Stop: 5888, Start Num: 4
Candidate Starts for Odin_9:
(Start: 4 @4473 has 81 MA's), (32, 4764), (39, 4824), (40, 4830), (41, 4851), (43, 4857), (48, 4896), (87, 5079), (92, 5130), (138, 5559), (153, 5610), (154, 5613), (159, 5673), (161, 5676),

Gene: Onglai_10 Start: 4512, Stop: 6092, Start Num: 7
Candidate Starts for Onglai_10:
(Start: 7 @4512 has 59 MA's), (10, 4563), (18, 4653), (19, 4656), (22, 4671), (37, 4842), (38, 4854), (40, 4863), (64, 5124), (87, 5286), (92, 5337), (98, 5454), (123, 5679), (129, 5751), (144, 5811), (168,

5907), (173, 5952), (176, 5970),

Gene: Orange_10 Start: 6224, Stop: 7624, Start Num: 6
Candidate Starts for Orange_10:
(1, 6185), (Start: 6 @6224 has 21 MA's), (17, 6365), (18, 6371), (22, 6389), (31, 6509), (37, 6560), (40, 6581), (44, 6614), (86, 6761), (92, 6824), (93, 6830), (102, 6974), (110, 7055), (113, 7082), (136, 7286), (140, 7307), (146, 7331), (159, 7391), (168, 7424), (178, 7490), (191, 7586),

Gene: PR_36 Start: 36630, Stop: 38252, Start Num: 4
Candidate Starts for PR_36:
(Start: 4 @36630 has 81 MA's), (8, 36636), (11, 36699), (18, 36777), (22, 36795), (24, 36849), (29, 36897), (33, 36948), (37, 36984), (40, 37005), (46, 37059), (53, 37146), (56, 37185), (67, 37323), (68, 37344), (71, 37362), (79, 37404), (89, 37467), (96, 37551), (109, 37698), (110, 37704), (124, 37830), (125, 37842), (127, 37872), (132, 37911), (135, 37932), (143, 37965), (145, 37974), (150, 37989), (161, 38037), (172, 38088), (176, 38124), (181, 38139), (189, 38190), (194, 38247),

Gene: PackMan_11 Start: 6146, Stop: 7726, Start Num: 7
Candidate Starts for PackMan_11:
(Start: 7 @6146 has 59 MA's), (10, 6197), (18, 6287), (19, 6290), (37, 6476), (40, 6497), (64, 6758), (87, 6920), (92, 6971), (98, 7088), (123, 7313), (129, 7385), (144, 7445), (168, 7541), (173, 7586), (176, 7604),

Gene: Petersenfast_10 Start: 6227, Stop: 7627, Start Num: 6
Candidate Starts for Petersenfast_10:
(1, 6188), (Start: 6 @6227 has 21 MA's), (17, 6368), (18, 6374), (22, 6392), (31, 6512), (37, 6563), (40, 6584), (44, 6617), (86, 6764), (92, 6827), (93, 6833), (102, 6977), (110, 7058), (113, 7085), (136, 7289), (140, 7310), (146, 7334), (159, 7394), (168, 7427), (178, 7493), (191, 7589),

Gene: Ph8s_11 Start: 4474, Stop: 5847, Start Num: 4
Candidate Starts for Ph8s_11:
(Start: 4 @4474 has 81 MA's), (16, 4609), (20, 4630), (32, 4765), (36, 4798), (39, 4825), (40, 4831), (41, 4852), (43, 4858), (84, 5062), (92, 5131), (119, 5341), (125, 5404), (152, 5566), (153, 5569), (159, 5632), (161, 5635), (176, 5722),

Gene: Phaeder_11 Start: 6146, Stop: 7726, Start Num: 7
Candidate Starts for Phaeder_11:
(Start: 7 @6146 has 59 MA's), (10, 6197), (18, 6287), (19, 6290), (37, 6476), (40, 6497), (64, 6758), (87, 6920), (92, 6971), (98, 7088), (123, 7313), (129, 7385), (144, 7445), (168, 7541), (173, 7586), (176, 7604),

Gene: Phonnegut_11 Start: 6179, Stop: 7759, Start Num: 7
Candidate Starts for Phonnegut_11:
(Start: 7 @6179 has 59 MA's), (10, 6230), (18, 6320), (19, 6323), (22, 6338), (37, 6509), (40, 6530), (64, 6791), (87, 6953), (92, 7004), (98, 7121), (123, 7346), (129, 7418), (144, 7478), (168, 7574), (173, 7619), (176, 7637),

Gene: Pioneer_11 Start: 6179, Stop: 7759, Start Num: 7
Candidate Starts for Pioneer_11:
(Start: 7 @6179 has 59 MA's), (10, 6230), (18, 6320), (19, 6323), (22, 6338), (37, 6509), (40, 6530), (64, 6791), (87, 6953), (92, 7004), (98, 7121), (123, 7346), (129, 7418), (144, 7478), (168, 7574), (173, 7619), (176, 7637),

Gene: Piro94_10 Start: 5206, Stop: 6510, Start Num: 4

Candidate Starts for Piro94_10:
(Start: 4 @5206 has 81 MA's), (9, 5251), (15, 5338), (26, 5431), (32, 5497), (39, 5557), (40, 5563), (41, 5584), (50, 5644), (74, 5743), (76, 5746), (90, 5818), (130, 6085), (136, 6118), (149, 6172), (156, 6223), (164, 6268), (168, 6286),

Gene: Pmask_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Pmask_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Polyphemus_13 Start: 5856, Stop: 7067, Start Num: 21
Candidate Starts for Polyphemus_13:
(Start: 21 @5856 has 36 MA's), (23, 5874), (35, 6024), (36, 6039), (47, 6135), (55, 6198), (72, 6282), (76, 6294), (83, 6327), (100, 6528), (130, 6747), (144, 6786), (147, 6792), (160, 6855),

Gene: Pomar16_12 Start: 4738, Stop: 6219, Start Num: 4
Candidate Starts for Pomar16_12:
(Start: 4 @4738 has 81 MA's), (9, 4783), (32, 5029), (39, 5089), (40, 5095), (41, 5116), (50, 5176), (87, 5344), (92, 5395), (102, 5545), (110, 5626), (129, 5815), (136, 5857), (151, 5920), (167, 6019), (189, 6148),

Gene: Power_9 Start: 4694, Stop: 5941, Start Num: 4
Candidate Starts for Power_9:
(Start: 4 @4694 has 81 MA's), (8, 4706), (9, 4739), (15, 4826), (20, 4850), (28, 4943), (32, 4985), (34, 5000), (39, 5045), (40, 5051), (41, 5072), (42, 5075), (76, 5222), (97, 5342), (130, 5561), (136, 5591), (140, 5615), (146, 5639), (167, 5738), (178, 5804), (180, 5810), (189, 5867),

Gene: Priamo_13 Start: 5872, Stop: 7083, Start Num: 21
Candidate Starts for Priamo_13:
(Start: 21 @5872 has 36 MA's), (23, 5890), (35, 6040), (47, 6151), (55, 6214), (72, 6298), (76, 6310), (83, 6343), (100, 6544), (130, 6763), (142, 6799), (144, 6802), (160, 6871),

Gene: Priya_11 Start: 6177, Stop: 7757, Start Num: 7
Candidate Starts for Priya_11:
(Start: 7 @6177 has 59 MA's), (10, 6228), (18, 6318), (19, 6321), (37, 6507), (40, 6528), (87, 6951), (92, 7002), (98, 7119), (107, 7203), (110, 7227), (113, 7254), (123, 7344), (129, 7416), (144, 7476), (168, 7572), (173, 7617), (176, 7635),

Gene: Prudy_12 Start: 6526, Stop: 7824, Start Num: 4
Candidate Starts for Prudy_12:
(Start: 4 @6526 has 81 MA's), (9, 6571), (30, 6790), (32, 6817), (39, 6877), (40, 6883), (41, 6904), (43, 6910), (50, 6958), (97, 7180), (130, 7399), (136, 7432), (156, 7537), (157, 7555), (162, 7573), (165, 7585), (176, 7663), (189, 7753), (190, 7765),

Gene: Qobbit_11 Start: 6176, Stop: 7756, Start Num: 7
Candidate Starts for Qobbit_11:
(Start: 7 @6176 has 59 MA's), (10, 6227), (18, 6317), (19, 6320), (22, 6335), (37, 6506), (40, 6527), (64, 6788), (87, 6950), (92, 7001), (98, 7118), (123, 7343), (129, 7415), (144, 7475), (168, 7571), (173, 7616), (176, 7634),

Gene: QueenB2_9 Start: 4800, Stop: 6035, Start Num: 4
Candidate Starts for QueenB2_9:

(Start: 4 @4800 has 81 MA's), (8, 4812), (9, 4845), (15, 4932), (20, 4956), (28, 5049), (32, 5091), (39, 5151), (40, 5157), (41, 5178), (43, 5184), (54, 5268), (76, 5328), (78, 5334), (90, 5400), (97, 5448), (130, 5667), (136, 5697), (140, 5721), (167, 5835), (178, 5901), (183, 5925),

Gene: QueenBeesly_9 Start: 4694, Stop: 5941, Start Num: 4
Candidate Starts for QueenBeesly_9:
(Start: 4 @4694 has 81 MA's), (8, 4706), (9, 4739), (14, 4823), (15, 4826), (20, 4850), (28, 4943), (32, 4985), (34, 5000), (39, 5045), (40, 5051), (41, 5072), (42, 5075), (76, 5222), (97, 5342), (130, 5561), (136, 5591), (140, 5615), (146, 5639), (167, 5738), (178, 5804), (180, 5810), (189, 5867),

Gene: Rahalelujah_9 Start: 4273, Stop: 5823, Start Num: 7
Candidate Starts for Rahalelujah_9:
(Start: 7 @4273 has 59 MA's), (13, 4366), (18, 4414), (22, 4432), (27, 4495), (37, 4603), (40, 4624), (51, 4714), (60, 4855), (64, 4885), (73, 4975), (92, 5098), (103, 5236), (129, 5482), (134, 5512), (144, 5542), (168, 5638),

Gene: RedRock_12 Start: 6487, Stop: 7968, Start Num: 4
Candidate Starts for RedRock_12:
(Start: 4 @6487 has 81 MA's), (9, 6532), (15, 6619), (28, 6736), (32, 6778), (39, 6838), (40, 6844), (41, 6865), (42, 6868), (70, 7009), (80, 7057), (92, 7144), (101, 7291), (102, 7294), (110, 7375), (129, 7564), (136, 7606), (137, 7624), (140, 7630), (146, 7654), (167, 7768), (169, 7777), (189, 7897),

Gene: Retro23_9 Start: 4797, Stop: 6089, Start Num: 4
Candidate Starts for Retro23_9:
(Start: 4 @4797 has 81 MA's), (8, 4809), (9, 4842), (15, 4929), (20, 4953), (28, 5046), (32, 5088), (34, 5103), (39, 5148), (40, 5154), (41, 5175), (54, 5265), (76, 5325), (78, 5331), (97, 5445), (130, 5664), (136, 5697), (146, 5742), (156, 5802), (164, 5847), (176, 5928), (190, 6030),

Gene: Roksolana_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Roksolana_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: RyeScarlet_11 Start: 6182, Stop: 7762, Start Num: 7
Candidate Starts for RyeScarlet_11:
(Start: 7 @6182 has 59 MA's), (10, 6233), (18, 6323), (19, 6326), (22, 6341), (37, 6512), (38, 6524), (40, 6533), (64, 6794), (87, 6956), (92, 7007), (98, 7124), (123, 7349), (129, 7421), (144, 7481), (168, 7577), (173, 7622), (176, 7640),

Gene: Sachima_11 Start: 6146, Stop: 7726, Start Num: 7
Candidate Starts for Sachima_11:
(Start: 7 @6146 has 59 MA's), (10, 6197), (18, 6287), (19, 6290), (22, 6305), (37, 6476), (38, 6488), (40, 6497), (64, 6758), (87, 6920), (92, 6971), (98, 7088), (123, 7313), (129, 7385), (144, 7445), (168, 7541), (173, 7586), (176, 7604),

Gene: Salz_10 Start: 6224, Stop: 7624, Start Num: 6
Candidate Starts for Salz_10:
(1, 6185), (Start: 6 @6224 has 21 MA's), (17, 6365), (18, 6371), (22, 6389), (31, 6509), (37, 6560), (40, 6581), (44, 6614), (86, 6761), (92, 6824), (93, 6830), (102, 6974), (110, 7055), (113, 7082), (136, 7286), (140, 7307), (146, 7331), (159, 7391), (168, 7424), (178, 7490), (191, 7586),

Gene: Saskia_10 Start: 6227, Stop: 7627, Start Num: 6
Candidate Starts for Saskia_10:

(1, 6188), (Start: 6 @6227 has 21 MA's), (11, 6296), (18, 6374), (22, 6392), (31, 6512), (37, 6563), (40, 6584), (44, 6617), (86, 6764), (92, 6827), (102, 6977), (110, 7058), (113, 7085), (136, 7289), (140, 7310), (146, 7334), (159, 7394), (168, 7427), (178, 7493), (191, 7589),

Gene: Scherzo_11 Start: 6179, Stop: 7759, Start Num: 7
Candidate Starts for Scherzo_11:
(Start: 7 @6179 has 59 MA's), (10, 6230), (18, 6320), (19, 6323), (22, 6338), (37, 6509), (38, 6521), (40, 6530), (64, 6791), (87, 6953), (92, 7004), (98, 7121), (123, 7346), (129, 7418), (144, 7478), (168, 7574), (173, 7619), (176, 7637),

Gene: SemperFi_11 Start: 5122, Stop: 6369, Start Num: 4
Candidate Starts for SemperFi_11:
(Start: 4 @5122 has 81 MA's), (8, 5134), (9, 5167), (15, 5254), (20, 5278), (28, 5371), (32, 5413), (34, 5428), (39, 5473), (40, 5479), (41, 5500), (42, 5503), (76, 5650), (97, 5770), (130, 5989), (136, 6019), (140, 6043), (146, 6067), (167, 6166), (178, 6232), (180, 6238), (189, 6295),

Gene: Sham4_10 Start: 6227, Stop: 7627, Start Num: 6
Candidate Starts for Sham4_10:
(1, 6188), (Start: 6 @6227 has 21 MA's), (17, 6368), (18, 6374), (22, 6392), (31, 6512), (37, 6563), (40, 6584), (44, 6617), (86, 6764), (92, 6827), (93, 6833), (102, 6977), (110, 7058), (113, 7085), (136, 7289), (140, 7310), (146, 7334), (159, 7394), (168, 7427), (178, 7493), (191, 7589),

Gene: SheaKeira_10 Start: 4377, Stop: 5927, Start Num: 7
Candidate Starts for SheaKeira_10:
(Start: 7 @4377 has 59 MA's), (18, 4518), (37, 4707), (40, 4728), (62, 4980), (92, 5202), (99, 5298), (103, 5340), (115, 5439), (129, 5586), (144, 5646), (168, 5742), (175, 5802),

Gene: Sheen_10 Start: 5731, Stop: 7155, Start Num: 4
Candidate Starts for Sheen_10:
(Start: 4 @5731 has 81 MA's), (9, 5776), (15, 5863), (28, 5980), (31, 6019), (32, 6022), (39, 6082), (40, 6088), (41, 6109), (43, 6115), (50, 6163), (73, 6256), (87, 6328), (90, 6346), (92, 6379), (108, 6550), (112, 6589), (131, 6790), (136, 6817), (140, 6838), (146, 6862), (158, 6922), (159, 6925), (167, 6955), (171, 6979), (178, 7021), (179, 7024), (185, 7060), (188, 7066), (193, 7138),

Gene: Sknot_9 Start: 4749, Stop: 6053, Start Num: 4
Candidate Starts for Sknot_9:
(Start: 4 @4749 has 81 MA's), (8, 4761), (9, 4794), (15, 4881), (30, 5013), (32, 5040), (39, 5100), (40, 5106), (41, 5127), (50, 5187), (74, 5286), (76, 5289), (90, 5361), (97, 5409), (130, 5628), (136, 5661), (149, 5715), (156, 5766), (164, 5811), (168, 5829),

Gene: SmellyB_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for SmellyB_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (34, 6019), (35, 6022), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (139, 6772), (144, 6784), (147, 6790), (160, 6853), (191, 7036),

Gene: SnapTap_9 Start: 4694, Stop: 5941, Start Num: 4
Candidate Starts for SnapTap_9:
(Start: 4 @4694 has 81 MA's), (8, 4706), (9, 4739), (15, 4826), (20, 4850), (28, 4943), (32, 4985), (34, 5000), (39, 5045), (40, 5051), (41, 5072), (42, 5075), (76, 5222), (97, 5342), (130, 5561), (136, 5591), (140, 5615), (146, 5639), (167, 5738), (178, 5804), (180, 5810), (189, 5867),

Gene: Snape_10 Start: 6230, Stop: 7630, Start Num: 6

Candidate Starts for Snape_10:
(1, 6191), (Start: 6 @6230 has 21 MA's), (17, 6371), (18, 6377), (22, 6395), (31, 6515), (37, 6566), (40, 6587), (44, 6620), (86, 6767), (92, 6830), (93, 6836), (102, 6980), (110, 7061), (113, 7088), (136, 7292), (140, 7313), (146, 7337), (159, 7397), (168, 7430), (178, 7496), (191, 7592),

Gene: SororFago_9 Start: 4555, Stop: 6138, Start Num: 7
Candidate Starts for SororFago_9:
(Start: 7 @4555 has 59 MA's), (18, 4696), (19, 4699), (25, 4768), (37, 4885), (40, 4906), (45, 4957), (68, 5218), (73, 5257), (86, 5317), (87, 5329), (92, 5380), (98, 5497), (112, 5623), (123, 5722), (129, 5794), (133, 5815), (144, 5860), (168, 5956), (173, 6001),

Gene: Spouty_11 Start: 6176, Stop: 7756, Start Num: 7
Candidate Starts for Spouty_11:
(Start: 7 @6176 has 59 MA's), (10, 6227), (18, 6317), (19, 6320), (37, 6506), (40, 6527), (87, 6950), (92, 7001), (98, 7118), (107, 7202), (110, 7226), (113, 7253), (123, 7343), (129, 7415), (144, 7475), (168, 7571), (173, 7616), (176, 7634),

Gene: StarStuff_12 Start: 4697, Stop: 6178, Start Num: 4
Candidate Starts for StarStuff_12:
(Start: 4 @4697 has 81 MA's), (9, 4742), (32, 4988), (39, 5048), (40, 5054), (41, 5075), (49, 5129), (50, 5135), (87, 5303), (92, 5354), (102, 5504), (110, 5585), (129, 5774), (136, 5816), (151, 5879), (167, 5978), (189, 6107),

Gene: Stellammi_32 Start: 25910, Stop: 27592, Start Num: 5
Candidate Starts for Stellammi_32:
(Start: 5 @25910 has 1 MA's), (12, 25994), (18, 26057), (22, 26075), (37, 26246), (40, 26267), (52, 26396), (56, 26444), (58, 26459), (60, 26528), (63, 26555), (65, 26561), (66, 26570), (69, 26633), (77, 26663), (81, 26690), (88, 26738), (92, 26777), (94, 26792), (104, 26954), (105, 26975), (108, 26984), (112, 27023), (118, 27083), (126, 27179), (136, 27260), (140, 27281), (168, 27398), (174, 27452), (177, 27461), (182, 27482), (187, 27509),

Gene: Sunhee_9 Start: 4574, Stop: 6157, Start Num: 7
Candidate Starts for Sunhee_9:
(Start: 7 @4574 has 59 MA's), (18, 4715), (19, 4718), (25, 4787), (37, 4904), (40, 4925), (44, 4958), (45, 4976), (73, 5276), (87, 5348), (92, 5399), (112, 5642), (113, 5651), (129, 5813), (133, 5834), (144, 5876), (168, 5972), (170, 5993), (173, 6017), (187, 6086),

Gene: SuperAwesome_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for SuperAwesome_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: SuperCallie99_13 Start: 5855, Stop: 7066, Start Num: 21
Candidate Starts for SuperCallie99_13:
(Start: 21 @5855 has 36 MA's), (23, 5873), (35, 6023), (36, 6038), (47, 6134), (55, 6197), (72, 6281), (76, 6293), (83, 6326), (100, 6527), (130, 6746), (144, 6785), (147, 6791), (160, 6854),

Gene: Superchunk_9 Start: 4337, Stop: 5746, Start Num: 3
Candidate Starts for Superchunk_9:
(2, 4331), (Start: 3 @4337 has 2 MA's), (32, 4628), (39, 4688), (40, 4694), (41, 4715), (43, 4721), (50, 4769), (87, 4937), (92, 4988), (138, 5417), (153, 5468), (154, 5471), (159, 5531), (161, 5534), (191, 5717),

Gene: SweetiePie_9 Start: 4694, Stop: 5941, Start Num: 4
Candidate Starts for SweetiePie_9:
(Start: 4 @4694 has 81 MA's), (8, 4706), (9, 4739), (15, 4826), (20, 4850), (28, 4943), (32, 4985), (34, 5000), (39, 5045), (40, 5051), (41, 5072), (42, 5075), (76, 5222), (97, 5342), (130, 5561), (136, 5591), (140, 5615), (146, 5639), (167, 5738), (178, 5804), (180, 5810), (189, 5867),

Gene: SwirlSquare_11 Start: 4508, Stop: 5878, Start Num: 4
Candidate Starts for SwirlSquare_11:
(Start: 4 @4508 has 81 MA's), (20, 4664), (32, 4799), (39, 4859), (40, 4865), (41, 4886), (43, 4892), (50, 4940), (88, 5120), (92, 5159), (114, 5321), (122, 5408), (141, 5555), (153, 5600), (154, 5603), (159, 5663), (161, 5666), (191, 5849),

Gene: Taptic_36 Start: 36026, Stop: 37648, Start Num: 4
Candidate Starts for Taptic_36:
(Start: 4 @36026 has 81 MA's), (8, 36032), (11, 36095), (18, 36173), (22, 36191), (24, 36245), (29, 36293), (33, 36344), (37, 36380), (40, 36401), (46, 36455), (53, 36542), (56, 36581), (67, 36719), (71, 36758), (79, 36800), (89, 36863), (96, 36947), (109, 37094), (110, 37100), (124, 37226), (125, 37238), (127, 37268), (132, 37307), (135, 37328), (143, 37361), (145, 37370), (150, 37385), (161, 37433), (172, 37484), (176, 37520), (181, 37535), (189, 37586), (194, 37643),

Gene: Temprado_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Temprado_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Terrific_11 Start: 5203, Stop: 6507, Start Num: 4
Candidate Starts for Terrific_11:
(Start: 4 @5203 has 81 MA's), (9, 5248), (15, 5335), (32, 5494), (39, 5554), (40, 5560), (41, 5581), (50, 5641), (74, 5740), (76, 5743), (90, 5815), (130, 6082), (136, 6115), (149, 6169), (156, 6220), (164, 6265), (168, 6283),

Gene: Timothy_10 Start: 6224, Stop: 7624, Start Num: 6
Candidate Starts for Timothy_10:
(1, 6185), (Start: 6 @6224 has 21 MA's), (18, 6371), (22, 6389), (31, 6509), (37, 6560), (40, 6581), (44, 6614), (86, 6761), (92, 6824), (93, 6830), (102, 6974), (110, 7055), (113, 7082), (136, 7286), (140, 7307), (146, 7331), (159, 7391), (168, 7424), (178, 7490), (191, 7586),

Gene: TinyTimmy_10 Start: 6279, Stop: 7676, Start Num: 7
Candidate Starts for TinyTimmy_10:
(Start: 7 @6279 has 59 MA's), (17, 6417), (18, 6423), (22, 6441), (31, 6561), (37, 6612), (40, 6633), (44, 6666), (86, 6813), (92, 6876), (93, 6882), (102, 7026), (110, 7107), (113, 7134), (136, 7338), (140, 7359), (146, 7383), (159, 7443), (168, 7476), (178, 7542), (191, 7638),

Gene: Toaka_9 Start: 4553, Stop: 6103, Start Num: 7
Candidate Starts for Toaka_9:
(Start: 7 @4553 has 59 MA's), (13, 4646), (18, 4694), (37, 4883), (40, 4904), (51, 4994), (61, 5138), (64, 5165), (73, 5255), (91, 5363), (92, 5378), (99, 5474), (115, 5615), (123, 5690), (129, 5762), (134, 5792), (144, 5822), (168, 5918), (176, 5981),

Gene: Tomathan_12 Start: 4697, Stop: 6178, Start Num: 4
Candidate Starts for Tomathan_12:
(Start: 4 @4697 has 81 MA's), (9, 4742), (32, 4988), (39, 5048), (40, 5054), (41, 5075), (49, 5129), (50, 5135), (87, 5303), (92, 5354), (102, 5504), (110, 5585), (129, 5774), (136, 5816), (151, 5879), (167,

5978), (189, 6107),

Gene: Toro_11 Start: 5649, Stop: 7097, Start Num: 4
Candidate Starts for Toro_11:
(Start: 4 @5649 has 81 MA's), (9, 5694), (15, 5781), (28, 5898), (31, 5937), (32, 5940), (39, 6000), (40, 6006), (41, 6027), (43, 6033), (50, 6081), (73, 6174), (87, 6246), (92, 6297), (102, 6447), (108, 6507), (110, 6528), (120, 6618), (123, 6645), (131, 6732), (136, 6759), (140, 6780), (146, 6804), (158, 6864), (159, 6867), (167, 6897), (171, 6921), (178, 6963), (179, 6966), (185, 7002), (188, 7008), (193, 7080),

Gene: Travvers_12 Start: 4697, Stop: 6178, Start Num: 4
Candidate Starts for Travvers_12:
(Start: 4 @4697 has 81 MA's), (9, 4742), (32, 4988), (39, 5048), (40, 5054), (41, 5075), (49, 5129), (50, 5135), (87, 5303), (92, 5354), (102, 5504), (110, 5585), (129, 5774), (136, 5816), (151, 5879), (167, 5978), (189, 6107),

Gene: Trixie_12 Start: 6376, Stop: 7671, Start Num: 4
Candidate Starts for Trixie_12:
(Start: 4 @6376 has 81 MA's), (8, 6388), (9, 6421), (15, 6508), (20, 6532), (28, 6625), (32, 6667), (34, 6682), (39, 6727), (40, 6733), (41, 6754), (43, 6760), (97, 7033), (130, 7252), (136, 7279), (146, 7324), (156, 7384), (176, 7510), (189, 7600), (190, 7612),

Gene: Tubs_11 Start: 6146, Stop: 7726, Start Num: 7
Candidate Starts for Tubs_11:
(Start: 7 @6146 has 59 MA's), (10, 6197), (18, 6287), (19, 6290), (37, 6476), (40, 6497), (64, 6758), (87, 6920), (92, 6971), (98, 7088), (123, 7313), (129, 7385), (144, 7445), (168, 7541), (173, 7586), (176, 7604),

Gene: Tucker_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for Tucker_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (35, 6022), (36, 6037), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (144, 6784), (147, 6790), (160, 6853),

Gene: Ugenie5_8 Start: 6179, Stop: 7759, Start Num: 7
Candidate Starts for Ugenie5_8:
(Start: 7 @6179 has 59 MA's), (10, 6230), (18, 6320), (19, 6323), (22, 6338), (37, 6509), (38, 6521), (40, 6530), (64, 6791), (87, 6953), (92, 7004), (98, 7121), (123, 7346), (129, 7418), (144, 7478), (168, 7574), (173, 7619), (176, 7637),

Gene: Updawg_11 Start: 5191, Stop: 6495, Start Num: 4
Candidate Starts for Updawg_11:
(Start: 4 @5191 has 81 MA's), (9, 5236), (15, 5323), (32, 5482), (39, 5542), (40, 5548), (41, 5569), (42, 5572), (50, 5629), (74, 5728), (76, 5731), (90, 5803), (97, 5851), (130, 6070), (136, 6103), (149, 6157), (156, 6208), (164, 6253), (168, 6271), (184, 6388),

Gene: VA6_9 Start: 4672, Stop: 5973, Start Num: 4
Candidate Starts for VA6_9:
(Start: 4 @4672 has 81 MA's), (9, 4717), (15, 4804), (20, 4828), (28, 4921), (32, 4963), (34, 4978), (39, 5023), (40, 5029), (41, 5050), (43, 5056), (76, 5212), (90, 5284), (97, 5332), (117, 5455), (130, 5551), (136, 5584), (156, 5689), (162, 5725), (176, 5815), (190, 5917),

Gene: VC3_12 Start: 4696, Stop: 6177, Start Num: 4
Candidate Starts for VC3_12:

(Start: 4 @4696 has 81 MA's), (9, 4741), (14, 4825), (32, 4987), (39, 5047), (40, 5053), (41, 5074), (49, 5128), (50, 5134), (87, 5302), (92, 5353), (102, 5503), (110, 5584), (136, 5815), (151, 5878), (167, 5977), (189, 6106),

Gene: Vanisoa_9 Start: 4264, Stop: 5814, Start Num: 7
Candidate Starts for Vanisoa_9:
(Start: 7 @4264 has 59 MA's), (18, 4405), (19, 4408), (22, 4423), (37, 4594), (40, 4615), (43, 4645), (60, 4846), (64, 4876), (73, 4966), (91, 5074), (92, 5089), (99, 5185), (103, 5227), (115, 5326), (129, 5473), (134, 5503), (144, 5533), (168, 5629), (175, 5689),

Gene: VohminGhazi_13 Start: 5854, Stop: 7065, Start Num: 21
Candidate Starts for VohminGhazi_13:
(Start: 21 @5854 has 36 MA's), (23, 5872), (34, 6019), (35, 6022), (47, 6133), (55, 6196), (72, 6280), (76, 6292), (83, 6325), (100, 6526), (130, 6745), (139, 6772), (144, 6784), (147, 6790), (160, 6853), (191, 7036),

Gene: WeiHuaDA_14 Start: 6986, Stop: 8281, Start Num: 4
Candidate Starts for WeiHuaDA_14:
(Start: 4 @6986 has 81 MA's), (8, 6998), (9, 7031), (15, 7118), (20, 7142), (28, 7235), (32, 7277), (39, 7337), (40, 7343), (41, 7364), (43, 7370), (54, 7454), (72, 7511), (97, 7643), (130, 7862), (136, 7889), (146, 7934), (155, 7976), (156, 7994), (164, 8039), (176, 8120), (187, 8192), (190, 8222),

Gene: WideWale_11 Start: 5191, Stop: 6495, Start Num: 4
Candidate Starts for WideWale_11:
(Start: 4 @5191 has 81 MA's), (9, 5236), (15, 5323), (32, 5482), (39, 5542), (40, 5548), (41, 5569), (42, 5572), (50, 5629), (74, 5728), (76, 5731), (90, 5803), (97, 5851), (130, 6070), (136, 6103), (149, 6157), (156, 6208), (164, 6253), (168, 6271), (184, 6388),

Gene: Wolpertinger_9 Start: 6227, Stop: 7627, Start Num: 6
Candidate Starts for Wolpertinger_9:
(1, 6188), (Start: 6 @6227 has 21 MA's), (17, 6368), (18, 6374), (22, 6392), (31, 6512), (37, 6563), (40, 6584), (44, 6617), (86, 6764), (92, 6827), (93, 6833), (102, 6977), (110, 7058), (113, 7085), (136, 7289), (140, 7310), (146, 7334), (159, 7394), (168, 7427), (178, 7493), (191, 7589),

Gene: WorldCup_8 Start: 4273, Stop: 5823, Start Num: 7
Candidate Starts for WorldCup_8:
(Start: 7 @4273 has 59 MA's), (13, 4366), (18, 4414), (22, 4432), (27, 4495), (37, 4603), (40, 4624), (51, 4714), (60, 4855), (64, 4885), (73, 4975), (92, 5098), (103, 5236), (115, 5335), (129, 5482), (134, 5512), (144, 5542), (168, 5638),

Gene: Yecey3_10 Start: 4341, Stop: 5915, Start Num: 7
Candidate Starts for Yecey3_10:
(Start: 7 @4341 has 59 MA's), (13, 4434), (18, 4482), (19, 4485), (24, 4554), (37, 4689), (40, 4710), (45, 4761), (64, 4971), (82, 5103), (87, 5133), (92, 5184), (103, 5322), (113, 5406), (115, 5421), (129, 5568), (144, 5634), (168, 5730), (170, 5751), (185, 5838),