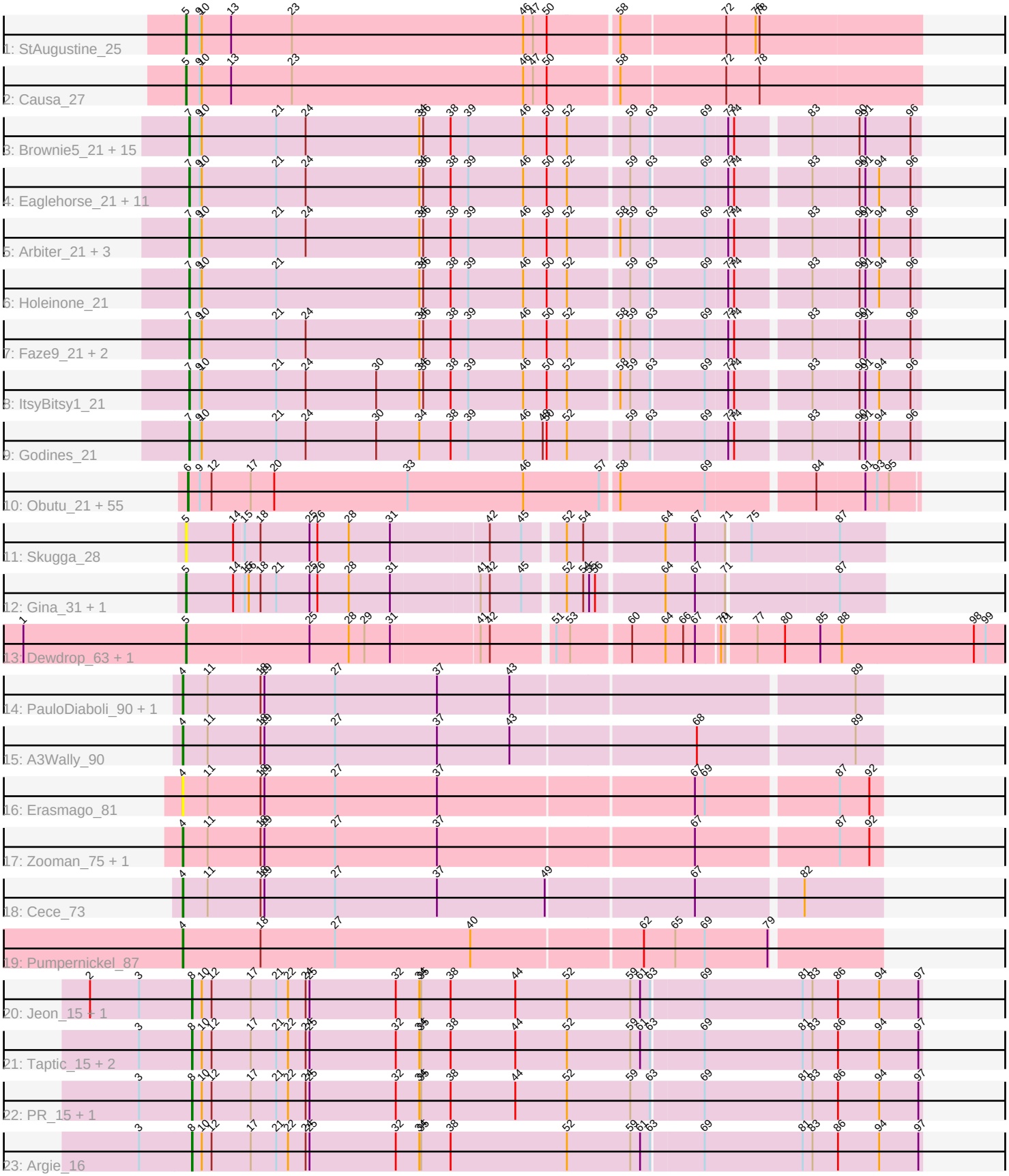
Pham 347410


1: StAugustine_25
2: Causa_27
3: Brownie5_21 + 15
4: Eaglehorse_21 + 11
5: Arbiter_21 + 3
6: Holeinone_21
7: Faze9_21 + 2
8: ItsyBitsy1_21
9: Godines_21
10: Obutu_21 + 55
11: Skugga_28
12: Gina_31 + 1
13: Dewdrop_63 + 1
14: PauloDiaboli_90 + 1
15: A3Wally_90
16: Erasmago_81
17: Zooman_75 + 1
18: Cece_73
19: Pumpernickel_87
20: Jeon_15 + 1
21: Taptic_15 + 2
22: PR_15 + 1
23: Argie_16

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 347410 Report

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

Pham number 347410 has 117 members, 6 are drafts.

Phages represented in each track:
• Track 1 : StAugustine_25
• Track 2 : Causa_27
• Track 3 : Brownie5_21, Boyle_21, Tres_21, Opia_21, Rosebush_21, Hedgerow_21, LilSmirk_21, Tinciduntsolum_22, Glass_21, West99_21, Sabella_21, Blocker23_21, Ares_21, Kheth_21, Lars_21, MasterPo_21
• Track 4 : Eaglehorse_21, Coffee_21, Laurie_21, Kaleb_21, PrinceCharming_21, Vic9_00021, Allegro_21, Calamitous_21, Lephleur_21, TA17A_21, Rhinoforte_21, Bananafish_21
• Track 5 : Arbiter_21, Phantasmagoria_21, Qyrzula_20, LizLemon_21
• Track 6 : Holeinone_21
• Track 7 : Faze9_21, Kolhan_21, FrenchFry_21
• Track 8 : ItsyBitsy1_21
• Track 9 : Godines_21
• Track 10 : Obutu_21, Mulaychimus_21, Neos5_21, Bernardo_21, RagingRooster_21, Tydolla_21, Baloo_21, Gervas_21, HarveySr_21, Briakila_21, OrangeOswald_21, Corofin_21, Morty007_21, RomaT_21, Chentzyk_20, Audrey_21, Rita1961_21, Phlyer_21, Pipefish_21, Chalmers_21, Shenandoah_21, ChaChing_21, Phayeta_21, Athena_22, Mortcellus_20, Daisy_21, Marley1013_21, SwainyDoc_21, Ben11_20, Devonte_21, TinyTerror_21, Marlia_21, Heathcliff_21, Olivio_20, GlenHope_22, SynergyX_21, Akoma_21, LestyG_21, Philly_20, Jackstina_20, Deenasa_21, Kronus_20, Glubnar_22, Yahalom_21, Halfpint_20, MmasiCarm_21, Yinz_21, SlippinJimmy_21, Chandler_21, Compostia_22, Phaedrus_20, Abinghost_21, Gadjet_22, Casbah_20, Nozo_21, Kamiyu_21
• Track 11 : Skugga_28
• Track 12 : Gina_31, Teamocil_31
• Track 13 : Dewdrop_63, Leaf_63
• Track 14 : PauloDiaboli_90, Dodo_92
• Track 15 : A3Wally_90
• Track 16 : Erasmago_81
• Track 17 : Zooman_75, Big4_79
• Track 18 : Cece_73
• Track 19 : Pumpernickel_87
• Track 20 : Jeon_15, GodPhather_16
• Track 21 : Taptic_15, Megabear_15, Cepens_15
• Track 22 : PR_15, D12_15
• Track 23 : Argie_16

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

The start number called the most often in the published annotations is 6, it was called in 53 of the 111 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abinghost_21, Akoma_21, Athena_22, Audrey_21, Baloo_21, Ben11_20, Bernardo_21, Briakila_21, Casbah_20, ChaChing_21, Chalmers_21, Chandler_21, Chentzyk_20, Compostia_22, Corofin_21, Daisy_21, Deenasa_21, Devonte_21, Gadjet_22, Gervas_21, GlenHope_22, Glubnar_22, Halfpint_20, HarveySr_21, Heathcliff_21, Jackstina_20, Kamiyu_21, Kronus_20, LestyG_21, Marley1013_21, Marlia_21, MmasiCarm_21, Mortcellus_20, Morty007_21, Mulaychimus_21, Neos5_21, Nozo_21, Obutu_21, Olivio_20, OrangeOswald_21, Phaedrus_20, Phayeta_21, Philly_20, Phlyer_21, Pipefish_21, RagingRooster_21, Rita1961_21, RomaT_21, Shenandoah_21, SlippinJimmy_21, SwainyDoc_21, SynergyX_21, TinyTerror_21, Tydolla_21, Yahalom_21, Yinz_21,

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

Genes that do not have the "Most Annotated" start:
• A3Wally_90, Allegro_21, Arbiter_21, Ares_21, Argie_16, Bananafish_21, Big4_79, Blocker23_21, Boyle_21, Brownie5_21, Calamitous_21, Causa_27, Cece_73, Cepens_15, Coffee_21, D12_15, Dewdrop_63, Dodo_92, Eaglehorse_21, Erasmago_81, Faze9_21, FrenchFry_21, Gina_31, Glass_21, GodPhather_16, Godines_21, Hedgerow_21, Holeinone_21, ItsyBitsy1_21, Jeon_15, Kaleb_21, Kheth_21, Kolhan_21, Lars_21, Laurie_21, Leaf_63, Lephleur_21, LilSmirk_21, LizLemon_21, MasterPo_21, Megabear_15, Opia_21, PR_15, PauloDiaboli_90, Phantasmagoria_21, PrinceCharming_21, Pumpernickel_87, Qyrzula_20, Rhinoforte_21, Rosebush_21, Sabella_21, Skugga_28, StAugustine_25, TA17A_21, Taptic_15, Teamocil_31, Tinciduntsolum_22, Tres_21, Vic9_00021, West99_21, Zooman_75,

Summary by start number:

Start 4:
• Found in 8 of 117 (6.8%) of genes in pham
• Manual Annotations of this start: 7 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A3Wally_90 (GD1), Big4_79 (GD2), Cece_73 (GD3), Dodo_92 (GD1), Erasmago_81 (GD2), PauloDiaboli_90 (GD1), Pumpernickel_87 (GD4), Zooman_75 (GD2),

Start 5:
• Found in 7 of 117 (6.0%) of genes in pham
• Manual Annotations of this start: 6 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Causa_27 (AI), Dewdrop_63 (GC), Gina_31 (EC), Leaf_63 (GC), Skugga_28 (EC), StAugustine_25 (AI), Teamocil_31 (EC),

Start 6:
• Found in 56 of 117 (47.9%) of genes in pham
• Manual Annotations of this start: 53 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abinghost_21 (B3), Akoma_21 (B3), Athena_22 (B3), Audrey_21 (B3), Baloo_21 (B3), Ben11_20 (B3), Bernardo_21 (B3), Briakila_21 (B3), Casbah_20 (B3), ChaChing_21 (B3), Chalmers_21 (B3), Chandler_21 (B3), Chentzyk_20 (B3), Compostia_22 (B3), Corofin_21 (B3), Daisy_21 (B3), Deenasa_21 (B3), Devonte_21 (B3), Gadjet_22 (B3), Gervas_21 (B3), GlenHope_22 (B3), Glubnar_22 (B3), Halfpint_20 (B3), HarveySr_21 (B3), Heathcliff_21 (B3), Jackstina_20 (B3), Kamiyu_21 (B3), Kronus_20 (B3), LestyG_21 (B3), Marley1013_21 (B3), Marlia_21 (B3), MmasiCarm_21 (B3), Mortcellus_20 (B3), Morty007_21 (B3), Mulaychimus_21 (B3), Neos5_21 (B3), Nozo_21 (B3), Obutu_21 (B3), Olivio_20 (B3), OrangeOswald_21 (B3), Phaedrus_20 (B3), Phayeta_21 (B3), Philly_20 (B3), Phlyer_21 (B3), Pipefish_21 (B3), RagingRooster_21 (B3), Rita1961_21 (B3), RomaT_21 (B3), Shenandoah_21 (B3), SlippinJimmy_21 (B3), SwainyDoc_21 (B3), SynergyX_21 (B3), TinyTerror_21 (B3), Tydolla_21 (B3), Yahalom_21 (B3), Yinz_21 (B3),

Start 7:
• Found in 38 of 117 (32.5%) of genes in pham
• Manual Annotations of this start: 37 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Allegro_21 (B2), Arbiter_21 (B2), Ares_21 (B2), Bananafish_21 (B2), Blocker23_21 (B2), Boyle_21 (B2), Brownie5_21 (B2), Calamitous_21 (B2), Coffee_21 (B2), Eaglehorse_21 (B2), Faze9_21 (B2), FrenchFry_21 (B2), Glass_21 (B2), Godines_21 (B2), Hedgerow_21 (B2), Holeinone_21 (B2), ItsyBitsy1_21 (B2), Kaleb_21 (B2), Kheth_21 (B2), Kolhan_21 (B2), Lars_21 (B2), Laurie_21 (B2), Lephleur_21 (B2), LilSmirk_21 (B2), LizLemon_21 (B2), MasterPo_21 (B2), Opia_21 (B2), Phantasmagoria_21 (B2), PrinceCharming_21 (B2), Qyrzula_20 (B2), Rhinoforte_21 (B2), Rosebush_21 (B2), Sabella_21 (B2), TA17A_21 (B2), Tinciduntsolum_22 (B2), Tres_21 (B2), Vic9_00021 (B2), West99_21 (B2),

Start 8:
• Found in 8 of 117 (6.8%) of genes in pham
• Manual Annotations of this start: 8 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Argie_16 (W), Cepens_15 (W), D12_15 (W), GodPhather_16 (W), Jeon_15 (W), Megabear_15 (W), PR_15 (W), Taptic_15 (W),

Summary by clusters:

There are 10 clusters represented in this pham: GD1, GD2, GD3, GD4, B2, AI, EC, GC, W, B3,

Info for manual annotations of cluster AI:
•Start number 5 was manually annotated 2 times for cluster AI.

Info for manual annotations of cluster B2:
•Start number 7 was manually annotated 37 times for cluster B2.

Info for manual annotations of cluster B3:
•Start number 6 was manually annotated 53 times for cluster B3.

Info for manual annotations of cluster EC:
•Start number 5 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster GC:
•Start number 5 was manually annotated 2 times for cluster GC.

Info for manual annotations of cluster GD1:
•Start number 4 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 4 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 4 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 4 was manually annotated 1 time for cluster GD4.

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

Gene Information:

Gene: A3Wally_90 Start: 47909, Stop: 48949, Start Num: 4
Candidate Starts for A3Wally_90:
(Start: 4 @47909 has 7 MA's), (11, 47945), (18, 48026), (19, 48032), (27, 48140), (37, 48296), (43, 48407), (68, 48680), (89, 48908),

Gene: Abinghost_21 Start: 16357, Stop: 17436, Start Num: 6
Candidate Starts for Abinghost_21:
(Start: 6 @16357 has 53 MA's), (9, 16375), (12, 16393), (17, 16453), (20, 16489), (33, 16693), (46, 16870), (57, 16984), (58, 17008), (69, 17137), (84, 17290), (91, 17359), (93, 17377), (95, 17395),

Gene: Akoma_21 Start: 16357, Stop: 17436, Start Num: 6
Candidate Starts for Akoma_21:
(Start: 6 @16357 has 53 MA's), (9, 16375), (12, 16393), (17, 16453), (20, 16489), (33, 16693), (46, 16870), (57, 16984), (58, 17008), (69, 17137), (84, 17290), (91, 17359), (93, 17377), (95, 17395),

Gene: Allegro_21 Start: 17579, Stop: 18655, Start Num: 7
Candidate Starts for Allegro_21:
(Start: 7 @17579 has 37 MA's), (9, 17594), (10, 17597), (21, 17711), (24, 17756), (34, 17930), (36, 17936), (38, 17978), (39, 18005), (46, 18089), (50, 18125), (52, 18155), (59, 18242), (63, 18272), (69, 18350), (73, 18383), (74, 18392), (83, 18497), (90, 18566), (91, 18575), (94, 18596), (96, 18644),

Gene: Arbiter_21 Start: 17666, Stop: 18742, Start Num: 7
Candidate Starts for Arbiter_21:

(Start: 7 @17666 has 37 MA's), (9, 17681), (10, 17684), (21, 17798), (24, 17843), (34, 18017), (36, 18023), (38, 18065), (39, 18092), (46, 18176), (50, 18212), (52, 18242), (58, 18314), (59, 18329), (63, 18359), (69, 18437), (73, 18470), (74, 18479), (83, 18584), (90, 18653), (91, 18662), (94, 18683), (96, 18731),

Gene: Ares_21 Start: 17579, Stop: 18658, Start Num: 7
Candidate Starts for Ares_21:
(Start: 7 @17579 has 37 MA's), (9, 17594), (10, 17597), (21, 17711), (24, 17756), (34, 17930), (36, 17936), (38, 17978), (39, 18005), (46, 18089), (50, 18125), (52, 18155), (59, 18242), (63, 18272), (69, 18350), (73, 18383), (74, 18392), (83, 18497), (90, 18566), (91, 18575), (96, 18644),

Gene: Argie_16 Start: 15691, Stop: 16797, Start Num: 8
Candidate Starts for Argie_16:
(3, 15613), (Start: 8 @15691 has 8 MA's), (10, 15706), (12, 15721), (17, 15781), (21, 15820), (22, 15838), (24, 15865), (25, 15871), (32, 16003), (34, 16039), (35, 16042), (38, 16087), (52, 16264), (59, 16360), (61, 16375), (63, 16390), (69, 16465), (81, 16615), (83, 16630), (86, 16669), (94, 16732), (97, 16792),

Gene: Athena_22 Start: 17120, Stop: 18199, Start Num: 6
Candidate Starts for Athena_22:
(Start: 6 @17120 has 53 MA's), (9, 17138), (12, 17156), (17, 17216), (20, 17252), (33, 17456), (46, 17633), (57, 17747), (58, 17771), (69, 17900), (84, 18053), (91, 18122), (93, 18140), (95, 18158),

Gene: Audrey_21 Start: 16357, Stop: 17436, Start Num: 6
Candidate Starts for Audrey_21:
(Start: 6 @16357 has 53 MA's), (9, 16375), (12, 16393), (17, 16453), (20, 16489), (33, 16693), (46, 16870), (57, 16984), (58, 17008), (69, 17137), (84, 17290), (91, 17359), (93, 17377), (95, 17395),

Gene: Baloo_21 Start: 16354, Stop: 17433, Start Num: 6
Candidate Starts for Baloo_21:
(Start: 6 @16354 has 53 MA's), (9, 16372), (12, 16390), (17, 16450), (20, 16486), (33, 16690), (46, 16867), (57, 16981), (58, 17005), (69, 17134), (84, 17287), (91, 17356), (93, 17374), (95, 17392),

Gene: Bananafish_21 Start: 17576, Stop: 18652, Start Num: 7
Candidate Starts for Bananafish_21:
(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (94, 18593), (96, 18641),

Gene: Ben11_20 Start: 16181, Stop: 17260, Start Num: 6
Candidate Starts for Ben11_20:
(Start: 6 @16181 has 53 MA's), (9, 16199), (12, 16217), (17, 16277), (20, 16313), (33, 16517), (46, 16694), (57, 16808), (58, 16832), (69, 16961), (84, 17114), (91, 17183), (93, 17201), (95, 17219),

Gene: Bernardo_21 Start: 16356, Stop: 17435, Start Num: 6
Candidate Starts for Bernardo_21:
(Start: 6 @16356 has 53 MA's), (9, 16374), (12, 16392), (17, 16452), (20, 16488), (33, 16692), (46, 16869), (57, 16983), (58, 17007), (69, 17136), (84, 17289), (91, 17358), (93, 17376), (95, 17394),

Gene: Big4_79 Start: 46745, Stop: 47785, Start Num: 4
Candidate Starts for Big4_79:
(Start: 4 @46745 has 7 MA's), (11, 46781), (18, 46862), (19, 46868), (27, 46976), (37, 47132), (67, 47513), (87, 47720), (92, 47765),

Gene: Blocker23_21 Start: 17696, Stop: 18775, Start Num: 7
Candidate Starts for Blocker23_21:
(Start: 7 @17696 has 37 MA's), (9, 17711), (10, 17714), (21, 17828), (24, 17873), (34, 18047), (36, 18053), (38, 18095), (39, 18122), (46, 18206), (50, 18242), (52, 18272), (59, 18359), (63, 18389), (69, 18467), (73, 18500), (74, 18509), (83, 18614), (90, 18683), (91, 18692), (96, 18761),

Gene: Boyle_21 Start: 17697, Stop: 18776, Start Num: 7
Candidate Starts for Boyle_21:
(Start: 7 @17697 has 37 MA's), (9, 17712), (10, 17715), (21, 17829), (24, 17874), (34, 18048), (36, 18054), (38, 18096), (39, 18123), (46, 18207), (50, 18243), (52, 18273), (59, 18360), (63, 18390), (69, 18468), (73, 18501), (74, 18510), (83, 18615), (90, 18684), (91, 18693), (96, 18762),

Gene: Briakila_21 Start: 17122, Stop: 18201, Start Num: 6
Candidate Starts for Briakila_21:
(Start: 6 @17122 has 53 MA's), (9, 17140), (12, 17158), (17, 17218), (20, 17254), (33, 17458), (46, 17635), (57, 17749), (58, 17773), (69, 17902), (84, 18055), (91, 18124), (93, 18142), (95, 18160),

Gene: Brownie5_21 Start: 17696, Stop: 18775, Start Num: 7
Candidate Starts for Brownie5_21:
(Start: 7 @17696 has 37 MA's), (9, 17711), (10, 17714), (21, 17828), (24, 17873), (34, 18047), (36, 18053), (38, 18095), (39, 18122), (46, 18206), (50, 18242), (52, 18272), (59, 18359), (63, 18389), (69, 18467), (73, 18500), (74, 18509), (83, 18614), (90, 18683), (91, 18692), (96, 18761),

Gene: Calamitous_21 Start: 17576, Stop: 18655, Start Num: 7
Candidate Starts for Calamitous_21:
(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (94, 18593), (96, 18641),

Gene: Casbah_20 Start: 16209, Stop: 17288, Start Num: 6
Candidate Starts for Casbah_20:
(Start: 6 @16209 has 53 MA's), (9, 16227), (12, 16245), (17, 16305), (20, 16341), (33, 16545), (46, 16722), (57, 16836), (58, 16860), (69, 16989), (84, 17142), (91, 17211), (93, 17229), (95, 17247),

Gene: Causa_27 Start: 18877, Stop: 19983, Start Num: 5
Candidate Starts for Causa_27:
(Start: 5 @18877 has 6 MA's), (9, 18898), (10, 18901), (13, 18946), (23, 19039), (46, 19393), (47, 19408), (50, 19429), (58, 19531), (72, 19687), (78, 19738),

Gene: Cece_73 Start: 42820, Stop: 43860, Start Num: 4
Candidate Starts for Cece_73:
(Start: 4 @42820 has 7 MA's), (11, 42856), (18, 42937), (19, 42943), (27, 43051), (37, 43207), (49, 43372), (67, 43588), (82, 43741),

Gene: Cepens_15 Start: 15415, Stop: 16521, Start Num: 8
Candidate Starts for Cepens_15:
(3, 15337), (Start: 8 @15415 has 8 MA's), (10, 15430), (12, 15445), (17, 15505), (21, 15544), (22, 15562), (24, 15589), (25, 15595), (32, 15727), (34, 15763), (35, 15766), (38, 15811), (44, 15910), (52, 15988), (59, 16084), (61, 16099), (63, 16114), (69, 16189), (81, 16339), (83, 16354), (86, 16393), (94, 16456), (97, 16516),

Gene: ChaChing_21 Start: 16372, Stop: 17451, Start Num: 6

Candidate Starts for ChaChing_21:
(Start: 6 @16372 has 53 MA's), (9, 16390), (12, 16408), (17, 16468), (20, 16504), (33, 16708), (46, 16885), (57, 16999), (58, 17023), (69, 17152), (84, 17305), (91, 17374), (93, 17392), (95, 17410),

Gene: Chalmers_21 Start: 17165, Stop: 18244, Start Num: 6
Candidate Starts for Chalmers_21:
(Start: 6 @17165 has 53 MA's), (9, 17183), (12, 17201), (17, 17261), (20, 17297), (33, 17501), (46, 17678), (57, 17792), (58, 17816), (69, 17945), (84, 18098), (91, 18167), (93, 18185), (95, 18203),

Gene: Chandler_21 Start: 17131, Stop: 18210, Start Num: 6
Candidate Starts for Chandler_21:
(Start: 6 @17131 has 53 MA's), (9, 17149), (12, 17167), (17, 17227), (20, 17263), (33, 17467), (46, 17644), (57, 17758), (58, 17782), (69, 17911), (84, 18064), (91, 18133), (93, 18151), (95, 18169),

Gene: Chentzyk_20 Start: 16227, Stop: 17306, Start Num: 6
Candidate Starts for Chentzyk_20:
(Start: 6 @16227 has 53 MA's), (9, 16245), (12, 16263), (17, 16323), (20, 16359), (33, 16563), (46, 16740), (57, 16854), (58, 16878), (69, 17007), (84, 17160), (91, 17229), (93, 17247), (95, 17265),

Gene: Coffee_21 Start: 17693, Stop: 18769, Start Num: 7
Candidate Starts for Coffee_21:
(Start: 7 @17693 has 37 MA's), (9, 17708), (10, 17711), (21, 17825), (24, 17870), (34, 18044), (36, 18050), (38, 18092), (39, 18119), (46, 18203), (50, 18239), (52, 18269), (59, 18356), (63, 18386), (69, 18464), (73, 18497), (74, 18506), (83, 18611), (90, 18680), (91, 18689), (94, 18710), (96, 18758),

Gene: Compostia_22 Start: 16790, Stop: 17869, Start Num: 6
Candidate Starts for Compostia_22:
(Start: 6 @16790 has 53 MA's), (9, 16808), (12, 16826), (17, 16886), (20, 16922), (33, 17126), (46, 17303), (57, 17417), (58, 17441), (69, 17570), (84, 17723), (91, 17792), (93, 17810), (95, 17828),

Gene: Corofin_21 Start: 16382, Stop: 17461, Start Num: 6
Candidate Starts for Corofin_21:
(Start: 6 @16382 has 53 MA's), (9, 16400), (12, 16418), (17, 16478), (20, 16514), (33, 16718), (46, 16895), (57, 17009), (58, 17033), (69, 17162), (84, 17315), (91, 17384), (93, 17402), (95, 17420),

Gene: D12_15 Start: 15408, Stop: 16514, Start Num: 8
Candidate Starts for D12_15:
(3, 15330), (Start: 8 @15408 has 8 MA's), (10, 15423), (12, 15438), (17, 15498), (21, 15537), (22, 15555), (24, 15582), (25, 15588), (32, 15720), (34, 15756), (35, 15759), (38, 15804), (44, 15903), (52, 15981), (59, 16077), (63, 16107), (69, 16182), (81, 16332), (83, 16347), (86, 16386), (94, 16449), (97, 16509),

Gene: Daisy_21 Start: 16378, Stop: 17457, Start Num: 6
Candidate Starts for Daisy_21:
(Start: 6 @16378 has 53 MA's), (9, 16396), (12, 16414), (17, 16474), (20, 16510), (33, 16714), (46, 16891), (57, 17005), (58, 17029), (69, 17158), (84, 17311), (91, 17380), (93, 17398), (95, 17416),

Gene: Deenasa_21 Start: 17120, Stop: 18199, Start Num: 6
Candidate Starts for Deenasa_21:
(Start: 6 @17120 has 53 MA's), (9, 17138), (12, 17156), (17, 17216), (20, 17252), (33, 17456), (46, 17633), (57, 17747), (58, 17771), (69, 17900), (84, 18053), (91, 18122), (93, 18140), (95, 18158),

Gene: Devonte_21 Start: 16357, Stop: 17436, Start Num: 6

Candidate Starts for Devonte_21:
(Start: 6 @16357 has 53 MA's), (9, 16375), (12, 16393), (17, 16453), (20, 16489), (33, 16693), (46, 16870), (57, 16984), (58, 17008), (69, 17137), (84, 17290), (91, 17359), (93, 17377), (95, 17395),

Gene: Dewdrop_63 Start: 33239, Stop: 34438, Start Num: 5
Candidate Starts for Dewdrop_63:
(1, 32990), (Start: 5 @33239 has 6 MA's), (25, 33425), (28, 33485), (29, 33509), (31, 33548), (41, 33680), (42, 33692), (51, 33779), (53, 33797), (60, 33878), (64, 33929), (66, 33956), (67, 33974), (70, 34007), (71, 34013), (77, 34055), (80, 34097), (85, 34151), (88, 34184), (98, 34385), (99, 34403),

Gene: Dodo_92 Start: 48231, Stop: 49271, Start Num: 4
Candidate Starts for Dodo_92:
(Start: 4 @48231 has 7 MA's), (11, 48267), (18, 48348), (19, 48354), (27, 48462), (37, 48618), (43, 48729), (89, 49230),

Gene: Eaglehorse_21 Start: 17600, Stop: 18676, Start Num: 7
Candidate Starts for Eaglehorse_21:
(Start: 7 @17600 has 37 MA's), (9, 17615), (10, 17618), (21, 17732), (24, 17777), (34, 17951), (36, 17957), (38, 17999), (39, 18026), (46, 18110), (50, 18146), (52, 18176), (59, 18263), (63, 18293), (69, 18371), (73, 18404), (74, 18413), (83, 18518), (90, 18587), (91, 18596), (94, 18617), (96, 18665),

Gene: Erasmago_81 Start: 44400, Stop: 45440, Start Num: 4
Candidate Starts for Erasmago_81:
(Start: 4 @44400 has 7 MA's), (11, 44436), (18, 44517), (19, 44523), (27, 44631), (37, 44787), (67, 45168), (69, 45183), (87, 45375), (92, 45420),

Gene: Faze9_21 Start: 17693, Stop: 18772, Start Num: 7
Candidate Starts for Faze9_21:
(Start: 7 @17693 has 37 MA's), (9, 17708), (10, 17711), (21, 17825), (24, 17870), (34, 18044), (36, 18050), (38, 18092), (39, 18119), (46, 18203), (50, 18239), (52, 18269), (58, 18341), (59, 18356), (63, 18386), (69, 18464), (73, 18497), (74, 18506), (83, 18611), (90, 18680), (91, 18689), (96, 18758),

Gene: FrenchFry_21 Start: 17696, Stop: 18775, Start Num: 7
Candidate Starts for FrenchFry_21:
(Start: 7 @17696 has 37 MA's), (9, 17711), (10, 17714), (21, 17828), (24, 17873), (34, 18047), (36, 18053), (38, 18095), (39, 18122), (46, 18206), (50, 18242), (52, 18272), (58, 18344), (59, 18359), (63, 18389), (69, 18467), (73, 18500), (74, 18509), (83, 18614), (90, 18683), (91, 18692), (96, 18761),

Gene: Gadjet_22 Start: 16361, Stop: 17440, Start Num: 6
Candidate Starts for Gadjet_22:
(Start: 6 @16361 has 53 MA's), (9, 16379), (12, 16397), (17, 16457), (20, 16493), (33, 16697), (46, 16874), (57, 16988), (58, 17012), (69, 17141), (84, 17294), (91, 17363), (93, 17381), (95, 17399),

Gene: Gervas_21 Start: 16340, Stop: 17419, Start Num: 6
Candidate Starts for Gervas_21:
(Start: 6 @16340 has 53 MA's), (9, 16358), (12, 16376), (17, 16436), (20, 16472), (33, 16676), (46, 16853), (57, 16967), (58, 16991), (69, 17120), (84, 17273), (91, 17342), (93, 17360), (95, 17378),

Gene: Gina_31 Start: 16779, Stop: 17786, Start Num: 5
Candidate Starts for Gina_31:
(Start: 5 @16779 has 6 MA's), (14, 16851), (15, 16866), (16, 16872), (18, 16890), (21, 16914), (25, 16965), (26, 16977), (28, 17025), (31, 17085), (41, 17214), (42, 17226), (45, 17274), (52, 17328), (54, 17352), (55, 17361), (56, 17370), (64, 17466), (67, 17511), (71, 17553), (87, 17718),

Gene: Glass_21 Start: 17696, Stop: 18775, Start Num: 7
Candidate Starts for Glass_21:
(Start: 7 @17696 has 37 MA's), (9, 17711), (10, 17714), (21, 17828), (24, 17873), (34, 18047), (36, 18053), (38, 18095), (39, 18122), (46, 18206), (50, 18242), (52, 18272), (59, 18359), (63, 18389), (69, 18467), (73, 18500), (74, 18509), (83, 18614), (90, 18683), (91, 18692), (96, 18761),

Gene: GlenHope_22 Start: 16347, Stop: 17426, Start Num: 6
Candidate Starts for GlenHope_22:
(Start: 6 @16347 has 53 MA's), (9, 16365), (12, 16383), (17, 16443), (20, 16479), (33, 16683), (46, 16860), (57, 16974), (58, 16998), (69, 17127), (84, 17280), (91, 17349), (93, 17367), (95, 17385),

Gene: Glubnar_22 Start: 16362, Stop: 17441, Start Num: 6
Candidate Starts for Glubnar_22:
(Start: 6 @16362 has 53 MA's), (9, 16380), (12, 16398), (17, 16458), (20, 16494), (33, 16698), (46, 16875), (57, 16989), (58, 17013), (69, 17142), (84, 17295), (91, 17364), (93, 17382), (95, 17400),

Gene: GodPhather_16 Start: 15673, Stop: 16779, Start Num: 8
Candidate Starts for GodPhather_16:
(2, 15520), (3, 15595), (Start: 8 @15673 has 8 MA's), (10, 15688), (12, 15703), (17, 15763), (21, 15802), (22, 15820), (24, 15847), (25, 15853), (32, 15985), (34, 16021), (35, 16024), (38, 16069), (44, 16168), (52, 16246), (59, 16342), (61, 16357), (63, 16372), (69, 16447), (81, 16597), (83, 16612), (86, 16651), (94, 16714), (97, 16774),

Gene: Godines_21 Start: 17591, Stop: 18667, Start Num: 7
Candidate Starts for Godines_21:
(Start: 7 @17591 has 37 MA's), (9, 17606), (10, 17609), (21, 17723), (24, 17768), (30, 17876), (34, 17942), (38, 17990), (39, 18017), (46, 18101), (48, 18131), (50, 18137), (52, 18167), (59, 18254), (63, 18284), (69, 18362), (73, 18395), (74, 18404), (83, 18509), (90, 18578), (91, 18587), (94, 18608), (96, 18656),

Gene: Halfpint_20 Start: 16182, Stop: 17261, Start Num: 6
Candidate Starts for Halfpint_20:
(Start: 6 @16182 has 53 MA's), (9, 16200), (12, 16218), (17, 16278), (20, 16314), (33, 16518), (46, 16695), (57, 16809), (58, 16833), (69, 16962), (84, 17115), (91, 17184), (93, 17202), (95, 17220),

Gene: HarveySr_21 Start: 16334, Stop: 17413, Start Num: 6
Candidate Starts for HarveySr_21:
(Start: 6 @16334 has 53 MA's), (9, 16352), (12, 16370), (17, 16430), (20, 16466), (33, 16670), (46, 16847), (57, 16961), (58, 16985), (69, 17114), (84, 17267), (91, 17336), (93, 17354), (95, 17372),

Gene: Heathcliff_21 Start: 16319, Stop: 17398, Start Num: 6
Candidate Starts for Heathcliff_21:
(Start: 6 @16319 has 53 MA's), (9, 16337), (12, 16355), (17, 16415), (20, 16451), (33, 16655), (46, 16832), (57, 16946), (58, 16970), (69, 17099), (84, 17252), (91, 17321), (93, 17339), (95, 17357),

Gene: Hedgerow_21 Start: 17678, Stop: 18757, Start Num: 7
Candidate Starts for Hedgerow_21:
(Start: 7 @17678 has 37 MA's), (9, 17693), (10, 17696), (21, 17810), (24, 17855), (34, 18029), (36, 18035), (38, 18077), (39, 18104), (46, 18188), (50, 18224), (52, 18254), (59, 18341), (63, 18371), (69, 18449), (73, 18482), (74, 18491), (83, 18596), (90, 18665), (91, 18674), (96, 18743),

Gene: Holeinone_21 Start: 17578, Stop: 18654, Start Num: 7

Candidate Starts for Holeinone_21:
(Start: 7 @17578 has 37 MA's), (9, 17593), (10, 17596), (21, 17710), (34, 17929), (36, 17935), (38, 17977), (39, 18004), (46, 18088), (50, 18124), (52, 18154), (59, 18241), (63, 18271), (69, 18349), (73, 18382), (74, 18391), (83, 18496), (90, 18565), (91, 18574), (94, 18595), (96, 18643),

Gene: ItsyBitsy1_21 Start: 17570, Stop: 18646, Start Num: 7
Candidate Starts for ItsyBitsy1_21:
(Start: 7 @17570 has 37 MA's), (9, 17585), (10, 17588), (21, 17702), (24, 17747), (30, 17855), (34, 17921), (36, 17927), (38, 17969), (39, 17996), (46, 18080), (50, 18116), (52, 18146), (58, 18218), (59, 18233), (63, 18263), (69, 18341), (73, 18374), (74, 18383), (83, 18488), (90, 18557), (91, 18566), (94, 18587), (96, 18635),

Gene: Jackstina_20 Start: 16283, Stop: 17362, Start Num: 6
Candidate Starts for Jackstina_20:
(Start: 6 @16283 has 53 MA's), (9, 16301), (12, 16319), (17, 16379), (20, 16415), (33, 16619), (46, 16796), (57, 16910), (58, 16934), (69, 17063), (84, 17216), (91, 17285), (93, 17303), (95, 17321),

Gene: Jeon_15 Start: 15415, Stop: 16521, Start Num: 8
Candidate Starts for Jeon_15:
(2, 15262), (3, 15337), (Start: 8 @15415 has 8 MA's), (10, 15430), (12, 15445), (17, 15505), (21, 15544), (22, 15562), (24, 15589), (25, 15595), (32, 15727), (34, 15763), (35, 15766), (38, 15811), (44, 15910), (52, 15988), (59, 16084), (61, 16099), (63, 16114), (69, 16189), (81, 16339), (83, 16354), (86, 16393), (94, 16456), (97, 16516),

Gene: Kaleb_21 Start: 17696, Stop: 18772, Start Num: 7
Candidate Starts for Kaleb_21:
(Start: 7 @17696 has 37 MA's), (9, 17711), (10, 17714), (21, 17828), (24, 17873), (34, 18047), (36, 18053), (38, 18095), (39, 18122), (46, 18206), (50, 18242), (52, 18272), (59, 18359), (63, 18389), (69, 18467), (73, 18500), (74, 18509), (83, 18614), (90, 18683), (91, 18692), (94, 18713), (96, 18761),

Gene: Kamiyu_21 Start: 16328, Stop: 17407, Start Num: 6
Candidate Starts for Kamiyu_21:
(Start: 6 @16328 has 53 MA's), (9, 16346), (12, 16364), (17, 16424), (20, 16460), (33, 16664), (46, 16841), (57, 16955), (58, 16979), (69, 17108), (84, 17261), (91, 17330), (93, 17348), (95, 17366),

Gene: Kheth_21 Start: 17579, Stop: 18658, Start Num: 7
Candidate Starts for Kheth_21:
(Start: 7 @17579 has 37 MA's), (9, 17594), (10, 17597), (21, 17711), (24, 17756), (34, 17930), (36, 17936), (38, 17978), (39, 18005), (46, 18089), (50, 18125), (52, 18155), (59, 18242), (63, 18272), (69, 18350), (73, 18383), (74, 18392), (83, 18497), (90, 18566), (91, 18575), (96, 18644),

Gene: Kolhan_21 Start: 17576, Stop: 18655, Start Num: 7
Candidate Starts for Kolhan_21:
(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (58, 18224), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (96, 18641),

Gene: Kronus_20 Start: 16940, Stop: 18019, Start Num: 6
Candidate Starts for Kronus_20:
(Start: 6 @16940 has 53 MA's), (9, 16958), (12, 16976), (17, 17036), (20, 17072), (33, 17276), (46, 17453), (57, 17567), (58, 17591), (69, 17720), (84, 17873), (91, 17942), (93, 17960), (95, 17978),

Gene: Lars_21 Start: 17696, Stop: 18775, Start Num: 7

Candidate Starts for Lars_21:
(Start: 7 @17696 has 37 MA's), (9, 17711), (10, 17714), (21, 17828), (24, 17873), (34, 18047), (36, 18053), (38, 18095), (39, 18122), (46, 18206), (50, 18242), (52, 18272), (59, 18359), (63, 18389), (69, 18467), (73, 18500), (74, 18509), (83, 18614), (90, 18683), (91, 18692), (96, 18761),

Gene: Laurie_21 Start: 17574, Stop: 18650, Start Num: 7
Candidate Starts for Laurie_21:
(Start: 7 @17574 has 37 MA's), (9, 17589), (10, 17592), (21, 17706), (24, 17751), (34, 17925), (36, 17931), (38, 17973), (39, 18000), (46, 18084), (50, 18120), (52, 18150), (59, 18237), (63, 18267), (69, 18345), (73, 18378), (74, 18387), (83, 18492), (90, 18561), (91, 18570), (94, 18591), (96, 18639),

Gene: Leaf_63 Start: 33239, Stop: 34438, Start Num: 5
Candidate Starts for Leaf_63:
(1, 32990), (Start: 5 @33239 has 6 MA's), (25, 33425), (28, 33485), (29, 33509), (31, 33548), (41, 33680), (42, 33692), (51, 33779), (53, 33797), (60, 33878), (64, 33929), (66, 33956), (67, 33974), (70, 34007), (71, 34013), (77, 34055), (80, 34097), (85, 34151), (88, 34184), (98, 34385), (99, 34403),

Gene: Lephleur_21 Start: 17576, Stop: 18655, Start Num: 7
Candidate Starts for Lephleur_21:
(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (94, 18593), (96, 18641),

Gene: LestyG_21 Start: 16361, Stop: 17440, Start Num: 6
Candidate Starts for LestyG_21:
(Start: 6 @16361 has 53 MA's), (9, 16379), (12, 16397), (17, 16457), (20, 16493), (33, 16697), (46, 16874), (57, 16988), (58, 17012), (69, 17141), (84, 17294), (91, 17363), (93, 17381), (95, 17399),

Gene: LilSmirk_21 Start: 17576, Stop: 18655, Start Num: 7
Candidate Starts for LilSmirk_21:
(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (96, 18641),

Gene: LizLemon_21 Start: 17696, Stop: 18772, Start Num: 7
Candidate Starts for LizLemon_21:
(Start: 7 @17696 has 37 MA's), (9, 17711), (10, 17714), (21, 17828), (24, 17873), (34, 18047), (36, 18053), (38, 18095), (39, 18122), (46, 18206), (50, 18242), (52, 18272), (58, 18344), (59, 18359), (63, 18389), (69, 18467), (73, 18500), (74, 18509), (83, 18614), (90, 18683), (91, 18692), (94, 18713), (96, 18761),

Gene: Marley1013_21 Start: 17141, Stop: 18220, Start Num: 6
Candidate Starts for Marley1013_21:
(Start: 6 @17141 has 53 MA's), (9, 17159), (12, 17177), (17, 17237), (20, 17273), (33, 17477), (46, 17654), (57, 17768), (58, 17792), (69, 17921), (84, 18074), (91, 18143), (93, 18161), (95, 18179),

Gene: Marlia_21 Start: 16343, Stop: 17422, Start Num: 6
Candidate Starts for Marlia_21:
(Start: 6 @16343 has 53 MA's), (9, 16361), (12, 16379), (17, 16439), (20, 16475), (33, 16679), (46, 16856), (57, 16970), (58, 16994), (69, 17123), (84, 17276), (91, 17345), (93, 17363), (95, 17381),

Gene: MasterPo_21 Start: 17576, Stop: 18655, Start Num: 7
Candidate Starts for MasterPo_21:

(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (96, 18641),

Gene: Megabear_15 Start: 15358, Stop: 16464, Start Num: 8
Candidate Starts for Megabear_15:
(3, 15280), (Start: 8 @15358 has 8 MA's), (10, 15373), (12, 15388), (17, 15448), (21, 15487), (22, 15505), (24, 15532), (25, 15538), (32, 15670), (34, 15706), (35, 15709), (38, 15754), (44, 15853), (52, 15931), (59, 16027), (61, 16042), (63, 16057), (69, 16132), (81, 16282), (83, 16297), (86, 16336), (94, 16399), (97, 16459),

Gene: MmasiCarm_21 Start: 16354, Stop: 17433, Start Num: 6
Candidate Starts for MmasiCarm_21:
(Start: 6 @16354 has 53 MA's), (9, 16372), (12, 16390), (17, 16450), (20, 16486), (33, 16690), (46, 16867), (57, 16981), (58, 17005), (69, 17134), (84, 17287), (91, 17356), (93, 17374), (95, 17392),

Gene: Mortcellus_20 Start: 16995, Stop: 18074, Start Num: 6
Candidate Starts for Mortcellus_20:
(Start: 6 @16995 has 53 MA's), (9, 17013), (12, 17031), (17, 17091), (20, 17127), (33, 17331), (46, 17508), (57, 17622), (58, 17646), (69, 17775), (84, 17928), (91, 17997), (93, 18015), (95, 18033),

Gene: Morty007_21 Start: 17141, Stop: 18220, Start Num: 6
Candidate Starts for Morty007_21:
(Start: 6 @17141 has 53 MA's), (9, 17159), (12, 17177), (17, 17237), (20, 17273), (33, 17477), (46, 17654), (57, 17768), (58, 17792), (69, 17921), (84, 18074), (91, 18143), (93, 18161), (95, 18179),

Gene: Mulaychimus_21 Start: 16334, Stop: 17413, Start Num: 6
Candidate Starts for Mulaychimus_21:
(Start: 6 @16334 has 53 MA's), (9, 16352), (12, 16370), (17, 16430), (20, 16466), (33, 16670), (46, 16847), (57, 16961), (58, 16985), (69, 17114), (84, 17267), (91, 17336), (93, 17354), (95, 17372),

Gene: Neos5_21 Start: 17149, Stop: 18228, Start Num: 6
Candidate Starts for Neos5_21:
(Start: 6 @17149 has 53 MA's), (9, 17167), (12, 17185), (17, 17245), (20, 17281), (33, 17485), (46, 17662), (57, 17776), (58, 17800), (69, 17929), (84, 18082), (91, 18151), (93, 18169), (95, 18187),

Gene: Nozo_21 Start: 17119, Stop: 18198, Start Num: 6
Candidate Starts for Nozo_21:
(Start: 6 @17119 has 53 MA's), (9, 17137), (12, 17155), (17, 17215), (20, 17251), (33, 17455), (46, 17632), (57, 17746), (58, 17770), (69, 17899), (84, 18052), (91, 18121), (93, 18139), (95, 18157),

Gene: Obutu_21 Start: 16352, Stop: 17431, Start Num: 6
Candidate Starts for Obutu_21:
(Start: 6 @16352 has 53 MA's), (9, 16370), (12, 16388), (17, 16448), (20, 16484), (33, 16688), (46, 16865), (57, 16979), (58, 17003), (69, 17132), (84, 17285), (91, 17354), (93, 17372), (95, 17390),

Gene: Olivio_20 Start: 16206, Stop: 17285, Start Num: 6
Candidate Starts for Olivio_20:
(Start: 6 @16206 has 53 MA's), (9, 16224), (12, 16242), (17, 16302), (20, 16338), (33, 16542), (46, 16719), (57, 16833), (58, 16857), (69, 16986), (84, 17139), (91, 17208), (93, 17226), (95, 17244),

Gene: Opia_21 Start: 17576, Stop: 18655, Start Num: 7
Candidate Starts for Opia_21:

(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (96, 18641),

Gene: OrangeOswald_21 Start: 16357, Stop: 17436, Start Num: 6
Candidate Starts for OrangeOswald_21:
(Start: 6 @16357 has 53 MA's), (9, 16375), (12, 16393), (17, 16453), (20, 16489), (33, 16693), (46, 16870), (57, 16984), (58, 17008), (69, 17137), (84, 17290), (91, 17359), (93, 17377), (95, 17395),

Gene: PR_15 Start: 15385, Stop: 16491, Start Num: 8
Candidate Starts for PR_15:
(3, 15307), (Start: 8 @15385 has 8 MA's), (10, 15400), (12, 15415), (17, 15475), (21, 15514), (22, 15532), (24, 15559), (25, 15565), (32, 15697), (34, 15733), (35, 15736), (38, 15781), (44, 15880), (52, 15958), (59, 16054), (63, 16084), (69, 16159), (81, 16309), (83, 16324), (86, 16363), (94, 16426), (97, 16486),

Gene: PauloDiaboli_90 Start: 47266, Stop: 48306, Start Num: 4
Candidate Starts for PauloDiaboli_90:
(Start: 4 @47266 has 7 MA's), (11, 47302), (18, 47383), (19, 47389), (27, 47497), (37, 47653), (43, 47764), (89, 48265),

Gene: Phaedrus_20 Start: 16275, Stop: 17354, Start Num: 6
Candidate Starts for Phaedrus_20:
(Start: 6 @16275 has 53 MA's), (9, 16293), (12, 16311), (17, 16371), (20, 16407), (33, 16611), (46, 16788), (57, 16902), (58, 16926), (69, 17055), (84, 17208), (91, 17277), (93, 17295), (95, 17313),

Gene: Phantasmagoria_21 Start: 17576, Stop: 18652, Start Num: 7
Candidate Starts for Phantasmagoria_21:
(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (58, 18224), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (94, 18593), (96, 18641),

Gene: Phayeta_21 Start: 16233, Stop: 17312, Start Num: 6
Candidate Starts for Phayeta_21:
(Start: 6 @16233 has 53 MA's), (9, 16251), (12, 16269), (17, 16329), (20, 16365), (33, 16569), (46, 16746), (57, 16860), (58, 16884), (69, 17013), (84, 17166), (91, 17235), (93, 17253), (95, 17271),

Gene: Philly_20 Start: 16223, Stop: 17302, Start Num: 6
Candidate Starts for Philly_20:
(Start: 6 @16223 has 53 MA's), (9, 16241), (12, 16259), (17, 16319), (20, 16355), (33, 16559), (46, 16736), (57, 16850), (58, 16874), (69, 17003), (84, 17156), (91, 17225), (93, 17243), (95, 17261),

Gene: Phlyer_21 Start: 17092, Stop: 18171, Start Num: 6
Candidate Starts for Phlyer_21:
(Start: 6 @17092 has 53 MA's), (9, 17110), (12, 17128), (17, 17188), (20, 17224), (33, 17428), (46, 17605), (57, 17719), (58, 17743), (69, 17872), (84, 18025), (91, 18094), (93, 18112), (95, 18130),

Gene: Pipefish_21 Start: 17241, Stop: 18320, Start Num: 6
Candidate Starts for Pipefish_21:
(Start: 6 @17241 has 53 MA's), (9, 17259), (12, 17277), (17, 17337), (20, 17373), (33, 17577), (46, 17754), (57, 17868), (58, 17892), (69, 18021), (84, 18174), (91, 18243), (93, 18261), (95, 18279),

Gene: PrinceCharming_21 Start: 17696, Stop: 18772, Start Num: 7
Candidate Starts for PrinceCharming_21:
(Start: 7 @17696 has 37 MA's), (9, 17711), (10, 17714), (21, 17828), (24, 17873), (34, 18047), (36, 18053), (38, 18095), (39, 18122), (46, 18206), (50, 18242), (52, 18272), (59, 18359), (63, 18389), (69, 18467), (73, 18500), (74, 18509), (83, 18614), (90, 18683), (91, 18692), (94, 18713), (96, 18761),

Gene: Pumpernickel_87 Start: 48478, Stop: 49518, Start Num: 4
Candidate Starts for Pumpernickel_87:
(Start: 4 @48478 has 7 MA's), (18, 48595), (27, 48709), (40, 48916), (62, 49168), (65, 49216), (69, 49261), (79, 49357),

Gene: Qyrzula_20 Start: 17666, Stop: 18742, Start Num: 7
Candidate Starts for Qyrzula_20:
(Start: 7 @17666 has 37 MA's), (9, 17681), (10, 17684), (21, 17798), (24, 17843), (34, 18017), (36, 18023), (38, 18065), (39, 18092), (46, 18176), (50, 18212), (52, 18242), (58, 18314), (59, 18329), (63, 18359), (69, 18437), (73, 18470), (74, 18479), (83, 18584), (90, 18653), (91, 18662), (94, 18683), (96, 18731),

Gene: RagingRooster_21 Start: 16358, Stop: 17437, Start Num: 6
Candidate Starts for RagingRooster_21:
(Start: 6 @16358 has 53 MA's), (9, 16376), (12, 16394), (17, 16454), (20, 16490), (33, 16694), (46, 16871), (57, 16985), (58, 17009), (69, 17138), (84, 17291), (91, 17360), (93, 17378), (95, 17396),

Gene: Rhinoforte_21 Start: 17693, Stop: 18772, Start Num: 7
Candidate Starts for Rhinoforte_21:
(Start: 7 @17693 has 37 MA's), (9, 17708), (10, 17711), (21, 17825), (24, 17870), (34, 18044), (36, 18050), (38, 18092), (39, 18119), (46, 18203), (50, 18239), (52, 18269), (59, 18356), (63, 18386), (69, 18464), (73, 18497), (74, 18506), (83, 18611), (90, 18680), (91, 18689), (94, 18710), (96, 18758),

Gene: Rita1961_21 Start: 16353, Stop: 17432, Start Num: 6
Candidate Starts for Rita1961_21:
(Start: 6 @16353 has 53 MA's), (9, 16371), (12, 16389), (17, 16449), (20, 16485), (33, 16689), (46, 16866), (57, 16980), (58, 17004), (69, 17133), (84, 17286), (91, 17355), (93, 17373), (95, 17391),

Gene: RomaT_21 Start: 17139, Stop: 18218, Start Num: 6
Candidate Starts for RomaT_21:
(Start: 6 @17139 has 53 MA's), (9, 17157), (12, 17175), (17, 17235), (20, 17271), (33, 17475), (46, 17652), (57, 17766), (58, 17790), (69, 17919), (84, 18072), (91, 18141), (93, 18159), (95, 18177),

Gene: Rosebush_21 Start: 17693, Stop: 18772, Start Num: 7
Candidate Starts for Rosebush_21:
(Start: 7 @17693 has 37 MA's), (9, 17708), (10, 17711), (21, 17825), (24, 17870), (34, 18044), (36, 18050), (38, 18092), (39, 18119), (46, 18203), (50, 18239), (52, 18269), (59, 18356), (63, 18386), (69, 18464), (73, 18497), (74, 18506), (83, 18611), (90, 18680), (91, 18689), (96, 18758),

Gene: Sabella_21 Start: 17579, Stop: 18658, Start Num: 7
Candidate Starts for Sabella_21:
(Start: 7 @17579 has 37 MA's), (9, 17594), (10, 17597), (21, 17711), (24, 17756), (34, 17930), (36, 17936), (38, 17978), (39, 18005), (46, 18089), (50, 18125), (52, 18155), (59, 18242), (63, 18272), (69, 18350), (73, 18383), (74, 18392), (83, 18497), (90, 18566), (91, 18575), (96, 18644),

Gene: Shenandoah_21 Start: 16336, Stop: 17415, Start Num: 6
Candidate Starts for Shenandoah_21:

(Start: 6 @16336 has 53 MA's), (9, 16354), (12, 16372), (17, 16432), (20, 16468), (33, 16672), (46, 16849), (57, 16963), (58, 16987), (69, 17116), (84, 17269), (91, 17338), (93, 17356), (95, 17374),

Gene: Skugga_28 Start: 16797, Stop: 17804, Start Num: 5
Candidate Starts for Skugga_28:
(Start: 5 @16797 has 6 MA's), (14, 16869), (15, 16884), (18, 16908), (25, 16983), (26, 16995), (28, 17043), (31, 17103), (42, 17244), (45, 17292), (52, 17346), (54, 17370), (64, 17484), (67, 17529), (71, 17571), (75, 17604), (87, 17736),

Gene: SlippinJimmy_21 Start: 17122, Stop: 18201, Start Num: 6
Candidate Starts for SlippinJimmy_21:
(Start: 6 @17122 has 53 MA's), (9, 17140), (12, 17158), (17, 17218), (20, 17254), (33, 17458), (46, 17635), (57, 17749), (58, 17773), (69, 17902), (84, 18055), (91, 18124), (93, 18142), (95, 18160),

Gene: StAugustine_25 Start: 18871, Stop: 19977, Start Num: 5
Candidate Starts for StAugustine_25:
(Start: 5 @18871 has 6 MA's), (9, 18892), (10, 18895), (13, 18940), (23, 19033), (46, 19387), (47, 19402), (50, 19423), (58, 19525), (72, 19681), (76, 19726), (78, 19732),

Gene: SwainyDoc_21 Start: 16355, Stop: 17434, Start Num: 6
Candidate Starts for SwainyDoc_21:
(Start: 6 @16355 has 53 MA's), (9, 16373), (12, 16391), (17, 16451), (20, 16487), (33, 16691), (46, 16868), (57, 16982), (58, 17006), (69, 17135), (84, 17288), (91, 17357), (93, 17375), (95, 17393),

Gene: SynergyX_21 Start: 16358, Stop: 17437, Start Num: 6
Candidate Starts for SynergyX_21:
(Start: 6 @16358 has 53 MA's), (9, 16376), (12, 16394), (17, 16454), (20, 16490), (33, 16694), (46, 16871), (57, 16985), (58, 17009), (69, 17138), (84, 17291), (91, 17360), (93, 17378), (95, 17396),

Gene: TA17A_21 Start: 17576, Stop: 18652, Start Num: 7
Candidate Starts for TA17A_21:
(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (94, 18593), (96, 18641),

Gene: Taptic_15 Start: 15358, Stop: 16464, Start Num: 8
Candidate Starts for Taptic_15:
(3, 15280), (Start: 8 @15358 has 8 MA's), (10, 15373), (12, 15388), (17, 15448), (21, 15487), (22, 15505), (24, 15532), (25, 15538), (32, 15670), (34, 15706), (35, 15709), (38, 15754), (44, 15853), (52, 15931), (59, 16027), (61, 16042), (63, 16057), (69, 16132), (81, 16282), (83, 16297), (86, 16336), (94, 16399), (97, 16459),

Gene: Teamocil_31 Start: 16878, Stop: 17885, Start Num: 5
Candidate Starts for Teamocil_31:
(Start: 5 @16878 has 6 MA's), (14, 16950), (15, 16965), (16, 16971), (18, 16989), (21, 17013), (25, 17064), (26, 17076), (28, 17124), (31, 17184), (41, 17313), (42, 17325), (45, 17373), (52, 17427), (54, 17451), (55, 17460), (56, 17469), (64, 17565), (67, 17610), (71, 17652), (87, 17817),

Gene: Tinciduntsolum_22 Start: 17695, Stop: 18774, Start Num: 7
Candidate Starts for Tinciduntsolum_22:
(Start: 7 @17695 has 37 MA's), (9, 17710), (10, 17713), (21, 17827), (24, 17872), (34, 18046), (36, 18052), (38, 18094), (39, 18121), (46, 18205), (50, 18241), (52, 18271), (59, 18358), (63, 18388), (69, 18466), (73, 18499), (74, 18508), (83, 18613), (90, 18682), (91, 18691), (96, 18760),

Gene: TinyTerror_21 Start: 16357, Stop: 17436, Start Num: 6
Candidate Starts for TinyTerror_21:
(Start: 6 @16357 has 53 MA's), (9, 16375), (12, 16393), (17, 16453), (20, 16489), (33, 16693), (46, 16870), (57, 16984), (58, 17008), (69, 17137), (84, 17290), (91, 17359), (93, 17377), (95, 17395),

Gene: Tres_21 Start: 17576, Stop: 18655, Start Num: 7
Candidate Starts for Tres_21:
(Start: 7 @17576 has 37 MA's), (9, 17591), (10, 17594), (21, 17708), (24, 17753), (34, 17927), (36, 17933), (38, 17975), (39, 18002), (46, 18086), (50, 18122), (52, 18152), (59, 18239), (63, 18269), (69, 18347), (73, 18380), (74, 18389), (83, 18494), (90, 18563), (91, 18572), (96, 18641),

Gene: Tydolla_21 Start: 17095, Stop: 18174, Start Num: 6
Candidate Starts for Tydolla_21:
(Start: 6 @17095 has 53 MA's), (9, 17113), (12, 17131), (17, 17191), (20, 17227), (33, 17431), (46, 17608), (57, 17722), (58, 17746), (69, 17875), (84, 18028), (91, 18097), (93, 18115), (95, 18133),

Gene: Vic9_00021 Start: 18016, Stop: 19095, Start Num: 7
Candidate Starts for Vic9_00021:
(Start: 7 @18016 has 37 MA's), (9, 18031), (10, 18034), (21, 18148), (24, 18193), (34, 18367), (36, 18373), (38, 18415), (39, 18442), (46, 18526), (50, 18562), (52, 18592), (59, 18679), (63, 18709), (69, 18787), (73, 18820), (74, 18829), (83, 18934), (90, 19003), (91, 19012), (94, 19033), (96, 19081),

Gene: West99_21 Start: 17696, Stop: 18775, Start Num: 7
Candidate Starts for West99_21:
(Start: 7 @17696 has 37 MA's), (9, 17711), (10, 17714), (21, 17828), (24, 17873), (34, 18047), (36, 18053), (38, 18095), (39, 18122), (46, 18206), (50, 18242), (52, 18272), (59, 18359), (63, 18389), (69, 18467), (73, 18500), (74, 18509), (83, 18614), (90, 18683), (91, 18692), (96, 18761),

Gene: Yahalom_21 Start: 16369, Stop: 17448, Start Num: 6
Candidate Starts for Yahalom_21:
(Start: 6 @16369 has 53 MA's), (9, 16387), (12, 16405), (17, 16465), (20, 16501), (33, 16705), (46, 16882), (57, 16996), (58, 17020), (69, 17149), (84, 17302), (91, 17371), (93, 17389), (95, 17407),

Gene: Yinz_21 Start: 16396, Stop: 17475, Start Num: 6
Candidate Starts for Yinz_21:
(Start: 6 @16396 has 53 MA's), (9, 16414), (12, 16432), (17, 16492), (20, 16528), (33, 16732), (46, 16909), (57, 17023), (58, 17047), (69, 17176), (84, 17329), (91, 17398), (93, 17416), (95, 17434),

Gene: Zooman_75 Start: 45441, Stop: 46481, Start Num: 4
Candidate Starts for Zooman_75:
(Start: 4 @45441 has 7 MA's), (11, 45477), (18, 45558), (19, 45564), (27, 45672), (37, 45828), (67, 46209), (87, 46416), (92, 46461),