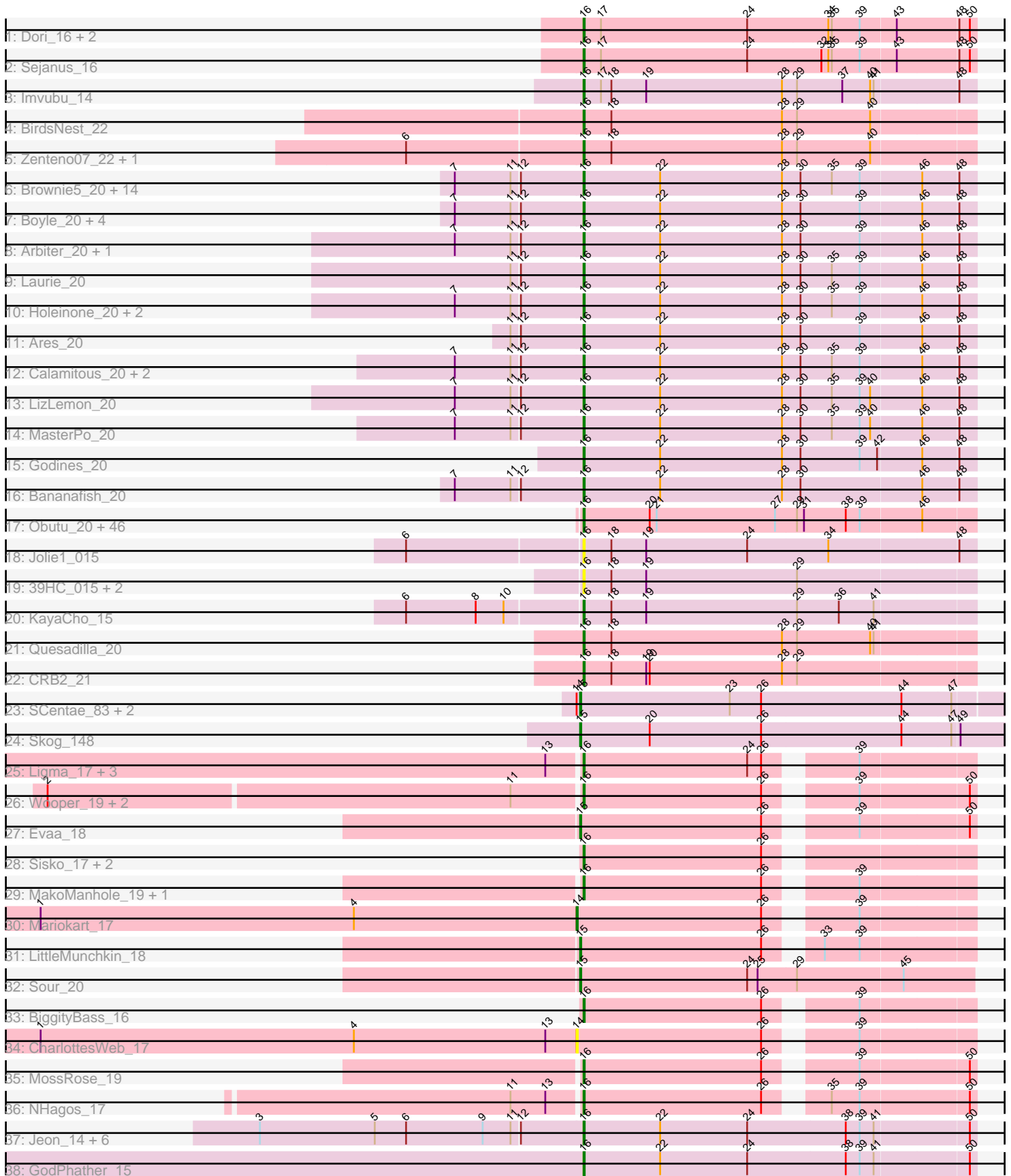


Pham 154560



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 154560 Report

This analysis was run 04/12/24 on database version 558.

Pham number 154560 has 128 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Dori_16, Mao1_15, Mask_16
- Track 2 : Sejanus_16
- Track 3 : Imvubu_14
- Track 4 : BirdsNest_22
- Track 5 : Zenteno07_22, Hashim76_22
- Track 6 : Brownie5_20, Eaglehorse_20, Opia_20, Lars_20, Hedgerow_20, Kaleb_20, Tinciduntolum_21, West99_20, TA17A_20, Sabella_20, Tres_20, Kheth_20, Lephleur_20, Rhinoforte_20, FrenchFry_20
- Track 7 : Boyle_20, Coffee_20, Rosebush_20, Phantasmagoria_20, Blocker23_20
- Track 8 : Arbitrator_20, Qyrzula_19
- Track 9 : Laurie_20
- Track 10 : Holeinone_20, Glass_20, Allegro_20
- Track 11 : Ares_20
- Track 12 : Calamitous_20, Faze9_20, ItsyBitsy1_20
- Track 13 : LizLemon_20
- Track 14 : MasterPo_20
- Track 15 : Godines_20
- Track 16 : Bananafish_20
- Track 17 : Obutu_20, Philly_19, Jackstina_19, Ben11_19, Bernardo_20, RagingRooster_20, GlenHope_21, Tydolla_20, Baloo_20, Gervas_20, Briakila_20, HarveySr_20, OrangeOswald_20, Morty007_20, RomaT_20, Audrey_20, Rita1961_20, Phlyer_20, Pipefish_20, ChaChing_20, Phayeta_20, Athena_21, Daisy_20, Marley1013_20, Devonte_20, Gadget_21, Neos5_20, Corofin_20, Heathcliff_20, Kronus_19, SynergyX_20, Akoma_20, LestyG_20, Halfpint_19, Mortcellus_19, Yahalom_20, Phaedrus_19, Casbah_19, SlippinJimmy_20, MmasiCarm_20, Yinz_20, Chandler_20, Compostia_21, Abinghost_20, Deenasa_20, Nozo_20, Kamiyu_20
- Track 18 : Jolie1_015
- Track 19 : 39HC_015, Hosp_013, 40BC_015
- Track 20 : KayaCho_15
- Track 21 : Quesadilla_20
- Track 22 : CRB2_21
- Track 23 : SCentae_83, CherryTomatoes_88, Pupper_85
- Track 24 : Skog_148
- Track 25 : Ligma_17, Axumite_17, Shatter_17, Fresco_17
- Track 26 : Wooper_19, AnarQue_19, CaiB_19
- Track 27 : Evaa_18

- Track 28 : Sisko_17, Yago84_17, AnClar_17
- Track 29 : MakoManhole_19, CloverMinnie_19
- Track 30 : Mariokart_17
- Track 31 : LittleMunchkin_18
- Track 32 : Sour_20
- Track 33 : BiggityBass_16
- Track 34 : CharlottesWeb_17
- Track 35 : MossRose_19
- Track 36 : NHagos_17
- Track 37 : Jeon_14, Taptic_14, PR_14, Argie_15, Megabear_14, Cepens_14, D12_14
- Track 38 : GodPhather_15

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

The start number called the most often in the published annotations is 16, it was called in 105 of the 112 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 39HC_015, 40BC_015, Abinghost_20, Akoma_20, Allegro_20, AnClar_17, AnarQue_19, Arbitrator_20, Ares_20, Argie_15, Athena_21, Audrey_20, Axumite_17, Baloo_20, Bananafish_20, Ben11_19, Bernardo_20, BiggityBass_16, BirdsNest_22, Blocker23_20, Boyle_20, Briakila_20, Brownie5_20, CRB2_21, CaiB_19, Calamitous_20, Casbah_19, Cepens_14, ChaChing_20, Chandler_20, CloverMinnie_19, Coffee_20, Compostia_21, Corofin_20, D12_14, Daisy_20, Deenasa_20, Devonte_20, Dori_16, Eaglehorse_20, Faze9_20, FrenchFry_20, Fresco_17, Gadget_21, Gervas_20, Glass_20, GlenHope_21, GodPhather_15, Godines_20, Halfpint_19, HarveySr_20, Hashim76_22, Heathcliff_20, Hedgerow_20, Holeinone_20, Hosp_013, Imvubu_14, ItsyBitsy1_20, Jackstina_19, Jeon_14, Jolie1_015, Kaleb_20, Kamiyu_20, KayaCho_15, Kheth_20, Kronus_19, Lars_20, Laurie_20, Lephleur_20, LestyG_20, Ligma_17, LizLemon_20, MakoManhole_19, Mao1_15, Marley1013_20, Mask_16, MasterPo_20, Megabear_14, MmasiCarm_20, Mortcellus_19, Morty007_20, MossRose_19, NHagos_17, Neos5_20, Nozo_20, Obutu_20, Opia_20, OrangeOswald_20, PR_14, Phaedrus_19, Phantasmagoria_20, Phayeta_20, Philly_19, Phlyer_20, Pipefish_20, Quesadilla_20, Qyrzula_19, RagingRooster_20, Rhinoforte_20, Rita1961_20, RomaT_20, Rosebush_20, Sabella_20, Sejanus_16, Shatter_17, Sisko_17, SlippinJimmy_20, SynergyX_20, TA17A_20, Taptic_14, Tinciduntolum_21, Tres_20, Tydolla_20, West99_20, Wooper_19, Yago84_17, Yahalom_20, Yinz_20, Zenteno07_22,

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

-

Genes that do not have the "Most Annotated" start:

- CharlottesWeb_17, CherryTomatoes_88, Evaa_18, LittleMunchkin_18, Mariokart_17, Pupper_85, SCentae_83, Skog_148, Sour_20,

Summary by start number:

Start 14:

- Found in 5 of 128 (3.9%) of genes in pham
- Manual Annotations of this start: 1 of 112
- Called 40.0% of time when present
- Phage (with cluster) where this start called: CharlottesWeb_17 (DR), Mariokart_17 (DR),

Start 15:

- Found in 7 of 128 (5.5%) of genes in pham
- Manual Annotations of this start: 6 of 112
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes_88 (DO), Evaa_18 (DR), LittleMunchkin_18 (DR), Pupper_85 (DO), SCentae_83 (DO), Skog_148 (DO), Sour_20 (DR),

Start 16:

- Found in 119 of 128 (93.0%) of genes in pham
- Manual Annotations of this start: 105 of 112
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC_015 (B6), 40BC_015 (B6), Abinghost_20 (B3), Akoma_20 (B3), Allegro_20 (B2), AnClar_17 (DR), AnarQue_19 (DR), Arbiter_20 (B2), Ares_20 (B2), Argie_15 (W), Athena_21 (B3), Audrey_20 (B3), Axumite_17 (DR), Baloo_20 (B3), Bananafish_20 (B2), Ben11_19 (B3), Bernardo_20 (B3), BiggityBass_16 (DR), BirdsNest_22 (B13), Blocker23_20 (B2), Boyle_20 (B2), Briakila_20 (B3), Brownie5_20 (B2), CRB2_21 (B9), CaiB_19 (DR), Calamitous_20 (B2), Casbah_19 (B3), Cepens_14 (W), ChaChing_20 (B3), Chandler_20 (B3), CloverMinnie_19 (DR), Coffee_20 (B2), Compostia_21 (B3), Corofin_20 (B3), D12_14 (W), Daisy_20 (B3), Deenasa_20 (B3), Devonte_20 (B3), Dori_16 (AD), Eaglehorse_20 (B2), Faze9_20 (B2), FrenchFry_20 (B2), Fresco_17 (DR), Gadget_21 (B3), Gervas_20 (B3), Glass_20 (B2), GlenHope_21 (B3), GodPhather_15 (W), Godines_20 (B2), Halfpint_19 (B3), HarveySr_20 (B3), Hashim76_22 (B13), Heathcliff_20 (B3), Hedgerow_20 (B2), Holeinone_20 (B2), Hosp_013 (B6), Imvubu_14 (B10), ItsyBitsy1_20 (B2), Jackstina_19 (B3), Jeon_14 (W), Jolie1_015 (B6), Kaleb_20 (B2), Kamiyu_20 (B3), KayaCho_15 (B6), Kheth_20 (B2), Kronus_19 (B3), Lars_20 (B2), Laurie_20 (B2), Lephleur_20 (B2), LestyG_20 (B3), Ligma_17 (DR), LizLemon_20 (B2), MakoManhole_19 (DR), Mao1_15 (AD), Marley1013_20 (B3), Mask_16 (AD), MasterPo_20 (B2), Megabear_14 (W), MmasiCarm_20 (B3), Mortcellus_19 (B3), Morty007_20 (B3), MossRose_19 (DR), NHagos_17 (DR), Neos5_20 (B3), Nozo_20 (B3), Obutu_20 (B3), Opia_20 (B2), OrangeOswald_20 (B3), PR_14 (W), Phaedrus_19 (B3), Phantasmagoria_20 (B2), Phayeta_20 (B3), Philly_19 (B3), Phlyer_20 (B3), Pipefish_20 (B3), Quesadilla_20 (B9), Qyrzula_19 (B2), RagingRooster_20 (B3), Rhinoforte_20 (B2), Rita1961_20 (B3), RomaT_20 (B3), Rosebush_20 (B2), Sabella_20 (B2), Sejanus_16 (AD), Shatter_17 (DR), Sisko_17 (DR), SlippinJimmy_20 (B3), SynergyX_20 (B3), TA17A_20 (B2), Taptic_14 (W), Tinciduntolum_21 (B2), Tres_20 (B2), Tydolla_20 (B3), West99_20 (B2), Wooper_19 (DR), Yago84_17 (DR), Yahalom_20 (B3), Yinz_20 (B3), Zenteno07_22 (B13),

Summary by clusters:

There are 10 clusters represented in this pham: DO, B2, W, B6, B13, B10, B3, DR, B9, AD,

Info for manual annotations of cluster AD:

- Start number 16 was manually annotated 3 times for cluster AD.

Info for manual annotations of cluster B10:

- Start number 16 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B13:

- Start number 16 was manually annotated 2 times for cluster B13.

Info for manual annotations of cluster B2:

- Start number 16 was manually annotated 32 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 16 was manually annotated 44 times for cluster B3.

Info for manual annotations of cluster B6:

- Start number 16 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B9:

- Start number 16 was manually annotated 2 times for cluster B9.

Info for manual annotations of cluster DO:

- Start number 15 was manually annotated 3 times for cluster DO.

Info for manual annotations of cluster DR:

- Start number 14 was manually annotated 1 time for cluster DR.
- Start number 15 was manually annotated 3 times for cluster DR.
- Start number 16 was manually annotated 12 times for cluster DR.

Info for manual annotations of cluster W:

- Start number 16 was manually annotated 8 times for cluster W.

Gene Information:

Gene: 39HC_015 Start: 14564, Stop: 14896, Start Num: 16

Candidate Starts for 39HC_015:

(Start: 16 @14564 has 105 MA's), (18, 14588), (19, 14618), (29, 14747),

Gene: 40BC_015 Start: 14564, Stop: 14896, Start Num: 16

Candidate Starts for 40BC_015:

(Start: 16 @14564 has 105 MA's), (18, 14588), (19, 14618), (29, 14747),

Gene: Abinghost_20 Start: 15937, Stop: 16269, Start Num: 16

Candidate Starts for Abinghost_20:

(Start: 16 @15937 has 105 MA's), (20, 15994), (21, 16000), (27, 16102), (29, 16120), (31, 16126), (38, 16162), (39, 16174), (46, 16225),

Gene: Akoma_20 Start: 15937, Stop: 16269, Start Num: 16

Candidate Starts for Akoma_20:

(Start: 16 @15937 has 105 MA's), (20, 15994), (21, 16000), (27, 16102), (29, 16120), (31, 16126), (38, 16162), (39, 16174), (46, 16225),

Gene: Allegro_20 Start: 17157, Stop: 17489, Start Num: 16

Candidate Starts for Allegro_20:

(7, 17055), (11, 17103), (12, 17109), (Start: 16 @17157 has 105 MA's), (22, 17223), (28, 17328), (30, 17343), (35, 17370), (39, 17394), (46, 17445), (48, 17475),

Gene: AnClar_17 Start: 15101, Stop: 15412, Start Num: 16

Candidate Starts for AnClar_17:

(Start: 16 @15101 has 105 MA's), (26, 15254),

Gene: AnarQue_19 Start: 15725, Stop: 16036, Start Num: 16

Candidate Starts for AnarQue_19:

(2, 15275), (11, 15668), (Start: 16 @15725 has 105 MA's), (26, 15878), (39, 15941), (50, 16031),

Gene: Arbiter_20 Start: 17244, Stop: 17576, Start Num: 16

Candidate Starts for Arbiter_20:

(7, 17142), (11, 17190), (12, 17196), (Start: 16 @17244 has 105 MA's), (22, 17310), (28, 17415), (30, 17430), (39, 17481), (46, 17532), (48, 17562),

Gene: Ares_20 Start: 17157, Stop: 17489, Start Num: 16

Candidate Starts for Ares_20:

(11, 17103), (12, 17109), (Start: 16 @17157 has 105 MA's), (22, 17223), (28, 17328), (30, 17343), (39, 17394), (46, 17445), (48, 17475),

Gene: Argie_15 Start: 15255, Stop: 15587, Start Num: 16

Candidate Starts for Argie_15:

(3, 14985), (5, 15084), (6, 15111), (9, 15177), (11, 15201), (12, 15207), (Start: 16 @15255 has 105 MA's), (22, 15321), (24, 15396), (38, 15480), (39, 15492), (41, 15504), (50, 15582),

Gene: Athena_21 Start: 16700, Stop: 17032, Start Num: 16

Candidate Starts for Athena_21:

(Start: 16 @16700 has 105 MA's), (20, 16757), (21, 16763), (27, 16865), (29, 16883), (31, 16889), (38, 16925), (39, 16937), (46, 16988),

Gene: Audrey_20 Start: 15937, Stop: 16269, Start Num: 16

Candidate Starts for Audrey_20:

(Start: 16 @15937 has 105 MA's), (20, 15994), (21, 16000), (27, 16102), (29, 16120), (31, 16126), (38, 16162), (39, 16174), (46, 16225),

Gene: Axumite_17 Start: 14287, Stop: 14598, Start Num: 16

Candidate Starts for Axumite_17:

(13, 14260), (Start: 16 @14287 has 105 MA's), (24, 14428), (26, 14440), (39, 14503),

Gene: Baloo_20 Start: 15934, Stop: 16266, Start Num: 16

Candidate Starts for Baloo_20:

(Start: 16 @15934 has 105 MA's), (20, 15991), (21, 15997), (27, 16099), (29, 16117), (31, 16123), (38, 16159), (39, 16171), (46, 16222),

Gene: Bananafish_20 Start: 17154, Stop: 17486, Start Num: 16

Candidate Starts for Bananafish_20:

(7, 17052), (11, 17100), (12, 17106), (Start: 16 @17154 has 105 MA's), (22, 17220), (28, 17325), (30, 17340), (46, 17442), (48, 17472),

Gene: Ben11_19 Start: 15761, Stop: 16093, Start Num: 16

Candidate Starts for Ben11_19:

(Start: 16 @15761 has 105 MA's), (20, 15818), (21, 15824), (27, 15926), (29, 15944), (31, 15950), (38, 15986), (39, 15998), (46, 16049),

Gene: Bernardo_20 Start: 15936, Stop: 16268, Start Num: 16

Candidate Starts for Bernardo_20:

(Start: 16 @15936 has 105 MA's), (20, 15993), (21, 15999), (27, 16101), (29, 16119), (31, 16125), (38, 16161), (39, 16173), (46, 16224),

Gene: BiggityBass_16 Start: 14198, Stop: 14509, Start Num: 16

Candidate Starts for BiggityBass_16:

(Start: 16 @14198 has 105 MA's), (26, 14351), (39, 14414),

Gene: BirdsNest_22 Start: 15252, Stop: 15584, Start Num: 16

Candidate Starts for BirdsNest_22:

(Start: 16 @15252 has 105 MA's), (18, 15276), (28, 15423), (29, 15435), (40, 15498),

Gene: Blocker23_20 Start: 17274, Stop: 17606, Start Num: 16

Candidate Starts for Blocker23_20:

(7, 17172), (11, 17220), (12, 17226), (Start: 16 @17274 has 105 MA's), (22, 17340), (28, 17445), (30, 17460), (39, 17511), (46, 17562), (48, 17592),

Gene: Boyle_20 Start: 17275, Stop: 17607, Start Num: 16

Candidate Starts for Boyle_20:

(7, 17173), (11, 17221), (12, 17227), (Start: 16 @17275 has 105 MA's), (22, 17341), (28, 17446), (30, 17461), (39, 17512), (46, 17563), (48, 17593),

Gene: Briakila_20 Start: 16702, Stop: 17034, Start Num: 16

Candidate Starts for Briakila_20:

(Start: 16 @16702 has 105 MA's), (20, 16759), (21, 16765), (27, 16867), (29, 16885), (31, 16891), (38, 16927), (39, 16939), (46, 16990),

Gene: Brownie5_20 Start: 17274, Stop: 17606, Start Num: 16

Candidate Starts for Brownie5_20:

(7, 17172), (11, 17220), (12, 17226), (Start: 16 @17274 has 105 MA's), (22, 17340), (28, 17445), (30, 17460), (35, 17487), (39, 17511), (46, 17562), (48, 17592),

Gene: CRB2_21 Start: 17511, Stop: 17843, Start Num: 16

Candidate Starts for CRB2_21:

(Start: 16 @17511 has 105 MA's), (18, 17535), (19, 17565), (20, 17568), (28, 17682), (29, 17694),

Gene: CaiB_19 Start: 15710, Stop: 16021, Start Num: 16

Candidate Starts for CaiB_19:

(2, 15260), (11, 15653), (Start: 16 @15710 has 105 MA's), (26, 15863), (39, 15926), (50, 16016),

Gene: Calamitous_20 Start: 17154, Stop: 17486, Start Num: 16

Candidate Starts for Calamitous_20:

(7, 17052), (11, 17100), (12, 17106), (Start: 16 @17154 has 105 MA's), (22, 17220), (28, 17325), (30, 17340), (35, 17367), (39, 17391), (46, 17442), (48, 17472),

Gene: Casbah_19 Start: 15789, Stop: 16121, Start Num: 16

Candidate Starts for Casbah_19:

(Start: 16 @15789 has 105 MA's), (20, 15846), (21, 15852), (27, 15954), (29, 15972), (31, 15978), (38, 16014), (39, 16026), (46, 16077),

Gene: Cepens_14 Start: 14979, Stop: 15311, Start Num: 16

Candidate Starts for Cepens_14:

(3, 14709), (5, 14808), (6, 14835), (9, 14901), (11, 14925), (12, 14931), (Start: 16 @14979 has 105 MA's), (22, 15045), (24, 15120), (38, 15204), (39, 15216), (41, 15228), (50, 15306),

Gene: ChaChing_20 Start: 15952, Stop: 16284, Start Num: 16

Candidate Starts for ChaChing_20:

(Start: 16 @15952 has 105 MA's), (20, 16009), (21, 16015), (27, 16117), (29, 16135), (31, 16141), (38, 16177), (39, 16189), (46, 16240),

Gene: Chandler_20 Start: 16711, Stop: 17043, Start Num: 16

Candidate Starts for Chandler_20:

(Start: 16 @16711 has 105 MA's), (20, 16768), (21, 16774), (27, 16876), (29, 16894), (31, 16900), (38, 16936), (39, 16948), (46, 16999),

Gene: CharlottesWeb_17 Start: 14197, Stop: 14514, Start Num: 14

Candidate Starts for CharlottesWeb_17:

(1, 13735), (4, 14005), (13, 14170), (Start: 14 @14197 has 1 MA's), (26, 14356), (39, 14419),

Gene: CherryTomatoes_88 Start: 32872, Stop: 33231, Start Num: 15

Candidate Starts for CherryTomatoes_88:

(Start: 14 @32869 has 1 MA's), (Start: 15 @32872 has 6 MA's), (23, 33001), (26, 33028), (44, 33148), (47, 33190),

Gene: CloverMinnie_19 Start: 15650, Stop: 15961, Start Num: 16

Candidate Starts for CloverMinnie_19:

(Start: 16 @15650 has 105 MA's), (26, 15803), (39, 15866),

Gene: Coffee_20 Start: 17271, Stop: 17603, Start Num: 16

Candidate Starts for Coffee_20:

(7, 17169), (11, 17217), (12, 17223), (Start: 16 @17271 has 105 MA's), (22, 17337), (28, 17442), (30, 17457), (39, 17508), (46, 17559), (48, 17589),

Gene: Compostia_21 Start: 16370, Stop: 16702, Start Num: 16

Candidate Starts for Compostia_21:

(Start: 16 @16370 has 105 MA's), (20, 16427), (21, 16433), (27, 16535), (29, 16553), (31, 16559), (38, 16595), (39, 16607), (46, 16658),

Gene: Corofin_20 Start: 15962, Stop: 16294, Start Num: 16

Candidate Starts for Corofin_20:

(Start: 16 @15962 has 105 MA's), (20, 16019), (21, 16025), (27, 16127), (29, 16145), (31, 16151), (38, 16187), (39, 16199), (46, 16250),

Gene: D12_14 Start: 14972, Stop: 15304, Start Num: 16

Candidate Starts for D12_14:

(3, 14702), (5, 14801), (6, 14828), (9, 14894), (11, 14918), (12, 14924), (Start: 16 @14972 has 105 MA's), (22, 15038), (24, 15113), (38, 15197), (39, 15209), (41, 15221), (50, 15299),

Gene: Daisy_20 Start: 15958, Stop: 16290, Start Num: 16

Candidate Starts for Daisy_20:

(Start: 16 @15958 has 105 MA's), (20, 16015), (21, 16021), (27, 16123), (29, 16141), (31, 16147), (38, 16183), (39, 16195), (46, 16246),

Gene: Deenasa_20 Start: 16700, Stop: 17032, Start Num: 16

Candidate Starts for Deenasa_20:

(Start: 16 @16700 has 105 MA's), (20, 16757), (21, 16763), (27, 16865), (29, 16883), (31, 16889), (38, 16925), (39, 16937), (46, 16988),

Gene: Devonte_20 Start: 15937, Stop: 16269, Start Num: 16

Candidate Starts for Devonte_20:

(Start: 16 @15937 has 105 MA's), (20, 15994), (21, 16000), (27, 16102), (29, 16120), (31, 16126), (38, 16162), (39, 16174), (46, 16225),

Gene: Dori_16 Start: 12908, Stop: 13240, Start Num: 16

Candidate Starts for Dori_16:

(Start: 16 @12908 has 105 MA's), (17, 12923), (24, 13049), (34, 13118), (35, 13121), (39, 13145), (43, 13175), (48, 13226), (50, 13235),

Gene: Eaglehorse_20 Start: 17178, Stop: 17510, Start Num: 16

Candidate Starts for Eaglehorse_20:

(7, 17076), (11, 17124), (12, 17130), (Start: 16 @17178 has 105 MA's), (22, 17244), (28, 17349), (30, 17364), (35, 17391), (39, 17415), (46, 17466), (48, 17496),

Gene: Evaa_18 Start: 15556, Stop: 15870, Start Num: 15

Candidate Starts for Evaa_18:

(Start: 15 @15556 has 6 MA's), (26, 15712), (39, 15775), (50, 15865),

Gene: Faze9_20 Start: 17271, Stop: 17603, Start Num: 16

Candidate Starts for Faze9_20:

(7, 17169), (11, 17217), (12, 17223), (Start: 16 @17271 has 105 MA's), (22, 17337), (28, 17442), (30, 17457), (35, 17484), (39, 17508), (46, 17559), (48, 17589),

Gene: FrenchFry_20 Start: 17274, Stop: 17606, Start Num: 16

Candidate Starts for FrenchFry_20:

(7, 17172), (11, 17220), (12, 17226), (Start: 16 @17274 has 105 MA's), (22, 17340), (28, 17445), (30, 17460), (35, 17487), (39, 17511), (46, 17562), (48, 17592),

Gene: Fresco_17 Start: 14287, Stop: 14598, Start Num: 16

Candidate Starts for Fresco_17:

(13, 14260), (Start: 16 @14287 has 105 MA's), (24, 14428), (26, 14440), (39, 14503),

Gene: Gadget_21 Start: 15941, Stop: 16273, Start Num: 16

Candidate Starts for Gadget_21:

(Start: 16 @15941 has 105 MA's), (20, 15998), (21, 16004), (27, 16106), (29, 16124), (31, 16130), (38, 16166), (39, 16178), (46, 16229),

Gene: Gervas_20 Start: 15920, Stop: 16252, Start Num: 16

Candidate Starts for Gervas_20:

(Start: 16 @15920 has 105 MA's), (20, 15977), (21, 15983), (27, 16085), (29, 16103), (31, 16109), (38, 16145), (39, 16157), (46, 16208),

Gene: Glass_20 Start: 17274, Stop: 17606, Start Num: 16

Candidate Starts for Glass_20:

(7, 17172), (11, 17220), (12, 17226), (Start: 16 @17274 has 105 MA's), (22, 17340), (28, 17445), (30, 17460), (35, 17487), (39, 17511), (46, 17562), (48, 17592),

Gene: GlenHope_21 Start: 15927, Stop: 16259, Start Num: 16

Candidate Starts for GlenHope_21:

(Start: 16 @15927 has 105 MA's), (20, 15984), (21, 15990), (27, 16092), (29, 16110), (31, 16116), (38, 16152), (39, 16164), (46, 16215),

Gene: GodPhather_15 Start: 15237, Stop: 15569, Start Num: 16

Candidate Starts for GodPhather_15:

(Start: 16 @15237 has 105 MA's), (22, 15303), (24, 15378), (38, 15462), (39, 15474), (41, 15486), (50, 15564),

Gene: Godines_20 Start: 17169, Stop: 17501, Start Num: 16

Candidate Starts for Godines_20:

(Start: 16 @17169 has 105 MA's), (22, 17235), (28, 17340), (30, 17355), (39, 17406), (42, 17421), (46, 17457), (48, 17487),

Gene: Halfpint_19 Start: 15762, Stop: 16094, Start Num: 16

Candidate Starts for Halfpint_19:

(Start: 16 @15762 has 105 MA's), (20, 15819), (21, 15825), (27, 15927), (29, 15945), (31, 15951), (38, 15987), (39, 15999), (46, 16050),

Gene: HarveySr_20 Start: 15914, Stop: 16246, Start Num: 16

Candidate Starts for HarveySr_20:

(Start: 16 @15914 has 105 MA's), (20, 15971), (21, 15977), (27, 16079), (29, 16097), (31, 16103), (38, 16139), (39, 16151), (46, 16202),

Gene: Hashim76_22 Start: 15489, Stop: 15821, Start Num: 16

Candidate Starts for Hashim76_22:

(6, 15345), (Start: 16 @15489 has 105 MA's), (18, 15513), (28, 15660), (29, 15672), (40, 15735),

Gene: Heathcliff_20 Start: 15899, Stop: 16231, Start Num: 16

Candidate Starts for Heathcliff_20:

(Start: 16 @15899 has 105 MA's), (20, 15956), (21, 15962), (27, 16064), (29, 16082), (31, 16088), (38, 16124), (39, 16136), (46, 16187),

Gene: Hedgerow_20 Start: 17256, Stop: 17588, Start Num: 16

Candidate Starts for Hedgerow_20:

(7, 17154), (11, 17202), (12, 17208), (Start: 16 @17256 has 105 MA's), (22, 17322), (28, 17427), (30, 17442), (35, 17469), (39, 17493), (46, 17544), (48, 17574),

Gene: Holeinone_20 Start: 17156, Stop: 17488, Start Num: 16

Candidate Starts for Holeinone_20:

(7, 17054), (11, 17102), (12, 17108), (Start: 16 @17156 has 105 MA's), (22, 17222), (28, 17327), (30, 17342), (35, 17369), (39, 17393), (46, 17444), (48, 17474),

Gene: Hosp_013 Start: 12766, Stop: 13098, Start Num: 16

Candidate Starts for Hosp_013:

(Start: 16 @12766 has 105 MA's), (18, 12790), (19, 12820), (29, 12949),

Gene: Imvubu_14 Start: 13522, Stop: 13854, Start Num: 16

Candidate Starts for Imvubu_14:

(Start: 16 @13522 has 105 MA's), (17, 13537), (18, 13546), (19, 13576), (28, 13693), (29, 13705), (37, 13744), (40, 13768), (41, 13771), (48, 13840),

Gene: ItsyBitsy1_20 Start: 17148, Stop: 17480, Start Num: 16

Candidate Starts for ItsyBitsy1_20:

(7, 17046), (11, 17094), (12, 17100), (Start: 16 @17148 has 105 MA's), (22, 17214), (28, 17319), (30, 17334), (35, 17361), (39, 17385), (46, 17436), (48, 17466),

Gene: Jackstina_19 Start: 15863, Stop: 16195, Start Num: 16

Candidate Starts for Jackstina_19:

(Start: 16 @15863 has 105 MA's), (20, 15920), (21, 15926), (27, 16028), (29, 16046), (31, 16052), (38, 16088), (39, 16100), (46, 16151),

Gene: Jeon_14 Start: 14979, Stop: 15311, Start Num: 16

Candidate Starts for Jeon_14:

(3, 14709), (5, 14808), (6, 14835), (9, 14901), (11, 14925), (12, 14931), (Start: 16 @14979 has 105 MA's), (22, 15045), (24, 15120), (38, 15204), (39, 15216), (41, 15228), (50, 15306),

Gene: Jolie1_015 Start: 14536, Stop: 14868, Start Num: 16

Candidate Starts for Jolie1_015:

(6, 14389), (Start: 16 @14536 has 105 MA's), (18, 14560), (19, 14590), (24, 14677), (34, 14746), (48, 14854),

Gene: Kaleb_20 Start: 17274, Stop: 17606, Start Num: 16

Candidate Starts for Kaleb_20:

(7, 17172), (11, 17220), (12, 17226), (Start: 16 @17274 has 105 MA's), (22, 17340), (28, 17445), (30, 17460), (35, 17487), (39, 17511), (46, 17562), (48, 17592),

Gene: Kamiyu_20 Start: 15908, Stop: 16240, Start Num: 16

Candidate Starts for Kamiyu_20:

(Start: 16 @15908 has 105 MA's), (20, 15965), (21, 15971), (27, 16073), (29, 16091), (31, 16097), (38, 16133), (39, 16145), (46, 16196),

Gene: KayaCho_15 Start: 14554, Stop: 14886, Start Num: 16

Candidate Starts for KayaCho_15:

(6, 14407), (8, 14467), (10, 14491), (Start: 16 @14554 has 105 MA's), (18, 14578), (19, 14608), (29, 14737), (36, 14773), (41, 14803),

Gene: Kheth_20 Start: 17157, Stop: 17489, Start Num: 16

Candidate Starts for Kheth_20:

(7, 17055), (11, 17103), (12, 17109), (Start: 16 @17157 has 105 MA's), (22, 17223), (28, 17328), (30, 17343), (35, 17370), (39, 17394), (46, 17445), (48, 17475),

Gene: Kronus_19 Start: 16520, Stop: 16852, Start Num: 16

Candidate Starts for Kronus_19:

(Start: 16 @16520 has 105 MA's), (20, 16577), (21, 16583), (27, 16685), (29, 16703), (31, 16709), (38, 16745), (39, 16757), (46, 16808),

Gene: Lars_20 Start: 17274, Stop: 17606, Start Num: 16

Candidate Starts for Lars_20:

(7, 17172), (11, 17220), (12, 17226), (Start: 16 @17274 has 105 MA's), (22, 17340), (28, 17445), (30, 17460), (35, 17487), (39, 17511), (46, 17562), (48, 17592),

Gene: Laurie_20 Start: 17152, Stop: 17484, Start Num: 16

Candidate Starts for Laurie_20:

(11, 17098), (12, 17104), (Start: 16 @17152 has 105 MA's), (22, 17218), (28, 17323), (30, 17338), (35, 17365), (39, 17389), (46, 17440), (48, 17470),

Gene: Lephleur_20 Start: 17154, Stop: 17486, Start Num: 16

Candidate Starts for Lephleur_20:

(7, 17052), (11, 17100), (12, 17106), (Start: 16 @17154 has 105 MA's), (22, 17220), (28, 17325), (30, 17340), (35, 17367), (39, 17391), (46, 17442), (48, 17472),

Gene: LestyG_20 Start: 15941, Stop: 16273, Start Num: 16

Candidate Starts for LestyG_20:

(Start: 16 @15941 has 105 MA's), (20, 15998), (21, 16004), (27, 16106), (29, 16124), (31, 16130), (38, 16166), (39, 16178), (46, 16229),

Gene: Ligma_17 Start: 14287, Stop: 14598, Start Num: 16

Candidate Starts for Ligma_17:

(13, 14260), (Start: 16 @14287 has 105 MA's), (24, 14428), (26, 14440), (39, 14503),

Gene: LittleMunchkin_18 Start: 15707, Stop: 16021, Start Num: 15

Candidate Starts for LittleMunchkin_18:

(Start: 15 @15707 has 6 MA's), (26, 15863), (33, 15896), (39, 15926),

Gene: LizLemon_20 Start: 17274, Stop: 17606, Start Num: 16

Candidate Starts for LizLemon_20:

(7, 17172), (11, 17220), (12, 17226), (Start: 16 @17274 has 105 MA's), (22, 17340), (28, 17445), (30, 17460), (35, 17487), (39, 17511), (40, 17520), (46, 17562), (48, 17592),

Gene: MakoManhole_19 Start: 15728, Stop: 16039, Start Num: 16

Candidate Starts for MakoManhole_19:

(Start: 16 @15728 has 105 MA's), (26, 15881), (39, 15944),

Gene: Mao1_15 Start: 13304, Stop: 13636, Start Num: 16

Candidate Starts for Mao1_15:

(Start: 16 @13304 has 105 MA's), (17, 13319), (24, 13445), (34, 13514), (35, 13517), (39, 13541), (43, 13571), (48, 13622), (50, 13631),

Gene: Mariokart_17 Start: 14196, Stop: 14513, Start Num: 14

Candidate Starts for Mariokart_17:

(1, 13734), (4, 14004), (Start: 14 @14196 has 1 MA's), (26, 14355), (39, 14418),

Gene: Marley1013_20 Start: 16721, Stop: 17053, Start Num: 16

Candidate Starts for Marley1013_20:

(Start: 16 @16721 has 105 MA's), (20, 16778), (21, 16784), (27, 16886), (29, 16904), (31, 16910), (38, 16946), (39, 16958), (46, 17009),

Gene: Mask_16 Start: 13305, Stop: 13637, Start Num: 16

Candidate Starts for Mask_16:

(Start: 16 @13305 has 105 MA's), (17, 13320), (24, 13446), (34, 13515), (35, 13518), (39, 13542), (43, 13572), (48, 13623), (50, 13632),

Gene: MasterPo_20 Start: 17154, Stop: 17486, Start Num: 16

Candidate Starts for MasterPo_20:

(7, 17052), (11, 17100), (12, 17106), (Start: 16 @17154 has 105 MA's), (22, 17220), (28, 17325), (30, 17340), (35, 17367), (39, 17391), (40, 17400), (46, 17442), (48, 17472),

Gene: Megabear_14 Start: 14922, Stop: 15254, Start Num: 16

Candidate Starts for Megabear_14:

(3, 14652), (5, 14751), (6, 14778), (9, 14844), (11, 14868), (12, 14874), (Start: 16 @14922 has 105 MA's), (22, 14988), (24, 15063), (38, 15147), (39, 15159), (41, 15171), (50, 15249),

Gene: MmasiCarm_20 Start: 15934, Stop: 16266, Start Num: 16

Candidate Starts for MmasiCarm_20:

(Start: 16 @15934 has 105 MA's), (20, 15991), (21, 15997), (27, 16099), (29, 16117), (31, 16123), (38, 16159), (39, 16171), (46, 16222),

Gene: Mortcellus_19 Start: 16575, Stop: 16907, Start Num: 16

Candidate Starts for Mortcellus_19:

(Start: 16 @16575 has 105 MA's), (20, 16632), (21, 16638), (27, 16740), (29, 16758), (31, 16764), (38, 16800), (39, 16812), (46, 16863),

Gene: Morty007_20 Start: 16721, Stop: 17053, Start Num: 16

Candidate Starts for Morty007_20:

(Start: 16 @16721 has 105 MA's), (20, 16778), (21, 16784), (27, 16886), (29, 16904), (31, 16910), (38, 16946), (39, 16958), (46, 17009),

Gene: MossRose_19 Start: 15707, Stop: 16018, Start Num: 16

Candidate Starts for MossRose_19:

(Start: 16 @15707 has 105 MA's), (26, 15860), (39, 15923), (50, 16013),

Gene: NHagos_17 Start: 14186, Stop: 14497, Start Num: 16

Candidate Starts for NHagos_17:

(11, 14129), (13, 14159), (Start: 16 @14186 has 105 MA's), (26, 14339), (35, 14378), (39, 14402), (50, 14492),

Gene: Neos5_20 Start: 16729, Stop: 17061, Start Num: 16

Candidate Starts for Neos5_20:

(Start: 16 @16729 has 105 MA's), (20, 16786), (21, 16792), (27, 16894), (29, 16912), (31, 16918), (38, 16954), (39, 16966), (46, 17017),

Gene: Nozo_20 Start: 16699, Stop: 17031, Start Num: 16

Candidate Starts for Nozo_20:

(Start: 16 @16699 has 105 MA's), (20, 16756), (21, 16762), (27, 16864), (29, 16882), (31, 16888), (38, 16924), (39, 16936), (46, 16987),

Gene: Obutu_20 Start: 15932, Stop: 16264, Start Num: 16

Candidate Starts for Obutu_20:

(Start: 16 @15932 has 105 MA's), (20, 15989), (21, 15995), (27, 16097), (29, 16115), (31, 16121), (38, 16157), (39, 16169), (46, 16220),

Gene: Opia_20 Start: 17154, Stop: 17486, Start Num: 16

Candidate Starts for Opia_20:

(7, 17052), (11, 17100), (12, 17106), (Start: 16 @17154 has 105 MA's), (22, 17220), (28, 17325), (30, 17340), (35, 17367), (39, 17391), (46, 17442), (48, 17472),

Gene: OrangeOswald_20 Start: 15937, Stop: 16269, Start Num: 16

Candidate Starts for OrangeOswald_20:

(Start: 16 @15937 has 105 MA's), (20, 15994), (21, 16000), (27, 16102), (29, 16120), (31, 16126), (38, 16162), (39, 16174), (46, 16225),

Gene: PR_14 Start: 14949, Stop: 15281, Start Num: 16

Candidate Starts for PR_14:

(3, 14679), (5, 14778), (6, 14805), (9, 14871), (11, 14895), (12, 14901), (Start: 16 @14949 has 105 MA's), (22, 15015), (24, 15090), (38, 15174), (39, 15186), (41, 15198), (50, 15276),

Gene: Phaedrus_19 Start: 15855, Stop: 16187, Start Num: 16

Candidate Starts for Phaedrus_19:

(Start: 16 @15855 has 105 MA's), (20, 15912), (21, 15918), (27, 16020), (29, 16038), (31, 16044), (38, 16080), (39, 16092), (46, 16143),

Gene: Phantasmagoria_20 Start: 17154, Stop: 17486, Start Num: 16

Candidate Starts for Phantasmagoria_20:

(7, 17052), (11, 17100), (12, 17106), (Start: 16 @17154 has 105 MA's), (22, 17220), (28, 17325), (30, 17340), (39, 17391), (46, 17442), (48, 17472),

Gene: Phayeta_20 Start: 15813, Stop: 16145, Start Num: 16

Candidate Starts for Phayeta_20:

(Start: 16 @15813 has 105 MA's), (20, 15870), (21, 15876), (27, 15978), (29, 15996), (31, 16002), (38, 16038), (39, 16050), (46, 16101),

Gene: Philly_19 Start: 15803, Stop: 16135, Start Num: 16

Candidate Starts for Philly_19:

(Start: 16 @15803 has 105 MA's), (20, 15860), (21, 15866), (27, 15968), (29, 15986), (31, 15992), (38, 16028), (39, 16040), (46, 16091),

Gene: Phlyer_20 Start: 16672, Stop: 17004, Start Num: 16

Candidate Starts for Phlyer_20:

(Start: 16 @16672 has 105 MA's), (20, 16729), (21, 16735), (27, 16837), (29, 16855), (31, 16861), (38, 16897), (39, 16909), (46, 16960),

Gene: Pipefish_20 Start: 16821, Stop: 17153, Start Num: 16

Candidate Starts for Pipefish_20:

(Start: 16 @16821 has 105 MA's), (20, 16878), (21, 16884), (27, 16986), (29, 17004), (31, 17010), (38, 17046), (39, 17058), (46, 17109),

Gene: Pupper_85 Start: 33056, Stop: 33415, Start Num: 15

Candidate Starts for Pupper_85:

(Start: 14 @33053 has 1 MA's), (Start: 15 @33056 has 6 MA's), (23, 33185), (26, 33212), (44, 33332), (47, 33374),

Gene: Quesadilla_20 Start: 17337, Stop: 17669, Start Num: 16

Candidate Starts for Quesadilla_20:

(Start: 16 @17337 has 105 MA's), (18, 17361), (28, 17508), (29, 17520), (40, 17583), (41, 17586),

Gene: Qyrzula_19 Start: 17244, Stop: 17576, Start Num: 16

Candidate Starts for Qyrzula_19:

(7, 17142), (11, 17190), (12, 17196), (Start: 16 @17244 has 105 MA's), (22, 17310), (28, 17415), (30, 17430), (39, 17481), (46, 17532), (48, 17562),

Gene: RagingRooster_20 Start: 15938, Stop: 16270, Start Num: 16
Candidate Starts for RagingRooster_20:
(Start: 16 @15938 has 105 MA's), (20, 15995), (21, 16001), (27, 16103), (29, 16121), (31, 16127), (38, 16163), (39, 16175), (46, 16226),

Gene: Rhinoforte_20 Start: 17271, Stop: 17603, Start Num: 16
Candidate Starts for Rhinoforte_20:
(7, 17169), (11, 17217), (12, 17223), (Start: 16 @17271 has 105 MA's), (22, 17337), (28, 17442), (30, 17457), (35, 17484), (39, 17508), (46, 17559), (48, 17589),

Gene: Rita1961_20 Start: 15933, Stop: 16265, Start Num: 16
Candidate Starts for Rita1961_20:
(Start: 16 @15933 has 105 MA's), (20, 15990), (21, 15996), (27, 16098), (29, 16116), (31, 16122), (38, 16158), (39, 16170), (46, 16221),

Gene: RomaT_20 Start: 16719, Stop: 17051, Start Num: 16
Candidate Starts for RomaT_20:
(Start: 16 @16719 has 105 MA's), (20, 16776), (21, 16782), (27, 16884), (29, 16902), (31, 16908), (38, 16944), (39, 16956), (46, 17007),

Gene: Rosebush_20 Start: 17271, Stop: 17603, Start Num: 16
Candidate Starts for Rosebush_20:
(7, 17169), (11, 17217), (12, 17223), (Start: 16 @17271 has 105 MA's), (22, 17337), (28, 17442), (30, 17457), (39, 17508), (46, 17559), (48, 17589),

Gene: SCentae_83 Start: 32730, Stop: 33089, Start Num: 15
Candidate Starts for SCentae_83:
(Start: 14 @32727 has 1 MA's), (Start: 15 @32730 has 6 MA's), (23, 32859), (26, 32886), (44, 33006), (47, 33048),

Gene: Sabella_20 Start: 17157, Stop: 17489, Start Num: 16
Candidate Starts for Sabella_20:
(7, 17055), (11, 17103), (12, 17109), (Start: 16 @17157 has 105 MA's), (22, 17223), (28, 17328), (30, 17343), (35, 17370), (39, 17394), (46, 17445), (48, 17475),

Gene: Sejanus_16 Start: 14238, Stop: 14570, Start Num: 16
Candidate Starts for Sejanus_16:
(Start: 16 @14238 has 105 MA's), (17, 14253), (24, 14379), (32, 14442), (34, 14448), (35, 14451), (39, 14475), (43, 14505), (48, 14556), (50, 14565),

Gene: Shatter_17 Start: 14287, Stop: 14598, Start Num: 16
Candidate Starts for Shatter_17:
(13, 14260), (Start: 16 @14287 has 105 MA's), (24, 14428), (26, 14440), (39, 14503),

Gene: Sisko_17 Start: 14609, Stop: 14920, Start Num: 16
Candidate Starts for Sisko_17:
(Start: 16 @14609 has 105 MA's), (26, 14762),

Gene: Skog_148 Start: 62143, Stop: 62505, Start Num: 15
Candidate Starts for Skog_148:
(Start: 15 @62143 has 6 MA's), (20, 62203), (26, 62299), (44, 62419), (47, 62461), (49, 62467),

Gene: SlippinJimmy_20 Start: 16702, Stop: 17034, Start Num: 16

Candidate Starts for SlippinJimmy_20:

(Start: 16 @16702 has 105 MA's), (20, 16759), (21, 16765), (27, 16867), (29, 16885), (31, 16891), (38, 16927), (39, 16939), (46, 16990),

Gene: Sour_20 Start: 16058, Stop: 16393, Start Num: 15

Candidate Starts for Sour_20:

(Start: 15 @16058 has 6 MA's), (24, 16202), (25, 16211), (29, 16244), (45, 16334),

Gene: SynergyX_20 Start: 15938, Stop: 16270, Start Num: 16

Candidate Starts for SynergyX_20:

(Start: 16 @15938 has 105 MA's), (20, 15995), (21, 16001), (27, 16103), (29, 16121), (31, 16127), (38, 16163), (39, 16175), (46, 16226),

Gene: TA17A_20 Start: 17154, Stop: 17486, Start Num: 16

Candidate Starts for TA17A_20:

(7, 17052), (11, 17100), (12, 17106), (Start: 16 @17154 has 105 MA's), (22, 17220), (28, 17325), (30, 17340), (35, 17367), (39, 17391), (46, 17442), (48, 17472),

Gene: Taptic_14 Start: 14922, Stop: 15254, Start Num: 16

Candidate Starts for Taptic_14:

(3, 14652), (5, 14751), (6, 14778), (9, 14844), (11, 14868), (12, 14874), (Start: 16 @14922 has 105 MA's), (22, 14988), (24, 15063), (38, 15147), (39, 15159), (41, 15171), (50, 15249),

Gene: Tinciduntolum_21 Start: 17273, Stop: 17605, Start Num: 16

Candidate Starts for Tinciduntolum_21:

(7, 17171), (11, 17219), (12, 17225), (Start: 16 @17273 has 105 MA's), (22, 17339), (28, 17444), (30, 17459), (35, 17486), (39, 17510), (46, 17561), (48, 17591),

Gene: Tres_20 Start: 17154, Stop: 17486, Start Num: 16

Candidate Starts for Tres_20:

(7, 17052), (11, 17100), (12, 17106), (Start: 16 @17154 has 105 MA's), (22, 17220), (28, 17325), (30, 17340), (35, 17367), (39, 17391), (46, 17442), (48, 17472),

Gene: Tydolla_20 Start: 16675, Stop: 17007, Start Num: 16

Candidate Starts for Tydolla_20:

(Start: 16 @16675 has 105 MA's), (20, 16732), (21, 16738), (27, 16840), (29, 16858), (31, 16864), (38, 16900), (39, 16912), (46, 16963),

Gene: West99_20 Start: 17274, Stop: 17606, Start Num: 16

Candidate Starts for West99_20:

(7, 17172), (11, 17220), (12, 17226), (Start: 16 @17274 has 105 MA's), (22, 17340), (28, 17445), (30, 17460), (35, 17487), (39, 17511), (46, 17562), (48, 17592),

Gene: Wooper_19 Start: 15716, Stop: 16027, Start Num: 16

Candidate Starts for Wooper_19:

(2, 15266), (11, 15659), (Start: 16 @15716 has 105 MA's), (26, 15869), (39, 15932), (50, 16022),

Gene: Yago84_17 Start: 14618, Stop: 14929, Start Num: 16

Candidate Starts for Yago84_17:

(Start: 16 @14618 has 105 MA's), (26, 14771),

Gene: Yahalom_20 Start: 15949, Stop: 16281, Start Num: 16

Candidate Starts for Yahalom_20:

(Start: 16 @15949 has 105 MA's), (20, 16006), (21, 16012), (27, 16114), (29, 16132), (31, 16138), (38, 16174), (39, 16186), (46, 16237),

Gene: Yinz_20 Start: 15976, Stop: 16308, Start Num: 16

Candidate Starts for Yinz_20:

(Start: 16 @15976 has 105 MA's), (20, 16033), (21, 16039), (27, 16141), (29, 16159), (31, 16165), (38, 16201), (39, 16213), (46, 16264),

Gene: Zenteno07_22 Start: 15443, Stop: 15775, Start Num: 16

Candidate Starts for Zenteno07_22:

(6, 15299), (Start: 16 @15443 has 105 MA's), (18, 15467), (28, 15614), (29, 15626), (40, 15689),