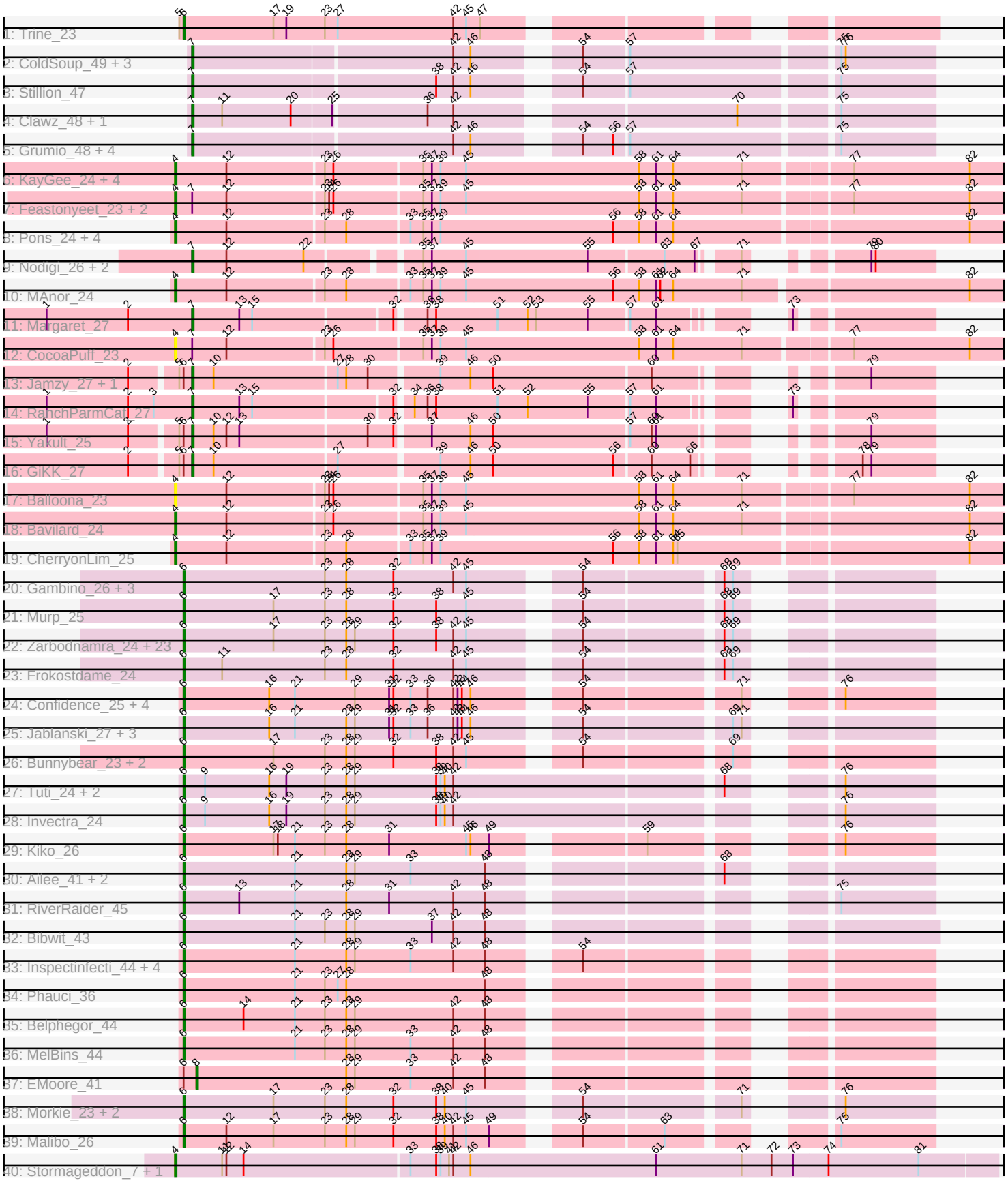
Pham 347444


1: Trine_23
2: ColdSoup_49 + 3
3: Stillion_47
4: Clawz_48 + 1
5: Grumio_48 + 4
6: KayGee_24 + 4
7: Feastonyeet_23 + 2
8: Pons_24 + 4
9: Nodigi_26 + 2
10: MAnor_24
11: Margaret_27
12: CocoaPuff_23
13: Jamzy_27 + 1
14: RanchParmCat_27
15: Yakult_25
16: GiKK_27
17: Balloona_23
18: Bavilard_24
19: CherryonLim_25
20: Gambino_26 + 3
21: Murp_25
22: Zarbodnamra_24 + 23
23: Frokostdame_24
24: Confidence_25 + 4
25: Jablanski_27 + 3
26: Bunnybear_23 + 2
27: Tuti_24 + 2
28: Invectra_24
29: Kiko_26
30: Ailee_41 + 2
31: RiverRaider_45
32: Bibwit_43
33: Inspectinfecti_44 + 4
34: Phauci_36
35: Belphegor_44
36: MelBins_44
37: EMoore_41
38: Morkie_23 + 2
39: Malibo_26
40: Stormageddon_7 + 1

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 347444 Report

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

Pham number 347444 has 107 members, 10 are drafts.

Phages represented in each track:
• Track 1 : Trine_23
• Track 2 : ColdSoup_49, Jollymon_48, Purplicious_47, Amo99_49
• Track 3 : Stillion_47
• Track 4 : Clawz_48, Makar_49
• Track 5 : Grumio_48, DonTron_48, Soos_44, Sting_47, KingstonB_46
• Track 6 : KayGee_24, Vine_25, Yucky_24, Elinal_25, Lauer_23
• Track 7 : Feastonyeet_23, PotPie_24, BigChungus_23
• Track 8 : Pons_24, McDazzle_23, Tarnish_24, Mayweather_25, ElJefes_23
• Track 9 : Nodigi_26, Hexbug_26, Orla_26
• Track 10 : MAnor_24
• Track 11 : Margaret_27
• Track 12 : CocoaPuff_23
• Track 13 : Jamzy_27, Button_25
• Track 14 : RanchParmCat_27
• Track 15 : Yakult_25
• Track 16 : GiKK_27
• Track 17 : Balloona_23
• Track 18 : Bavilard_24
• Track 19 : CherryonLim_25
• Track 20 : Gambino_26, MissRona_26, Blueberry_26, Azula_26
• Track 21 : Murp_25
• Track 22 : Zarbodnamra_24, Malachai_25, Jalammah_26, Wisp_23, CaptainKirk2_24, Mellie_23, UmaThurman_24, JasperJr_24, Zilla_24, Archis_25, Samba_24, PhrostedPhlake_26, Utz_24, Begonia_25, Guacamole_24, Lysidious_25, Delian_24, Fenry_23, Melba_24, Hitter_24, Barco_24, BlingBling_24, MintFen_24, Walrus_26
• Track 23 : Frokostdame_24
• Track 24 : Confidence_25, Cashline_25, BeeGee_25, ODay_31, Denise_21
• Track 25 : Jablanski_27, Posh_27, Pytheas_27, Wrigley_27
• Track 26 : Bunnybear_23, Pipp_24, CheeseSpider_27
• Track 27 : Tuti_24, Dorito_23, PhriskyACE_23
• Track 28 : Invectra_24
• Track 29 : Kiko_26
• Track 30 : Ailee_41, Keitabear_44, Sedona_44
• Track 31 : RiverRaider_45
• Track 32 : Bibwit_43
• Track 33 : Inspectinfecti_44, Phinally_43, Leonard_43, Hans_45, Ali17_41

• Track 34 : Phauci_36
• Track 35 : Belphegor_44
• Track 36 : MelBins_44
• Track 37 : EMoore_41
• Track 38 : Morkie_23, PhorbesPhlower_23, InLimbo_24
• Track 39 : Malibo_26
• Track 40 : Stormageddon_7, RedWattleHog_7

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 64 of the 97 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ailee_41, Ali17_41, Archis_25, Azula_26, Barco_24, BeeGee_25, Begonia_25, Belphegor_44, Bibwit_43, BlingBling_24, Blueberry_26, Bunnybear_23, CaptainKirk2_24, Cashline_25, CheeseSpider_27, Confidence_25, Delian_24, Denise_21, Dorito_23, Fenry_23, Frokostdame_24, Gambino_26, Guacamole_24, Hans_45, Hitter_24, InLimbo_24, Inspectinfecti_44, Invectra_24, Jablanski_27, Jalammah_26, JasperJr_24, Keitabear_44, Kiko_26, Leonard_43, Lysidious_25, Malachai_25, Malibo_26, MelBins_44, Melba_24, Mellie_23, MintFen_24, MissRona_26, Morkie_23, Murp_25, ODay_31, Phauci_36, Phinally_43, PhorbesPhlower_23, PhriskyACE_23, PhrostedPhlake_26, Pipp_24, Posh_27, Pytheas_27, RiverRaider_45, Samba_24, Sedona_44, Trine_23, Tuti_24, UmaThurman_24, Utz_24, Walrus_26, Wisp_23, Wrigley_27, Zarbodnamra_24, Zilla_24,

Genes that have the "Most Annotated" start but do not call it:
• Button_25, EMoore_41, GiKK_27, Jamzy_27, Yakult_25,

Genes that do not have the "Most Annotated" start:
• Amo99_49, Balloona_23, Bavilard_24, BigChungus_23, CherryonLim_25, Clawz_48, CocoaPuff_23, ColdSoup_49, DonTron_48, ElJefes_23, Elinal_25, Feastonyeet_23, Grumio_48, Hexbug_26, Jollymon_48, KayGee_24, KingstonB_46, Lauer_23, MAnor_24, Makar_49, Margaret_27, Mayweather_25, McDazzle_23, Nodigi_26, Orla_26, Pons_24, PotPie_24, Purplicious_47, RanchParmCat_27, RedWattleHog_7, Soos_44, Stillion_47, Sting_47, Stormageddon_7, Tarnish_24, Vine_25, Yucky_24,

Summary by start number:

Start 4:
• Found in 20 of 107 (18.7%) of genes in pham
• Manual Annotations of this start: 16 of 97
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Balloona_23 (CT), Bavilard_24 (CT), BigChungus_23 (CT), CherryonLim_25 (CT), CocoaPuff_23 (CT), ElJefes_23 (CT), Elinal_25 (CT), Feastonyeet_23 (CT), KayGee_24 (CT), Lauer_23 (CT), MAnor_24 (CT), Mayweather_25 (CT), McDazzle_23 (CT), Pons_24 (CT), PotPie_24 (CT), RedWattleHog_7 (DX), Stormageddon_7 (DX), Tarnish_24 (CT), Vine_25 (CT),

Yucky_24 (CT),

Start 6:
• Found in 70 of 107 (65.4%) of genes in pham
• Manual Annotations of this start: 64 of 97
• Called 92.9% of time when present
• Phage (with cluster) where this start called: Ailee_41 (DE1), Ali17_41 (DE2), Archis_25 (CV), Azula_26 (CV), Barco_24 (CV), BeeGee_25 (CY5), Begonia_25 (CV), Belphegor_44 (DE2), Bibwit_43 (DE1), BlingBling_24 (CV), Blueberry_26 (CV), Bunnybear_23 (CZ), CaptainKirk2_24 (CV), Cashline_25 (CY6), CheeseSpider_27 (CV), Confidence_25 (CY1), Delian_24 (CV), Denise_21 (CZ5), Dorito_23 (CZ4), Fenry_23 (CV), Frokostdame_24 (CV), Gambino_26 (CV), Guacamole_24 (CV), Hans_45 (DE2), Hitter_24 (CV), InLimbo_24 (DH), Inspectinfecti_44 (DE2), Invectra_24 (CZ4), Jablanski_27 (CY3), Jalammah_26 (CV), JasperJr_24 (CV), Keitabear_44 (DE1), Kiko_26 (DB), Leonard_43 (DE2), Lysidious_25 (CV), Malachai_25 (CV), Malibo_26 (DW), MelBins_44 (DE2), Melba_24 (CV), Mellie_23 (CV), MintFen_24 (CV), MissRona_26 (CV), Morkie_23 (DH), Murp_25 (CV), ODay_31 (DN), Phauci_36 (DE2), Phinally_43 (DE2), PhorbesPhlower_23 (DH), PhriskyACE_23 (CZ4), PhrostedPhlake_26 (CV), Pipp_24 (CV), Posh_27 (CY4), Pytheas_27 (CY3), RiverRaider_45 (DE1), Samba_24 (CV), Sedona_44 (DE1), Trine_23 (CD), Tuti_24 (CZ4), UmaThurman_24 (CV), Utz_24 (CV), Walrus_26 (CV), Wisp_23 (CV), Wrigley_27 (CY4), Zarbodnamra_24 (CV), Zilla_24 (CV),

Start 7:
• Found in 25 of 107 (23.4%) of genes in pham
• Manual Annotations of this start: 16 of 97
• Called 84.0% of time when present
• Phage (with cluster) where this start called: Amo99_49 (CP), Button_25 (CT), Clawz_48 (CP), ColdSoup_49 (CP), DonTron_48 (CP), GiKK_27 (CT), Grumio_48 (CP), Hexbug_26 (CT), Jamzy_27 (CT), Jollymon_48 (CP), KingstonB_46 (CP), Makar_49 (CP), Margaret_27 (CT), Nodigi_26 (CT), Orla_26 (CT), Purplicious_47 (CP), RanchParmCat_27 (CT), Soos_44 (CP), Stillion_47 (CP), Sting_47 (CP), Yakult_25 (CT),

Start 8:
• Found in 1 of 107 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 97
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EMoore_41 (DE2),

Summary by clusters:

There are 19 clusters represented in this pham: CY3, DX, CY1, CY6, CY5, CY4, DE1, DE2, DB, CZ4, CD, CZ, DH, DW, DN, CP, CZ5, CV, CT,

Info for manual annotations of cluster CD:
•Start number 6 was manually annotated 1 time for cluster CD.

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

Info for manual annotations of cluster CT:
•Start number 4 was manually annotated 14 times for cluster CT.

•Start number 7 was manually annotated 9 times for cluster CT.

Info for manual annotations of cluster CV:
•Start number 6 was manually annotated 32 times for cluster CV.

Info for manual annotations of cluster CY1:
•Start number 6 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY3:
•Start number 6 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:
•Start number 6 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 6 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:
•Start number 6 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CZ:
•Start number 6 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ4:
•Start number 6 was manually annotated 4 times for cluster CZ4.

Info for manual annotations of cluster CZ5:
•Start number 6 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster DB:
•Start number 6 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DE1:
•Start number 6 was manually annotated 5 times for cluster DE1.

Info for manual annotations of cluster DE2:
•Start number 6 was manually annotated 8 times for cluster DE2.
•Start number 8 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster DH:
•Start number 6 was manually annotated 2 times for cluster DH.

Info for manual annotations of cluster DN:
•Start number 6 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DW:
•Start number 6 was manually annotated 1 time for cluster DW.

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

Gene Information:

Gene: Ailee_41 Start: 38585, Stop: 39043, Start Num: 6
Candidate Starts for Ailee_41:
(Start: 6 @38585 has 64 MA's), (21, 38663), (28, 38699), (29, 38705), (33, 38744), (48, 38795), (68, 38930),

Gene: Ali17_41 Start: 37879, Stop: 38337, Start Num: 6
Candidate Starts for Ali17_41:
(Start: 6 @37879 has 64 MA's), (21, 37957), (28, 37993), (29, 37999), (33, 38038), (42, 38068), (48, 38089), (54, 38137),

Gene: Amo99_49 Start: 26503, Stop: 26979, Start Num: 7
Candidate Starts for Amo99_49:
(Start: 7 @26503 has 16 MA's), (42, 26680), (46, 26692), (54, 26749), (57, 26779), (75, 26914), (76, 26917),

Gene: Archis_25 Start: 20911, Stop: 21369, Start Num: 6
Candidate Starts for Archis_25:
(Start: 6 @20911 has 64 MA's), (17, 20974), (23, 21010), (28, 21025), (29, 21031), (32, 21058), (38, 21088), (42, 21100), (45, 21109), (54, 21169), (68, 21256), (69, 21262),

Gene: Azula_26 Start: 21012, Stop: 21470, Start Num: 6
Candidate Starts for Azula_26:
(Start: 6 @21012 has 64 MA's), (23, 21111), (28, 21126), (32, 21159), (42, 21201), (45, 21210), (54, 21270), (68, 21357), (69, 21363),

Gene: Balloona_23 Start: 19713, Stop: 20276, Start Num: 4
Candidate Starts for Balloona_23:
(Start: 4 @19713 has 16 MA's), (12, 19749), (23, 19815), (24, 19818), (26, 19821), (35, 19881), (37, 19887), (39, 19893), (45, 19911), (58, 20031), (61, 20043), (64, 20055), (71, 20103), (77, 20172), (82, 20253),

Gene: Barco_24 Start: 20700, Stop: 21158, Start Num: 6
Candidate Starts for Barco_24:
(Start: 6 @20700 has 64 MA's), (17, 20763), (23, 20799), (28, 20814), (29, 20820), (32, 20847), (38, 20877), (42, 20889), (45, 20898), (54, 20958), (68, 21045), (69, 21051),

Gene: Bavilard_24 Start: 20498, Stop: 21061, Start Num: 4
Candidate Starts for Bavilard_24:
(Start: 4 @20498 has 16 MA's), (12, 20534), (23, 20600), (26, 20606), (35, 20666), (37, 20672), (39, 20678), (45, 20696), (58, 20816), (61, 20828), (64, 20840), (71, 20888), (82, 21038),

Gene: BeeGee_25 Start: 21331, Stop: 21789, Start Num: 6
Candidate Starts for BeeGee_25:
(Start: 6 @21331 has 64 MA's), (16, 21391), (21, 21409), (29, 21451), (31, 21475), (32, 21478), (33, 21490), (36, 21502), (42, 21520), (43, 21523), (44, 21526), (46, 21532), (54, 21589), (71, 21688), (76, 21727),

Gene: Begonia_25 Start: 21181, Stop: 21639, Start Num: 6
Candidate Starts for Begonia_25:
(Start: 6 @21181 has 64 MA's), (17, 21244), (23, 21280), (28, 21295), (29, 21301), (32, 21328), (38, 21358), (42, 21370), (45, 21379), (54, 21439), (68, 21526), (69, 21532),

Gene: Belphegor_44 Start: 39930, Stop: 40388, Start Num: 6
Candidate Starts for Belphegor_44:
(Start: 6 @39930 has 64 MA's), (14, 39972), (21, 40008), (23, 40029), (28, 40044), (29, 40050), (42, 40119), (48, 40140),

Gene: Bibwit_43 Start: 38519, Stop: 38980, Start Num: 6
Candidate Starts for Bibwit_43:
(Start: 6 @38519 has 64 MA's), (21, 38597), (23, 38618), (28, 38633), (29, 38639), (37, 38693), (42, 38708), (48, 38729),

Gene: BigChungus_23 Start: 19756, Stop: 20319, Start Num: 4
Candidate Starts for BigChungus_23:
(Start: 4 @19756 has 16 MA's), (Start: 7 @19768 has 16 MA's), (12, 19792), (23, 19858), (24, 19861), (26, 19864), (35, 19924), (37, 19930), (39, 19936), (45, 19954), (58, 20074), (61, 20086), (64, 20098), (71, 20146), (77, 20215), (82, 20296),

Gene: BlingBling_24 Start: 20700, Stop: 21158, Start Num: 6
Candidate Starts for BlingBling_24:
(Start: 6 @20700 has 64 MA's), (17, 20763), (23, 20799), (28, 20814), (29, 20820), (32, 20847), (38, 20877), (42, 20889), (45, 20898), (54, 20958), (68, 21045), (69, 21051),

Gene: Blueberry_26 Start: 21012, Stop: 21470, Start Num: 6
Candidate Starts for Blueberry_26:
(Start: 6 @21012 has 64 MA's), (23, 21111), (28, 21126), (32, 21159), (42, 21201), (45, 21210), (54, 21270), (68, 21357), (69, 21363),

Gene: Bunnybear_23 Start: 21777, Stop: 22235, Start Num: 6
Candidate Starts for Bunnybear_23:
(Start: 6 @21777 has 64 MA's), (17, 21840), (23, 21876), (28, 21891), (29, 21897), (32, 21924), (38, 21954), (42, 21966), (45, 21975), (54, 22035), (69, 22128),

Gene: Button_25 Start: 19038, Stop: 19490, Start Num: 7
Candidate Starts for Button_25:
(2, 18999), (5, 19029), (Start: 6 @19032 has 64 MA's), (Start: 7 @19038 has 16 MA's), (10, 19053), (27, 19137), (28, 19143), (30, 19158), (39, 19203), (46, 19224), (50, 19239), (60, 19347), (79, 19446),

Gene: CaptainKirk2_24 Start: 20721, Stop: 21179, Start Num: 6
Candidate Starts for CaptainKirk2_24:
(Start: 6 @20721 has 64 MA's), (17, 20784), (23, 20820), (28, 20835), (29, 20841), (32, 20868), (38, 20898), (42, 20910), (45, 20919), (54, 20979), (68, 21066), (69, 21072),

Gene: Cashline_25 Start: 21198, Stop: 21656, Start Num: 6
Candidate Starts for Cashline_25:
(Start: 6 @21198 has 64 MA's), (16, 21258), (21, 21276), (29, 21318), (31, 21342), (32, 21345), (33, 21357), (36, 21369), (42, 21387), (43, 21390), (44, 21393), (46, 21399), (54, 21456), (71, 21555), (76, 21594),

Gene: CheeseSpider_27 Start: 21266, Stop: 21724, Start Num: 6
Candidate Starts for CheeseSpider_27:
(Start: 6 @21266 has 64 MA's), (17, 21329), (23, 21365), (28, 21380), (29, 21386), (32, 21413), (38, 21443), (42, 21455), (45, 21464), (54, 21524), (69, 21617),

Gene: CherryonLim_25 Start: 20466, Stop: 21029, Start Num: 4
Candidate Starts for CherryonLim_25:
(Start: 4 @20466 has 16 MA's), (12, 20502), (23, 20568), (28, 20583), (33, 20625), (35, 20634), (37, 20640), (39, 20646), (56, 20766), (58, 20784), (61, 20796), (64, 20808), (65, 20811), (82, 21006),

Gene: Clawz_48 Start: 26409, Stop: 26885, Start Num: 7
Candidate Starts for Clawz_48:
(Start: 7 @26409 has 16 MA's), (11, 26430), (20, 26478), (25, 26505), (36, 26568), (42, 26586), (70, 26760), (75, 26820),

Gene: CocoaPuff_23 Start: 19710, Stop: 20273, Start Num: 4
Candidate Starts for CocoaPuff_23:
(Start: 4 @19710 has 16 MA's), (Start: 7 @19722 has 16 MA's), (12, 19746), (23, 19812), (26, 19818), (35, 19878), (37, 19884), (39, 19890), (45, 19908), (58, 20028), (61, 20040), (64, 20052), (71, 20100), (77, 20169), (82, 20250),

Gene: ColdSoup_49 Start: 26503, Stop: 26979, Start Num: 7
Candidate Starts for ColdSoup_49:
(Start: 7 @26503 has 16 MA's), (42, 26680), (46, 26692), (54, 26749), (57, 26779), (75, 26914), (76, 26917),

Gene: Confidence_25 Start: 21361, Stop: 21819, Start Num: 6
Candidate Starts for Confidence_25:
(Start: 6 @21361 has 64 MA's), (16, 21421), (21, 21439), (29, 21481), (31, 21505), (32, 21508), (33, 21520), (36, 21532), (42, 21550), (43, 21553), (44, 21556), (46, 21562), (54, 21619), (71, 21718), (76, 21757),

Gene: Delian_24 Start: 20721, Stop: 21179, Start Num: 6
Candidate Starts for Delian_24:
(Start: 6 @20721 has 64 MA's), (17, 20784), (23, 20820), (28, 20835), (29, 20841), (32, 20868), (38, 20898), (42, 20910), (45, 20919), (54, 20979), (68, 21066), (69, 21072),

Gene: Denise_21 Start: 18426, Stop: 18884, Start Num: 6
Candidate Starts for Denise_21:
(Start: 6 @18426 has 64 MA's), (16, 18486), (21, 18504), (29, 18546), (31, 18570), (32, 18573), (33, 18585), (36, 18597), (42, 18615), (43, 18618), (44, 18621), (46, 18627), (54, 18684), (71, 18783), (76, 18822),

Gene: DonTron_48 Start: 26543, Stop: 27019, Start Num: 7
Candidate Starts for DonTron_48:
(Start: 7 @26543 has 16 MA's), (42, 26720), (46, 26732), (54, 26789), (56, 26810), (57, 26819), (75, 26954),

Gene: Dorito_23 Start: 20203, Stop: 20682, Start Num: 6
Candidate Starts for Dorito_23:
(Start: 6 @20203 has 64 MA's), (9, 20218), (16, 20263), (19, 20275), (23, 20302), (28, 20317), (29, 20323), (38, 20380), (39, 20383), (40, 20386), (42, 20392), (68, 20569), (76, 20620),

Gene: EMoore_41 Start: 39068, Stop: 39517, Start Num: 8
Candidate Starts for EMoore_41:
(Start: 6 @39059 has 64 MA's), (Start: 8 @39068 has 1 MA's), (28, 39173), (29, 39179), (33, 39218), (42, 39248), (48, 39269),

Gene: ElJefes_23 Start: 20189, Stop: 20752, Start Num: 4
Candidate Starts for ElJefes_23:
(Start: 4 @20189 has 16 MA's), (12, 20225), (23, 20291), (28, 20306), (33, 20348), (35, 20357), (37, 20363), (39, 20369), (56, 20489), (58, 20507), (61, 20519), (64, 20531), (82, 20729),

Gene: Elinal_25 Start: 19709, Stop: 20272, Start Num: 4
Candidate Starts for Elinal_25:
(Start: 4 @19709 has 16 MA's), (12, 19745), (23, 19811), (26, 19817), (35, 19877), (37, 19883), (39, 19889), (45, 19907), (58, 20027), (61, 20039), (64, 20051), (71, 20099), (77, 20168), (82, 20249),

Gene: Feastonyeet_23 Start: 19756, Stop: 20319, Start Num: 4
Candidate Starts for Feastonyeet_23:
(Start: 4 @19756 has 16 MA's), (Start: 7 @19768 has 16 MA's), (12, 19792), (23, 19858), (24, 19861), (26, 19864), (35, 19924), (37, 19930), (39, 19936), (45, 19954), (58, 20074), (61, 20086), (64, 20098), (71, 20146), (77, 20215), (82, 20296),

Gene: Fenry_23 Start: 20419, Stop: 20877, Start Num: 6
Candidate Starts for Fenry_23:
(Start: 6 @20419 has 64 MA's), (17, 20482), (23, 20518), (28, 20533), (29, 20539), (32, 20566), (38, 20596), (42, 20608), (45, 20617), (54, 20677), (68, 20764), (69, 20770),

Gene: Frokostdame_24 Start: 20666, Stop: 21124, Start Num: 6
Candidate Starts for Frokostdame_24:
(Start: 6 @20666 has 64 MA's), (11, 20693), (23, 20765), (28, 20780), (32, 20813), (42, 20855), (45, 20864), (54, 20924), (68, 21011), (69, 21017),

Gene: Gambino_26 Start: 21012, Stop: 21470, Start Num: 6
Candidate Starts for Gambino_26:
(Start: 6 @21012 has 64 MA's), (23, 21111), (28, 21126), (32, 21159), (42, 21201), (45, 21210), (54, 21270), (68, 21357), (69, 21363),

Gene: GiKK_27 Start: 19337, Stop: 19789, Start Num: 7
Candidate Starts for GiKK_27:
(2, 19298), (5, 19328), (Start: 6 @19331 has 64 MA's), (Start: 7 @19337 has 16 MA's), (10, 19352), (27, 19436), (39, 19502), (46, 19523), (50, 19538), (56, 19622), (60, 19646), (66, 19673), (78, 19739), (79, 19745),

Gene: Grumio_48 Start: 25981, Stop: 26457, Start Num: 7
Candidate Starts for Grumio_48:
(Start: 7 @25981 has 16 MA's), (42, 26158), (46, 26170), (54, 26227), (56, 26248), (57, 26257), (75, 26392),

Gene: Guacamole_24 Start: 20704, Stop: 21162, Start Num: 6
Candidate Starts for Guacamole_24:
(Start: 6 @20704 has 64 MA's), (17, 20767), (23, 20803), (28, 20818), (29, 20824), (32, 20851), (38, 20881), (42, 20893), (45, 20902), (54, 20962), (68, 21049), (69, 21055),

Gene: Hans_45 Start: 38519, Stop: 38977, Start Num: 6
Candidate Starts for Hans_45:
(Start: 6 @38519 has 64 MA's), (21, 38597), (28, 38633), (29, 38639), (33, 38678), (42, 38708), (48, 38729), (54, 38777),

Gene: Hexbug_26 Start: 20025, Stop: 20471, Start Num: 7

Candidate Starts for Hexbug_26:
(Start: 7 @20025 has 16 MA's), (12, 20049), (22, 20103), (35, 20172), (37, 20178), (45, 20202), (55, 20286), (63, 20337), (67, 20358), (71, 20379), (79, 20427), (80, 20430),

Gene: Hitter_24 Start: 20700, Stop: 21158, Start Num: 6
Candidate Starts for Hitter_24:
(Start: 6 @20700 has 64 MA's), (17, 20763), (23, 20799), (28, 20814), (29, 20820), (32, 20847), (38, 20877), (42, 20889), (45, 20898), (54, 20958), (68, 21045), (69, 21051),

Gene: InLimbo_24 Start: 18982, Stop: 19440, Start Num: 6
Candidate Starts for InLimbo_24:
(Start: 6 @18982 has 64 MA's), (17, 19045), (23, 19081), (28, 19096), (32, 19129), (38, 19159), (40, 19165), (45, 19180), (54, 19240), (71, 19339), (76, 19378),

Gene: Inspectinfecti_44 Start: 38965, Stop: 39423, Start Num: 6
Candidate Starts for Inspectinfecti_44:
(Start: 6 @38965 has 64 MA's), (21, 39043), (28, 39079), (29, 39085), (33, 39124), (42, 39154), (48, 39175), (54, 39223),

Gene: Invectra_24 Start: 21068, Stop: 21547, Start Num: 6
Candidate Starts for Invectra_24:
(Start: 6 @21068 has 64 MA's), (9, 21083), (16, 21128), (19, 21140), (23, 21167), (28, 21182), (29, 21188), (38, 21245), (39, 21248), (40, 21251), (42, 21257), (76, 21485),

Gene: Jablanski_27 Start: 22440, Stop: 22898, Start Num: 6
Candidate Starts for Jablanski_27:
(Start: 6 @22440 has 64 MA's), (16, 22500), (21, 22518), (28, 22554), (29, 22560), (31, 22584), (32, 22587), (33, 22599), (36, 22611), (42, 22629), (43, 22632), (44, 22635), (46, 22641), (54, 22698), (69, 22791), (71, 22797),

Gene: Jalammah_26 Start: 21494, Stop: 21952, Start Num: 6
Candidate Starts for Jalammah_26:
(Start: 6 @21494 has 64 MA's), (17, 21557), (23, 21593), (28, 21608), (29, 21614), (32, 21641), (38, 21671), (42, 21683), (45, 21692), (54, 21752), (68, 21839), (69, 21845),

Gene: Jamzy_27 Start: 19351, Stop: 19803, Start Num: 7
Candidate Starts for Jamzy_27:
(2, 19312), (5, 19342), (Start: 6 @19345 has 64 MA's), (Start: 7 @19351 has 16 MA's), (10, 19366), (27, 19450), (28, 19456), (30, 19471), (39, 19516), (46, 19537), (50, 19552), (60, 19660), (79, 19759),

Gene: JasperJr_24 Start: 20704, Stop: 21162, Start Num: 6
Candidate Starts for JasperJr_24:
(Start: 6 @20704 has 64 MA's), (17, 20767), (23, 20803), (28, 20818), (29, 20824), (32, 20851), (38, 20881), (42, 20893), (45, 20902), (54, 20962), (68, 21049), (69, 21055),

Gene: Jollymon_48 Start: 26503, Stop: 26979, Start Num: 7
Candidate Starts for Jollymon_48:
(Start: 7 @26503 has 16 MA's), (42, 26680), (46, 26692), (54, 26749), (57, 26779), (75, 26914), (76, 26917),

Gene: KayGee_24 Start: 19709, Stop: 20272, Start Num: 4
Candidate Starts for KayGee_24:

(Start: 4 @19709 has 16 MA's), (12, 19745), (23, 19811), (26, 19817), (35, 19877), (37, 19883), (39, 19889), (45, 19907), (58, 20027), (61, 20039), (64, 20051), (71, 20099), (77, 20168), (82, 20249),

Gene: Keitabear_44 Start: 40216, Stop: 40674, Start Num: 6
Candidate Starts for Keitabear_44:
(Start: 6 @40216 has 64 MA's), (21, 40294), (28, 40330), (29, 40336), (33, 40375), (48, 40426), (68, 40561),

Gene: Kiko_26 Start: 20953, Stop: 21411, Start Num: 6
Candidate Starts for Kiko_26:
(Start: 6 @20953 has 64 MA's), (17, 21016), (18, 21019), (21, 21031), (23, 21052), (28, 21067), (31, 21097), (45, 21151), (46, 21154), (49, 21166), (59, 21253), (76, 21349),

Gene: KingstonB_46 Start: 25981, Stop: 26457, Start Num: 7
Candidate Starts for KingstonB_46:
(Start: 7 @25981 has 16 MA's), (42, 26158), (46, 26170), (54, 26227), (56, 26248), (57, 26257), (75, 26392),

Gene: Lauer_23 Start: 19759, Stop: 20322, Start Num: 4
Candidate Starts for Lauer_23:
(Start: 4 @19759 has 16 MA's), (12, 19795), (23, 19861), (26, 19867), (35, 19927), (37, 19933), (39, 19939), (45, 19957), (58, 20077), (61, 20089), (64, 20101), (71, 20149), (77, 20218), (82, 20299),

Gene: Leonard_43 Start: 38604, Stop: 39062, Start Num: 6
Candidate Starts for Leonard_43:
(Start: 6 @38604 has 64 MA's), (21, 38682), (28, 38718), (29, 38724), (33, 38763), (42, 38793), (48, 38814), (54, 38862),

Gene: Lysidious_25 Start: 21224, Stop: 21682, Start Num: 6
Candidate Starts for Lysidious_25:
(Start: 6 @21224 has 64 MA's), (17, 21287), (23, 21323), (28, 21338), (29, 21344), (32, 21371), (38, 21401), (42, 21413), (45, 21422), (54, 21482), (68, 21569), (69, 21575),

Gene: MAnor_24 Start: 19726, Stop: 20289, Start Num: 4
Candidate Starts for MAnor_24:
(Start: 4 @19726 has 16 MA's), (12, 19762), (23, 19828), (28, 19843), (33, 19885), (35, 19894), (37, 19900), (39, 19906), (45, 19924), (56, 20026), (58, 20044), (61, 20056), (62, 20059), (64, 20068), (71, 20116), (82, 20266),

Gene: Makar_49 Start: 26436, Stop: 26912, Start Num: 7
Candidate Starts for Makar_49:
(Start: 7 @26436 has 16 MA's), (11, 26457), (20, 26505), (25, 26532), (36, 26595), (42, 26613), (70, 26787), (75, 26847),

Gene: Malachai_25 Start: 21181, Stop: 21639, Start Num: 6
Candidate Starts for Malachai_25:
(Start: 6 @21181 has 64 MA's), (17, 21244), (23, 21280), (28, 21295), (29, 21301), (32, 21328), (38, 21358), (42, 21370), (45, 21379), (54, 21439), (68, 21526), (69, 21532),

Gene: Malibo_26 Start: 20919, Stop: 21377, Start Num: 6
Candidate Starts for Malibo_26:
(Start: 6 @20919 has 64 MA's), (12, 20949), (17, 20982), (23, 21018), (28, 21033), (29, 21039), (32, 21066), (38, 21096), (40, 21102), (42, 21108), (45, 21117), (49, 21132), (54, 21177), (63, 21231), (75,

21312),

Gene: Margaret_27 Start: 19721, Stop: 20167, Start Num: 7
Candidate Starts for Margaret_27:
(1, 19619), (2, 19676), (Start: 7 @19721 has 16 MA's), (13, 19754), (15, 19763), (32, 19856), (36, 19874), (38, 19880), (51, 19922), (52, 19943), (53, 19949), (55, 19985), (57, 20012), (61, 20030), (73, 20084),

Gene: Mayweather_25 Start: 20342, Stop: 20905, Start Num: 4
Candidate Starts for Mayweather_25:
(Start: 4 @20342 has 16 MA's), (12, 20378), (23, 20444), (28, 20459), (33, 20501), (35, 20510), (37, 20516), (39, 20522), (56, 20642), (58, 20660), (61, 20672), (64, 20684), (82, 20882),

Gene: McDazzle_23 Start: 20183, Stop: 20746, Start Num: 4
Candidate Starts for McDazzle_23:
(Start: 4 @20183 has 16 MA's), (12, 20219), (23, 20285), (28, 20300), (33, 20342), (35, 20351), (37, 20357), (39, 20363), (56, 20483), (58, 20501), (61, 20513), (64, 20525), (82, 20723),

Gene: MelBins_44 Start: 38751, Stop: 39209, Start Num: 6
Candidate Starts for MelBins_44:
(Start: 6 @38751 has 64 MA's), (21, 38829), (23, 38850), (28, 38865), (29, 38871), (33, 38910), (42, 38940), (48, 38961),

Gene: Melba_24 Start: 20700, Stop: 21158, Start Num: 6
Candidate Starts for Melba_24:
(Start: 6 @20700 has 64 MA's), (17, 20763), (23, 20799), (28, 20814), (29, 20820), (32, 20847), (38, 20877), (42, 20889), (45, 20898), (54, 20958), (68, 21045), (69, 21051),

Gene: Mellie_23 Start: 20461, Stop: 20919, Start Num: 6
Candidate Starts for Mellie_23:
(Start: 6 @20461 has 64 MA's), (17, 20524), (23, 20560), (28, 20575), (29, 20581), (32, 20608), (38, 20638), (42, 20650), (45, 20659), (54, 20719), (68, 20806), (69, 20812),

Gene: MintFen_24 Start: 20700, Stop: 21158, Start Num: 6
Candidate Starts for MintFen_24:
(Start: 6 @20700 has 64 MA's), (17, 20763), (23, 20799), (28, 20814), (29, 20820), (32, 20847), (38, 20877), (42, 20889), (45, 20898), (54, 20958), (68, 21045), (69, 21051),

Gene: MissRona_26 Start: 21012, Stop: 21470, Start Num: 6
Candidate Starts for MissRona_26:
(Start: 6 @21012 has 64 MA's), (23, 21111), (28, 21126), (32, 21159), (42, 21201), (45, 21210), (54, 21270), (68, 21357), (69, 21363),

Gene: Morkie_23 Start: 18982, Stop: 19440, Start Num: 6
Candidate Starts for Morkie_23:
(Start: 6 @18982 has 64 MA's), (17, 19045), (23, 19081), (28, 19096), (32, 19129), (38, 19159), (40, 19165), (45, 19180), (54, 19240), (71, 19339), (76, 19378),

Gene: Murp_25 Start: 20968, Stop: 21426, Start Num: 6
Candidate Starts for Murp_25:
(Start: 6 @20968 has 64 MA's), (17, 21031), (23, 21067), (28, 21082), (32, 21115), (38, 21145), (45, 21166), (54, 21226), (68, 21313), (69, 21319),

Gene: Nodigi_26 Start: 19994, Stop: 20440, Start Num: 7
Candidate Starts for Nodigi_26:
(Start: 7 @19994 has 16 MA's), (12, 20018), (22, 20072), (35, 20141), (37, 20147), (45, 20171), (55, 20255), (63, 20306), (67, 20327), (71, 20348), (79, 20396), (80, 20399),

Gene: ODay_31 Start: 22917, Stop: 23375, Start Num: 6
Candidate Starts for ODay_31:
(Start: 6 @22917 has 64 MA's), (16, 22977), (21, 22995), (29, 23037), (31, 23061), (32, 23064), (33, 23076), (36, 23088), (42, 23106), (43, 23109), (44, 23112), (46, 23118), (54, 23175), (71, 23274), (76, 23313),

Gene: Orla_26 Start: 19998, Stop: 20444, Start Num: 7
Candidate Starts for Orla_26:
(Start: 7 @19998 has 16 MA's), (12, 20022), (22, 20076), (35, 20145), (37, 20151), (45, 20175), (55, 20259), (63, 20310), (67, 20331), (71, 20352), (79, 20400), (80, 20403),

Gene: Phauci_36 Start: 35454, Stop: 35912, Start Num: 6
Candidate Starts for Phauci_36:
(Start: 6 @35454 has 64 MA's), (21, 35532), (23, 35553), (27, 35562), (28, 35568), (48, 35664),

Gene: Phinally_43 Start: 38601, Stop: 39059, Start Num: 6
Candidate Starts for Phinally_43:
(Start: 6 @38601 has 64 MA's), (21, 38679), (28, 38715), (29, 38721), (33, 38760), (42, 38790), (48, 38811), (54, 38859),

Gene: PhorbesPhlower_23 Start: 18982, Stop: 19440, Start Num: 6
Candidate Starts for PhorbesPhlower_23:
(Start: 6 @18982 has 64 MA's), (17, 19045), (23, 19081), (28, 19096), (32, 19129), (38, 19159), (40, 19165), (45, 19180), (54, 19240), (71, 19339), (76, 19378),

Gene: PhriskyACE_23 Start: 20203, Stop: 20682, Start Num: 6
Candidate Starts for PhriskyACE_23:
(Start: 6 @20203 has 64 MA's), (9, 20218), (16, 20263), (19, 20275), (23, 20302), (28, 20317), (29, 20323), (38, 20380), (39, 20383), (40, 20386), (42, 20392), (68, 20569), (76, 20620),

Gene: PhrostedPhlake_26 Start: 21393, Stop: 21851, Start Num: 6
Candidate Starts for PhrostedPhlake_26:
(Start: 6 @21393 has 64 MA's), (17, 21456), (23, 21492), (28, 21507), (29, 21513), (32, 21540), (38, 21570), (42, 21582), (45, 21591), (54, 21651), (68, 21738), (69, 21744),

Gene: Pipp_24 Start: 20694, Stop: 21152, Start Num: 6
Candidate Starts for Pipp_24:
(Start: 6 @20694 has 64 MA's), (17, 20757), (23, 20793), (28, 20808), (29, 20814), (32, 20841), (38, 20871), (42, 20883), (45, 20892), (54, 20952), (69, 21045),

Gene: Pons_24 Start: 19714, Stop: 20277, Start Num: 4
Candidate Starts for Pons_24:
(Start: 4 @19714 has 16 MA's), (12, 19750), (23, 19816), (28, 19831), (33, 19873), (35, 19882), (37, 19888), (39, 19894), (56, 20014), (58, 20032), (61, 20044), (64, 20056), (82, 20254),

Gene: Posh_27 Start: 22293, Stop: 22751, Start Num: 6
Candidate Starts for Posh_27:

(Start: 6 @22293 has 64 MA's), (16, 22353), (21, 22371), (28, 22407), (29, 22413), (31, 22437), (32, 22440), (33, 22452), (36, 22464), (42, 22482), (43, 22485), (44, 22488), (46, 22494), (54, 22551), (69, 22644), (71, 22650),

Gene: PotPie_24 Start: 20575, Stop: 21138, Start Num: 4
Candidate Starts for PotPie_24:
(Start: 4 @20575 has 16 MA's), (Start: 7 @20587 has 16 MA's), (12, 20611), (23, 20677), (24, 20680), (26, 20683), (35, 20743), (37, 20749), (39, 20755), (45, 20773), (58, 20893), (61, 20905), (64, 20917), (71, 20965), (77, 21034), (82, 21115),

Gene: Purplicious_47 Start: 25749, Stop: 26225, Start Num: 7
Candidate Starts for Purplicious_47:
(Start: 7 @25749 has 16 MA's), (42, 25926), (46, 25938), (54, 25995), (57, 26025), (75, 26160), (76, 26163),

Gene: Pytheas_27 Start: 22439, Stop: 22897, Start Num: 6
Candidate Starts for Pytheas_27:
(Start: 6 @22439 has 64 MA's), (16, 22499), (21, 22517), (28, 22553), (29, 22559), (31, 22583), (32, 22586), (33, 22598), (36, 22610), (42, 22628), (43, 22631), (44, 22634), (46, 22640), (54, 22697), (69, 22790), (71, 22796),

Gene: RanchParmCat_27 Start: 19721, Stop: 20167, Start Num: 7
Candidate Starts for RanchParmCat_27:
(1, 19619), (2, 19676), (3, 19694), (Start: 7 @19721 has 16 MA's), (13, 19754), (15, 19763), (32, 19856), (34, 19865), (36, 19874), (38, 19880), (51, 19922), (52, 19943), (55, 19985), (57, 20012), (61, 20030), (73, 20084),

Gene: RedWattleHog_7 Start: 4039, Stop: 4608, Start Num: 4
Candidate Starts for RedWattleHog_7:
(Start: 4 @4039 has 16 MA's), (11, 4072), (12, 4075), (14, 4087), (33, 4201), (38, 4219), (39, 4222), (41, 4228), (42, 4231), (46, 4243), (61, 4372), (71, 4432), (72, 4453), (73, 4468), (74, 4492), (81, 4555),

Gene: RiverRaider_45 Start: 38134, Stop: 38592, Start Num: 6
Candidate Starts for RiverRaider_45:
(Start: 6 @38134 has 64 MA's), (13, 38173), (21, 38212), (28, 38248), (31, 38278), (42, 38323), (48, 38344), (75, 38527),

Gene: Samba_24 Start: 20778, Stop: 21236, Start Num: 6
Candidate Starts for Samba_24:
(Start: 6 @20778 has 64 MA's), (17, 20841), (23, 20877), (28, 20892), (29, 20898), (32, 20925), (38, 20955), (42, 20967), (45, 20976), (54, 21036), (68, 21123), (69, 21129),

Gene: Sedona_44 Start: 39952, Stop: 40410, Start Num: 6
Candidate Starts for Sedona_44:
(Start: 6 @39952 has 64 MA's), (21, 40030), (28, 40066), (29, 40072), (33, 40111), (48, 40162), (68, 40297),

Gene: Soos_44 Start: 25710, Stop: 26186, Start Num: 7
Candidate Starts for Soos_44:
(Start: 7 @25710 has 16 MA's), (42, 25887), (46, 25899), (54, 25956), (56, 25977), (57, 25986), (75, 26121),

Gene: Stillion_47 Start: 26295, Stop: 26771, Start Num: 7

Candidate Starts for Stillion_47:
(Start: 7 @26295 has 16 MA's), (38, 26460), (42, 26472), (46, 26484), (54, 26541), (57, 26571), (75, 26706),

Gene: Sting_47 Start: 26149, Stop: 26625, Start Num: 7
Candidate Starts for Sting_47:
(Start: 7 @26149 has 16 MA's), (42, 26326), (46, 26338), (54, 26395), (56, 26416), (57, 26425), (75, 26560),

Gene: Stormageddon_7 Start: 4039, Stop: 4608, Start Num: 4
Candidate Starts for Stormageddon_7:
(Start: 4 @4039 has 16 MA's), (11, 4072), (12, 4075), (14, 4087), (33, 4201), (38, 4219), (39, 4222), (41, 4228), (42, 4231), (46, 4243), (61, 4372), (71, 4432), (72, 4453), (73, 4468), (74, 4492), (81, 4555),

Gene: Tarnish_24 Start: 20082, Stop: 20645, Start Num: 4
Candidate Starts for Tarnish_24:
(Start: 4 @20082 has 16 MA's), (12, 20118), (23, 20184), (28, 20199), (33, 20241), (35, 20250), (37, 20256), (39, 20262), (56, 20382), (58, 20400), (61, 20412), (64, 20424), (82, 20622),

Gene: Trine_23 Start: 18593, Stop: 19054, Start Num: 6
Candidate Starts for Trine_23:
(5, 18590), (Start: 6 @18593 has 64 MA's), (17, 18656), (19, 18665), (23, 18692), (27, 18701), (42, 18782), (45, 18791), (47, 18800),

Gene: Tuti_24 Start: 21090, Stop: 21569, Start Num: 6
Candidate Starts for Tuti_24:
(Start: 6 @21090 has 64 MA's), (9, 21105), (16, 21150), (19, 21162), (23, 21189), (28, 21204), (29, 21210), (38, 21267), (39, 21270), (40, 21273), (42, 21279), (68, 21456), (76, 21507),

Gene: UmaThurman_24 Start: 20825, Stop: 21283, Start Num: 6
Candidate Starts for UmaThurman_24:
(Start: 6 @20825 has 64 MA's), (17, 20888), (23, 20924), (28, 20939), (29, 20945), (32, 20972), (38, 21002), (42, 21014), (45, 21023), (54, 21083), (68, 21170), (69, 21176),

Gene: Utz_24 Start: 20695, Stop: 21153, Start Num: 6
Candidate Starts for Utz_24:
(Start: 6 @20695 has 64 MA's), (17, 20758), (23, 20794), (28, 20809), (29, 20815), (32, 20842), (38, 20872), (42, 20884), (45, 20893), (54, 20953), (68, 21040), (69, 21046),

Gene: Vine_25 Start: 20722, Stop: 21285, Start Num: 4
Candidate Starts for Vine_25:
(Start: 4 @20722 has 16 MA's), (12, 20758), (23, 20824), (26, 20830), (35, 20890), (37, 20896), (39, 20902), (45, 20920), (58, 21040), (61, 21052), (64, 21064), (71, 21112), (77, 21181), (82, 21262),

Gene: Walrus_26 Start: 21240, Stop: 21698, Start Num: 6
Candidate Starts for Walrus_26:
(Start: 6 @21240 has 64 MA's), (17, 21303), (23, 21339), (28, 21354), (29, 21360), (32, 21387), (38, 21417), (42, 21429), (45, 21438), (54, 21498), (68, 21585), (69, 21591),

Gene: Wisp_23 Start: 20410, Stop: 20868, Start Num: 6
Candidate Starts for Wisp_23:
(Start: 6 @20410 has 64 MA's), (17, 20473), (23, 20509), (28, 20524), (29, 20530), (32, 20557), (38, 20587), (42, 20599), (45, 20608), (54, 20668), (68, 20755), (69, 20761),

Gene: Wrigley_27 Start: 22190, Stop: 22648, Start Num: 6
Candidate Starts for Wrigley_27:
(Start: 6 @22190 has 64 MA's), (16, 22250), (21, 22268), (28, 22304), (29, 22310), (31, 22334), (32, 22337), (33, 22349), (36, 22361), (42, 22379), (43, 22382), (44, 22385), (46, 22391), (54, 22448), (69, 22541), (71, 22547),

Gene: Yakult_25 Start: 19569, Stop: 20021, Start Num: 7
Candidate Starts for Yakult_25:
(1, 19473), (2, 19530), (5, 19560), (Start: 6 @19563 has 64 MA's), (Start: 7 @19569 has 16 MA's), (10, 19584), (12, 19593), (13, 19602), (30, 19689), (32, 19707), (37, 19728), (46, 19755), (50, 19770), (57, 19863), (60, 19878), (61, 19881), (79, 19977),

Gene: Yucky_24 Start: 20581, Stop: 21144, Start Num: 4
Candidate Starts for Yucky_24:
(Start: 4 @20581 has 16 MA's), (12, 20617), (23, 20683), (26, 20689), (35, 20749), (37, 20755), (39, 20761), (45, 20779), (58, 20899), (61, 20911), (64, 20923), (71, 20971), (77, 21040), (82, 21121),

Gene: Zarbodnamra_24 Start: 20699, Stop: 21157, Start Num: 6
Candidate Starts for Zarbodnamra_24:
(Start: 6 @20699 has 64 MA's), (17, 20762), (23, 20798), (28, 20813), (29, 20819), (32, 20846), (38, 20876), (42, 20888), (45, 20897), (54, 20957), (68, 21044), (69, 21050),

Gene: Zilla_24 Start: 20717, Stop: 21175, Start Num: 6
Candidate Starts for Zilla_24:
(Start: 6 @20717 has 64 MA's), (17, 20780), (23, 20816), (28, 20831), (29, 20837), (32, 20864), (38, 20894), (42, 20906), (45, 20915), (54, 20975), (68, 21062), (69, 21068),