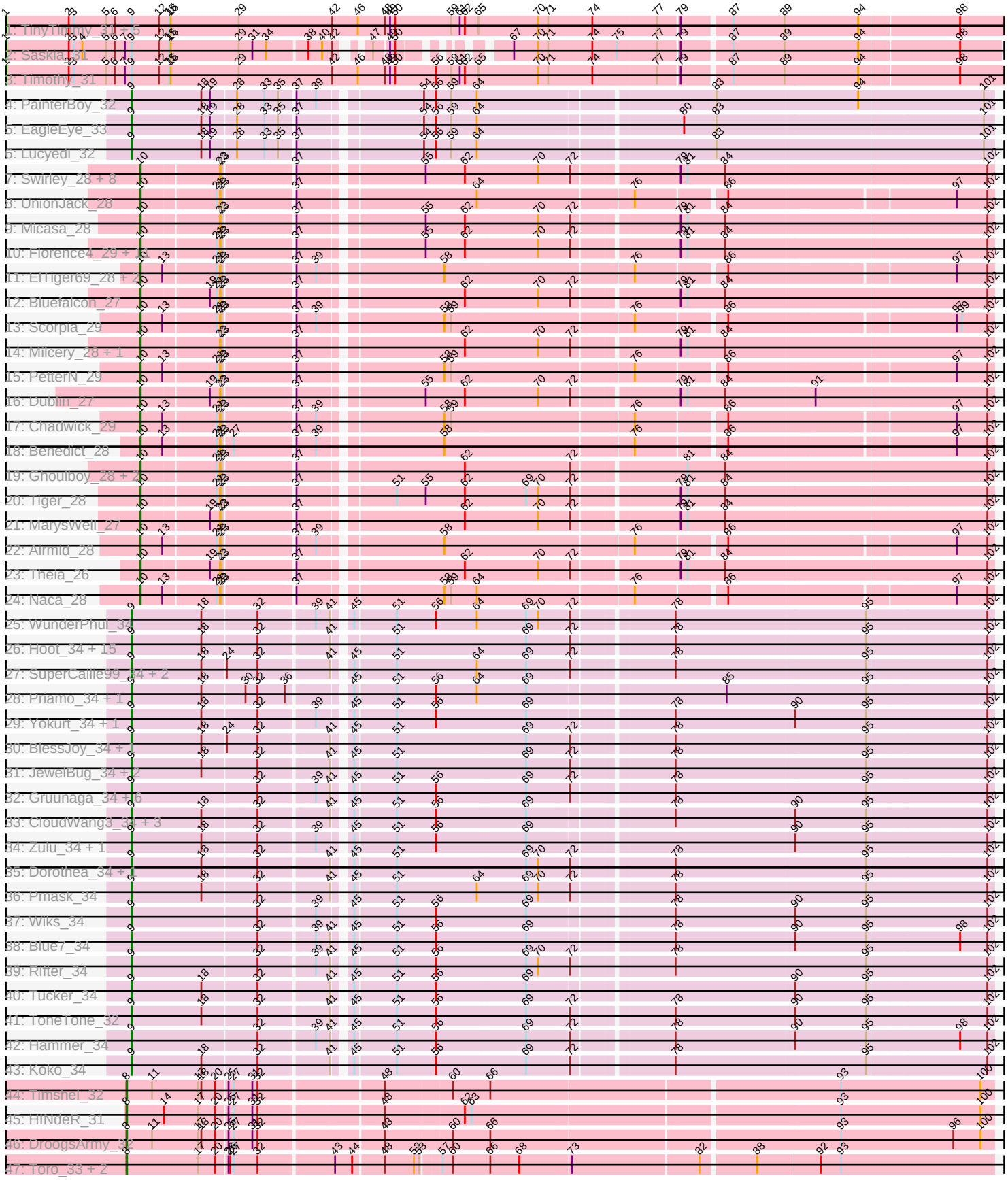
Pham 347430


1: TinyTimmy_34 + 5
2: Saskia_31
3: Timothy_31
4: PainterBoy_32
5: EagleEye_33
6: Lucyedi_32
7: Swirley_28 + 8
8: UnionJack_28
9: Micasa_28
10: Florence4_29 + 1
11: Ertiger69_28 + 2
12: Bluefalcon_27
13: Scorpia_29
14: Milcery_28 + 1
15: PetterN_29
16: Dublin_27
17: Chadwick_29
18: Benedict_28
19: Ghoulboy_28 + 2
20: Tiger_28
21: MarysWell_27
22: Airmid_28
23: Thela_26
24: Naca_28
25: WunderPhul_34
26: Hoot_34 + 15
27: SuperCallie99_34 + 2
28: Phamo_34 + 1
29: Yokurt_34 + 1
30: BlessJoy_34 + 1
31: JewelBug_34 + 2
32: Gruunaga_34 + 6
33: CloudWang3_34 + 3
34: Zulu_34 + 1
35: Dorothea_34 + 1
36: Pmask_34
37: Wiks_34
38: Blue7_34
39: Ritter_34
40: Tucker_34
41: ToneTone_32
42: Hammer_34
43: Koko_34
44: Timshel_32
45: HiNdeR_31
46: DroogsArmy_32
47: Toro_33 + 2

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 347430 Report

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

Pham number 347430 has 111 members, 6 are drafts.

Phages represented in each track:
• Track 1 : TinyTimmy_31, Salz_31, Kimba_31, Ebony_31, Et2Brutus_30, Mabel_31
• Track 2 : Saskia_31
• Track 3 : Timothy_31
• Track 4 : PainterBoy_32
• Track 5 : EagleEye_33
• Track 6 : Lucyedi_32
• Track 7 : Swirley_28, Prinashe11_28, Twigg_28, George_27, LittleCherry_28, Coog_28, Midas2_28, Cuco_28, HuhtaEnerson15_28
• Track 8 : UnionJack_28
• Track 9 : Micasa_28
• Track 10 : Florence4_29, Conspiracy_28, AgentM_28, Lev2_28, Florence1_28, ForGetIt_28, Aragog_28, Phlorence_28, Bonamassa_28, Jovo_28, PickleBack_28, Discoknowium_28
• Track 11 : ElTiger69_28, Jabiru_28, Archetta_28
• Track 12 : Bluefalcon_27
• Track 13 : Scorpia_29
• Track 14 : Milcery_28, Tarynearal_27
• Track 15 : PetterN_29
• Track 16 : Dublin_27
• Track 17 : Chadwick_29
• Track 18 : Benedict_28
• Track 19 : Ghoulboy_28, Zolita_27, SydNat_28
• Track 20 : Tiger_28
• Track 21 : MarysWell_27
• Track 22 : Airmid_28
• Track 23 : Theia_26
• Track 24 : Naca_28
• Track 25 : WunderPhul_34
• Track 26 : Hoot_34, GreedyLawyer_34, EricB_34, BABullseye_34, Newrala_34, Chartreuse_34, McFly_34, Kipper29_34, Cookiedough_34, SuperAwesome_34, DaVinci_34, Neeharika16_34, Candra_34, BennyP_34, SmellyB_34, VohminGhazi_34
• Track 27 : SuperCallie99_34, DelvinSonDorr_33, Isiphiwo_34
• Track 28 : Priamo_34, Blinn1_34
• Track 29 : Yokurt_34, Zaka_34
• Track 30 : BlessJoy_34, Kazan_34
• Track 31 : JewelBug_34, Imbriano_34, Polyphemus_34

• Track 32 : Gruunaga_34, Gladiator_34, Indra_34, Garak_35, Helmet_34, Roksolana_34, Temprado_34
• Track 33 : CloudWang3_34, Hexamo_34, Jeffabunny_34, Artemis2UCLA_34
• Track 34 : Zulu_34, Lilbunny_34
• Track 35 : Dorothea_34, Jordennis_34
• Track 36 : Pmask_34
• Track 37 : Wiks_34
• Track 38 : Blue7_34
• Track 39 : Rifter_34
• Track 40 : Tucker_34
• Track 41 : ToneTone_32
• Track 42 : Hammer_34
• Track 43 : Koko_34
• Track 44 : Timshel_32
• Track 45 : HINdeR_31
• Track 46 : DroogsArmy_32
• Track 47 : Toro_33, FlyCatcher_34, Sheen_32

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

The start number called the most often in the published annotations is 9, it was called in 53 of the 105 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Artemis2UCLA_34, BABullseye_34, BennyP_34, BlessJoy_34, Blinn1_34, Blue7_34, Candra_34, Chartreuse_34, CloudWang3_34, Cookiedough_34, DaVinci_34, DelvinSonDorr_33, Dorothea_34, EagleEye_33, EricB_34, Garak_35, Gladiator_34, GreedyLawyer_34, Gruunaga_34, Hammer_34, Helmet_34, Hexamo_34, Hoot_34, Imbriano_34, Indra_34, Isiphiwo_34, Jeffabunny_34, JewelBug_34, Jordennis_34, Kazan_34, Kipper29_34, Koko_34, Lilbunny_34, Lucyedi_32, McFly_34, Neeharika16_34, Newrala_34, PainterBoy_32, Pmask_34, Polyphemus_34, Priamo_34, Rifter_34, Roksolana_34, SmellyB_34, SuperAwesome_34, SuperCallie99_34, Temprado_34, ToneTone_32, Tucker_34, VohminGhazi_34, Wiks_34, WunderPhul_34, Yokurt_34, Zaka_34, Zulu_34,

Genes that have the "Most Annotated" start but do not call it:
• Ebony_31, Et2Brutus_30, Kimba_31, Mabel_31, Salz_31, Saskia_31, Timothy_31, TinyTimmy_31,

Genes that do not have the "Most Annotated" start:
• AgentM_28, Airmid_28, Aragog_28, Archetta_28, Benedict_28, Bluefalcon_27, Bonamassa_28, Chadwick_29, Conspiracy_28, Coog_28, Cuco_28, Discoknowium_28, DroogsArmy_32, Dublin_27, ElTiger69_28, Florence1_28, Florence4_29, FlyCatcher_34, ForGetIt_28, George_27, Ghoulboy_28, HINdeR_31, HuhtaEnerson15_28, Jabiru_28, Jovo_28, Lev2_28, LittleCherry_28, MarysWell_27, Micasa_28, Midas2_28, Milcery_28, Naca_28, PetterN_29, Phlorence_28, PickleBack_28, Prinashe11_28, Scorpia_29, Sheen_32, Swirley_28, SydNat_28, Tarynearal_27, Theia_26, Tiger_28, Timshel_32, Toro_33, Twigg_28, UnionJack_28, Zolita_27,

Summary by start number:

Start 1:
• Found in 8 of 111 (7.2%) of genes in pham
• Manual Annotations of this start: 8 of 105
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ebony_31 (A11), Et2Brutus_30 (A11), Kimba_31 (A11), Mabel_31 (A11), Salz_31 (A11), Saskia_31 (A11), Timothy_31 (A11), TinyTimmy_31 (A11),

Start 8:
• Found in 6 of 111 (5.4%) of genes in pham
• Manual Annotations of this start: 4 of 105
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DroogsArmy_32 (A7), FlyCatcher_34 (A7), HINdeR_31 (A7), Sheen_32 (A7), Timshel_32 (A7), Toro_33 (A7),

Start 9:
• Found in 63 of 111 (56.8%) of genes in pham
• Manual Annotations of this start: 53 of 105
• Called 87.3% of time when present
• Phage (with cluster) where this start called: Artemis2UCLA_34 (A6), BABullseye_34 (A6), BennyP_34 (A6), BlessJoy_34 (A6), Blinn1_34 (A6), Blue7_34 (A6), Candra_34 (A6), Chartreuse_34 (A6), CloudWang3_34 (A6), Cookiedough_34 (A6), DaVinci_34 (A6), DelvinSonDorr_33 (A6), Dorothea_34 (A6), EagleEye_33 (A16), EricB_34 (A6), Garak_35 (A6), Gladiator_34 (A6), GreedyLawyer_34 (A6), Gruunaga_34 (A6), Hammer_34 (A6), Helmet_34 (A6), Hexamo_34 (A6), Hoot_34 (A6), Imbriano_34 (A6), Indra_34 (A6), Isiphiwo_34 (A6), Jeffabunny_34 (A6), JewelBug_34 (A6), Jordennis_34 (A6), Kazan_34 (A6), Kipper29_34 (A6), Koko_34 (A6), Lilbunny_34 (A6), Lucyedi_32 (A16), McFly_34 (A6), Neeharika16_34 (A6), Newrala_34 (A6), PainterBoy_32 (A16), Pmask_34 (A6), Polyphemus_34 (A6), Priamo_34 (A6), Rifter_34 (A6), Roksolana_34 (A6), SmellyB_34 (A6), SuperAwesome_34 (A6), SuperCallie99_34 (A6), Temprado_34 (A6), ToneTone_32 (A6), Tucker_34 (A6), VohminGhazi_34 (A6), Wiks_34 (A6), WunderPhul_34 (A6), Yokurt_34 (A6), Zaka_34 (A6), Zulu_34 (A6),

Start 10:
• Found in 42 of 111 (37.8%) of genes in pham
• Manual Annotations of this start: 40 of 105
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AgentM_28 (A5), Airmid_28 (A5), Aragog_28 (A5), Archetta_28 (A5), Benedict_28 (A5), Bluefalcon_27 (A5), Bonamassa_28 (A5), Chadwick_29 (A5), Conspiracy_28 (A5), Coog_28 (A5), Cuco_28 (A5), Discoknowium_28 (A5), Dublin_27 (A5), ElTiger69_28 (A5), Florence1_28 (A5), Florence4_29 (A5), ForGetIt_28 (A5), George_27 (A5), Ghoulboy_28 (A5), HuhtaEnerson15_28 (A5), Jabiru_28 (A5), Jovo_28 (A5), Lev2_28 (A5), LittleCherry_28 (A5), MarysWell_27 (A5), Micasa_28 (A5), Midas2_28 (A5), Milcery_28 (A5), Naca_28 (A5), PetterN_29 (A5), Phlorence_28 (A5), PickleBack_28 (A5), Prinashe11_28 (A5), Scorpia_29 (A5), Swirley_28 (A5), SydNat_28 (A5), Tarynearal_27 (A5), Theia_26 (A5), Tiger_28 (A5), Twigg_28 (A5), UnionJack_28 (A5), Zolita_27 (A5),

Summary by clusters:

There are 5 clusters represented in this pham: A11, A16, A5, A7, A6,

Info for manual annotations of cluster A11:
•Start number 1 was manually annotated 8 times for cluster A11.

Info for manual annotations of cluster A16:
•Start number 9 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A5:
•Start number 10 was manually annotated 40 times for cluster A5.

Info for manual annotations of cluster A6:
•Start number 9 was manually annotated 50 times for cluster A6.

Info for manual annotations of cluster A7:
•Start number 8 was manually annotated 4 times for cluster A7.

Gene Information:

Gene: AgentM_28 Start: 22620, Stop: 24017, Start Num: 10
Candidate Starts for AgentM_28:
(Start: 10 @22620 has 40 MA's), (21, 22746), (22, 22752), (23, 22755), (37, 22869), (55, 23067), (62, 23136), (70, 23262), (72, 23313), (79, 23484), (81, 23496), (84, 23562), (102, 24006),

Gene: Airmid_28 Start: 21861, Stop: 23243, Start Num: 10
Candidate Starts for Airmid_28:
(Start: 10 @21861 has 40 MA's), (13, 21900), (21, 21987), (22, 21993), (23, 21996), (37, 22110), (39, 22143), (58, 22341), (76, 22659), (86, 22803), (97, 23178), (102, 23232),

Gene: Aragog_28 Start: 22650, Stop: 24047, Start Num: 10
Candidate Starts for Aragog_28:
(Start: 10 @22650 has 40 MA's), (21, 22776), (22, 22782), (23, 22785), (37, 22899), (55, 23097), (62, 23166), (70, 23292), (72, 23343), (79, 23514), (81, 23526), (84, 23592), (102, 24036),

Gene: Archetta_28 Start: 22443, Stop: 23825, Start Num: 10
Candidate Starts for Archetta_28:
(Start: 10 @22443 has 40 MA's), (13, 22482), (21, 22569), (22, 22575), (23, 22578), (37, 22692), (39, 22725), (58, 22923), (76, 23241), (86, 23385), (97, 23760), (102, 23814),

Gene: Artemis2UCLA_34 Start: 22403, Stop: 23824, Start Num: 9
Candidate Starts for Artemis2UCLA_34:
(Start: 9 @22403 has 53 MA's), (18, 22523), (32, 22613), (41, 22730), (45, 22751), (51, 22820), (56, 22889), (69, 23045), (78, 23279), (90, 23486), (95, 23609), (102, 23813),

Gene: BABullseye_34 Start: 22579, Stop: 24000, Start Num: 9
Candidate Starts for BABullseye_34:
(Start: 9 @22579 has 53 MA's), (18, 22699), (32, 22789), (41, 22906), (51, 22996), (69, 23221), (72, 23293), (78, 23455), (95, 23785), (102, 23989),

Gene: Benedict_28 Start: 21864, Stop: 23246, Start Num: 10

Candidate Starts for Benedict_28:
(Start: 10 @21864 has 40 MA's), (13, 21903), (21, 21990), (22, 21996), (23, 21999), (27, 22014), (37, 22113), (39, 22146), (58, 22344), (76, 22662), (86, 22806), (97, 23181), (102, 23235),

Gene: BennyP_34 Start: 22506, Stop: 23927, Start Num: 9
Candidate Starts for BennyP_34:
(Start: 9 @22506 has 53 MA's), (18, 22626), (32, 22716), (41, 22833), (51, 22923), (69, 23148), (72, 23220), (78, 23382), (95, 23712), (102, 23916),

Gene: BlessJoy_34 Start: 22501, Stop: 23922, Start Num: 9
Candidate Starts for BlessJoy_34:
(Start: 9 @22501 has 53 MA's), (18, 22621), (24, 22660), (32, 22711), (41, 22828), (45, 22849), (51, 22918), (69, 23143), (72, 23215), (78, 23377), (95, 23707), (102, 23911),

Gene: Blinn1_34 Start: 22572, Stop: 23993, Start Num: 9
Candidate Starts for Blinn1_34:
(Start: 9 @22572 has 53 MA's), (18, 22692), (30, 22761), (32, 22782), (36, 22830), (45, 22920), (51, 22989), (56, 23058), (64, 23130), (69, 23214), (85, 23538), (95, 23778), (102, 23982),

Gene: Blue7_34 Start: 22493, Stop: 23911, Start Num: 9
Candidate Starts for Blue7_34:
(Start: 9 @22493 has 53 MA's), (32, 22703), (39, 22796), (41, 22820), (45, 22841), (51, 22910), (56, 22979), (69, 23135), (78, 23369), (90, 23576), (95, 23699), (98, 23852), (102, 23900),

Gene: Bluefalcon_27 Start: 22700, Stop: 24097, Start Num: 10
Candidate Starts for Bluefalcon_27:
(Start: 10 @22700 has 40 MA's), (19, 22814), (21, 22826), (22, 22832), (23, 22835), (37, 22949), (62, 23216), (70, 23342), (72, 23393), (79, 23564), (81, 23576), (84, 23642), (102, 24086),

Gene: Bonamassa_28 Start: 22541, Stop: 23938, Start Num: 10
Candidate Starts for Bonamassa_28:
(Start: 10 @22541 has 40 MA's), (21, 22667), (22, 22673), (23, 22676), (37, 22790), (55, 22988), (62, 23057), (70, 23183), (72, 23234), (79, 23405), (81, 23417), (84, 23483), (102, 23927),

Gene: Candra_34 Start: 22542, Stop: 23963, Start Num: 9
Candidate Starts for Candra_34:
(Start: 9 @22542 has 53 MA's), (18, 22662), (32, 22752), (41, 22869), (51, 22959), (69, 23184), (72, 23256), (78, 23418), (95, 23748), (102, 23952),

Gene: Chadwick_29 Start: 21832, Stop: 23214, Start Num: 10
Candidate Starts for Chadwick_29:
(Start: 10 @21832 has 40 MA's), (13, 21871), (21, 21958), (22, 21964), (23, 21967), (37, 22081), (39, 22114), (58, 22312), (59, 22324), (76, 22630), (86, 22774), (97, 23149), (102, 23203),

Gene: Chartreuse_34 Start: 22453, Stop: 23874, Start Num: 9
Candidate Starts for Chartreuse_34:
(Start: 9 @22453 has 53 MA's), (18, 22573), (32, 22663), (41, 22780), (51, 22870), (69, 23095), (72, 23167), (78, 23329), (95, 23659), (102, 23863),

Gene: CloudWang3_34 Start: 22503, Stop: 23924, Start Num: 9
Candidate Starts for CloudWang3_34:
(Start: 9 @22503 has 53 MA's), (18, 22623), (32, 22713), (41, 22830), (45, 22851), (51, 22920), (56, 22989), (69, 23145), (78, 23379), (90, 23586), (95, 23709), (102, 23913),

Gene: Conspiracy_28 Start: 22450, Stop: 23847, Start Num: 10
Candidate Starts for Conspiracy_28:
(Start: 10 @22450 has 40 MA's), (21, 22576), (22, 22582), (23, 22585), (37, 22699), (55, 22897), (62, 22966), (70, 23092), (72, 23143), (79, 23314), (81, 23326), (84, 23392), (102, 23836),

Gene: Coog_28 Start: 22590, Stop: 23987, Start Num: 10
Candidate Starts for Coog_28:
(Start: 10 @22590 has 40 MA's), (22, 22722), (23, 22725), (37, 22839), (55, 23037), (62, 23106), (70, 23232), (72, 23283), (79, 23454), (81, 23466), (84, 23532), (102, 23976),

Gene: Cookiedough_34 Start: 22499, Stop: 23920, Start Num: 9
Candidate Starts for Cookiedough_34:
(Start: 9 @22499 has 53 MA's), (18, 22619), (32, 22709), (41, 22826), (51, 22916), (69, 23141), (72, 23213), (78, 23375), (95, 23705), (102, 23909),

Gene: Cuco_28 Start: 22540, Stop: 23937, Start Num: 10
Candidate Starts for Cuco_28:
(Start: 10 @22540 has 40 MA's), (22, 22672), (23, 22675), (37, 22789), (55, 22987), (62, 23056), (70, 23182), (72, 23233), (79, 23404), (81, 23416), (84, 23482), (102, 23926),

Gene: DaVinci_34 Start: 22507, Stop: 23928, Start Num: 9
Candidate Starts for DaVinci_34:
(Start: 9 @22507 has 53 MA's), (18, 22627), (32, 22717), (41, 22834), (51, 22924), (69, 23149), (72, 23221), (78, 23383), (95, 23713), (102, 23917),

Gene: DelvinSonDorr_33 Start: 22499, Stop: 23920, Start Num: 9
Candidate Starts for DelvinSonDorr_33:
(Start: 9 @22499 has 53 MA's), (18, 22619), (24, 22658), (32, 22709), (41, 22826), (45, 22847), (51, 22916), (64, 23057), (69, 23141), (72, 23213), (78, 23375), (95, 23705), (102, 23909),

Gene: Discoknowium_28 Start: 22659, Stop: 24056, Start Num: 10
Candidate Starts for Discoknowium_28:
(Start: 10 @22659 has 40 MA's), (21, 22785), (22, 22791), (23, 22794), (37, 22908), (55, 23106), (62, 23175), (70, 23301), (72, 23352), (79, 23523), (81, 23535), (84, 23601), (102, 24045),

Gene: Dorothea_34 Start: 22507, Stop: 23928, Start Num: 9
Candidate Starts for Dorothea_34:
(Start: 9 @22507 has 53 MA's), (18, 22627), (32, 22717), (41, 22834), (45, 22855), (51, 22924), (69, 23149), (70, 23170), (72, 23221), (78, 23383), (95, 23713), (102, 23917),

Gene: DroogsArmy_32 Start: 25763, Stop: 27226, Start Num: 8
Candidate Starts for DroogsArmy_32:
(Start: 8 @25763 has 4 MA's), (11, 25808), (17, 25889), (18, 25895), (20, 25919), (25, 25937), (27, 25946), (31, 25976), (32, 25985), (48, 26189), (60, 26303), (66, 26369), (93, 26960), (96, 27155), (100, 27203),

Gene: Dublin_27 Start: 22509, Stop: 23906, Start Num: 10
Candidate Starts for Dublin_27:
(Start: 10 @22509 has 40 MA's), (19, 22623), (22, 22641), (23, 22644), (37, 22758), (55, 22956), (62, 23025), (70, 23151), (72, 23202), (79, 23373), (81, 23385), (84, 23451), (91, 23607), (102, 23895),

Gene: EagleEye_33 Start: 23461, Stop: 24882, Start Num: 9

Candidate Starts for EagleEye_33:
(Start: 9 @23461 has 53 MA's), (18, 23584), (19, 23599), (28, 23641), (33, 23686), (35, 23710), (37, 23734), (54, 23929), (56, 23950), (59, 23977), (64, 24022), (80, 24355), (83, 24412), (101, 24865),

Gene: Ebony_31 Start: 23440, Stop: 25161, Start Num: 1
Candidate Starts for Ebony_31:
(Start: 1 @23440 has 8 MA's), (2, 23551), (3, 23560), (5, 23617), (6, 23632), (Start: 9 @23662 has 53 MA's), (12, 23710), (15, 23728), (16, 23731), (29, 23851), (42, 24016), (46, 24061), (48, 24109), (49, 24118), (50, 24127), (59, 24226), (61, 24241), (62, 24250), (65, 24274), (70, 24376), (71, 24394), (74, 24472), (77, 24580), (79, 24613), (87, 24694), (89, 24784), (94, 24913), (98, 25081),

Gene: ElTiger69_28 Start: 21862, Stop: 23244, Start Num: 10
Candidate Starts for ElTiger69_28:
(Start: 10 @21862 has 40 MA's), (13, 21901), (21, 21988), (22, 21994), (23, 21997), (37, 22111), (39, 22144), (58, 22342), (76, 22660), (86, 22804), (97, 23179), (102, 23233),

Gene: EricB_34 Start: 22499, Stop: 23920, Start Num: 9
Candidate Starts for EricB_34:
(Start: 9 @22499 has 53 MA's), (18, 22619), (32, 22709), (41, 22826), (51, 22916), (69, 23141), (72, 23213), (78, 23375), (95, 23705), (102, 23909),

Gene: Et2Brutus_30 Start: 23400, Stop: 25121, Start Num: 1
Candidate Starts for Et2Brutus_30:
(Start: 1 @23400 has 8 MA's), (2, 23511), (3, 23520), (5, 23577), (6, 23592), (Start: 9 @23622 has 53 MA's), (12, 23670), (15, 23688), (16, 23691), (29, 23811), (42, 23976), (46, 24021), (48, 24069), (49, 24078), (50, 24087), (59, 24186), (61, 24201), (62, 24210), (65, 24234), (70, 24336), (71, 24354), (74, 24432), (77, 24540), (79, 24573), (87, 24654), (89, 24744), (94, 24873), (98, 25041),

Gene: Florence1_28 Start: 22332, Stop: 23729, Start Num: 10
Candidate Starts for Florence1_28:
(Start: 10 @22332 has 40 MA's), (21, 22458), (22, 22464), (23, 22467), (37, 22581), (55, 22779), (62, 22848), (70, 22974), (72, 23025), (79, 23196), (81, 23208), (84, 23274), (102, 23718),

Gene: Florence4_29 Start: 22332, Stop: 23729, Start Num: 10
Candidate Starts for Florence4_29:
(Start: 10 @22332 has 40 MA's), (21, 22458), (22, 22464), (23, 22467), (37, 22581), (55, 22779), (62, 22848), (70, 22974), (72, 23025), (79, 23196), (81, 23208), (84, 23274), (102, 23718),

Gene: FlyCatcher_34 Start: 25538, Stop: 26992, Start Num: 8
Candidate Starts for FlyCatcher_34:
(Start: 8 @25538 has 4 MA's), (17, 25664), (20, 25694), (25, 25712), (26, 25715), (27, 25721), (32, 25760), (43, 25886), (44, 25916), (48, 25964), (52, 26015), (53, 26024), (57, 26054), (60, 26072), (66, 26138), (68, 26189), (73, 26276), (82, 26492), (88, 26582), (92, 26690), (93, 26726),

Gene: ForGetIt_28 Start: 22475, Stop: 23872, Start Num: 10
Candidate Starts for ForGetIt_28:
(Start: 10 @22475 has 40 MA's), (21, 22601), (22, 22607), (23, 22610), (37, 22724), (55, 22922), (62, 22991), (70, 23117), (72, 23168), (79, 23339), (81, 23351), (84, 23417), (102, 23861),

Gene: Garak_35 Start: 22507, Stop: 23928, Start Num: 9
Candidate Starts for Garak_35:
(Start: 9 @22507 has 53 MA's), (32, 22717), (39, 22810), (41, 22834), (45, 22855), (51, 22924), (56, 22993), (69, 23149), (72, 23221), (78, 23383), (95, 23713), (102, 23917),

Gene: George_27 Start: 22541, Stop: 23938, Start Num: 10
Candidate Starts for George_27:
(Start: 10 @22541 has 40 MA's), (22, 22673), (23, 22676), (37, 22790), (55, 22988), (62, 23057), (70, 23183), (72, 23234), (79, 23405), (81, 23417), (84, 23483), (102, 23927),

Gene: Ghoulboy_28 Start: 22790, Stop: 24187, Start Num: 10
Candidate Starts for Ghoulboy_28:
(Start: 10 @22790 has 40 MA's), (21, 22916), (22, 22922), (23, 22925), (37, 23039), (62, 23306), (72, 23483), (81, 23666), (84, 23732), (102, 24176),

Gene: Gladiator_34 Start: 22493, Stop: 23914, Start Num: 9
Candidate Starts for Gladiator_34:
(Start: 9 @22493 has 53 MA's), (32, 22703), (39, 22796), (41, 22820), (45, 22841), (51, 22910), (56, 22979), (69, 23135), (72, 23207), (78, 23369), (95, 23699), (102, 23903),

Gene: GreedyLawyer_34 Start: 22506, Stop: 23927, Start Num: 9
Candidate Starts for GreedyLawyer_34:
(Start: 9 @22506 has 53 MA's), (18, 22626), (32, 22716), (41, 22833), (51, 22923), (69, 23148), (72, 23220), (78, 23382), (95, 23712), (102, 23916),

Gene: Gruunaga_34 Start: 22493, Stop: 23914, Start Num: 9
Candidate Starts for Gruunaga_34:
(Start: 9 @22493 has 53 MA's), (32, 22703), (39, 22796), (41, 22820), (45, 22841), (51, 22910), (56, 22979), (69, 23135), (72, 23207), (78, 23369), (95, 23699), (102, 23903),

Gene: HINdeR_31 Start: 25869, Stop: 27332, Start Num: 8
Candidate Starts for HINdeR_31:
(Start: 8 @25869 has 4 MA's), (14, 25935), (17, 25995), (20, 26025), (25, 26043), (27, 26052), (31, 26082), (32, 26091), (48, 26295), (62, 26430), (63, 26442), (93, 27066), (100, 27309),

Gene: Hammer_34 Start: 22508, Stop: 23926, Start Num: 9
Candidate Starts for Hammer_34:
(Start: 9 @22508 has 53 MA's), (32, 22718), (39, 22811), (41, 22835), (45, 22856), (51, 22925), (56, 22994), (69, 23150), (72, 23222), (78, 23384), (90, 23591), (95, 23714), (98, 23867), (102, 23915),

Gene: Helmet_34 Start: 22507, Stop: 23928, Start Num: 9
Candidate Starts for Helmet_34:
(Start: 9 @22507 has 53 MA's), (32, 22717), (39, 22810), (41, 22834), (45, 22855), (51, 22924), (56, 22993), (69, 23149), (72, 23221), (78, 23383), (95, 23713), (102, 23917),

Gene: Hexamo_34 Start: 22475, Stop: 23896, Start Num: 9
Candidate Starts for Hexamo_34:
(Start: 9 @22475 has 53 MA's), (18, 22595), (32, 22685), (41, 22802), (45, 22823), (51, 22892), (56, 22961), (69, 23117), (78, 23351), (90, 23558), (95, 23681), (102, 23885),

Gene: Hoot_34 Start: 22485, Stop: 23906, Start Num: 9
Candidate Starts for Hoot_34:
(Start: 9 @22485 has 53 MA's), (18, 22605), (32, 22695), (41, 22812), (51, 22902), (69, 23127), (72, 23199), (78, 23361), (95, 23691), (102, 23895),

Gene: HuhtaEnerson15_28 Start: 22541, Stop: 23938, Start Num: 10
Candidate Starts for HuhtaEnerson15_28:

(Start: 10 @22541 has 40 MA's), (22, 22673), (23, 22676), (37, 22790), (55, 22988), (62, 23057), (70, 23183), (72, 23234), (79, 23405), (81, 23417), (84, 23483), (102, 23927),

Gene: Imbriano_34 Start: 22506, Stop: 23927, Start Num: 9
Candidate Starts for Imbriano_34:
(Start: 9 @22506 has 53 MA's), (18, 22626), (32, 22716), (41, 22833), (45, 22854), (51, 22923), (69, 23148), (72, 23220), (78, 23382), (95, 23712), (102, 23916),

Gene: Indra_34 Start: 22508, Stop: 23929, Start Num: 9
Candidate Starts for Indra_34:
(Start: 9 @22508 has 53 MA's), (32, 22718), (39, 22811), (41, 22835), (45, 22856), (51, 22925), (56, 22994), (69, 23150), (72, 23222), (78, 23384), (95, 23714), (102, 23918),

Gene: Isiphiwo_34 Start: 22577, Stop: 23998, Start Num: 9
Candidate Starts for Isiphiwo_34:
(Start: 9 @22577 has 53 MA's), (18, 22697), (24, 22736), (32, 22787), (41, 22904), (45, 22925), (51, 22994), (64, 23135), (69, 23219), (72, 23291), (78, 23453), (95, 23783), (102, 23987),

Gene: Jabiru_28 Start: 21912, Stop: 23294, Start Num: 10
Candidate Starts for Jabiru_28:
(Start: 10 @21912 has 40 MA's), (13, 21951), (21, 22038), (22, 22044), (23, 22047), (37, 22161), (39, 22194), (58, 22392), (76, 22710), (86, 22854), (97, 23229), (102, 23283),

Gene: Jeffabunny_34 Start: 22527, Stop: 23948, Start Num: 9
Candidate Starts for Jeffabunny_34:
(Start: 9 @22527 has 53 MA's), (18, 22647), (32, 22737), (41, 22854), (45, 22875), (51, 22944), (56, 23013), (69, 23169), (78, 23403), (90, 23610), (95, 23733), (102, 23937),

Gene: JewelBug_34 Start: 22511, Stop: 23932, Start Num: 9
Candidate Starts for JewelBug_34:
(Start: 9 @22511 has 53 MA's), (18, 22631), (32, 22721), (41, 22838), (45, 22859), (51, 22928), (69, 23153), (72, 23225), (78, 23387), (95, 23717), (102, 23921),

Gene: Jordennis_34 Start: 22496, Stop: 23917, Start Num: 9
Candidate Starts for Jordennis_34:
(Start: 9 @22496 has 53 MA's), (18, 22616), (32, 22706), (41, 22823), (45, 22844), (51, 22913), (69, 23138), (70, 23159), (72, 23210), (78, 23372), (95, 23702), (102, 23906),

Gene: Jovo_28 Start: 22731, Stop: 24128, Start Num: 10
Candidate Starts for Jovo_28:
(Start: 10 @22731 has 40 MA's), (21, 22857), (22, 22863), (23, 22866), (37, 22980), (55, 23178), (62, 23247), (70, 23373), (72, 23424), (79, 23595), (81, 23607), (84, 23673), (102, 24117),

Gene: Kazan_34 Start: 22512, Stop: 23933, Start Num: 9
Candidate Starts for Kazan_34:
(Start: 9 @22512 has 53 MA's), (18, 22632), (24, 22671), (32, 22722), (41, 22839), (45, 22860), (51, 22929), (69, 23154), (72, 23226), (78, 23388), (95, 23718), (102, 23922),

Gene: Kimba_31 Start: 23449, Stop: 25170, Start Num: 1
Candidate Starts for Kimba_31:
(Start: 1 @23449 has 8 MA's), (2, 23560), (3, 23569), (5, 23626), (6, 23641), (Start: 9 @23671 has 53 MA's), (12, 23719), (15, 23737), (16, 23740), (29, 23860), (42, 24025), (46, 24070), (48, 24118), (49, 24127), (50, 24136), (59, 24235), (61, 24250), (62, 24259), (65, 24283), (70, 24385), (71, 24403), (74,

24481), (77, 24589), (79, 24622), (87, 24703), (89, 24793), (94, 24922), (98, 25090),

Gene: Kipper29_34 Start: 22506, Stop: 23927, Start Num: 9
Candidate Starts for Kipper29_34:
(Start: 9 @22506 has 53 MA's), (18, 22626), (32, 22716), (41, 22833), (51, 22923), (69, 23148), (72, 23220), (78, 23382), (95, 23712), (102, 23916),

Gene: Koko_34 Start: 22844, Stop: 24265, Start Num: 9
Candidate Starts for Koko_34:
(Start: 9 @22844 has 53 MA's), (18, 22964), (32, 23054), (41, 23171), (45, 23192), (51, 23261), (56, 23330), (69, 23486), (72, 23558), (78, 23720), (95, 24050), (102, 24254),

Gene: Lev2_28 Start: 22363, Stop: 23760, Start Num: 10
Candidate Starts for Lev2_28:
(Start: 10 @22363 has 40 MA's), (21, 22489), (22, 22495), (23, 22498), (37, 22612), (55, 22810), (62, 22879), (70, 23005), (72, 23056), (79, 23227), (81, 23239), (84, 23305), (102, 23749),

Gene: Lilbunny_34 Start: 22501, Stop: 23922, Start Num: 9
Candidate Starts for Lilbunny_34:
(Start: 9 @22501 has 53 MA's), (18, 22621), (32, 22711), (39, 22804), (45, 22849), (51, 22918), (56, 22987), (69, 23143), (90, 23584), (95, 23707), (102, 23911),

Gene: LittleCherry_28 Start: 22542, Stop: 23939, Start Num: 10
Candidate Starts for LittleCherry_28:
(Start: 10 @22542 has 40 MA's), (22, 22674), (23, 22677), (37, 22791), (55, 22989), (62, 23058), (70, 23184), (72, 23235), (79, 23406), (81, 23418), (84, 23484), (102, 23928),

Gene: Lucyedi_32 Start: 23461, Stop: 24882, Start Num: 9
Candidate Starts for Lucyedi_32:
(Start: 9 @23461 has 53 MA's), (18, 23584), (19, 23599), (28, 23641), (33, 23686), (35, 23710), (37, 23734), (54, 23929), (56, 23950), (59, 23977), (64, 24022), (83, 24412), (101, 24865),

Gene: Mabel_31 Start: 23449, Stop: 25170, Start Num: 1
Candidate Starts for Mabel_31:
(Start: 1 @23449 has 8 MA's), (2, 23560), (3, 23569), (5, 23626), (6, 23641), (Start: 9 @23671 has 53 MA's), (12, 23719), (15, 23737), (16, 23740), (29, 23860), (42, 24025), (46, 24070), (48, 24118), (49, 24127), (50, 24136), (59, 24235), (61, 24250), (62, 24259), (65, 24283), (70, 24385), (71, 24403), (74, 24481), (77, 24589), (79, 24622), (87, 24703), (89, 24793), (94, 24922), (98, 25090),

Gene: MarysWell_27 Start: 22590, Stop: 23987, Start Num: 10
Candidate Starts for MarysWell_27:
(Start: 10 @22590 has 40 MA's), (19, 22704), (22, 22722), (23, 22725), (37, 22839), (62, 23106), (70, 23232), (72, 23283), (79, 23454), (81, 23466), (84, 23532), (102, 23976),

Gene: McFly_34 Start: 22506, Stop: 23927, Start Num: 9
Candidate Starts for McFly_34:
(Start: 9 @22506 has 53 MA's), (18, 22626), (32, 22716), (41, 22833), (51, 22923), (69, 23148), (72, 23220), (78, 23382), (95, 23712), (102, 23916),

Gene: Micasa_28 Start: 22516, Stop: 23913, Start Num: 10
Candidate Starts for Micasa_28:
(Start: 10 @22516 has 40 MA's), (22, 22648), (23, 22651), (37, 22765), (55, 22963), (62, 23032), (70, 23158), (72, 23209), (79, 23380), (81, 23392), (84, 23458), (102, 23902),

Gene: Midas2_28 Start: 22590, Stop: 23987, Start Num: 10
Candidate Starts for Midas2_28:
(Start: 10 @22590 has 40 MA's), (22, 22722), (23, 22725), (37, 22839), (55, 23037), (62, 23106), (70, 23232), (72, 23283), (79, 23454), (81, 23466), (84, 23532), (102, 23976),

Gene: Milcery_28 Start: 22546, Stop: 23943, Start Num: 10
Candidate Starts for Milcery_28:
(Start: 10 @22546 has 40 MA's), (22, 22678), (23, 22681), (37, 22795), (62, 23062), (70, 23188), (72, 23239), (79, 23410), (81, 23422), (84, 23488), (102, 23932),

Gene: Naca_28 Start: 22398, Stop: 23780, Start Num: 10
Candidate Starts for Naca_28:
(Start: 10 @22398 has 40 MA's), (13, 22437), (21, 22524), (22, 22530), (23, 22533), (37, 22647), (58, 22878), (59, 22890), (64, 22935), (76, 23196), (86, 23340), (97, 23715), (102, 23769),

Gene: Neeharika16_34 Start: 22499, Stop: 23920, Start Num: 9
Candidate Starts for Neeharika16_34:
(Start: 9 @22499 has 53 MA's), (18, 22619), (32, 22709), (41, 22826), (51, 22916), (69, 23141), (72, 23213), (78, 23375), (95, 23705), (102, 23909),

Gene: Newrala_34 Start: 22499, Stop: 23920, Start Num: 9
Candidate Starts for Newrala_34:
(Start: 9 @22499 has 53 MA's), (18, 22619), (32, 22709), (41, 22826), (51, 22916), (69, 23141), (72, 23213), (78, 23375), (95, 23705), (102, 23909),

Gene: PainterBoy_32 Start: 23398, Stop: 24819, Start Num: 9
Candidate Starts for PainterBoy_32:
(Start: 9 @23398 has 53 MA's), (18, 23521), (19, 23536), (28, 23578), (33, 23623), (35, 23647), (37, 23671), (39, 23704), (54, 23866), (56, 23887), (59, 23914), (64, 23959), (83, 24349), (94, 24595), (101, 24802),

Gene: PetterN_29 Start: 21832, Stop: 23214, Start Num: 10
Candidate Starts for PetterN_29:
(Start: 10 @21832 has 40 MA's), (13, 21871), (21, 21958), (22, 21964), (23, 21967), (37, 22081), (58, 22312), (59, 22324), (76, 22630), (86, 22774), (97, 23149), (102, 23203),

Gene: Phlorence_28 Start: 22650, Stop: 24047, Start Num: 10
Candidate Starts for Phlorence_28:
(Start: 10 @22650 has 40 MA's), (21, 22776), (22, 22782), (23, 22785), (37, 22899), (55, 23097), (62, 23166), (70, 23292), (72, 23343), (79, 23514), (81, 23526), (84, 23592), (102, 24036),

Gene: PickleBack_28 Start: 22364, Stop: 23761, Start Num: 10
Candidate Starts for PickleBack_28:
(Start: 10 @22364 has 40 MA's), (21, 22490), (22, 22496), (23, 22499), (37, 22613), (55, 22811), (62, 22880), (70, 23006), (72, 23057), (79, 23228), (81, 23240), (84, 23306), (102, 23750),

Gene: Pmask_34 Start: 22500, Stop: 23921, Start Num: 9
Candidate Starts for Pmask_34:
(Start: 9 @22500 has 53 MA's), (18, 22620), (32, 22710), (41, 22827), (45, 22848), (51, 22917), (64, 23058), (69, 23142), (70, 23163), (72, 23214), (78, 23376), (95, 23706), (102, 23910),

Gene: Polyphemus_34 Start: 22498, Stop: 23919, Start Num: 9

Candidate Starts for Polyphemus_34:
(Start: 9 @22498 has 53 MA's), (18, 22618), (32, 22708), (41, 22825), (45, 22846), (51, 22915), (69, 23140), (72, 23212), (78, 23374), (95, 23704), (102, 23908),

Gene: Priamo_34 Start: 22549, Stop: 23970, Start Num: 9
Candidate Starts for Priamo_34:
(Start: 9 @22549 has 53 MA's), (18, 22669), (30, 22738), (32, 22759), (36, 22807), (45, 22897), (51, 22966), (56, 23035), (64, 23107), (69, 23191), (85, 23515), (95, 23755), (102, 23959),

Gene: Prinashe11_28 Start: 22509, Stop: 23906, Start Num: 10
Candidate Starts for Prinashe11_28:
(Start: 10 @22509 has 40 MA's), (22, 22641), (23, 22644), (37, 22758), (55, 22956), (62, 23025), (70, 23151), (72, 23202), (79, 23373), (81, 23385), (84, 23451), (102, 23895),

Gene: Rifter_34 Start: 22492, Stop: 23913, Start Num: 9
Candidate Starts for Rifter_34:
(Start: 9 @22492 has 53 MA's), (32, 22702), (39, 22795), (41, 22819), (45, 22840), (51, 22909), (56, 22978), (69, 23134), (70, 23155), (72, 23206), (78, 23368), (95, 23698), (102, 23902),

Gene: Roksolana_34 Start: 22520, Stop: 23941, Start Num: 9
Candidate Starts for Roksolana_34:
(Start: 9 @22520 has 53 MA's), (32, 22730), (39, 22823), (41, 22847), (45, 22868), (51, 22937), (56, 23006), (69, 23162), (72, 23234), (78, 23396), (95, 23726), (102, 23930),

Gene: Salz_31 Start: 23388, Stop: 25109, Start Num: 1
Candidate Starts for Salz_31:
(Start: 1 @23388 has 8 MA's), (2, 23499), (3, 23508), (5, 23565), (6, 23580), (Start: 9 @23610 has 53 MA's), (12, 23658), (15, 23676), (16, 23679), (29, 23799), (42, 23964), (46, 24009), (48, 24057), (49, 24066), (50, 24075), (59, 24174), (61, 24189), (62, 24198), (65, 24222), (70, 24324), (71, 24342), (74, 24420), (77, 24528), (79, 24561), (87, 24642), (89, 24732), (94, 24861), (98, 25029),

Gene: Saskia_31 Start: 23391, Stop: 24953, Start Num: 1
Candidate Starts for Saskia_31:
(Start: 1 @23391 has 8 MA's), (2, 23502), (3, 23511), (4, 23526), (5, 23568), (6, 23583), (7, 23601), (Start: 9 @23613 has 53 MA's), (12, 23661), (15, 23679), (16, 23682), (29, 23802), (31, 23826), (34, 23850), (38, 23916), (40, 23937), (42, 23955), (47, 23985), (49, 24006), (50, 24012), (67, 24135), (70, 24177), (71, 24195), (74, 24273), (75, 24315), (77, 24381), (79, 24414), (87, 24495), (89, 24585), (94, 24714), (98, 24882),

Gene: Scorpia_29 Start: 21835, Stop: 23217, Start Num: 10
Candidate Starts for Scorpia_29:
(Start: 10 @21835 has 40 MA's), (13, 21874), (21, 21961), (22, 21967), (23, 21970), (37, 22084), (39, 22117), (58, 22315), (59, 22327), (76, 22633), (86, 22777), (97, 23152), (99, 23161), (102, 23206),

Gene: Sheen_32 Start: 25593, Stop: 27047, Start Num: 8
Candidate Starts for Sheen_32:
(Start: 8 @25593 has 4 MA's), (17, 25719), (20, 25749), (25, 25767), (26, 25770), (27, 25776), (32, 25815), (43, 25941), (44, 25971), (48, 26019), (52, 26070), (53, 26079), (57, 26109), (60, 26127), (66, 26193), (68, 26244), (73, 26331), (82, 26547), (88, 26637), (92, 26745), (93, 26781),

Gene: SmellyB_34 Start: 22506, Stop: 23927, Start Num: 9
Candidate Starts for SmellyB_34:

(Start: 9 @22506 has 53 MA's), (18, 22626), (32, 22716), (41, 22833), (51, 22923), (69, 23148), (72, 23220), (78, 23382), (95, 23712), (102, 23916),

Gene: SuperAwesome_34 Start: 22499, Stop: 23920, Start Num: 9
Candidate Starts for SuperAwesome_34:
(Start: 9 @22499 has 53 MA's), (18, 22619), (32, 22709), (41, 22826), (51, 22916), (69, 23141), (72, 23213), (78, 23375), (95, 23705), (102, 23909),

Gene: SuperCallie99_34 Start: 22498, Stop: 23919, Start Num: 9
Candidate Starts for SuperCallie99_34:
(Start: 9 @22498 has 53 MA's), (18, 22618), (24, 22657), (32, 22708), (41, 22825), (45, 22846), (51, 22915), (64, 23056), (69, 23140), (72, 23212), (78, 23374), (95, 23704), (102, 23908),

Gene: Swirley_28 Start: 22517, Stop: 23914, Start Num: 10
Candidate Starts for Swirley_28:
(Start: 10 @22517 has 40 MA's), (22, 22649), (23, 22652), (37, 22766), (55, 22964), (62, 23033), (70, 23159), (72, 23210), (79, 23381), (81, 23393), (84, 23459), (102, 23903),

Gene: SydNat_28 Start: 22802, Stop: 24199, Start Num: 10
Candidate Starts for SydNat_28:
(Start: 10 @22802 has 40 MA's), (21, 22928), (22, 22934), (23, 22937), (37, 23051), (62, 23318), (72, 23495), (81, 23678), (84, 23744), (102, 24188),

Gene: Tarynearal_27 Start: 22539, Stop: 23936, Start Num: 10
Candidate Starts for Tarynearal_27:
(Start: 10 @22539 has 40 MA's), (22, 22671), (23, 22674), (37, 22788), (62, 23055), (70, 23181), (72, 23232), (79, 23403), (81, 23415), (84, 23481), (102, 23925),

Gene: Temprado_34 Start: 22507, Stop: 23928, Start Num: 9
Candidate Starts for Temprado_34:
(Start: 9 @22507 has 53 MA's), (32, 22717), (39, 22810), (41, 22834), (45, 22855), (51, 22924), (56, 22993), (69, 23149), (72, 23221), (78, 23383), (95, 23713), (102, 23917),

Gene: Theia_26 Start: 22563, Stop: 23960, Start Num: 10
Candidate Starts for Theia_26:
(Start: 10 @22563 has 40 MA's), (19, 22677), (22, 22695), (23, 22698), (37, 22812), (62, 23079), (70, 23205), (72, 23256), (79, 23427), (81, 23439), (84, 23505), (102, 23949),

Gene: Tiger_28 Start: 22441, Stop: 23838, Start Num: 10
Candidate Starts for Tiger_28:
(Start: 10 @22441 has 40 MA's), (21, 22567), (22, 22573), (23, 22576), (37, 22690), (51, 22837), (55, 22888), (62, 22957), (69, 23062), (70, 23083), (72, 23134), (79, 23305), (81, 23317), (84, 23383), (102, 23827),

Gene: Timothy_31 Start: 23391, Stop: 25112, Start Num: 1
Candidate Starts for Timothy_31:
(Start: 1 @23391 has 8 MA's), (2, 23502), (3, 23511), (5, 23568), (6, 23583), (7, 23601), (Start: 9 @23613 has 53 MA's), (12, 23661), (15, 23679), (16, 23682), (29, 23802), (42, 23967), (46, 24012), (48, 24060), (49, 24069), (50, 24078), (56, 24150), (59, 24177), (61, 24192), (62, 24201), (65, 24225), (70, 24327), (71, 24345), (74, 24423), (77, 24531), (79, 24564), (87, 24645), (89, 24735), (94, 24864), (98, 25032),

Gene: Timshel_32 Start: 25993, Stop: 27456, Start Num: 8

Candidate Starts for Timshel_32:
(Start: 8 @25993 has 4 MA's), (11, 26038), (17, 26119), (18, 26125), (20, 26149), (25, 26167), (27, 26176), (31, 26206), (32, 26215), (48, 26419), (60, 26533), (66, 26599), (93, 27190), (100, 27433),

Gene: TinyTimmy_31 Start: 23434, Stop: 25155, Start Num: 1
Candidate Starts for TinyTimmy_31:
(Start: 1 @23434 has 8 MA's), (2, 23545), (3, 23554), (5, 23611), (6, 23626), (Start: 9 @23656 has 53 MA's), (12, 23704), (15, 23722), (16, 23725), (29, 23845), (42, 24010), (46, 24055), (48, 24103), (49, 24112), (50, 24121), (59, 24220), (61, 24235), (62, 24244), (65, 24268), (70, 24370), (71, 24388), (74, 24466), (77, 24574), (79, 24607), (87, 24688), (89, 24778), (94, 24907), (98, 25075),

Gene: ToneTone_32 Start: 22433, Stop: 23854, Start Num: 9
Candidate Starts for ToneTone_32:
(Start: 9 @22433 has 53 MA's), (18, 22553), (32, 22643), (41, 22760), (45, 22781), (51, 22850), (56, 22919), (69, 23075), (72, 23147), (78, 23309), (90, 23516), (95, 23639), (102, 23843),

Gene: Toro_33 Start: 25538, Stop: 26992, Start Num: 8
Candidate Starts for Toro_33:
(Start: 8 @25538 has 4 MA's), (17, 25664), (20, 25694), (25, 25712), (26, 25715), (27, 25721), (32, 25760), (43, 25886), (44, 25916), (48, 25964), (52, 26015), (53, 26024), (57, 26054), (60, 26072), (66, 26138), (68, 26189), (73, 26276), (82, 26492), (88, 26582), (92, 26690), (93, 26726),

Gene: Tucker_34 Start: 22519, Stop: 23940, Start Num: 9
Candidate Starts for Tucker_34:
(Start: 9 @22519 has 53 MA's), (18, 22639), (32, 22729), (41, 22846), (45, 22867), (51, 22936), (56, 23005), (69, 23161), (90, 23602), (95, 23725), (102, 23929),

Gene: Twigg_28 Start: 22512, Stop: 23909, Start Num: 10
Candidate Starts for Twigg_28:
(Start: 10 @22512 has 40 MA's), (22, 22644), (23, 22647), (37, 22761), (55, 22959), (62, 23028), (70, 23154), (72, 23205), (79, 23376), (81, 23388), (84, 23454), (102, 23898),

Gene: UnionJack_28 Start: 21570, Stop: 22952, Start Num: 10
Candidate Starts for UnionJack_28:
(Start: 10 @21570 has 40 MA's), (21, 21696), (22, 21702), (23, 21705), (37, 21819), (64, 22107), (76, 22368), (86, 22512), (97, 22887), (102, 22941),

Gene: VohminGhazi_34 Start: 22506, Stop: 23927, Start Num: 9
Candidate Starts for VohminGhazi_34:
(Start: 9 @22506 has 53 MA's), (18, 22626), (32, 22716), (41, 22833), (51, 22923), (69, 23148), (72, 23220), (78, 23382), (95, 23712), (102, 23916),

Gene: Wiks_34 Start: 22501, Stop: 23922, Start Num: 9
Candidate Starts for Wiks_34:
(Start: 9 @22501 has 53 MA's), (32, 22711), (39, 22804), (45, 22849), (51, 22918), (56, 22987), (69, 23143), (78, 23377), (90, 23584), (95, 23707), (102, 23911),

Gene: WunderPhul_34 Start: 22501, Stop: 23922, Start Num: 9
Candidate Starts for WunderPhul_34:
(Start: 9 @22501 has 53 MA's), (18, 22621), (32, 22711), (39, 22804), (41, 22828), (45, 22849), (51, 22918), (56, 22987), (64, 23059), (69, 23143), (70, 23164), (72, 23215), (78, 23377), (95, 23707), (102, 23911),

Gene: Yokurt_34 Start: 22501, Stop: 23922, Start Num: 9
Candidate Starts for Yokurt_34:
(Start: 9 @22501 has 53 MA's), (18, 22621), (32, 22711), (39, 22804), (45, 22849), (51, 22918), (56, 22987), (69, 23143), (78, 23377), (90, 23584), (95, 23707), (102, 23911),

Gene: Zaka_34 Start: 22501, Stop: 23922, Start Num: 9
Candidate Starts for Zaka_34:
(Start: 9 @22501 has 53 MA's), (18, 22621), (32, 22711), (39, 22804), (45, 22849), (51, 22918), (56, 22987), (69, 23143), (78, 23377), (90, 23584), (95, 23707), (102, 23911),

Gene: Zolita_27 Start: 22803, Stop: 24200, Start Num: 10
Candidate Starts for Zolita_27:
(Start: 10 @22803 has 40 MA's), (21, 22929), (22, 22935), (23, 22938), (37, 23052), (62, 23319), (72, 23496), (81, 23679), (84, 23745), (102, 24189),

Gene: Zulu_34 Start: 22500, Stop: 23921, Start Num: 9
Candidate Starts for Zulu_34:
(Start: 9 @22500 has 53 MA's), (18, 22620), (32, 22710), (39, 22803), (45, 22848), (51, 22917), (56, 22986), (69, 23142), (90, 23583), (95, 23706), (102, 23910),