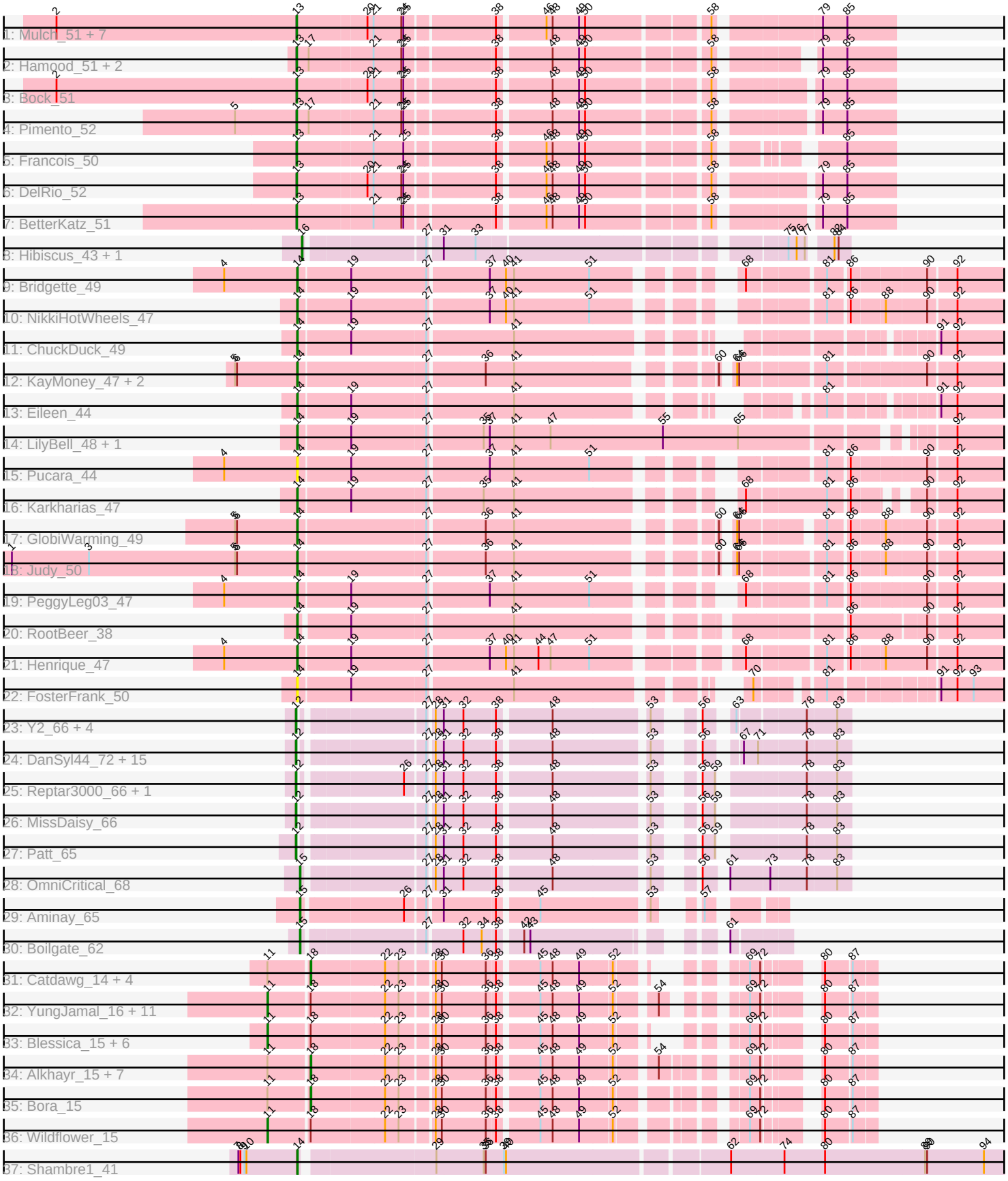
Pham 347463


1: Mulch_51 + 7
2: Hamood_51 + 2
3: Bock_51
4: Pimento_52
5: Francois_50
6: DelRio_52
7: BetterKatz_51
8: Hibiscus_43 + 1
9: Bridgette_49
10: NikkiHotWheels_47
11: ChuckDuck_49
12: KayMoney_47 + 2
13: Eileen_44
14: LilyBell_48 + 1
15: Pucara_44
16: Karkharias_47
17: GlobiWarming_49
18: Judy_50
19: PeggyLeg03_47
20: RootBeer_38
21: Henrique_47
22: FosterFrank_50
23: Y2_66 + 4
24: DanSyl44_72 + 15
25: Reptar3000_66 + 1
26: MissDaisy_66
27: Patt_65
28: OmniCritical_68
29: Aminay_65
30: Boilgate_62
31: Catdawg_14 + 4
32: YungJamal_16 + 11
33: Blessica_15 + 6
34: Alkhayr_15 + 7
35: Bora_15
36: Wildflower_15
37: Shambre1_41

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 347463 Report

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

Pham number 347463 has 98 members, 11 are drafts.

Phages represented in each track:
• Track 1 : Mulch_51, NancyRae_50, Nadeem_51, SussRoloMann_51, Brylie_51, WheatThin_50, Parada_51, Ayotoya_51
• Track 2 : Hamood_51, Chop_51, GrandSlam_51
• Track 3 : Bock_51
• Track 4 : Pimento_52
• Track 5 : Francois_50
• Track 6 : DelRio_52
• Track 7 : BetterKatz_51
• Track 8 : Hibiscus_43, Heinz_42
• Track 9 : Bridgette_49
• Track 10 : NikkiHotWheels_47
• Track 11 : ChuckDuck_49
• Track 12 : KayMoney_47, LittleRon_45, Constance_47
• Track 13 : Eileen_44
• Track 14 : LilyBell_48, NidoQ_44
• Track 15 : Pucara_44
• Track 16 : Karkharias_47
• Track 17 : GlobiWarming_49
• Track 18 : Judy_50
• Track 19 : PeggyLeg03_47
• Track 20 : RootBeer_38
• Track 21 : Henrique_47
• Track 22 : FosterFrank_50
• Track 23 : Y2_66, Ruthiejr_70, Y10_66, YasnayaPolyana_68, JF1_69
• Track 24 : DanSyl44_72, Eponine_71, Cheetobro_69, Malthus_70, Taquito_68, Lebo14_68, Juliette_71, Slarp_69, Fionnbharth_69, Mitti_69, Wintermute_69, Qhanda_71, Kraw_69, SamScheppers_67, Chancellor_69, Nolwazi_71
• Track 25 : Reptar3000_66, Bobquesha_70
• Track 26 : MissDaisy_66
• Track 27 : Patt_65
• Track 28 : OmniCritical_68
• Track 29 : Aminay_65
• Track 30 : Boilgate_62
• Track 31 : Catdawg_14, JangDynasty_14, FoulBall_14, Imara_15, YoyoKar_15
• Track 32 : YungJamal_16, Zakhe101_16, Ryadel_17, Ashwin_16, Firecracker_15, Murai_15, Krili_15, Dylan_15, Vagabond_15, Smooch_16, MadKillah_16, Winget_15

• Track 33 : Blessica_15, Idergollasper_14, KingPhillip3_14, Zebo_14, Familton_15, TelAviv_14, SchoolBus_14
• Track 34 : Alkhayr_15, Vorrps_15, Mori_15, Schuy_16, NiebruSaylor_15, Shida_15, Corndog_17, Wogge42_15
• Track 35 : Bora_15
• Track 36 : Wildflower_15
• Track 37 : Shambre1_41

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

The start number called the most often in the published annotations is 12, it was called in 21 of the 87 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Bobquesha_70, Chancellor_69, Cheetobro_69, DanSyl44_72, Eponine_71, Fionnbharth_69, JF1_69, Juliette_71, Kraw_69, Lebo14_68, Malthus_70, MissDaisy_66, Mitti_69, Nolwazi_71, Patt_65, Qhanda_71, Reptar3000_66, Ruthiejr_70, SamScheppers_67, Slarp_69, Taquito_68, Wintermute_69, Y10_66, Y2_66, YasnayaPolyana_68,

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

Genes that do not have the "Most Annotated" start:
• Alkhayr_15, Aminay_65, Ashwin_16, Ayotoya_51, BetterKatz_51, Blessica_15, Bock_51, Boilgate_62, Bora_15, Bridgette_49, Brylie_51, Catdawg_14, Chop_51, ChuckDuck_49, Constance_47, Corndog_17, DelRio_52, Dylan_15, Eileen_44, Familton_15, Firecracker_15, FosterFrank_50, FoulBall_14, Francois_50, GlobiWarming_49, GrandSlam_51, Hamood_51, Heinz_42, Henrique_47, Hibiscus_43, Idergollasper_14, Imara_15, JangDynasty_14, Judy_50, Karkharias_47, KayMoney_47, KingPhillip3_14, Krili_15, LilyBell_48, LittleRon_45, MadKillah_16, Mori_15, Mulch_51, Murai_15, Nadeem_51, NancyRae_50, NidoQ_44, NiebruSaylor_15, NikkiHotWheels_47, OmniCritical_68, Parada_51, PeggyLeg03_47, Pimento_52, Pucara_44, RootBeer_38, Ryadel_17, SchoolBus_14, Schuy_16, Shambre1_41, Shida_15, Smooch_16, SussRoloMann_51, TelAviv_14, Vagabond_15, Vorrps_15, WheatThin_50, Wildflower_15, Winget_15, Wogge42_15, YoyoKar_15, YungJamal_16, Zakhe101_16, Zebo_14,

Summary by start number:

Start 11:
• Found in 34 of 98 (34.7%) of genes in pham
• Manual Annotations of this start: 20 of 87
• Called 58.8% of time when present
• Phage (with cluster) where this start called: Ashwin_16 (O), Blessica_15 (O), Dylan_15 (O), Familton_15 (O), Firecracker_15 (O), Idergollasper_14 (O), KingPhillip3_14 (O), Krili_15 (O), MadKillah_16 (O), Murai_15 (O), Ryadel_17 (O), SchoolBus_14 (O), Smooch_16 (O), TelAviv_14 (O), Vagabond_15 (O), Wildflower_15 (O), Winget_15 (O), YungJamal_16 (O), Zakhe101_16 (O), Zebo_14 (O),

Start 12:
• Found in 25 of 98 (25.5%) of genes in pham
• Manual Annotations of this start: 21 of 87
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bobquesha_70 (K4), Chancellor_69 (K4), Cheetobro_69 (K4), DanSyl44_72 (K4), Eponine_71 (K4), Fionnbharth_69 (K4), JF1_69 (K4), Juliette_71 (K4), Kraw_69 (K4), Lebo14_68 (K4), Malthus_70 (K4), MissDaisy_66 (K4), Mitti_69 (K4), Nolwazi_71 (K4), Patt_65 (K4), Qhanda_71 (K4), Reptar3000_66 (K4), Ruthiejr_70 (K4), SamScheppers_67 (K4), Slarp_69 (K4), Taquito_68 (K4), Wintermute_69 (K4), Y10_66 (K4), Y2_66 (K4), YasnayaPolyana_68 (K4),

Start 13:
• Found in 16 of 98 (16.3%) of genes in pham
• Manual Annotations of this start: 15 of 87
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ayotoya_51 (DI), BetterKatz_51 (DI), Bock_51 (DI), Brylie_51 (DI), Chop_51 (DI), DelRio_52 (DI), Francois_50 (DI), GrandSlam_51 (DI), Hamood_51 (DI), Mulch_51 (DI), Nadeem_51 (DI), NancyRae_50 (DI), Parada_51 (DI), Pimento_52 (DI), SussRoloMann_51 (DI), WheatThin_50 (DI),

Start 14:
• Found in 18 of 98 (18.4%) of genes in pham
• Manual Annotations of this start: 14 of 87
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bridgette_49 (FA), ChuckDuck_49 (FA), Constance_47 (FA), Eileen_44 (FA), FosterFrank_50 (FA), GlobiWarming_49 (FA), Henrique_47 (FA), Judy_50 (FA), Karkharias_47 (FA), KayMoney_47 (FA), LilyBell_48 (FA), LittleRon_45 (FA), NidoQ_44 (FA), NikkiHotWheels_47 (FA), PeggyLeg03_47 (FA), Pucara_44 (FA), RootBeer_38 (FA), Shambre1_41 (singleton),

Start 15:
• Found in 3 of 98 (3.1%) of genes in pham
• Manual Annotations of this start: 3 of 87
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aminay_65 (K7), Boilgate_62 (K8), OmniCritical_68 (K4),

Start 16:
• Found in 2 of 98 (2.0%) of genes in pham
• Manual Annotations of this start: 2 of 87
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Heinz_42 (DY), Hibiscus_43 (DY),

Start 18:
• Found in 34 of 98 (34.7%) of genes in pham
• Manual Annotations of this start: 12 of 87
• Called 41.2% of time when present
• Phage (with cluster) where this start called: Alkhayr_15 (O), Bora_15 (O), Catdawg_14 (O), Corndog_17 (O), FoulBall_14 (O), Imara_15 (O), JangDynasty_14 (O), Mori_15 (O), NiebruSaylor_15 (O), Schuy_16 (O), Shida_15 (O), Vorrps_15 (O),

Wogge42_15 (O), YoyoKar_15 (O),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, DI, DY, O, FA, K7, K4, K8,

Info for manual annotations of cluster DI:
•Start number 13 was manually annotated 15 times for cluster DI.

Info for manual annotations of cluster DY:
•Start number 16 was manually annotated 2 times for cluster DY.

Info for manual annotations of cluster FA:
•Start number 14 was manually annotated 13 times for cluster FA.

Info for manual annotations of cluster K4:
•Start number 12 was manually annotated 21 times for cluster K4.
•Start number 15 was manually annotated 1 time for cluster K4.

Info for manual annotations of cluster K7:
•Start number 15 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:
•Start number 15 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster O:
•Start number 11 was manually annotated 20 times for cluster O.
•Start number 18 was manually annotated 12 times for cluster O.

Gene Information:

Gene: Alkhayr_15 Start: 6062, Stop: 6742, Start Num: 18
Candidate Starts for Alkhayr_15:
(Start: 11 @6005 has 20 MA's), (Start: 18 @6062 has 12 MA's), (22, 6167), (23, 6185), (28, 6227), (30, 6236), (36, 6299), (38, 6311), (45, 6365), (48, 6383), (49, 6422), (52, 6467), (54, 6515), (69, 6605), (72, 6620), (80, 6674), (87, 6710),

Gene: Aminay_65 Start: 42473, Stop: 43045, Start Num: 15
Candidate Starts for Aminay_65:
(Start: 15 @42473 has 3 MA's), (26, 42614), (27, 42641), (31, 42659), (38, 42731), (45, 42785), (53, 42932), (57, 42959),

Gene: Ashwin_16 Start: 6240, Stop: 6962, Start Num: 11
Candidate Starts for Ashwin_16:
(Start: 11 @6240 has 20 MA's), (Start: 18 @6297 has 12 MA's), (22, 6402), (23, 6420), (28, 6462), (30, 6471), (36, 6534), (38, 6546), (45, 6600), (48, 6618), (49, 6657), (52, 6702), (54, 6750), (69, 6825), (72, 6840), (80, 6894), (87, 6930),

Gene: Ayotoya_51 Start: 37282, Stop: 38049, Start Num: 13
Candidate Starts for Ayotoya_51:

(2, 36928), (Start: 13 @37282 has 15 MA's), (20, 37381), (21, 37390), (24, 37429), (25, 37432), (38, 37549), (46, 37612), (48, 37621), (49, 37660), (50, 37669), (58, 37831), (79, 37942), (85, 37978),

Gene: BetterKatz_51 Start: 36768, Stop: 37547, Start Num: 13
Candidate Starts for BetterKatz_51:
(Start: 13 @36768 has 15 MA's), (21, 36876), (24, 36915), (25, 36918), (38, 37035), (46, 37098), (48, 37107), (49, 37146), (50, 37155), (58, 37317), (79, 37440), (85, 37476),

Gene: Blessica_15 Start: 6070, Stop: 6765, Start Num: 11
Candidate Starts for Blessica_15:
(Start: 11 @6070 has 20 MA's), (Start: 18 @6127 has 12 MA's), (22, 6232), (23, 6250), (28, 6292), (30, 6301), (36, 6364), (38, 6376), (45, 6430), (48, 6448), (49, 6487), (52, 6532), (69, 6628), (72, 6643), (80, 6697), (87, 6733),

Gene: Bobquesha_70 Start: 41491, Stop: 42162, Start Num: 12
Candidate Starts for Bobquesha_70:
(Start: 12 @41491 has 21 MA's), (26, 41626), (27, 41653), (28, 41659), (31, 41671), (32, 41698), (38, 41743), (48, 41815), (53, 41944), (56, 41977), (59, 41995), (78, 42100), (83, 42142),

Gene: Bock_51 Start: 36502, Stop: 37281, Start Num: 13
Candidate Starts for Bock_51:
(2, 36148), (Start: 13 @36502 has 15 MA's), (20, 36601), (21, 36610), (24, 36649), (25, 36652), (38, 36769), (48, 36841), (49, 36880), (50, 36889), (58, 37051), (79, 37174), (85, 37210),

Gene: Boilgate_62 Start: 44590, Stop: 45171, Start Num: 15
Candidate Starts for Boilgate_62:
(Start: 15 @44590 has 3 MA's), (27, 44755), (32, 44800), (34, 44827), (38, 44845), (42, 44875), (43, 44884), (61, 45094),

Gene: Bora_15 Start: 6095, Stop: 6772, Start Num: 18
Candidate Starts for Bora_15:
(Start: 11 @6038 has 20 MA's), (Start: 18 @6095 has 12 MA's), (22, 6200), (23, 6218), (28, 6260), (30, 6269), (36, 6332), (38, 6344), (45, 6398), (48, 6416), (49, 6455), (52, 6500), (69, 6635), (72, 6650), (80, 6704), (87, 6740),

Gene: Bridgette_49 Start: 31889, Stop: 32794, Start Num: 14
Candidate Starts for Bridgette_49:
(4, 31781), (Start: 14 @31889 has 14 MA's), (19, 31964), (27, 32075), (37, 32159), (40, 32183), (41, 32195), (51, 32306), (68, 32450), (81, 32552), (86, 32579), (90, 32681), (92, 32720),

Gene: Brylie_51 Start: 36552, Stop: 37343, Start Num: 13
Candidate Starts for Brylie_51:
(2, 36198), (Start: 13 @36552 has 15 MA's), (20, 36651), (21, 36660), (24, 36699), (25, 36702), (38, 36819), (46, 36882), (48, 36891), (49, 36930), (50, 36939), (58, 37101), (79, 37236), (85, 37272),

Gene: Catdawg_14 Start: 5733, Stop: 6371, Start Num: 18
Candidate Starts for Catdawg_14:
(Start: 11 @5676 has 20 MA's), (Start: 18 @5733 has 12 MA's), (22, 5838), (23, 5856), (28, 5898), (30, 5907), (36, 5970), (38, 5982), (45, 6036), (48, 6054), (49, 6093), (52, 6138), (69, 6234), (72, 6249), (80, 6303), (87, 6339),

Gene: Chancellor_69 Start: 42601, Stop: 43269, Start Num: 12
Candidate Starts for Chancellor_69:

(Start: 12 @42601 has 21 MA's), (27, 42763), (28, 42769), (31, 42781), (32, 42808), (38, 42853), (48, 42925), (53, 43054), (56, 43087), (67, 43120), (71, 43141), (78, 43207), (83, 43249),

Gene: Cheetobro_69 Start: 42598, Stop: 43266, Start Num: 12
Candidate Starts for Cheetobro_69:
(Start: 12 @42598 has 21 MA's), (27, 42760), (28, 42766), (31, 42778), (32, 42805), (38, 42850), (48, 42922), (53, 43051), (56, 43084), (67, 43117), (71, 43138), (78, 43204), (83, 43246),

Gene: Chop_51 Start: 37033, Stop: 37800, Start Num: 13
Candidate Starts for Chop_51:
(Start: 13 @37033 has 15 MA's), (17, 37051), (21, 37141), (24, 37180), (25, 37183), (38, 37300), (48, 37372), (49, 37411), (50, 37420), (58, 37582), (79, 37693), (85, 37729),

Gene: ChuckDuck_49 Start: 31325, Stop: 32191, Start Num: 14
Candidate Starts for ChuckDuck_49:
(Start: 14 @31325 has 14 MA's), (19, 31400), (27, 31508), (41, 31628), (91, 32093), (92, 32117),

Gene: Constance_47 Start: 31516, Stop: 32430, Start Num: 14
Candidate Starts for Constance_47:
(5, 31426), (6, 31429), (Start: 14 @31516 has 14 MA's), (27, 31699), (36, 31777), (41, 31819), (60, 32065), (64, 32074), (66, 32077), (81, 32188), (90, 32317), (92, 32356),

Gene: Corndog_17 Start: 6409, Stop: 7074, Start Num: 18
Candidate Starts for Corndog_17:
(Start: 11 @6352 has 20 MA's), (Start: 18 @6409 has 12 MA's), (22, 6514), (23, 6532), (28, 6574), (30, 6583), (36, 6646), (38, 6658), (45, 6712), (48, 6730), (49, 6769), (52, 6814), (54, 6862), (69, 6937), (72, 6952), (80, 7006), (87, 7042),

Gene: DanSyl44_72 Start: 43792, Stop: 44460, Start Num: 12
Candidate Starts for DanSyl44_72:
(Start: 12 @43792 has 21 MA's), (27, 43954), (28, 43960), (31, 43972), (32, 43999), (38, 44044), (48, 44116), (53, 44245), (56, 44278), (67, 44311), (71, 44332), (78, 44398), (83, 44440),

Gene: DelRio_52 Start: 37746, Stop: 38525, Start Num: 13
Candidate Starts for DelRio_52:
(Start: 13 @37746 has 15 MA's), (20, 37845), (21, 37854), (24, 37893), (25, 37896), (38, 38013), (46, 38076), (48, 38085), (49, 38124), (50, 38133), (58, 38295), (79, 38418), (85, 38454),

Gene: Dylan_15 Start: 6240, Stop: 6962, Start Num: 11
Candidate Starts for Dylan_15:
(Start: 11 @6240 has 20 MA's), (Start: 18 @6297 has 12 MA's), (22, 6402), (23, 6420), (28, 6462), (30, 6471), (36, 6534), (38, 6546), (45, 6600), (48, 6618), (49, 6657), (52, 6702), (54, 6750), (69, 6825), (72, 6840), (80, 6894), (87, 6930),

Gene: Eileen_44 Start: 29832, Stop: 30680, Start Num: 14
Candidate Starts for Eileen_44:
(Start: 14 @29832 has 14 MA's), (19, 29907), (27, 30015), (41, 30135), (81, 30462), (91, 30582), (92, 30606),

Gene: Eponine_71 Start: 43444, Stop: 44112, Start Num: 12
Candidate Starts for Eponine_71:
(Start: 12 @43444 has 21 MA's), (27, 43606), (28, 43612), (31, 43624), (32, 43651), (38, 43696), (48, 43768), (53, 43897), (56, 43930), (67, 43963), (71, 43984), (78, 44050), (83, 44092),

Gene: Familton_15 Start: 5677, Stop: 6372, Start Num: 11
Candidate Starts for Familton_15:
(Start: 11 @5677 has 20 MA's), (Start: 18 @5734 has 12 MA's), (22, 5839), (23, 5857), (28, 5899), (30, 5908), (36, 5971), (38, 5983), (45, 6037), (48, 6055), (49, 6094), (52, 6139), (69, 6235), (72, 6250), (80, 6304), (87, 6340),

Gene: Fionnbharth_69 Start: 42842, Stop: 43510, Start Num: 12
Candidate Starts for Fionnbharth_69:
(Start: 12 @42842 has 21 MA's), (27, 43004), (28, 43010), (31, 43022), (32, 43049), (38, 43094), (48, 43166), (53, 43295), (56, 43328), (67, 43361), (71, 43382), (78, 43448), (83, 43490),

Gene: Firecracker_15 Start: 5973, Stop: 6695, Start Num: 11
Candidate Starts for Firecracker_15:
(Start: 11 @5973 has 20 MA's), (Start: 18 @6030 has 12 MA's), (22, 6135), (23, 6153), (28, 6195), (30, 6204), (36, 6267), (38, 6279), (45, 6333), (48, 6351), (49, 6390), (52, 6435), (54, 6483), (69, 6558), (72, 6573), (80, 6627), (87, 6663),

Gene: FosterFrank_50 Start: 31513, Stop: 32376, Start Num: 14
Candidate Starts for FosterFrank_50:
(Start: 14 @31513 has 14 MA's), (19, 31588), (27, 31696), (41, 31816), (70, 32074), (81, 32146), (91, 32278), (92, 32302), (93, 32326),

Gene: FoulBall_14 Start: 5734, Stop: 6372, Start Num: 18
Candidate Starts for FoulBall_14:
(Start: 11 @5677 has 20 MA's), (Start: 18 @5734 has 12 MA's), (22, 5839), (23, 5857), (28, 5899), (30, 5908), (36, 5971), (38, 5983), (45, 6037), (48, 6055), (49, 6094), (52, 6139), (69, 6235), (72, 6250), (80, 6304), (87, 6340),

Gene: Francois_50 Start: 36554, Stop: 37309, Start Num: 13
Candidate Starts for Francois_50:
(Start: 13 @36554 has 15 MA's), (21, 36662), (25, 36704), (38, 36821), (46, 36884), (48, 36893), (49, 36932), (50, 36941), (58, 37103), (85, 37238),

Gene: GlobiWarming_49 Start: 31284, Stop: 32189, Start Num: 14
Candidate Starts for GlobiWarming_49:
(5, 31194), (6, 31197), (Start: 14 @31284 has 14 MA's), (27, 31467), (36, 31545), (41, 31587), (60, 31833), (64, 31842), (66, 31845), (81, 31947), (86, 31974), (88, 32019), (90, 32076), (92, 32115),

Gene: GrandSlam_51 Start: 37033, Stop: 37800, Start Num: 13
Candidate Starts for GrandSlam_51:
(Start: 13 @37033 has 15 MA's), (17, 37051), (21, 37141), (24, 37180), (25, 37183), (38, 37300), (48, 37372), (49, 37411), (50, 37420), (58, 37582), (79, 37693), (85, 37729),

Gene: Hamood_51 Start: 37033, Stop: 37800, Start Num: 13
Candidate Starts for Hamood_51:
(Start: 13 @37033 has 15 MA's), (17, 37051), (21, 37141), (24, 37180), (25, 37183), (38, 37300), (48, 37372), (49, 37411), (50, 37420), (58, 37582), (79, 37693), (85, 37729),

Gene: Heinz_42 Start: 28349, Stop: 29047, Start Num: 16
Candidate Starts for Heinz_42:
(Start: 16 @28349 has 2 MA's), (27, 28511), (31, 28529), (33, 28574), (75, 28973), (76, 28985), (77, 28997), (82, 29024), (84, 29030),

Gene: Henrique_47 Start: 30734, Stop: 31669, Start Num: 14
Candidate Starts for Henrique_47:
(4, 30626), (Start: 14 @30734 has 14 MA's), (19, 30809), (27, 30920), (37, 31004), (40, 31028), (41, 31040), (44, 31076), (47, 31094), (51, 31151), (68, 31322), (81, 31424), (86, 31451), (88, 31496), (90, 31556), (92, 31595),

Gene: Hibiscus_43 Start: 28298, Stop: 28996, Start Num: 16
Candidate Starts for Hibiscus_43:
(Start: 16 @28298 has 2 MA's), (27, 28460), (31, 28478), (33, 28523), (75, 28922), (76, 28934), (77, 28946), (82, 28973), (84, 28979),

Gene: Idergollasper_14 Start: 5677, Stop: 6372, Start Num: 11
Candidate Starts for Idergollasper_14:
(Start: 11 @5677 has 20 MA's), (Start: 18 @5734 has 12 MA's), (22, 5839), (23, 5857), (28, 5899), (30, 5908), (36, 5971), (38, 5983), (45, 6037), (48, 6055), (49, 6094), (52, 6139), (69, 6235), (72, 6250), (80, 6304), (87, 6340),

Gene: Imara_15 Start: 5987, Stop: 6625, Start Num: 18
Candidate Starts for Imara_15:
(Start: 11 @5930 has 20 MA's), (Start: 18 @5987 has 12 MA's), (22, 6092), (23, 6110), (28, 6152), (30, 6161), (36, 6224), (38, 6236), (45, 6290), (48, 6308), (49, 6347), (52, 6392), (69, 6488), (72, 6503), (80, 6557), (87, 6593),

Gene: JF1_69 Start: 42759, Stop: 43424, Start Num: 12
Candidate Starts for JF1_69:
(Start: 12 @42759 has 21 MA's), (27, 42921), (28, 42927), (31, 42939), (32, 42966), (38, 43011), (48, 43083), (53, 43212), (56, 43245), (63, 43272), (78, 43362), (83, 43404),

Gene: JangDynasty_14 Start: 5823, Stop: 6461, Start Num: 18
Candidate Starts for JangDynasty_14:
(Start: 11 @5766 has 20 MA's), (Start: 18 @5823 has 12 MA's), (22, 5928), (23, 5946), (28, 5988), (30, 5997), (36, 6060), (38, 6072), (45, 6126), (48, 6144), (49, 6183), (52, 6228), (69, 6324), (72, 6339), (80, 6393), (87, 6429),

Gene: Judy_50 Start: 32343, Stop: 33257, Start Num: 14
Candidate Starts for Judy_50:
(1, 31923), (3, 32037), (5, 32253), (6, 32256), (Start: 14 @32343 has 14 MA's), (27, 32526), (36, 32604), (41, 32646), (60, 32892), (64, 32901), (66, 32904), (81, 33015), (86, 33042), (88, 33087), (90, 33144), (92, 33183),

Gene: Juliette_71 Start: 42906, Stop: 43574, Start Num: 12
Candidate Starts for Juliette_71:
(Start: 12 @42906 has 21 MA's), (27, 43068), (28, 43074), (31, 43086), (32, 43113), (38, 43158), (48, 43230), (53, 43359), (56, 43392), (67, 43425), (71, 43446), (78, 43512), (83, 43554),

Gene: Karkharias_47 Start: 31441, Stop: 32322, Start Num: 14
Candidate Starts for Karkharias_47:
(Start: 14 @31441 has 14 MA's), (19, 31516), (27, 31624), (35, 31699), (41, 31744), (68, 31999), (81, 32110), (86, 32137), (90, 32209), (92, 32248),

Gene: KayMoney_47 Start: 30859, Stop: 31773, Start Num: 14
Candidate Starts for KayMoney_47:

(5, 30769), (6, 30772), (Start: 14 @30859 has 14 MA's), (27, 31042), (36, 31120), (41, 31162), (60, 31408), (64, 31417), (66, 31420), (81, 31531), (90, 31660), (92, 31699),

Gene: KingPhillip3_14 Start: 5677, Stop: 6372, Start Num: 11
Candidate Starts for KingPhillip3_14:
(Start: 11 @5677 has 20 MA's), (Start: 18 @5734 has 12 MA's), (22, 5839), (23, 5857), (28, 5899), (30, 5908), (36, 5971), (38, 5983), (45, 6037), (48, 6055), (49, 6094), (52, 6139), (69, 6235), (72, 6250), (80, 6304), (87, 6340),

Gene: Kraw_69 Start: 42594, Stop: 43262, Start Num: 12
Candidate Starts for Kraw_69:
(Start: 12 @42594 has 21 MA's), (27, 42756), (28, 42762), (31, 42774), (32, 42801), (38, 42846), (48, 42918), (53, 43047), (56, 43080), (67, 43113), (71, 43134), (78, 43200), (83, 43242),

Gene: Krili_15 Start: 6006, Stop: 6731, Start Num: 11
Candidate Starts for Krili_15:
(Start: 11 @6006 has 20 MA's), (Start: 18 @6063 has 12 MA's), (22, 6168), (23, 6186), (28, 6228), (30, 6237), (36, 6300), (38, 6312), (45, 6366), (48, 6384), (49, 6423), (52, 6468), (54, 6507), (69, 6594), (72, 6609), (80, 6663), (87, 6699),

Gene: Lebo14_68 Start: 42927, Stop: 43595, Start Num: 12
Candidate Starts for Lebo14_68:
(Start: 12 @42927 has 21 MA's), (27, 43089), (28, 43095), (31, 43107), (32, 43134), (38, 43179), (48, 43251), (53, 43380), (56, 43413), (67, 43446), (71, 43467), (78, 43533), (83, 43575),

Gene: LilyBell_48 Start: 31454, Stop: 32422, Start Num: 14
Candidate Starts for LilyBell_48:
(Start: 14 @31454 has 14 MA's), (19, 31529), (27, 31637), (35, 31712), (37, 31721), (41, 31757), (47, 31811), (55, 31976), (65, 32084), (92, 32342),

Gene: LittleRon_45 Start: 30456, Stop: 31370, Start Num: 14
Candidate Starts for LittleRon_45:
(5, 30366), (6, 30369), (Start: 14 @30456 has 14 MA's), (27, 30639), (36, 30717), (41, 30759), (60, 31005), (64, 31014), (66, 31017), (81, 31128), (90, 31257), (92, 31296),

Gene: MadKillah_16 Start: 6027, Stop: 6764, Start Num: 11
Candidate Starts for MadKillah_16:
(Start: 11 @6027 has 20 MA's), (Start: 18 @6084 has 12 MA's), (22, 6189), (23, 6207), (28, 6249), (30, 6258), (36, 6321), (38, 6333), (45, 6387), (48, 6405), (49, 6444), (52, 6489), (54, 6537), (69, 6627), (72, 6642), (80, 6696), (87, 6732),

Gene: Malthus_70 Start: 42594, Stop: 43262, Start Num: 12
Candidate Starts for Malthus_70:
(Start: 12 @42594 has 21 MA's), (27, 42756), (28, 42762), (31, 42774), (32, 42801), (38, 42846), (48, 42918), (53, 43047), (56, 43080), (67, 43113), (71, 43134), (78, 43200), (83, 43242),

Gene: MissDaisy_66 Start: 41506, Stop: 42177, Start Num: 12
Candidate Starts for MissDaisy_66:
(Start: 12 @41506 has 21 MA's), (27, 41668), (28, 41674), (31, 41686), (32, 41713), (38, 41758), (48, 41830), (53, 41959), (56, 41992), (59, 42010), (78, 42115), (83, 42157),

Gene: Mitti_69 Start: 42773, Stop: 43417, Start Num: 12
Candidate Starts for Mitti_69:

(Start: 12 @42773 has 21 MA's), (27, 42935), (28, 42941), (31, 42953), (32, 42980), (38, 43025), (48, 43097), (53, 43226), (56, 43259), (67, 43292), (71, 43313), (78, 43355), (83, 43397),

Gene: Mori_15 Start: 5923, Stop: 6603, Start Num: 18
Candidate Starts for Mori_15:
(Start: 11 @5866 has 20 MA's), (Start: 18 @5923 has 12 MA's), (22, 6028), (23, 6046), (28, 6088), (30, 6097), (36, 6160), (38, 6172), (45, 6226), (48, 6244), (49, 6283), (52, 6328), (54, 6376), (69, 6466), (72, 6481), (80, 6535), (87, 6571),

Gene: Mulch_51 Start: 36552, Stop: 37343, Start Num: 13
Candidate Starts for Mulch_51:
(2, 36198), (Start: 13 @36552 has 15 MA's), (20, 36651), (21, 36660), (24, 36699), (25, 36702), (38, 36819), (46, 36882), (48, 36891), (49, 36930), (50, 36939), (58, 37101), (79, 37236), (85, 37272),

Gene: Murai_15 Start: 5866, Stop: 6603, Start Num: 11
Candidate Starts for Murai_15:
(Start: 11 @5866 has 20 MA's), (Start: 18 @5923 has 12 MA's), (22, 6028), (23, 6046), (28, 6088), (30, 6097), (36, 6160), (38, 6172), (45, 6226), (48, 6244), (49, 6283), (52, 6328), (54, 6376), (69, 6466), (72, 6481), (80, 6535), (87, 6571),

Gene: Nadeem_51 Start: 36552, Stop: 37331, Start Num: 13
Candidate Starts for Nadeem_51:
(2, 36198), (Start: 13 @36552 has 15 MA's), (20, 36651), (21, 36660), (24, 36699), (25, 36702), (38, 36819), (46, 36882), (48, 36891), (49, 36930), (50, 36939), (58, 37101), (79, 37224), (85, 37260),

Gene: NancyRae_50 Start: 36571, Stop: 37350, Start Num: 13
Candidate Starts for NancyRae_50:
(2, 36217), (Start: 13 @36571 has 15 MA's), (20, 36670), (21, 36679), (24, 36718), (25, 36721), (38, 36838), (46, 36901), (48, 36910), (49, 36949), (50, 36958), (58, 37120), (79, 37243), (85, 37279),

Gene: NidoQ_44 Start: 30618, Stop: 31583, Start Num: 14
Candidate Starts for NidoQ_44:
(Start: 14 @30618 has 14 MA's), (19, 30693), (27, 30801), (35, 30876), (37, 30885), (41, 30921), (47, 30975), (55, 31140), (65, 31248), (92, 31503),

Gene: NiebruSaylor_15 Start: 5923, Stop: 6603, Start Num: 18
Candidate Starts for NiebruSaylor_15:
(Start: 11 @5866 has 20 MA's), (Start: 18 @5923 has 12 MA's), (22, 6028), (23, 6046), (28, 6088), (30, 6097), (36, 6160), (38, 6172), (45, 6226), (48, 6244), (49, 6283), (52, 6328), (54, 6376), (69, 6466), (72, 6481), (80, 6535), (87, 6571),

Gene: NikkiHotWheels_47 Start: 30840, Stop: 31745, Start Num: 14
Candidate Starts for NikkiHotWheels_47:
(Start: 14 @30840 has 14 MA's), (19, 30915), (27, 31026), (37, 31110), (40, 31134), (41, 31146), (51, 31257), (81, 31503), (86, 31530), (88, 31575), (90, 31632), (92, 31671),

Gene: Nolwazi_71 Start: 42740, Stop: 43408, Start Num: 12
Candidate Starts for Nolwazi_71:
(Start: 12 @42740 has 21 MA's), (27, 42902), (28, 42908), (31, 42920), (32, 42947), (38, 42992), (48, 43064), (53, 43193), (56, 43226), (67, 43259), (71, 43280), (78, 43346), (83, 43388),

Gene: OmniCritical_68 Start: 42624, Stop: 43298, Start Num: 15
Candidate Starts for OmniCritical_68:

(Start: 15 @42624 has 3 MA's), (27, 42786), (28, 42792), (31, 42804), (32, 42831), (38, 42876), (48, 42948), (53, 43077), (56, 43110), (61, 43131), (73, 43185), (78, 43236), (83, 43278),

Gene: Parada_51 Start: 36552, Stop: 37343, Start Num: 13
Candidate Starts for Parada_51:
(2, 36198), (Start: 13 @36552 has 15 MA's), (20, 36651), (21, 36660), (24, 36699), (25, 36702), (38, 36819), (46, 36882), (48, 36891), (49, 36930), (50, 36939), (58, 37101), (79, 37236), (85, 37272),

Gene: Patt_65 Start: 41230, Stop: 41901, Start Num: 12
Candidate Starts for Patt_65:
(Start: 12 @41230 has 21 MA's), (27, 41392), (28, 41398), (31, 41410), (32, 41437), (38, 41482), (48, 41554), (53, 41683), (56, 41716), (59, 41734), (78, 41839), (83, 41881),

Gene: PeggyLeg03_47 Start: 31530, Stop: 32435, Start Num: 14
Candidate Starts for PeggyLeg03_47:
(4, 31422), (Start: 14 @31530 has 14 MA's), (19, 31605), (27, 31716), (37, 31800), (41, 31836), (51, 31947), (68, 32091), (81, 32193), (86, 32220), (90, 32322), (92, 32361),

Gene: Pimento_52 Start: 36149, Stop: 36928, Start Num: 13
Candidate Starts for Pimento_52:
(5, 36059), (Start: 13 @36149 has 15 MA's), (17, 36167), (21, 36257), (24, 36296), (25, 36299), (38, 36416), (48, 36488), (49, 36527), (50, 36536), (58, 36698), (79, 36821), (85, 36857),

Gene: Pucara_44 Start: 31135, Stop: 32040, Start Num: 14
Candidate Starts for Pucara_44:
(4, 31027), (Start: 14 @31135 has 14 MA's), (19, 31210), (27, 31321), (37, 31405), (41, 31441), (51, 31552), (81, 31798), (86, 31825), (90, 31927), (92, 31966),

Gene: Qhanda_71 Start: 42610, Stop: 43278, Start Num: 12
Candidate Starts for Qhanda_71:
(Start: 12 @42610 has 21 MA's), (27, 42772), (28, 42778), (31, 42790), (32, 42817), (38, 42862), (48, 42934), (53, 43063), (56, 43096), (67, 43129), (71, 43150), (78, 43216), (83, 43258),

Gene: Reptar3000_66 Start: 41218, Stop: 41889, Start Num: 12
Candidate Starts for Reptar3000_66:
(Start: 12 @41218 has 21 MA's), (26, 41353), (27, 41380), (28, 41386), (31, 41398), (32, 41425), (38, 41470), (48, 41542), (53, 41671), (56, 41704), (59, 41722), (78, 41827), (83, 41869),

Gene: RootBeer_38 Start: 27630, Stop: 28544, Start Num: 14
Candidate Starts for RootBeer_38:
(Start: 14 @27630 has 14 MA's), (19, 27699), (27, 27807), (41, 27927), (86, 28329), (90, 28431), (92, 28470),

Gene: Ruthiejr_70 Start: 42644, Stop: 43309, Start Num: 12
Candidate Starts for Ruthiejr_70:
(Start: 12 @42644 has 21 MA's), (27, 42806), (28, 42812), (31, 42824), (32, 42851), (38, 42896), (48, 42968), (53, 43097), (56, 43130), (63, 43157), (78, 43247), (83, 43289),

Gene: Ryadel_17 Start: 6460, Stop: 7185, Start Num: 11
Candidate Starts for Ryadel_17:
(Start: 11 @6460 has 20 MA's), (Start: 18 @6517 has 12 MA's), (22, 6622), (23, 6640), (28, 6682), (30, 6691), (36, 6754), (38, 6766), (45, 6820), (48, 6838), (49, 6877), (52, 6922), (54, 6961), (69, 7048), (72, 7063), (80, 7117), (87, 7153),

Gene: SamScheppers_67 Start: 43073, Stop: 43741, Start Num: 12
Candidate Starts for SamScheppers_67:
(Start: 12 @43073 has 21 MA's), (27, 43235), (28, 43241), (31, 43253), (32, 43280), (38, 43325), (48, 43397), (53, 43526), (56, 43559), (67, 43592), (71, 43613), (78, 43679), (83, 43721),

Gene: SchoolBus_14 Start: 5677, Stop: 6372, Start Num: 11
Candidate Starts for SchoolBus_14:
(Start: 11 @5677 has 20 MA's), (Start: 18 @5734 has 12 MA's), (22, 5839), (23, 5857), (28, 5899), (30, 5908), (36, 5971), (38, 5983), (45, 6037), (48, 6055), (49, 6094), (52, 6139), (69, 6235), (72, 6250), (80, 6304), (87, 6340),

Gene: Schuy_16 Start: 6084, Stop: 6764, Start Num: 18
Candidate Starts for Schuy_16:
(Start: 11 @6027 has 20 MA's), (Start: 18 @6084 has 12 MA's), (22, 6189), (23, 6207), (28, 6249), (30, 6258), (36, 6321), (38, 6333), (45, 6387), (48, 6405), (49, 6444), (52, 6489), (54, 6537), (69, 6627), (72, 6642), (80, 6696), (87, 6732),

Gene: Shambre1_41 Start: 27134, Stop: 28132, Start Num: 14
Candidate Starts for Shambre1_41:
(7, 27047), (8, 27050), (9, 27056), (10, 27059), (Start: 14 @27134 has 14 MA's), (29, 27317), (35, 27386), (36, 27389), (39, 27416), (40, 27419), (62, 27728), (74, 27806), (80, 27866), (89, 28013), (90, 28016), (94, 28100),

Gene: Shida_15 Start: 5989, Stop: 6669, Start Num: 18
Candidate Starts for Shida_15:
(Start: 11 @5932 has 20 MA's), (Start: 18 @5989 has 12 MA's), (22, 6094), (23, 6112), (28, 6154), (30, 6163), (36, 6226), (38, 6238), (45, 6292), (48, 6310), (49, 6349), (52, 6394), (54, 6442), (69, 6532), (72, 6547), (80, 6601), (87, 6637),

Gene: Slarp_69 Start: 42601, Stop: 43269, Start Num: 12
Candidate Starts for Slarp_69:
(Start: 12 @42601 has 21 MA's), (27, 42763), (28, 42769), (31, 42781), (32, 42808), (38, 42853), (48, 42925), (53, 43054), (56, 43087), (67, 43120), (71, 43141), (78, 43207), (83, 43249),

Gene: Smooch_16 Start: 6196, Stop: 6918, Start Num: 11
Candidate Starts for Smooch_16:
(Start: 11 @6196 has 20 MA's), (Start: 18 @6253 has 12 MA's), (22, 6358), (23, 6376), (28, 6418), (30, 6427), (36, 6490), (38, 6502), (45, 6556), (48, 6574), (49, 6613), (52, 6658), (54, 6706), (69, 6781), (72, 6796), (80, 6850), (87, 6886),

Gene: SussRoloMann_51 Start: 36552, Stop: 37343, Start Num: 13
Candidate Starts for SussRoloMann_51:
(2, 36198), (Start: 13 @36552 has 15 MA's), (20, 36651), (21, 36660), (24, 36699), (25, 36702), (38, 36819), (46, 36882), (48, 36891), (49, 36930), (50, 36939), (58, 37101), (79, 37236), (85, 37272),

Gene: Taquito_68 Start: 42836, Stop: 43474, Start Num: 12
Candidate Starts for Taquito_68:
(Start: 12 @42836 has 21 MA's), (27, 42998), (28, 43004), (31, 43016), (32, 43043), (38, 43088), (48, 43160), (53, 43289), (56, 43322), (67, 43355), (71, 43376), (78, 43412), (83, 43454),

Gene: TelAviv_14 Start: 5674, Stop: 6369, Start Num: 11
Candidate Starts for TelAviv_14:

(Start: 11 @5674 has 20 MA's), (Start: 18 @5731 has 12 MA's), (22, 5836), (23, 5854), (28, 5896), (30, 5905), (36, 5968), (38, 5980), (45, 6034), (48, 6052), (49, 6091), (52, 6136), (69, 6232), (72, 6247), (80, 6301), (87, 6337),

Gene: Vagabond_15 Start: 5932, Stop: 6645, Start Num: 11
Candidate Starts for Vagabond_15:
(Start: 11 @5932 has 20 MA's), (Start: 18 @5989 has 12 MA's), (22, 6094), (23, 6112), (28, 6154), (30, 6163), (36, 6226), (38, 6238), (45, 6292), (48, 6310), (49, 6349), (52, 6394), (54, 6442), (69, 6508), (72, 6523), (80, 6577), (87, 6613),

Gene: Vorrps_15 Start: 5923, Stop: 6603, Start Num: 18
Candidate Starts for Vorrps_15:
(Start: 11 @5866 has 20 MA's), (Start: 18 @5923 has 12 MA's), (22, 6028), (23, 6046), (28, 6088), (30, 6097), (36, 6160), (38, 6172), (45, 6226), (48, 6244), (49, 6283), (52, 6328), (54, 6376), (69, 6466), (72, 6481), (80, 6535), (87, 6571),

Gene: WheatThin_50 Start: 36552, Stop: 37331, Start Num: 13
Candidate Starts for WheatThin_50:
(2, 36198), (Start: 13 @36552 has 15 MA's), (20, 36651), (21, 36660), (24, 36699), (25, 36702), (38, 36819), (46, 36882), (48, 36891), (49, 36930), (50, 36939), (58, 37101), (79, 37224), (85, 37260),

Gene: Wildflower_15 Start: 5892, Stop: 6626, Start Num: 11
Candidate Starts for Wildflower_15:
(Start: 11 @5892 has 20 MA's), (Start: 18 @5949 has 12 MA's), (22, 6054), (23, 6072), (28, 6114), (30, 6123), (36, 6186), (38, 6198), (45, 6252), (48, 6270), (49, 6309), (52, 6354), (69, 6489), (72, 6504), (80, 6558), (87, 6594),

Gene: Winget_15 Start: 5931, Stop: 6644, Start Num: 11
Candidate Starts for Winget_15:
(Start: 11 @5931 has 20 MA's), (Start: 18 @5988 has 12 MA's), (22, 6093), (23, 6111), (28, 6153), (30, 6162), (36, 6225), (38, 6237), (45, 6291), (48, 6309), (49, 6348), (52, 6393), (54, 6441), (69, 6507), (72, 6522), (80, 6576), (87, 6612),

Gene: Wintermute_69 Start: 42831, Stop: 43499, Start Num: 12
Candidate Starts for Wintermute_69:
(Start: 12 @42831 has 21 MA's), (27, 42993), (28, 42999), (31, 43011), (32, 43038), (38, 43083), (48, 43155), (53, 43284), (56, 43317), (67, 43350), (71, 43371), (78, 43437), (83, 43479),

Gene: Wogge42_15 Start: 6078, Stop: 6734, Start Num: 18
Candidate Starts for Wogge42_15:
(Start: 11 @6021 has 20 MA's), (Start: 18 @6078 has 12 MA's), (22, 6183), (23, 6201), (28, 6243), (30, 6252), (36, 6315), (38, 6327), (45, 6381), (48, 6399), (49, 6438), (52, 6483), (54, 6531), (69, 6597), (72, 6612), (80, 6666), (87, 6702),

Gene: Y10_66 Start: 42759, Stop: 43424, Start Num: 12
Candidate Starts for Y10_66:
(Start: 12 @42759 has 21 MA's), (27, 42921), (28, 42927), (31, 42939), (32, 42966), (38, 43011), (48, 43083), (53, 43212), (56, 43245), (63, 43272), (78, 43362), (83, 43404),

Gene: Y2_66 Start: 42759, Stop: 43424, Start Num: 12
Candidate Starts for Y2_66:
(Start: 12 @42759 has 21 MA's), (27, 42921), (28, 42927), (31, 42939), (32, 42966), (38, 43011), (48, 43083), (53, 43212), (56, 43245), (63, 43272), (78, 43362), (83, 43404),

Gene: YasnayaPolyana_68 Start: 42684, Stop: 43325, Start Num: 12
Candidate Starts for YasnayaPolyana_68:
(Start: 12 @42684 has 21 MA's), (27, 42846), (28, 42852), (31, 42864), (32, 42891), (38, 42936), (48, 43008), (53, 43137), (56, 43170), (63, 43197), (78, 43263), (83, 43305),

Gene: YoyoKar_15 Start: 5735, Stop: 6373, Start Num: 18
Candidate Starts for YoyoKar_15:
(Start: 11 @5678 has 20 MA's), (Start: 18 @5735 has 12 MA's), (22, 5840), (23, 5858), (28, 5900), (30, 5909), (36, 5972), (38, 5984), (45, 6038), (48, 6056), (49, 6095), (52, 6140), (69, 6236), (72, 6251), (80, 6305), (87, 6341),

Gene: YungJamal_16 Start: 6232, Stop: 6954, Start Num: 11
Candidate Starts for YungJamal_16:
(Start: 11 @6232 has 20 MA's), (Start: 18 @6289 has 12 MA's), (22, 6394), (23, 6412), (28, 6454), (30, 6463), (36, 6526), (38, 6538), (45, 6592), (48, 6610), (49, 6649), (52, 6694), (54, 6742), (69, 6817), (72, 6832), (80, 6886), (87, 6922),

Gene: Zakhe101_16 Start: 6244, Stop: 6966, Start Num: 11
Candidate Starts for Zakhe101_16:
(Start: 11 @6244 has 20 MA's), (Start: 18 @6301 has 12 MA's), (22, 6406), (23, 6424), (28, 6466), (30, 6475), (36, 6538), (38, 6550), (45, 6604), (48, 6622), (49, 6661), (52, 6706), (54, 6754), (69, 6829), (72, 6844), (80, 6898), (87, 6934),

Gene: Zebo_14 Start: 5677, Stop: 6372, Start Num: 11
Candidate Starts for Zebo_14:
(Start: 11 @5677 has 20 MA's), (Start: 18 @5734 has 12 MA's), (22, 5839), (23, 5857), (28, 5899), (30, 5908), (36, 5971), (38, 5983), (45, 6037), (48, 6055), (49, 6094), (52, 6139), (69, 6235), (72, 6250), (80, 6304), (87, 6340),