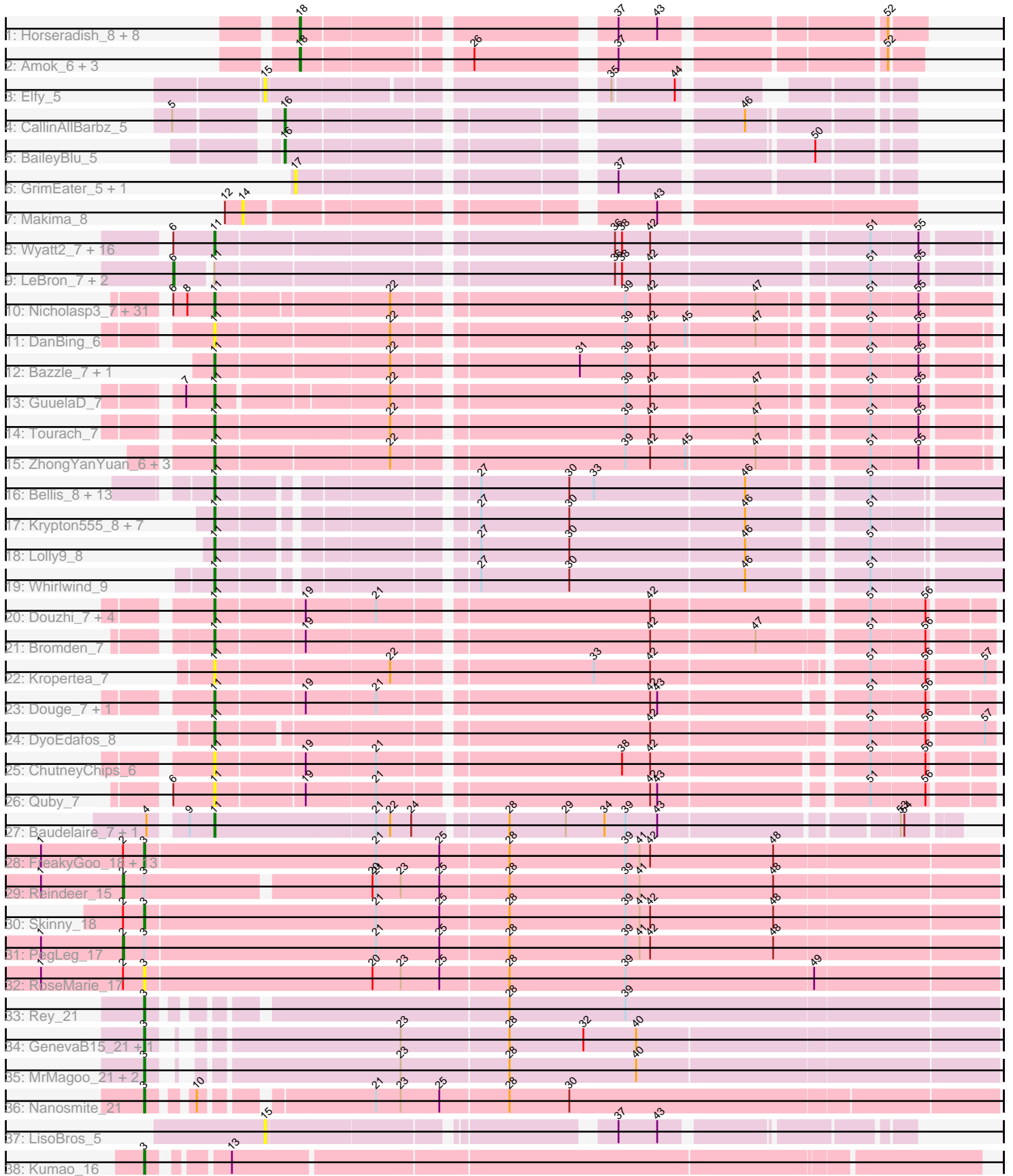


Pham 296325



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 296325 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296325 has 145 members, 33 are drafts.

Phages represented in each track:

- Track 1 : Horseradish_8, Blondies_8, Biskit_8, MScarn_9, Troje_7, SketchMex_6, SweatNTears_9, Buttrmlkdreams_7, Yummy_8
- Track 2 : Amok_6, GTE2_05, Emalyn_6, AikoCarson_6
- Track 3 : Elfy_5
- Track 4 : CallinAllBarbz_5
- Track 5 : BaileyBlu_5
- Track 6 : GrimEater_5, Jankie_5
- Track 7 : Makima_8
- Track 8 : Wyatt2_7, CicholasNage_7, AvadaKedavra_7, Halena_7, Wamburgxpress_7, Appletree2_7, Rose5_7, Calm_7, Zaria_7, JoeDirt_7, MAckerman_7, Enceladus_7, DirkDirk_7, Poochiewood_7, Silverleaf_7, Acquire49_7, OhShagHennessy_7
- Track 9 : LeBron_7, UPIE_7, Tyson_7
- Track 10 : Nicholasp3_7, Underpass_7, Vetrix_7, Soap141_7, Gabriela_7, BobsGarage_7, Lynnae_7, OverPar_7, Netyap_7, LilDestine_7, Faith1_7, Winky_7, Sarshaun_7, Kahlid_7, BigCheese_7, Finemlucis_7, Zakai_7, Rossetti_7, Lewan_7, Loadrie_7, Gardann_7, DrSeegs_7, Wilder_7, Breezona_7, SoJulia_7, Miley16_7, MkaliMitinis3_7, Hafay_7, Itos_7, Crossroads_7, Wigglewiggle_7, Rumpelstiltskin_7
- Track 11 : DanBing_6
- Track 12 : Bazzle_7, Archie_7
- Track 13 : GuuelaD_7
- Track 14 : Tourach_7
- Track 15 : ZhongYanYuan_6, DHan_7, Claus_7, Baoshan_6
- Track 16 : Bellis_8, Nicholas_8, Kingsolomon_8, Lumos_8, Red305_8, Moostard_8, Snenia_8, MsGreen_8, Jubie_8, Clautastrophe_8, Samty_8, Jobypre_8, Finnry_8, TriFive_8
- Track 17 : Krypton555_8, DuncansLeg_8, MiniMac_8, MiniLon_8, Ellson_8, KirDoubleO7_6, BourbonZero_7, LiyuLake_8
- Track 18 : Lolly9_8
- Track 19 : Whirlwind_9
- Track 20 : Douzhi_7, BrainDrainer_8, Chaser_7, PYPDinur_7, Sheng711_7
- Track 21 : Bromden_7
- Track 22 : Kropertea_7
- Track 23 : Douge_7, FarmResident_7
- Track 24 : DyoEdafos_8
- Track 25 : ChutneyChips_6
- Track 26 : Quby_7

- Track 27 : Baudelaire_7, Aegeus_7
- Track 28 : FreakyGoo_18, Auspice_17, Bricole_17, TpudiCK_18, IPhane7_17, Diminimus_18, KleverKiS_17, Izel_18, Dulcita_18, Glaske16_18, LilhomieP_16, TyDawg_17, SlimJimmy_16, Bongo_17
- Track 29 : Reindeer_15
- Track 30 : Skinny_18
- Track 31 : PegLeg_17
- Track 32 : RoseMarie_17
- Track 33 : Rey_21
- Track 34 : GenevaB15_21, Aziz_21
- Track 35 : MrMagoo_21, GardenSalsa_21, Estes_22
- Track 36 : Nanosmite_21
- Track 37 : LisoBros_5
- Track 38 : Kumao_16

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

The start number called the most often in the published annotations is 11, it was called in 72 of the 112 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_7, Aegeus_7, Appletree2_7, Archie_7, AvadaKedavra_7, Baoshan_6, Baudelaire_7, Bazzle_7, Bellis_8, BigCheese_7, BobsGarage_7, BourbonZero_7, BrainDrainer_8, Breezona_7, Bromden_7, Calm_7, Chaser_7, ChutneyChips_6, CicholasNage_7, Claus_7, Clautastrophe_8, Crossroads_7, DHan_7, DanBing_6, DirkDirk_7, Douge_7, Douzhi_7, DrSeegs_7, DuncansLeg_8, DyoEdafos_8, Ellson_8, Enceladus_7, Faith1_7, FarmResident_7, Finemlucis_7, Finnry_8, Gabriela_7, Gardann_7, GuuelaD_7, Hafay_7, Halena_7, Itos_7, Jobypre_8, JoeDirt_7, Jubie_8, Kahlid_7, Kingsolomon_8, KirDoubleO7_6, Kropertea_7, Krypton555_8, Lewan_7, LilDestine_7, LiyuLake_8, Loadrie_7, Lolly9_8, Lumos_8, Lynnae_7, MAckerman_7, Miley16_7, MiniLon_8, MiniMac_8, MkaliMitinis3_7, Moostard_8, MsGreen_8, Netyap_7, Nicholas_8, Nicholasp3_7, OhShagHennessy_7, OverPar_7, PYPDinur_7, Poochiewood_7, Quby_7, Red305_8, Rose5_7, Rossetti_7, Rumpelstiltskin_7, Samty_8, Sarshaun_7, Sheng711_7, Silverleaf_7, Snenia_8, SoJulia_7, Soap141_7, Tourach_7, TriFive_8, Underpass_7, Vetrix_7, Wamburggrxpress_7, Whirlwind_9, Wigglewiggle_7, Wilder_7, Winky_7, Wyatt2_7, Zakai_7, Zaria_7, ZhongYanYuan_6,

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

- LeBron_7, Tyson_7, UPIE_7,

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

- AikoCarson_6, Amok_6, Auspice_17, Aziz_21, BaileyBlu_5, Biskit_8, Blondies_8, Bongo_17, Bricole_17, Buttrmilkdreams_7, CallinAllBarbz_5, Diminimus_18, Dulcita_18, Elfy_5, Emalyn_6, Estes_22, FreakyGoo_18, GTE2_05, GardenSalsa_21, GenevaB15_21, Glaske16_18, GrimEater_5, Horseradish_8, IPhane7_17, Izel_18, Jankie_5, KleverKiS_17, Kumao_16, LilhomieP_16, LisoBros_5, MScarn_9, Makima_8, MrMagoo_21, Nanosmite_21, PegLeg_17, Reindeer_15, Rey_21, RoseMarie_17, SketchMex_6, Skinny_18, SlimJimmy_16, SweatNTears_9, TpudiCK_18, Troje_7, TyDawg_17, Yummy_8,

Summary by start number:

Start 2:

- Found in 18 of 145 (12.4%) of genes in pham
- Manual Annotations of this start: 2 of 112
- Called 11.1% of time when present
- Phage (with cluster) where this start called: PegLeg_17 (M1), Reindeer_15 (M1),

Start 3:

- Found in 26 of 145 (17.9%) of genes in pham
- Manual Annotations of this start: 21 of 112
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Auspice_17 (M1), Aziz_21 (M2), Bongo_17 (M1), Bricole_17 (M1), Diminimus_18 (M1), Dulcita_18 (M1), Estes_22 (M2), FreakyGoo_18 (M1), GardenSalsa_21 (M2), GenevaB15_21 (M2), Glaske16_18 (M1), IPhane7_17 (M1), Izel_18 (M1), KleverKiS_17 (M1), Kumao_16 (singleton), LilhomieP_16 (M1), MrMagoo_21 (M2), Nanosmite_21 (M3), Rey_21 (M2), RoseMarie_17 (M1), Skinny_18 (M1), SlimJimmy_16 (M1), TpudiCK_18 (M1), TyDawg_17 (M1),

Start 6:

- Found in 53 of 145 (36.6%) of genes in pham
- Manual Annotations of this start: 3 of 112
- Called 5.7% of time when present
- Phage (with cluster) where this start called: LeBron_7 (L1), Tyson_7 (L1), UPIE_7 (L1),

Start 11:

- Found in 99 of 145 (68.3%) of genes in pham
- Manual Annotations of this start: 72 of 112
- Called 97.0% of time when present
- Phage (with cluster) where this start called: Acquire49_7 (L1), Aegeus_7 (L5), Appletree2_7 (L1), Archie_7 (L2), AvadaKedavra_7 (L1), Baoshan_6 (L2), Baudelaire_7 (L5), Bazzle_7 (L2), Bellis_8 (L3), BigCheese_7 (L2), BobsGarage_7 (L2), BourbonZero_7 (L3), BrainDrainer_8 (L4), Breezona_7 (L2), Bromden_7 (L4), Calm_7 (L1), Chaser_7 (L4), ChutneyChips_6 (L4), CicholasNage_7 (L1), Claus_7 (L2), Clautastrophe_8 (L3), Crossroads_7 (L2), DHan_7 (L2), DanBing_6 (L2), DirkDirk_7 (L1), Douge_7 (L4), Douzhi_7 (L4), DrSeegs_7 (L2), DuncansLeg_8 (L3), DyoEdafos_8 (L4), Ellson_8 (L3), Enceladus_7 (L1), Faith1_7 (L2), FarmResident_7 (L4), Finemlucis_7 (L2), Finnry_8 (L3), Gabriela_7 (L2), Gardann_7 (L2), GuuelaD_7 (L2), Hafay_7 (L2), Halena_7 (L1), Itos_7 (L2), Jobypre_8 (L3), JoeDirt_7 (L1), Jubie_8 (L3), Kahlid_7 (L2), Kingsolomon_8 (L3), KirDoubleO7_6 (L3), Kropertea_7 (L4), Krypton555_8 (L3), Lewan_7 (L2), LilDestine_7 (L2), LiyuLake_8 (L3), Loadrie_7 (L2), Lolly9_8 (L3), Lumos_8 (L3), Lynnae_7 (L2), MAckerman_7 (L1), Miley16_7 (L2), MiniLon_8 (L3), MiniMac_8 (L3), MkaliMitinis3_7 (L2), Moostard_8 (L3), MsGreen_8 (L3), Netyap_7 (L2), Nicholas_8 (L3), Nicholasp3_7 (L2), OhShagHennessy_7 (L1), OverPar_7 (L2), PYPDinur_7 (L4), Poochiewood_7 (L1), Quby_7 (L4), Red305_8 (L3), Rose5_7 (L1), Rossetti_7 (L2), Rumpelstiltskin_7 (L2), Samty_8 (L3), Sarshaun_7 (L2), Sheng711_7 (L4), Silverleaf_7 (L1), Snenia_8 (L3), SoJulia_7 (L2), Soap141_7 (L2), Tourach_7 (L2), TriFive_8 (L3), Underpass_7 (L2), Vetrrix_7 (L2), Wamburggrxpress_7 (L1), Whirlwind_9 (L3), Wigglewiggle_7 (L2), Wilder_7 (L2), Winky_7 (L2), Wyatt2_7 (L1), Zakai_7 (L2), Zaria_7 (L1),

ZhongYanYuan_6 (L2),

Start 14:

- Found in 1 of 145 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Makima_8 (FR),

Start 15:

- Found in 2 of 145 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elfy_5 (FP), LisoBros_5 (UNK),

Start 16:

- Found in 2 of 145 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 112
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu_5 (FP), CallinAllBarbz_5 (FP),

Start 17:

- Found in 2 of 145 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GrimEater_5 (FP), Jankie_5 (FP),

Start 18:

- Found in 13 of 145 (9.0%) of genes in pham
- Manual Annotations of this start: 12 of 112
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AikoCarson_6 (CT), Amok_6 (CT), Biskit_8 (CT), Blondies_8 (CT), Buttrmlkdreams_7 (CT), Emalyn_6 (CT), GTE2_05 (CT), Horseradish_8 (CT), MScarn_9 (CT), SketchMex_6 (CT), SweatNTears_9 (CT), Troje_7 (CT), Yummy_8 (CT),

Summary by clusters:

There are 13 clusters represented in this pham: FP, FR, M2, singleton, L4, L5, L2, L3, M3, L1, M1, UNK, CT,

Info for manual annotations of cluster CT:

- Start number 18 was manually annotated 12 times for cluster CT.

Info for manual annotations of cluster FP:

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

Info for manual annotations of cluster L1:

- Start number 6 was manually annotated 3 times for cluster L1.
- Start number 11 was manually annotated 16 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 11 was manually annotated 31 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 11 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 11 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 11 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:

- Start number 2 was manually annotated 2 times for cluster M1.
- Start number 3 was manually annotated 13 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 3 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 3 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: Acquire49_7 Start: 5429, Stop: 6040, Start Num: 11

Candidate Starts for Acquire49_7:

(Start: 6 @5402 has 3 MA's), (Start: 11 @5429 has 72 MA's), (36, 5744), (38, 5750), (42, 5774), (51, 5948), (55, 5987),

Gene: Aegeus_7 Start: 5028, Stop: 5621, Start Num: 11

Candidate Starts for Aegeus_7:

(4, 4989), (9, 5013), (Start: 11 @5028 has 72 MA's), (21, 5163), (22, 5175), (24, 5193), (28, 5265), (29, 5313), (34, 5346), (39, 5364), (43, 5391), (53, 5577), (54, 5580),

Gene: AikoCarson_6 Start: 4622, Stop: 5080, Start Num: 18

Candidate Starts for AikoCarson_6:

(Start: 18 @4622 has 12 MA's), (26, 4748), (37, 4853), (52, 5054),

Gene: Amok_6 Start: 4623, Stop: 5081, Start Num: 18

Candidate Starts for Amok_6:

(Start: 18 @4623 has 12 MA's), (26, 4749), (37, 4854), (52, 5055),

Gene: Appletree2_7 Start: 5403, Stop: 6014, Start Num: 11

Candidate Starts for Appletree2_7:

(Start: 6 @5376 has 3 MA's), (Start: 11 @5403 has 72 MA's), (36, 5718), (38, 5724), (42, 5748), (51, 5922), (55, 5961),

Gene: Archie_7 Start: 5396, Stop: 6001, Start Num: 11

Candidate Starts for Archie_7:

(Start: 11 @5396 has 72 MA's), (22, 5537), (31, 5681), (39, 5720), (42, 5741), (51, 5909), (55, 5948),

Gene: Auspice_17 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for Auspice_17:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 21 MA's), (21, 9288), (25, 9342), (28, 9399), (39, 9498), (41, 9510), (42, 9519), (48, 9624),

Gene: AvadaKedavra_7 Start: 5429, Stop: 6040, Start Num: 11

Candidate Starts for AvadaKedavra_7:

(Start: 6 @5402 has 3 MA's), (Start: 11 @5429 has 72 MA's), (36, 5744), (38, 5750), (42, 5774), (51, 5948), (55, 5987),

Gene: Aziz_21 Start: 9693, Stop: 10367, Start Num: 3

Candidate Starts for Aziz_21:

(Start: 3 @9693 has 21 MA's), (23, 9870), (28, 9960), (32, 10023), (40, 10068),

Gene: BaileyBlu_5 Start: 4160, Stop: 4618, Start Num: 16

Candidate Starts for BaileyBlu_5:

(Start: 16 @4160 has 2 MA's), (50, 4547),

Gene: Baoshan_6 Start: 5250, Stop: 5855, Start Num: 11

Candidate Starts for Baoshan_6:

(Start: 11 @5250 has 72 MA's), (22, 5391), (39, 5574), (42, 5595), (45, 5625), (47, 5682), (51, 5763), (55, 5802),

Gene: Baudelaire_7 Start: 5028, Stop: 5621, Start Num: 11

Candidate Starts for Baudelaire_7:

(4, 4989), (9, 5013), (Start: 11 @5028 has 72 MA's), (21, 5163), (22, 5175), (24, 5193), (28, 5265), (29, 5313), (34, 5346), (39, 5364), (43, 5391), (53, 5577), (54, 5580),

Gene: Bazzle_7 Start: 5372, Stop: 5977, Start Num: 11

Candidate Starts for Bazzle_7:

(Start: 11 @5372 has 72 MA's), (22, 5513), (31, 5657), (39, 5696), (42, 5717), (51, 5885), (55, 5924),

Gene: Bellis_8 Start: 5538, Stop: 6137, Start Num: 11

Candidate Starts for Bellis_8:

(Start: 11 @5538 has 72 MA's), (27, 5724), (30, 5799), (33, 5820), (46, 5946), (51, 6036),

Gene: BigCheese_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for BigCheese_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Biskit_8 Start: 4888, Stop: 5349, Start Num: 18

Candidate Starts for Biskit_8:

(Start: 18 @4888 has 12 MA's), (37, 5119), (43, 5152), (52, 5320),

Gene: Blondies_8 Start: 4889, Stop: 5350, Start Num: 18

Candidate Starts for Blondies_8:

(Start: 18 @4889 has 12 MA's), (37, 5120), (43, 5153), (52, 5321),

Gene: BobsGarage_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for BobsGarage_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Bongo_17 Start: 9093, Stop: 9809, Start Num: 3
Candidate Starts for Bongo_17:
(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 21 MA's), (21, 9288), (25, 9342), (28, 9399), (39, 9498), (41, 9510), (42, 9519), (48, 9624),

Gene: BourbonZero_7 Start: 5543, Stop: 6142, Start Num: 11
Candidate Starts for BourbonZero_7:
(Start: 11 @5543 has 72 MA's), (27, 5729), (30, 5804), (46, 5951), (51, 6041),

Gene: BrainDrainer_8 Start: 5236, Stop: 5844, Start Num: 11
Candidate Starts for BrainDrainer_8:
(Start: 11 @5236 has 72 MA's), (19, 5308), (21, 5365), (42, 5581), (51, 5749), (56, 5794),

Gene: Breezona_7 Start: 5422, Stop: 6027, Start Num: 11
Candidate Starts for Breezona_7:
(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Bricole_17 Start: 9092, Stop: 9808, Start Num: 3
Candidate Starts for Bricole_17:
(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 21 MA's), (21, 9287), (25, 9341), (28, 9398), (39, 9497), (41, 9509), (42, 9518), (48, 9623),

Gene: Bromden_7 Start: 5140, Stop: 5754, Start Num: 11
Candidate Starts for Bromden_7:
(Start: 11 @5140 has 72 MA's), (19, 5212), (42, 5485), (47, 5572), (51, 5659), (56, 5704),

Gene: Buttrmlkdreams_7 Start: 4889, Stop: 5350, Start Num: 18
Candidate Starts for Buttrmlkdreams_7:
(Start: 18 @4889 has 12 MA's), (37, 5120), (43, 5153), (52, 5321),

Gene: CallinAllBarbz_5 Start: 4163, Stop: 4621, Start Num: 16
Candidate Starts for CallinAllBarbz_5:
(5, 4088), (Start: 16 @4163 has 2 MA's), (46, 4499),

Gene: Calm_7 Start: 5430, Stop: 6041, Start Num: 11
Candidate Starts for Calm_7:
(Start: 6 @5403 has 3 MA's), (Start: 11 @5430 has 72 MA's), (36, 5745), (38, 5751), (42, 5775), (51, 5949), (55, 5988),

Gene: Chaser_7 Start: 5142, Stop: 5759, Start Num: 11
Candidate Starts for Chaser_7:
(Start: 11 @5142 has 72 MA's), (19, 5214), (21, 5271), (42, 5487), (51, 5664), (56, 5709),

Gene: ChutneyChips_6 Start: 5139, Stop: 5747, Start Num: 11
Candidate Starts for ChutneyChips_6:
(Start: 11 @5139 has 72 MA's), (19, 5211), (21, 5268), (38, 5460), (42, 5484), (51, 5652), (56, 5697),

Gene: CicholasNage_7 Start: 5430, Stop: 6041, Start Num: 11
Candidate Starts for CicholasNage_7:
(Start: 6 @5403 has 3 MA's), (Start: 11 @5430 has 72 MA's), (36, 5745), (38, 5751), (42, 5775), (51, 5949), (55, 5988),

Gene: Claus_7 Start: 5430, Stop: 6035, Start Num: 11
Candidate Starts for Claus_7:
(Start: 11 @5430 has 72 MA's), (22, 5571), (39, 5754), (42, 5775), (45, 5805), (47, 5862), (51, 5943),
(55, 5982),

Gene: Clautastrophe_8 Start: 5542, Stop: 6141, Start Num: 11
Candidate Starts for Clautastrophe_8:
(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: Crossroads_7 Start: 5422, Stop: 6027, Start Num: 11
Candidate Starts for Crossroads_7:
(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42,
5764), (47, 5851), (51, 5932), (55, 5971),

Gene: DHan_7 Start: 5366, Stop: 5971, Start Num: 11
Candidate Starts for DHan_7:
(Start: 11 @5366 has 72 MA's), (22, 5507), (39, 5690), (42, 5711), (45, 5741), (47, 5798), (51, 5879),
(55, 5918),

Gene: DanBing_6 Start: 5249, Stop: 5854, Start Num: 11
Candidate Starts for DanBing_6:
(Start: 11 @5249 has 72 MA's), (22, 5390), (39, 5573), (42, 5594), (45, 5624), (47, 5681), (51, 5762),
(55, 5801),

Gene: Diminimus_18 Start: 9092, Stop: 9808, Start Num: 3
Candidate Starts for Diminimus_18:
(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 21 MA's), (21, 9287), (25, 9341), (28,
9398), (39, 9497), (41, 9509), (42, 9518), (48, 9623),

Gene: DirkDirk_7 Start: 5431, Stop: 6042, Start Num: 11
Candidate Starts for DirkDirk_7:
(Start: 6 @5404 has 3 MA's), (Start: 11 @5431 has 72 MA's), (36, 5746), (38, 5752), (42, 5776), (51,
5950), (55, 5989),

Gene: Douge_7 Start: 5097, Stop: 5705, Start Num: 11
Candidate Starts for Douge_7:
(Start: 11 @5097 has 72 MA's), (19, 5169), (21, 5226), (42, 5442), (43, 5448), (51, 5610), (56, 5655),

Gene: Douzhi_7 Start: 5097, Stop: 5705, Start Num: 11
Candidate Starts for Douzhi_7:
(Start: 11 @5097 has 72 MA's), (19, 5169), (21, 5226), (42, 5442), (51, 5610), (56, 5655),

Gene: DrSeegs_7 Start: 5422, Stop: 6027, Start Num: 11
Candidate Starts for DrSeegs_7:
(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42,
5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Dulcita_18 Start: 9092, Stop: 9808, Start Num: 3
Candidate Starts for Dulcita_18:
(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 21 MA's), (21, 9287), (25, 9341), (28,
9398), (39, 9497), (41, 9509), (42, 9518), (48, 9623),

Gene: DuncansLeg_8 Start: 5545, Stop: 6144, Start Num: 11

Candidate Starts for DuncansLeg_8:

(Start: 11 @5545 has 72 MA's), (27, 5731), (30, 5806), (46, 5953), (51, 6043),

Gene: DyoEdafos_8 Start: 5282, Stop: 5893, Start Num: 11

Candidate Starts for DyoEdafos_8:

(Start: 11 @5282 has 72 MA's), (42, 5621), (51, 5795), (56, 5840), (57, 5885),

Gene: Elfy_5 Start: 4192, Stop: 4650, Start Num: 15

Candidate Starts for Elfy_5:

(15, 4192), (35, 4444), (44, 4495),

Gene: Ellson_8 Start: 5554, Stop: 6153, Start Num: 11

Candidate Starts for Ellson_8:

(Start: 11 @5554 has 72 MA's), (27, 5740), (30, 5815), (46, 5962), (51, 6052),

Gene: Emalyn_6 Start: 4622, Stop: 5080, Start Num: 18

Candidate Starts for Emalyn_6:

(Start: 18 @4622 has 12 MA's), (26, 4748), (37, 4853), (52, 5054),

Gene: Enceladus_7 Start: 5431, Stop: 6042, Start Num: 11

Candidate Starts for Enceladus_7:

(Start: 6 @5404 has 3 MA's), (Start: 11 @5431 has 72 MA's), (36, 5746), (38, 5752), (42, 5776), (51, 5950), (55, 5989),

Gene: Estes_22 Start: 9832, Stop: 10506, Start Num: 3

Candidate Starts for Estes_22:

(Start: 3 @9832 has 21 MA's), (23, 10009), (28, 10099), (40, 10207),

Gene: Faith1_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Faith1_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: FarmResident_7 Start: 5136, Stop: 5750, Start Num: 11

Candidate Starts for FarmResident_7:

(Start: 11 @5136 has 72 MA's), (19, 5205), (21, 5262), (42, 5478), (43, 5484), (51, 5655), (56, 5700),

Gene: Finemlucis_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Finemlucis_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Finnry_8 Start: 5539, Stop: 6138, Start Num: 11

Candidate Starts for Finnry_8:

(Start: 11 @5539 has 72 MA's), (27, 5725), (30, 5800), (33, 5821), (46, 5947), (51, 6037),

Gene: FreakyGoo_18 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for FreakyGoo_18:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 21 MA's), (21, 9288), (25, 9342), (28, 9399), (39, 9498), (41, 9510), (42, 9519), (48, 9624),

Gene: GTE2_05 Start: 4581, Stop: 5042, Start Num: 18

Candidate Starts for GTE2_05:

(Start: 18 @4581 has 12 MA's), (26, 4707), (37, 4812), (52, 5013),

Gene: Gabriela_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Gabriela_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Gardann_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Gardann_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: GardenSalsa_21 Start: 9666, Stop: 10340, Start Num: 3

Candidate Starts for GardenSalsa_21:

(Start: 3 @9666 has 21 MA's), (23, 9843), (28, 9933), (40, 10041),

Gene: GenevaB15_21 Start: 9693, Stop: 10367, Start Num: 3

Candidate Starts for GenevaB15_21:

(Start: 3 @9693 has 21 MA's), (23, 9870), (28, 9960), (32, 10023), (40, 10068),

Gene: Glaske16_18 Start: 9092, Stop: 9808, Start Num: 3

Candidate Starts for Glaske16_18:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 21 MA's), (21, 9287), (25, 9341), (28, 9398), (39, 9497), (41, 9509), (42, 9518), (48, 9623),

Gene: GrimEater_5 Start: 4179, Stop: 4631, Start Num: 17

Candidate Starts for GrimEater_5:

(17, 4179), (37, 4410),

Gene: GuuelaD_7 Start: 5462, Stop: 6061, Start Num: 11

Candidate Starts for GuuelaD_7:

(7, 5447), (Start: 11 @5462 has 72 MA's), (22, 5597), (39, 5780), (42, 5801), (47, 5888), (51, 5969), (55, 6008),

Gene: Hafay_7 Start: 5455, Stop: 6060, Start Num: 11

Candidate Starts for Hafay_7:

(Start: 6 @5428 has 3 MA's), (8, 5440), (Start: 11 @5455 has 72 MA's), (22, 5593), (39, 5776), (42, 5797), (47, 5884), (51, 5965), (55, 6004),

Gene: Halena_7 Start: 5430, Stop: 6041, Start Num: 11

Candidate Starts for Halena_7:

(Start: 6 @5403 has 3 MA's), (Start: 11 @5430 has 72 MA's), (36, 5745), (38, 5751), (42, 5775), (51, 5949), (55, 5988),

Gene: Horseradish_8 Start: 4795, Stop: 5256, Start Num: 18

Candidate Starts for Horseradish_8:

(Start: 18 @4795 has 12 MA's), (37, 5026), (43, 5059), (52, 5227),

Gene: IPHane7_17 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for IPHane7_17:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 21 MA's), (21, 9288), (25, 9342), (28, 9399), (39, 9498), (41, 9510), (42, 9519), (48, 9624),

Gene: Itos_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Itos_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Izel_18 Start: 9092, Stop: 9808, Start Num: 3

Candidate Starts for Izel_18:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 21 MA's), (21, 9287), (25, 9341), (28, 9398), (39, 9497), (41, 9509), (42, 9518), (48, 9623),

Gene: Jankie_5 Start: 4178, Stop: 4630, Start Num: 17

Candidate Starts for Jankie_5:

(17, 4178), (37, 4409),

Gene: Jobypre_8 Start: 5542, Stop: 6141, Start Num: 11

Candidate Starts for Jobypre_8:

(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: JoeDirt_7 Start: 5430, Stop: 6041, Start Num: 11

Candidate Starts for JoeDirt_7:

(Start: 6 @5403 has 3 MA's), (Start: 11 @5430 has 72 MA's), (36, 5745), (38, 5751), (42, 5775), (51, 5949), (55, 5988),

Gene: Jubie_8 Start: 5542, Stop: 6141, Start Num: 11

Candidate Starts for Jubie_8:

(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: Kahlid_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Kahlid_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Kingsolomon_8 Start: 5542, Stop: 6141, Start Num: 11

Candidate Starts for Kingsolomon_8:

(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: KirDoubleO7_6 Start: 5554, Stop: 6153, Start Num: 11

Candidate Starts for KirDoubleO7_6:

(Start: 11 @5554 has 72 MA's), (27, 5740), (30, 5815), (46, 5962), (51, 6052),

Gene: KleverKiS_17 Start: 9089, Stop: 9805, Start Num: 3

Candidate Starts for KleverKiS_17:

(1, 9002), (Start: 2 @9071 has 2 MA's), (Start: 3 @9089 has 21 MA's), (21, 9284), (25, 9338), (28, 9395), (39, 9494), (41, 9506), (42, 9515), (48, 9620),

Gene: Kropertea_7 Start: 5089, Stop: 5700, Start Num: 11

Candidate Starts for Kropertea_7:

(Start: 11 @5089 has 72 MA's), (22, 5230), (33, 5386), (42, 5434), (51, 5602), (56, 5647), (57, 5692),

Gene: Krypton555_8 Start: 5533, Stop: 6132, Start Num: 11

Candidate Starts for Krypton555_8:

(Start: 11 @5533 has 72 MA's), (27, 5719), (30, 5794), (46, 5941), (51, 6031),

Gene: Kumao_16 Start: 8489, Stop: 9151, Start Num: 3

Candidate Starts for Kumao_16:

(Start: 3 @8489 has 21 MA's), (13, 8540),

Gene: LeBron_7 Start: 5403, Stop: 6041, Start Num: 6

Candidate Starts for LeBron_7:

(Start: 6 @5403 has 3 MA's), (Start: 11 @5430 has 72 MA's), (36, 5745), (38, 5751), (42, 5775), (51, 5949), (55, 5988),

Gene: Lewan_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Lewan_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: LilDestine_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for LilDestine_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: LilhomieP_16 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for LilhomieP_16:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 21 MA's), (21, 9288), (25, 9342), (28, 9399), (39, 9498), (41, 9510), (42, 9519), (48, 9624),

Gene: LisoBros_5 Start: 4378, Stop: 4854, Start Num: 15

Candidate Starts for LisoBros_5:

(15, 4378), (37, 4636), (43, 4669),

Gene: LiyuLake_8 Start: 5545, Stop: 6144, Start Num: 11

Candidate Starts for LiyuLake_8:

(Start: 11 @5545 has 72 MA's), (27, 5731), (30, 5806), (46, 5953), (51, 6043),

Gene: Loadrie_7 Start: 5455, Stop: 6060, Start Num: 11

Candidate Starts for Loadrie_7:

(Start: 6 @5428 has 3 MA's), (8, 5440), (Start: 11 @5455 has 72 MA's), (22, 5593), (39, 5776), (42, 5797), (47, 5884), (51, 5965), (55, 6004),

Gene: Lolly9_8 Start: 5548, Stop: 6147, Start Num: 11

Candidate Starts for Lolly9_8:

(Start: 11 @5548 has 72 MA's), (27, 5734), (30, 5809), (46, 5956), (51, 6046),

Gene: Lumos_8 Start: 5542, Stop: 6141, Start Num: 11

Candidate Starts for Lumos_8:

(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: Lynnae_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Lynnae_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: MAckerman_7 Start: 5429, Stop: 6040, Start Num: 11

Candidate Starts for MAckerman_7:

(Start: 6 @5402 has 3 MA's), (Start: 11 @5429 has 72 MA's), (36, 5744), (38, 5750), (42, 5774), (51, 5948), (55, 5987),

Gene: MScarn_9 Start: 4889, Stop: 5350, Start Num: 18
Candidate Starts for MScarn_9:
(Start: 18 @4889 has 12 MA's), (37, 5120), (43, 5153), (52, 5321),

Gene: Makima_8 Start: 6454, Stop: 6963, Start Num: 14
Candidate Starts for Makima_8:
(12, 6439), (14, 6454), (43, 6757),

Gene: Miley16_7 Start: 5422, Stop: 6027, Start Num: 11
Candidate Starts for Miley16_7:
(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: MiniLon_8 Start: 5548, Stop: 6147, Start Num: 11
Candidate Starts for MiniLon_8:
(Start: 11 @5548 has 72 MA's), (27, 5734), (30, 5809), (46, 5956), (51, 6046),

Gene: MiniMac_8 Start: 5548, Stop: 6147, Start Num: 11
Candidate Starts for MiniMac_8:
(Start: 11 @5548 has 72 MA's), (27, 5734), (30, 5809), (46, 5956), (51, 6046),

Gene: MkaliMitinis3_7 Start: 5422, Stop: 6027, Start Num: 11
Candidate Starts for MkaliMitinis3_7:
(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Moostard_8 Start: 5538, Stop: 6137, Start Num: 11
Candidate Starts for Moostard_8:
(Start: 11 @5538 has 72 MA's), (27, 5724), (30, 5799), (33, 5820), (46, 5946), (51, 6036),

Gene: MrMagoo_21 Start: 9666, Stop: 10340, Start Num: 3
Candidate Starts for MrMagoo_21:
(Start: 3 @9666 has 21 MA's), (23, 9843), (28, 9933), (40, 10041),

Gene: MsGreen_8 Start: 5542, Stop: 6141, Start Num: 11
Candidate Starts for MsGreen_8:
(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: Nanosmite_21 Start: 9886, Stop: 10557, Start Num: 3
Candidate Starts for Nanosmite_21:
(Start: 3 @9886 has 21 MA's), (10, 9913), (21, 10039), (23, 10060), (25, 10093), (28, 10150), (30, 10201),

Gene: Netyap_7 Start: 5422, Stop: 6027, Start Num: 11
Candidate Starts for Netyap_7:
(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Nicholas_8 Start: 5542, Stop: 6141, Start Num: 11
Candidate Starts for Nicholas_8:

(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: Nicholasp3_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Nicholasp3_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: OhShagHennessy_7 Start: 5403, Stop: 6014, Start Num: 11

Candidate Starts for OhShagHennessy_7:

(Start: 6 @5376 has 3 MA's), (Start: 11 @5403 has 72 MA's), (36, 5718), (38, 5724), (42, 5748), (51, 5922), (55, 5961),

Gene: OverPar_7 Start: 5455, Stop: 6060, Start Num: 11

Candidate Starts for OverPar_7:

(Start: 6 @5428 has 3 MA's), (8, 5440), (Start: 11 @5455 has 72 MA's), (22, 5593), (39, 5776), (42, 5797), (47, 5884), (51, 5965), (55, 6004),

Gene: PYPDinur_7 Start: 5097, Stop: 5705, Start Num: 11

Candidate Starts for PYPDinur_7:

(Start: 11 @5097 has 72 MA's), (19, 5169), (21, 5226), (42, 5442), (51, 5610), (56, 5655),

Gene: PegLeg_17 Start: 9074, Stop: 9808, Start Num: 2

Candidate Starts for PegLeg_17:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 21 MA's), (21, 9287), (25, 9341), (28, 9398), (39, 9497), (41, 9509), (42, 9518), (48, 9623),

Gene: Poochiewood_7 Start: 5429, Stop: 6040, Start Num: 11

Candidate Starts for Poochiewood_7:

(Start: 6 @5402 has 3 MA's), (Start: 11 @5429 has 72 MA's), (36, 5744), (38, 5750), (42, 5774), (51, 5948), (55, 5987),

Gene: Quby_7 Start: 5096, Stop: 5704, Start Num: 11

Candidate Starts for Quby_7:

(Start: 6 @5069 has 3 MA's), (Start: 11 @5096 has 72 MA's), (19, 5168), (21, 5225), (42, 5441), (43, 5447), (51, 5609), (56, 5654),

Gene: Red305_8 Start: 5542, Stop: 6141, Start Num: 11

Candidate Starts for Red305_8:

(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: Reindeer_15 Start: 8937, Stop: 9662, Start Num: 2

Candidate Starts for Reindeer_15:

(1, 8868), (Start: 2 @8937 has 2 MA's), (Start: 3 @8955 has 21 MA's), (20, 9138), (21, 9141), (23, 9162), (25, 9195), (28, 9252), (39, 9351), (41, 9363), (48, 9477),

Gene: Rey_21 Start: 9898, Stop: 10575, Start Num: 3

Candidate Starts for Rey_21:

(Start: 3 @9898 has 21 MA's), (28, 10165), (39, 10264),

Gene: Rose5_7 Start: 5429, Stop: 6040, Start Num: 11

Candidate Starts for Rose5_7:

(Start: 6 @5402 has 3 MA's), (Start: 11 @5429 has 72 MA's), (36, 5744), (38, 5750), (42, 5774), (51, 5948), (55, 5987),

Gene: RoseMarie_17 Start: 9337, Stop: 10053, Start Num: 3

Candidate Starts for RoseMarie_17:

(1, 9250), (Start: 2 @9319 has 2 MA's), (Start: 3 @9337 has 21 MA's), (20, 9529), (23, 9553), (25, 9586), (28, 9643), (39, 9742), (49, 9901),

Gene: Rossetti_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Rossetti_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Rumpelstiltskin_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Rumpelstiltskin_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Samty_8 Start: 5538, Stop: 6137, Start Num: 11

Candidate Starts for Samty_8:

(Start: 11 @5538 has 72 MA's), (27, 5724), (30, 5799), (33, 5820), (46, 5946), (51, 6036),

Gene: Sarshaun_7 Start: 5455, Stop: 6060, Start Num: 11

Candidate Starts for Sarshaun_7:

(Start: 6 @5428 has 3 MA's), (8, 5440), (Start: 11 @5455 has 72 MA's), (22, 5593), (39, 5776), (42, 5797), (47, 5884), (51, 5965), (55, 6004),

Gene: Sheng711_7 Start: 5097, Stop: 5705, Start Num: 11

Candidate Starts for Sheng711_7:

(Start: 11 @5097 has 72 MA's), (19, 5169), (21, 5226), (42, 5442), (51, 5610), (56, 5655),

Gene: Silverleaf_7 Start: 5429, Stop: 6040, Start Num: 11

Candidate Starts for Silverleaf_7:

(Start: 6 @5402 has 3 MA's), (Start: 11 @5429 has 72 MA's), (36, 5744), (38, 5750), (42, 5774), (51, 5948), (55, 5987),

Gene: SketchMex_6 Start: 4888, Stop: 5349, Start Num: 18

Candidate Starts for SketchMex_6:

(Start: 18 @4888 has 12 MA's), (37, 5119), (43, 5152), (52, 5320),

Gene: Skinny_18 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for Skinny_18:

(Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 21 MA's), (21, 9288), (25, 9342), (28, 9399), (39, 9498), (41, 9510), (42, 9519), (48, 9624),

Gene: SlimJimmy_16 Start: 9092, Stop: 9808, Start Num: 3

Candidate Starts for SlimJimmy_16:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 21 MA's), (21, 9287), (25, 9341), (28, 9398), (39, 9497), (41, 9509), (42, 9518), (48, 9623),

Gene: Snenia_8 Start: 5542, Stop: 6141, Start Num: 11

Candidate Starts for Snenia_8:

(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: SoJulia_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for SoJulia_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Soap141_7 Start: 5455, Stop: 6060, Start Num: 11

Candidate Starts for Soap141_7:

(Start: 6 @5428 has 3 MA's), (8, 5440), (Start: 11 @5455 has 72 MA's), (22, 5593), (39, 5776), (42, 5797), (47, 5884), (51, 5965), (55, 6004),

Gene: SweatNTears_9 Start: 5415, Stop: 5876, Start Num: 18

Candidate Starts for SweatNTears_9:

(Start: 18 @5415 has 12 MA's), (37, 5646), (43, 5679), (52, 5847),

Gene: Tourach_7 Start: 5433, Stop: 6041, Start Num: 11

Candidate Starts for Tourach_7:

(Start: 11 @5433 has 72 MA's), (22, 5577), (39, 5760), (42, 5781), (47, 5868), (51, 5949), (55, 5988),

Gene: TpudiCK_18 Start: 9092, Stop: 9808, Start Num: 3

Candidate Starts for TpudiCK_18:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 21 MA's), (21, 9287), (25, 9341), (28, 9398), (39, 9497), (41, 9509), (42, 9518), (48, 9623),

Gene: TriFive_8 Start: 5542, Stop: 6141, Start Num: 11

Candidate Starts for TriFive_8:

(Start: 11 @5542 has 72 MA's), (27, 5728), (30, 5803), (33, 5824), (46, 5950), (51, 6040),

Gene: Troje_7 Start: 4889, Stop: 5350, Start Num: 18

Candidate Starts for Troje_7:

(Start: 18 @4889 has 12 MA's), (37, 5120), (43, 5153), (52, 5321),

Gene: TyDawg_17 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for TyDawg_17:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 21 MA's), (21, 9288), (25, 9342), (28, 9399), (39, 9498), (41, 9510), (42, 9519), (48, 9624),

Gene: Tyson_7 Start: 5402, Stop: 6040, Start Num: 6

Candidate Starts for Tyson_7:

(Start: 6 @5402 has 3 MA's), (Start: 11 @5429 has 72 MA's), (36, 5744), (38, 5750), (42, 5774), (51, 5948), (55, 5987),

Gene: UPIE_7 Start: 5400, Stop: 6038, Start Num: 6

Candidate Starts for UPIE_7:

(Start: 6 @5400 has 3 MA's), (Start: 11 @5427 has 72 MA's), (36, 5742), (38, 5748), (42, 5772), (51, 5946), (55, 5985),

Gene: Underpass_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Underpass_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Vetrrix_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Vetrrix_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Wamburgrxpress_7 Start: 5429, Stop: 6040, Start Num: 11

Candidate Starts for Wamburgrxpress_7:

(Start: 6 @5402 has 3 MA's), (Start: 11 @5429 has 72 MA's), (36, 5744), (38, 5750), (42, 5774), (51, 5948), (55, 5987),

Gene: Whirlwind_9 Start: 5535, Stop: 6134, Start Num: 11

Candidate Starts for Whirlwind_9:

(Start: 11 @5535 has 72 MA's), (27, 5721), (30, 5796), (46, 5943), (51, 6033),

Gene: Wigglewigggle_7 Start: 5455, Stop: 6060, Start Num: 11

Candidate Starts for Wigglewigggle_7:

(Start: 6 @5428 has 3 MA's), (8, 5440), (Start: 11 @5455 has 72 MA's), (22, 5593), (39, 5776), (42, 5797), (47, 5884), (51, 5965), (55, 6004),

Gene: Wilder_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Wilder_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Winky_7 Start: 5422, Stop: 6027, Start Num: 11

Candidate Starts for Winky_7:

(Start: 6 @5395 has 3 MA's), (8, 5407), (Start: 11 @5422 has 72 MA's), (22, 5560), (39, 5743), (42, 5764), (47, 5851), (51, 5932), (55, 5971),

Gene: Wyatt2_7 Start: 5429, Stop: 6040, Start Num: 11

Candidate Starts for Wyatt2_7:

(Start: 6 @5402 has 3 MA's), (Start: 11 @5429 has 72 MA's), (36, 5744), (38, 5750), (42, 5774), (51, 5948), (55, 5987),

Gene: Yummy_8 Start: 4795, Stop: 5256, Start Num: 18

Candidate Starts for Yummy_8:

(Start: 18 @4795 has 12 MA's), (37, 5026), (43, 5059), (52, 5227),

Gene: Zakai_7 Start: 5410, Stop: 6015, Start Num: 11

Candidate Starts for Zakai_7:

(Start: 6 @5383 has 3 MA's), (8, 5395), (Start: 11 @5410 has 72 MA's), (22, 5548), (39, 5731), (42, 5752), (47, 5839), (51, 5920), (55, 5959),

Gene: Zaria_7 Start: 5430, Stop: 6041, Start Num: 11

Candidate Starts for Zaria_7:

(Start: 6 @5403 has 3 MA's), (Start: 11 @5430 has 72 MA's), (36, 5745), (38, 5751), (42, 5775), (51, 5949), (55, 5988),

Gene: ZhongYanYuan_6 Start: 5250, Stop: 5855, Start Num: 11

Candidate Starts for ZhongYanYuan_6:

(Start: 11 @5250 has 72 MA's), (22, 5391), (39, 5574), (42, 5595), (45, 5625), (47, 5682), (51, 5763), (55, 5802),