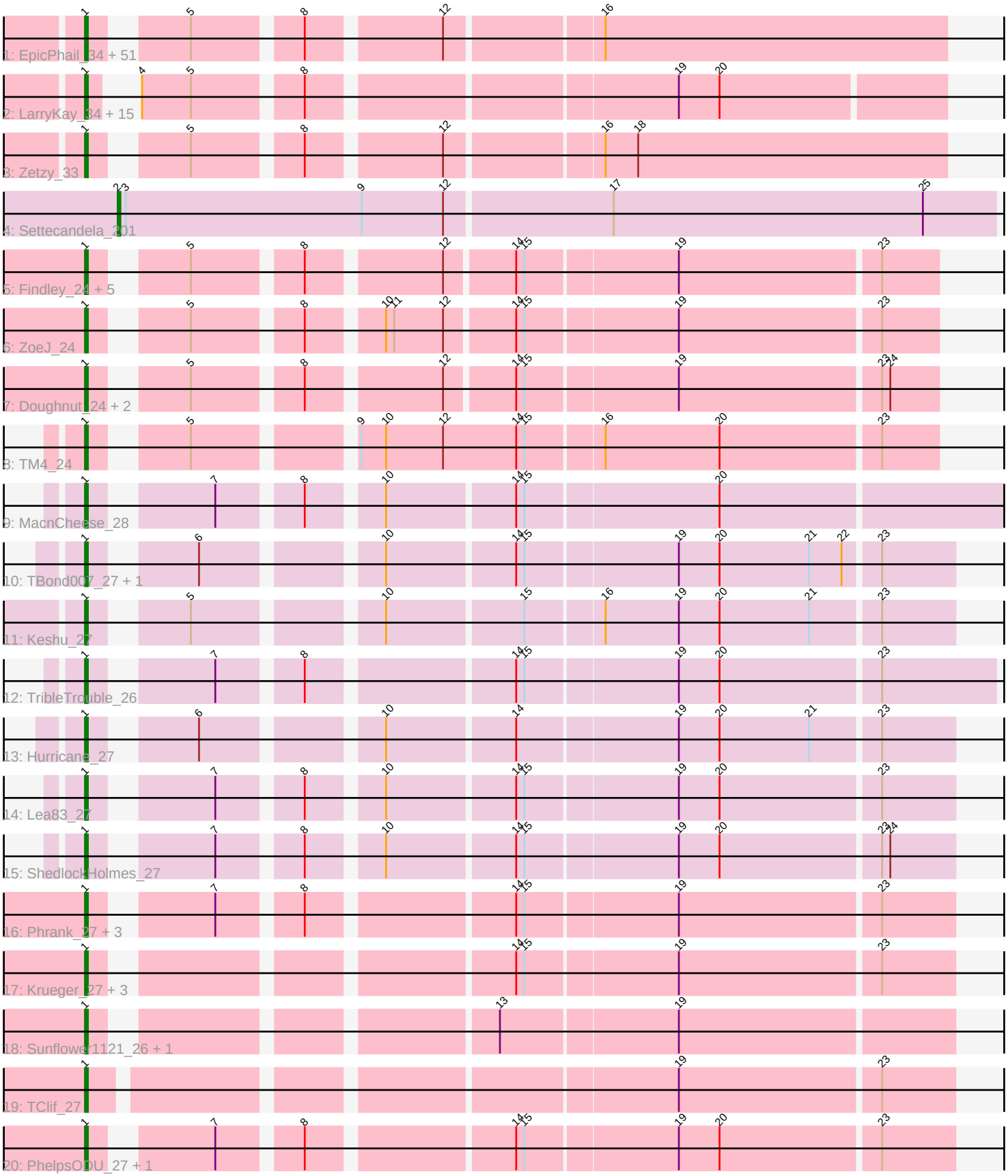
Pham 345579


1: EpicPhail_34 + 51
2: LarryKay_34 + 15
3: Zetzy_33
4: Settecandela_201
5: Findley_24 + 5
6: ZoeJ_24
7: Doughnut_24 + 2
8: TM4_24
9: MacnCheese_28
10: TBond007_27 + 1
11: Keshu_27
12: TribleTrouble_26
13: Hurricane_27
14: Lea83_27
15: ShedlockHolmes_27
16: Phrank_27 + 3
17: Krueger_27 + 3
18: Sunflower1121_26 + 1
19: TClif_27
20: PhelpsODU_27 + 1

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 345579 Report

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

Pham number 345579 has 102 members, 2 are drafts.

Phages represented in each track:
• Track 1 : EpicPhail_34, Vix_34, Microwolf_34, Taurus_34, Grub_34, Dieselweasel_34, Watson_34, LBerry_34, StepMih_34, PGHhamlin_36, MuchMore_36, Croquant_35, Lowa_34, Montavir_33, Bigflo_34, PotatoSplit_35, Malinsilva_36, Aglet_34, Wooldri_36, MarQuardt_34, DaHudson_34, Anubis_36, Colbster_34, Phoebe_34, P28Green_34, Grum1_34, AugsMagnumOpus_36, Gwennie_34, Sabia_34, JenCasNa_34, GingkoMaracino_34, SoYo_34, Snickers_34, Mainiac_34, Pembroke_34, Ollie_34, BreSam8_34, Cullens_34, JHC117_34, Farber_34, Beauxregard13_34, MoneyMay_34, GtownJaz_34, Marie_34, Stagni_34, Sabinator_34, MadMarie_34, Fernando_34, Hercules11_34, LugYA_36, Lilith_34, Penny1_34
• Track 2 : LarryKay_34, TinyPebbles_34, Misomonster_36, KADY_35, Phoxy_34, Tiffany_34, Rummer_34, Spike509_34, Daishi_33, Methuselah_33, Soshari_36, BuzzBuzz_33, Grif_34, HashRod_35, Louie6_34, AgronaGT15_34
• Track 3 : Zetzy_33
• Track 4 : Settecandela_201
• Track 5 : Findley_24, Strobilo_24, DismalStressor_24, DismalFunk_24, Marcoliusprime_24, Milly_24
• Track 6 : ZoeJ_24
• Track 7 : Doughnut_24, Mufasa_24, BoostSeason_24
• Track 8 : TM4_24
• Track 9 : MacnCheese_28
• Track 10 : TBond007_27, Pixie_27
• Track 11 : Keshu_27
• Track 12 : TribleTrouble_26
• Track 13 : Hurricane_27
• Track 14 : Lea83_27
• Track 15 : ShedlockHolmes_27
• Track 16 : Phrank_27, Bryler_27, Tierra_27, Cain_27
• Track 17 : Krueger_27, Syra333_27, Tigress9_27, Ximenita_28
• Track 18 : Sunflower1121_26, Shadow1_26
• Track 19 : TClif_27
• Track 20 : PhelpsODU_27, Unicorn_27

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

The start number called the most often in the published annotations is 1, it was called in 99 of the 100 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aglet_34, AgronaGT15_34, Anubis_36, AugsMagnumOpus_36, Beauxregard13_34, Bigflo_34, BoostSeason_24, BreSam8_34, Bryler_27, BuzzBuzz_33, Cain_27, Colbster_34, Croquant_35, Cullens_34, DaHudson_34, Daishi_33, Dieselweasel_34, DismalFunk_24, DismalStressor_24, Doughnut_24, EpicPhail_34, Farber_34, Fernando_34, Findley_24, GingkoMaracino_34, Grif_34, Grub_34, Grum1_34, GtownJaz_34, Gwennie_34, HashRod_35, Hercules11_34, Hurricane_27, JHC117_34, JenCasNa_34, KADY_35, Keshu_27, Krueger_27, LBerry_34, LarryKay_34, Lea83_27, Lilith_34, Louie6_34, Lowa_34, LugYA_36, MacnCheese_28, MadMarie_34, Mainiac_34, Malinsilva_36, MarQuardt_34, Marcoliusprime_24, Marie_34, Methuselah_33, Microwolf_34, Milly_24, Misomonster_36, MoneyMay_34, Montavir_33, MuchMore_36, Mufasa_24, Ollie_34, P28Green_34, PGHhamlin_36, Pembroke_34, Penny1_34, PhelpsODU_27, Phoebe_34, Phoxy_34, Phrank_27, Pixie_27, PotatoSplit_35, Rummer_34, Sabia_34, Sabinator_34, Shadow1_26, ShedlockHolmes_27, Snickers_34, SoYo_34, Soshari_36, Spike509_34, Stagni_34, StepMih_34, Strobilo_24, Sunflower1121_26, Syra333_27, TBond007_27, TClif_27, TM4_24, Taurus_34, Tierra_27, Tiffany_34, Tigress9_27, TinyPebbles_34, TribleTrouble_26, Unicorn_27, Vix_34, Watson_34, Wooldri_36, Ximenita_28, Zetzy_33, ZoeJ_24,

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

Genes that do not have the "Most Annotated" start:
• Settecandela_201,

Summary by start number:

Start 1:
• Found in 101 of 102 (99.0%) of genes in pham
• Manual Annotations of this start: 99 of 100
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aglet_34 (A3), AgronaGT15_34 (A3), Anubis_36 (A3), AugsMagnumOpus_36 (A3), Beauxregard13_34 (A3), Bigflo_34 (A3), BoostSeason_24 (K2), BreSam8_34 (A3), Bryler_27 (K6), BuzzBuzz_33 (A3), Cain_27 (K6), Colbster_34 (A3), Croquant_35 (A3), Cullens_34 (A3), DaHudson_34 (A3), Daishi_33 (A3), Dieselweasel_34 (A3), DismalFunk_24 (K2), DismalStressor_24 (K2), Doughnut_24 (K2), EpicPhail_34 (A3), Farber_34 (A3), Fernando_34 (A3), Findley_24 (K2), GingkoMaracino_34 (A3), Grif_34 (A3), Grub_34 (A3), Grum1_34 (A3), GtownJaz_34 (A3), Gwennie_34 (A3), HashRod_35 (A3), Hercules11_34 (A3), Hurricane_27 (K3), JHC117_34 (A3), JenCasNa_34 (A3), KADY_35 (A3), Keshu_27 (K3), Krueger_27 (K6), LBerry_34 (A3), LarryKay_34 (A3), Lea83_27 (K3), Lilith_34 (A3), Louie6_34 (A3), Lowa_34 (A3), LugYA_36 (A3), MacnCheese_28 (K3), MadMarie_34 (A3), Mainiac_34 (A3), Malinsilva_36 (A3), MarQuardt_34 (A3), Marcoliusprime_24 (K2), Marie_34 (A3), Methuselah_33 (A3), Microwolf_34 (A3), Milly_24 (K2), Misomonster_36 (A3), MoneyMay_34 (A3), Montavir_33 (A3), MuchMore_36 (A3), Mufasa_24 (K2), Ollie_34 (A3), P28Green_34 (A3), PGHhamlin_36 (A3), Pembroke_34 (A3), Penny1_34 (A3), PhelpsODU_27 (K6), Phoebe_34 (A3), Phoxy_34 (A3), Phrank_27 (K6), Pixie_27 (K3), PotatoSplit_35 (A3),

Rummer_34 (A3), Sabia_34 (A3), Sabinator_34 (A3), Shadow1_26 (K6), ShedlockHolmes_27 (K3), Snickers_34 (A3), SoYo_34 (A3), Soshari_36 (A3), Spike509_34 (A3), Stagni_34 (A3), StepMih_34 (A3), Strobilo_24 (K2), Sunflower1121_26 (K6), Syra333_27 (K6), TBond007_27 (K3), TClif_27 (K6), TM4_24 (K2), Taurus_34 (A3), Tierra_27 (K6), Tiffany_34 (A3), Tigress9_27 (K6), TinyPebbles_34 (A3), TribleTrouble_26 (K3), Unicorn_27 (K6), Vix_34 (A3), Watson_34 (A3), Wooldri_36 (A3), Ximenita_28 (K6), Zetzy_33 (A3), ZoeJ_24 (K2),

Start 2:
• Found in 1 of 102 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 100
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Settecandela_201 (AA),

Summary by clusters:

There are 5 clusters represented in this pham: K3, K2, A3, AA, K6,

Info for manual annotations of cluster A3:
•Start number 1 was manually annotated 67 times for cluster A3.

Info for manual annotations of cluster AA:
•Start number 2 was manually annotated 1 time for cluster AA.

Info for manual annotations of cluster K2:
•Start number 1 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:
•Start number 1 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K6:
•Start number 1 was manually annotated 13 times for cluster K6.

Gene Information:

Gene: Aglet_34 Start: 25035, Stop: 25322, Start Num: 1
Candidate Starts for Aglet_34:
(Start: 1 @25035 has 99 MA's), (5, 25062), (8, 25098), (12, 25143), (16, 25197),

Gene: AgronaGT15_34 Start: 24936, Stop: 25217, Start Num: 1
Candidate Starts for AgronaGT15_34:
(Start: 1 @24936 has 99 MA's), (4, 24942), (5, 24960), (8, 24996), (19, 25122), (20, 25137),

Gene: Anubis_36 Start: 24920, Stop: 25207, Start Num: 1
Candidate Starts for Anubis_36:
(Start: 1 @24920 has 99 MA's), (5, 24947), (8, 24983), (12, 25028), (16, 25082),

Gene: AugsMagnumOpus_36 Start: 25026, Stop: 25313, Start Num: 1
Candidate Starts for AugsMagnumOpus_36:
(Start: 1 @25026 has 99 MA's), (5, 25053), (8, 25089), (12, 25134), (16, 25188),

Gene: Beauxregard13_34 Start: 25034, Stop: 25321, Start Num: 1
Candidate Starts for Beauxregard13_34:
(Start: 1 @25034 has 99 MA's), (5, 25061), (8, 25097), (12, 25142), (16, 25196),

Gene: Bigflo_34 Start: 25033, Stop: 25320, Start Num: 1
Candidate Starts for Bigflo_34:
(Start: 1 @25033 has 99 MA's), (5, 25060), (8, 25096), (12, 25141), (16, 25195),

Gene: BoostSeason_24 Start: 21027, Stop: 21308, Start Num: 1
Candidate Starts for BoostSeason_24:
(Start: 1 @21027 has 99 MA's), (5, 21054), (8, 21090), (12, 21135), (14, 21159), (15, 21162), (19, 21216), (23, 21288), (24, 21291),

Gene: BreSam8_34 Start: 25027, Stop: 25314, Start Num: 1
Candidate Starts for BreSam8_34:
(Start: 1 @25027 has 99 MA's), (5, 25054), (8, 25090), (12, 25135), (16, 25189),

Gene: Bryler_27 Start: 22407, Stop: 22694, Start Num: 1
Candidate Starts for Bryler_27:
(Start: 1 @22407 has 99 MA's), (7, 22443), (8, 22470), (14, 22539), (15, 22542), (19, 22596), (23, 22668),

Gene: BuzzBuzz_33 Start: 25115, Stop: 25396, Start Num: 1
Candidate Starts for BuzzBuzz_33:
(Start: 1 @25115 has 99 MA's), (4, 25121), (5, 25139), (8, 25175), (19, 25301), (20, 25316),

Gene: Cain_27 Start: 22395, Stop: 22682, Start Num: 1
Candidate Starts for Cain_27:
(Start: 1 @22395 has 99 MA's), (7, 22431), (8, 22458), (14, 22527), (15, 22530), (19, 22584), (23, 22656),

Gene: Colbster_34 Start: 25034, Stop: 25321, Start Num: 1
Candidate Starts for Colbster_34:
(Start: 1 @25034 has 99 MA's), (5, 25061), (8, 25097), (12, 25142), (16, 25196),

Gene: Croquant_35 Start: 25032, Stop: 25319, Start Num: 1
Candidate Starts for Croquant_35:
(Start: 1 @25032 has 99 MA's), (5, 25059), (8, 25095), (12, 25140), (16, 25194),

Gene: Cullens_34 Start: 25033, Stop: 25320, Start Num: 1
Candidate Starts for Cullens_34:
(Start: 1 @25033 has 99 MA's), (5, 25060), (8, 25096), (12, 25141), (16, 25195),

Gene: DaHudson_34 Start: 25026, Stop: 25313, Start Num: 1
Candidate Starts for DaHudson_34:
(Start: 1 @25026 has 99 MA's), (5, 25053), (8, 25089), (12, 25134), (16, 25188),

Gene: Daishi_33 Start: 23956, Stop: 24237, Start Num: 1
Candidate Starts for Daishi_33:
(Start: 1 @23956 has 99 MA's), (4, 23962), (5, 23980), (8, 24016), (19, 24142), (20, 24157),

Gene: Dieselweasel_34 Start: 25035, Stop: 25322, Start Num: 1
Candidate Starts for Dieselweasel_34:

(Start: 1 @25035 has 99 MA's), (5, 25062), (8, 25098), (12, 25143), (16, 25197),

Gene: DismalFunk_24 Start: 21001, Stop: 21282, Start Num: 1
Candidate Starts for DismalFunk_24:
(Start: 1 @21001 has 99 MA's), (5, 21028), (8, 21064), (12, 21109), (14, 21133), (15, 21136), (19, 21190), (23, 21262),

Gene: DismalStressor_24 Start: 21001, Stop: 21282, Start Num: 1
Candidate Starts for DismalStressor_24:
(Start: 1 @21001 has 99 MA's), (5, 21028), (8, 21064), (12, 21109), (14, 21133), (15, 21136), (19, 21190), (23, 21262),

Gene: Doughnut_24 Start: 21021, Stop: 21302, Start Num: 1
Candidate Starts for Doughnut_24:
(Start: 1 @21021 has 99 MA's), (5, 21048), (8, 21084), (12, 21129), (14, 21153), (15, 21156), (19, 21210), (23, 21282), (24, 21285),

Gene: EpicPhail_34 Start: 25034, Stop: 25321, Start Num: 1
Candidate Starts for EpicPhail_34:
(Start: 1 @25034 has 99 MA's), (5, 25061), (8, 25097), (12, 25142), (16, 25196),

Gene: Farber_34 Start: 25027, Stop: 25314, Start Num: 1
Candidate Starts for Farber_34:
(Start: 1 @25027 has 99 MA's), (5, 25054), (8, 25090), (12, 25135), (16, 25189),

Gene: Fernando_34 Start: 25033, Stop: 25320, Start Num: 1
Candidate Starts for Fernando_34:
(Start: 1 @25033 has 99 MA's), (5, 25060), (8, 25096), (12, 25141), (16, 25195),

Gene: Findley_24 Start: 21001, Stop: 21282, Start Num: 1
Candidate Starts for Findley_24:
(Start: 1 @21001 has 99 MA's), (5, 21028), (8, 21064), (12, 21109), (14, 21133), (15, 21136), (19, 21190), (23, 21262),

Gene: GingkoMaracino_34 Start: 24920, Stop: 25207, Start Num: 1
Candidate Starts for GingkoMaracino_34:
(Start: 1 @24920 has 99 MA's), (5, 24947), (8, 24983), (12, 25028), (16, 25082),

Gene: Grif_34 Start: 25111, Stop: 25395, Start Num: 1
Candidate Starts for Grif_34:
(Start: 1 @25111 has 99 MA's), (4, 25120), (5, 25138), (8, 25174), (19, 25300), (20, 25315),

Gene: Grub_34 Start: 25026, Stop: 25313, Start Num: 1
Candidate Starts for Grub_34:
(Start: 1 @25026 has 99 MA's), (5, 25053), (8, 25089), (12, 25134), (16, 25188),

Gene: Grum1_34 Start: 25033, Stop: 25320, Start Num: 1
Candidate Starts for Grum1_34:
(Start: 1 @25033 has 99 MA's), (5, 25060), (8, 25096), (12, 25141), (16, 25195),

Gene: GtownJaz_34 Start: 25035, Stop: 25322, Start Num: 1
Candidate Starts for GtownJaz_34:
(Start: 1 @25035 has 99 MA's), (5, 25062), (8, 25098), (12, 25143), (16, 25197),

Gene: Gwennie_34 Start: 25034, Stop: 25321, Start Num: 1
Candidate Starts for Gwennie_34:
(Start: 1 @25034 has 99 MA's), (5, 25061), (8, 25097), (12, 25142), (16, 25196),

Gene: HashRod_35 Start: 25115, Stop: 25396, Start Num: 1
Candidate Starts for HashRod_35:
(Start: 1 @25115 has 99 MA's), (4, 25121), (5, 25139), (8, 25175), (19, 25301), (20, 25316),

Gene: Hercules11_34 Start: 25041, Stop: 25328, Start Num: 1
Candidate Starts for Hercules11_34:
(Start: 1 @25041 has 99 MA's), (5, 25068), (8, 25104), (12, 25149), (16, 25203),

Gene: Hurricane_27 Start: 23663, Stop: 23950, Start Num: 1
Candidate Starts for Hurricane_27:
(Start: 1 @23663 has 99 MA's), (6, 23693), (10, 23750), (14, 23795), (19, 23852), (20, 23867), (21, 23900), (23, 23924),

Gene: JHC117_34 Start: 25032, Stop: 25319, Start Num: 1
Candidate Starts for JHC117_34:
(Start: 1 @25032 has 99 MA's), (5, 25059), (8, 25095), (12, 25140), (16, 25194),

Gene: JenCasNa_34 Start: 25033, Stop: 25320, Start Num: 1
Candidate Starts for JenCasNa_34:
(Start: 1 @25033 has 99 MA's), (5, 25060), (8, 25096), (12, 25141), (16, 25195),

Gene: KADY_35 Start: 25115, Stop: 25396, Start Num: 1
Candidate Starts for KADY_35:
(Start: 1 @25115 has 99 MA's), (4, 25121), (5, 25139), (8, 25175), (19, 25301), (20, 25316),

Gene: Keshu_27 Start: 23655, Stop: 23942, Start Num: 1
Candidate Starts for Keshu_27:
(Start: 1 @23655 has 99 MA's), (5, 23682), (10, 23742), (15, 23790), (16, 23817), (19, 23844), (20, 23859), (21, 23892), (23, 23916),

Gene: Krueger_27 Start: 22351, Stop: 22638, Start Num: 1
Candidate Starts for Krueger_27:
(Start: 1 @22351 has 99 MA's), (14, 22483), (15, 22486), (19, 22540), (23, 22612),

Gene: LBerry_34 Start: 25034, Stop: 25321, Start Num: 1
Candidate Starts for LBerry_34:
(Start: 1 @25034 has 99 MA's), (5, 25061), (8, 25097), (12, 25142), (16, 25196),

Gene: LarryKay_34 Start: 25117, Stop: 25398, Start Num: 1
Candidate Starts for LarryKay_34:
(Start: 1 @25117 has 99 MA's), (4, 25123), (5, 25141), (8, 25177), (19, 25303), (20, 25318),

Gene: Lea83_27 Start: 23643, Stop: 23930, Start Num: 1
Candidate Starts for Lea83_27:
(Start: 1 @23643 has 99 MA's), (7, 23679), (8, 23706), (10, 23730), (14, 23775), (15, 23778), (19, 23832), (20, 23847), (23, 23904),

Gene: Lilith_34 Start: 25027, Stop: 25314, Start Num: 1

Candidate Starts for Lilith_34:
(Start: 1 @25027 has 99 MA's), (5, 25054), (8, 25090), (12, 25135), (16, 25189),

Gene: Louie6_34 Start: 25115, Stop: 25396, Start Num: 1
Candidate Starts for Louie6_34:
(Start: 1 @25115 has 99 MA's), (4, 25121), (5, 25139), (8, 25175), (19, 25301), (20, 25316),

Gene: Lowa_34 Start: 25026, Stop: 25313, Start Num: 1
Candidate Starts for Lowa_34:
(Start: 1 @25026 has 99 MA's), (5, 25053), (8, 25089), (12, 25134), (16, 25188),

Gene: LugYA_36 Start: 25034, Stop: 25321, Start Num: 1
Candidate Starts for LugYA_36:
(Start: 1 @25034 has 99 MA's), (5, 25061), (8, 25097), (12, 25142), (16, 25196),

Gene: MacnCheese_28 Start: 24002, Stop: 24319, Start Num: 1
Candidate Starts for MacnCheese_28:
(Start: 1 @24002 has 99 MA's), (7, 24038), (8, 24065), (10, 24089), (14, 24134), (15, 24137), (20, 24206),

Gene: MadMarie_34 Start: 25036, Stop: 25323, Start Num: 1
Candidate Starts for MadMarie_34:
(Start: 1 @25036 has 99 MA's), (5, 25063), (8, 25099), (12, 25144), (16, 25198),

Gene: Mainiac_34 Start: 25027, Stop: 25314, Start Num: 1
Candidate Starts for Mainiac_34:
(Start: 1 @25027 has 99 MA's), (5, 25054), (8, 25090), (12, 25135), (16, 25189),

Gene: Malinsilva_36 Start: 25026, Stop: 25313, Start Num: 1
Candidate Starts for Malinsilva_36:
(Start: 1 @25026 has 99 MA's), (5, 25053), (8, 25089), (12, 25134), (16, 25188),

Gene: MarQuardt_34 Start: 25035, Stop: 25322, Start Num: 1
Candidate Starts for MarQuardt_34:
(Start: 1 @25035 has 99 MA's), (5, 25062), (8, 25098), (12, 25143), (16, 25197),

Gene: Marcoliusprime_24 Start: 21001, Stop: 21282, Start Num: 1
Candidate Starts for Marcoliusprime_24:
(Start: 1 @21001 has 99 MA's), (5, 21028), (8, 21064), (12, 21109), (14, 21133), (15, 21136), (19, 21190), (23, 21262),

Gene: Marie_34 Start: 25033, Stop: 25320, Start Num: 1
Candidate Starts for Marie_34:
(Start: 1 @25033 has 99 MA's), (5, 25060), (8, 25096), (12, 25141), (16, 25195),

Gene: Methuselah_33 Start: 25111, Stop: 25392, Start Num: 1
Candidate Starts for Methuselah_33:
(Start: 1 @25111 has 99 MA's), (4, 25117), (5, 25135), (8, 25171), (19, 25297), (20, 25312),

Gene: Microwolf_34 Start: 25035, Stop: 25322, Start Num: 1
Candidate Starts for Microwolf_34:
(Start: 1 @25035 has 99 MA's), (5, 25062), (8, 25098), (12, 25143), (16, 25197),

Gene: Milly_24 Start: 21001, Stop: 21282, Start Num: 1
Candidate Starts for Milly_24:
(Start: 1 @21001 has 99 MA's), (5, 21028), (8, 21064), (12, 21109), (14, 21133), (15, 21136), (19, 21190), (23, 21262),

Gene: Misomonster_36 Start: 25114, Stop: 25395, Start Num: 1
Candidate Starts for Misomonster_36:
(Start: 1 @25114 has 99 MA's), (4, 25120), (5, 25138), (8, 25174), (19, 25300), (20, 25315),

Gene: MoneyMay_34 Start: 25033, Stop: 25320, Start Num: 1
Candidate Starts for MoneyMay_34:
(Start: 1 @25033 has 99 MA's), (5, 25060), (8, 25096), (12, 25141), (16, 25195),

Gene: Montavir_33 Start: 25034, Stop: 25321, Start Num: 1
Candidate Starts for Montavir_33:
(Start: 1 @25034 has 99 MA's), (5, 25061), (8, 25097), (12, 25142), (16, 25196),

Gene: MuchMore_36 Start: 25026, Stop: 25313, Start Num: 1
Candidate Starts for MuchMore_36:
(Start: 1 @25026 has 99 MA's), (5, 25053), (8, 25089), (12, 25134), (16, 25188),

Gene: Mufasa_24 Start: 21021, Stop: 21302, Start Num: 1
Candidate Starts for Mufasa_24:
(Start: 1 @21021 has 99 MA's), (5, 21048), (8, 21084), (12, 21129), (14, 21153), (15, 21156), (19, 21210), (23, 21282), (24, 21285),

Gene: Ollie_34 Start: 24904, Stop: 25191, Start Num: 1
Candidate Starts for Ollie_34:
(Start: 1 @24904 has 99 MA's), (5, 24931), (8, 24967), (12, 25012), (16, 25066),

Gene: P28Green_34 Start: 25035, Stop: 25322, Start Num: 1
Candidate Starts for P28Green_34:
(Start: 1 @25035 has 99 MA's), (5, 25062), (8, 25098), (12, 25143), (16, 25197),

Gene: PGHhamlin_36 Start: 25026, Stop: 25313, Start Num: 1
Candidate Starts for PGHhamlin_36:
(Start: 1 @25026 has 99 MA's), (5, 25053), (8, 25089), (12, 25134), (16, 25188),

Gene: Pembroke_34 Start: 25035, Stop: 25322, Start Num: 1
Candidate Starts for Pembroke_34:
(Start: 1 @25035 has 99 MA's), (5, 25062), (8, 25098), (12, 25143), (16, 25197),

Gene: Penny1_34 Start: 25034, Stop: 25321, Start Num: 1
Candidate Starts for Penny1_34:
(Start: 1 @25034 has 99 MA's), (5, 25061), (8, 25097), (12, 25142), (16, 25196),

Gene: PhelpsODU_27 Start: 22433, Stop: 22720, Start Num: 1
Candidate Starts for PhelpsODU_27:
(Start: 1 @22433 has 99 MA's), (7, 22469), (8, 22496), (14, 22565), (15, 22568), (19, 22622), (20, 22637), (23, 22694),

Gene: Phoebe_34 Start: 25032, Stop: 25319, Start Num: 1
Candidate Starts for Phoebe_34:

(Start: 1 @25032 has 99 MA's), (5, 25059), (8, 25095), (12, 25140), (16, 25194),

Gene: Phoxy_34 Start: 25112, Stop: 25393, Start Num: 1
Candidate Starts for Phoxy_34:
(Start: 1 @25112 has 99 MA's), (4, 25118), (5, 25136), (8, 25172), (19, 25298), (20, 25313),

Gene: Phrank_27 Start: 22383, Stop: 22670, Start Num: 1
Candidate Starts for Phrank_27:
(Start: 1 @22383 has 99 MA's), (7, 22419), (8, 22446), (14, 22515), (15, 22518), (19, 22572), (23, 22644),

Gene: Pixie_27 Start: 23437, Stop: 23724, Start Num: 1
Candidate Starts for Pixie_27:
(Start: 1 @23437 has 99 MA's), (6, 23467), (10, 23524), (14, 23569), (15, 23572), (19, 23626), (20, 23641), (21, 23674), (22, 23686), (23, 23698),

Gene: PotatoSplit_35 Start: 25034, Stop: 25321, Start Num: 1
Candidate Starts for PotatoSplit_35:
(Start: 1 @25034 has 99 MA's), (5, 25061), (8, 25097), (12, 25142), (16, 25196),

Gene: Rummer_34 Start: 25112, Stop: 25393, Start Num: 1
Candidate Starts for Rummer_34:
(Start: 1 @25112 has 99 MA's), (4, 25118), (5, 25136), (8, 25172), (19, 25298), (20, 25313),

Gene: Sabia_34 Start: 25027, Stop: 25314, Start Num: 1
Candidate Starts for Sabia_34:
(Start: 1 @25027 has 99 MA's), (5, 25054), (8, 25090), (12, 25135), (16, 25189),

Gene: Sabinator_34 Start: 25032, Stop: 25319, Start Num: 1
Candidate Starts for Sabinator_34:
(Start: 1 @25032 has 99 MA's), (5, 25059), (8, 25095), (12, 25140), (16, 25194),

Gene: Settecandela_201 Start: 125840, Stop: 126160, Start Num: 2
Candidate Starts for Settecandela_201:
(Start: 2 @125840 has 1 MA's), (3, 125843), (9, 125930), (12, 125960), (17, 126020), (25, 126134),

Gene: Shadow1_26 Start: 22256, Stop: 22543, Start Num: 1
Candidate Starts for Shadow1_26:
(Start: 1 @22256 has 99 MA's), (13, 22382), (19, 22445),

Gene: ShedlockHolmes_27 Start: 23643, Stop: 23930, Start Num: 1
Candidate Starts for ShedlockHolmes_27:
(Start: 1 @23643 has 99 MA's), (7, 23679), (8, 23706), (10, 23730), (14, 23775), (15, 23778), (19, 23832), (20, 23847), (23, 23904), (24, 23907),

Gene: Snickers_34 Start: 25008, Stop: 25295, Start Num: 1
Candidate Starts for Snickers_34:
(Start: 1 @25008 has 99 MA's), (5, 25035), (8, 25071), (12, 25116), (16, 25170),

Gene: SoYo_34 Start: 24945, Stop: 25232, Start Num: 1
Candidate Starts for SoYo_34:
(Start: 1 @24945 has 99 MA's), (5, 24972), (8, 25008), (12, 25053), (16, 25107),

Gene: Soshari_36 Start: 25111, Stop: 25392, Start Num: 1
Candidate Starts for Soshari_36:
(Start: 1 @25111 has 99 MA's), (4, 25117), (5, 25135), (8, 25171), (19, 25297), (20, 25312),

Gene: Spike509_34 Start: 25112, Stop: 25393, Start Num: 1
Candidate Starts for Spike509_34:
(Start: 1 @25112 has 99 MA's), (4, 25118), (5, 25136), (8, 25172), (19, 25298), (20, 25313),

Gene: Stagni_34 Start: 25036, Stop: 25323, Start Num: 1
Candidate Starts for Stagni_34:
(Start: 1 @25036 has 99 MA's), (5, 25063), (8, 25099), (12, 25144), (16, 25198),

Gene: StepMih_34 Start: 25027, Stop: 25314, Start Num: 1
Candidate Starts for StepMih_34:
(Start: 1 @25027 has 99 MA's), (5, 25054), (8, 25090), (12, 25135), (16, 25189),

Gene: Strobilo_24 Start: 21001, Stop: 21282, Start Num: 1
Candidate Starts for Strobilo_24:
(Start: 1 @21001 has 99 MA's), (5, 21028), (8, 21064), (12, 21109), (14, 21133), (15, 21136), (19, 21190), (23, 21262),

Gene: Sunflower1121_26 Start: 22268, Stop: 22555, Start Num: 1
Candidate Starts for Sunflower1121_26:
(Start: 1 @22268 has 99 MA's), (13, 22394), (19, 22457),

Gene: Syra333_27 Start: 22358, Stop: 22645, Start Num: 1
Candidate Starts for Syra333_27:
(Start: 1 @22358 has 99 MA's), (14, 22490), (15, 22493), (19, 22547), (23, 22619),

Gene: TBond007_27 Start: 23436, Stop: 23723, Start Num: 1
Candidate Starts for TBond007_27:
(Start: 1 @23436 has 99 MA's), (6, 23466), (10, 23523), (14, 23568), (15, 23571), (19, 23625), (20, 23640), (21, 23673), (22, 23685), (23, 23697),

Gene: TClif_27 Start: 22421, Stop: 22714, Start Num: 1
Candidate Starts for TClif_27:
(Start: 1 @22421 has 99 MA's), (19, 22616), (23, 22688),

Gene: TM4_24 Start: 21138, Stop: 21422, Start Num: 1
Candidate Starts for TM4_24:
(Start: 1 @21138 has 99 MA's), (5, 21165), (9, 21216), (10, 21225), (12, 21246), (14, 21273), (15, 21276), (16, 21303), (20, 21345), (23, 21402),

Gene: Taurus_34 Start: 25033, Stop: 25320, Start Num: 1
Candidate Starts for Taurus_34:
(Start: 1 @25033 has 99 MA's), (5, 25060), (8, 25096), (12, 25141), (16, 25195),

Gene: Tierra_27 Start: 23104, Stop: 23391, Start Num: 1
Candidate Starts for Tierra_27:
(Start: 1 @23104 has 99 MA's), (7, 23140), (8, 23167), (14, 23236), (15, 23239), (19, 23293), (23, 23365),

Gene: Tiffany_34 Start: 24922, Stop: 25206, Start Num: 1

Candidate Starts for Tiffany_34:
(Start: 1 @24922 has 99 MA's), (4, 24931), (5, 24949), (8, 24985), (19, 25111), (20, 25126),

Gene: Tigress9_27 Start: 22351, Stop: 22638, Start Num: 1
Candidate Starts for Tigress9_27:
(Start: 1 @22351 has 99 MA's), (14, 22483), (15, 22486), (19, 22540), (23, 22612),

Gene: TinyPebbles_34 Start: 25117, Stop: 25398, Start Num: 1
Candidate Starts for TinyPebbles_34:
(Start: 1 @25117 has 99 MA's), (4, 25123), (5, 25141), (8, 25177), (19, 25303), (20, 25318),

Gene: TribleTrouble_26 Start: 23572, Stop: 23874, Start Num: 1
Candidate Starts for TribleTrouble_26:
(Start: 1 @23572 has 99 MA's), (7, 23608), (8, 23635), (14, 23704), (15, 23707), (19, 23761), (20, 23776), (23, 23833),

Gene: Unicorn_27 Start: 22433, Stop: 22720, Start Num: 1
Candidate Starts for Unicorn_27:
(Start: 1 @22433 has 99 MA's), (7, 22469), (8, 22496), (14, 22565), (15, 22568), (19, 22622), (20, 22637), (23, 22694),

Gene: Vix_34 Start: 25116, Stop: 25403, Start Num: 1
Candidate Starts for Vix_34:
(Start: 1 @25116 has 99 MA's), (5, 25143), (8, 25179), (12, 25224), (16, 25278),

Gene: Watson_34 Start: 25026, Stop: 25313, Start Num: 1
Candidate Starts for Watson_34:
(Start: 1 @25026 has 99 MA's), (5, 25053), (8, 25089), (12, 25134), (16, 25188),

Gene: Wooldri_36 Start: 24945, Stop: 25232, Start Num: 1
Candidate Starts for Wooldri_36:
(Start: 1 @24945 has 99 MA's), (5, 24972), (8, 25008), (12, 25053), (16, 25107),

Gene: Ximenita_28 Start: 22536, Stop: 22823, Start Num: 1
Candidate Starts for Ximenita_28:
(Start: 1 @22536 has 99 MA's), (14, 22668), (15, 22671), (19, 22725), (23, 22797),

Gene: Zetzy_33 Start: 24574, Stop: 24861, Start Num: 1
Candidate Starts for Zetzy_33:
(Start: 1 @24574 has 99 MA's), (5, 24601), (8, 24637), (12, 24682), (16, 24736), (18, 24748),

Gene: ZoeJ_24 Start: 20942, Stop: 21223, Start Num: 1
Candidate Starts for ZoeJ_24:
(Start: 1 @20942 has 99 MA's), (5, 20969), (8, 21005), (10, 21029), (11, 21032), (12, 21050), (14, 21074), (15, 21077), (19, 21131), (23, 21203),