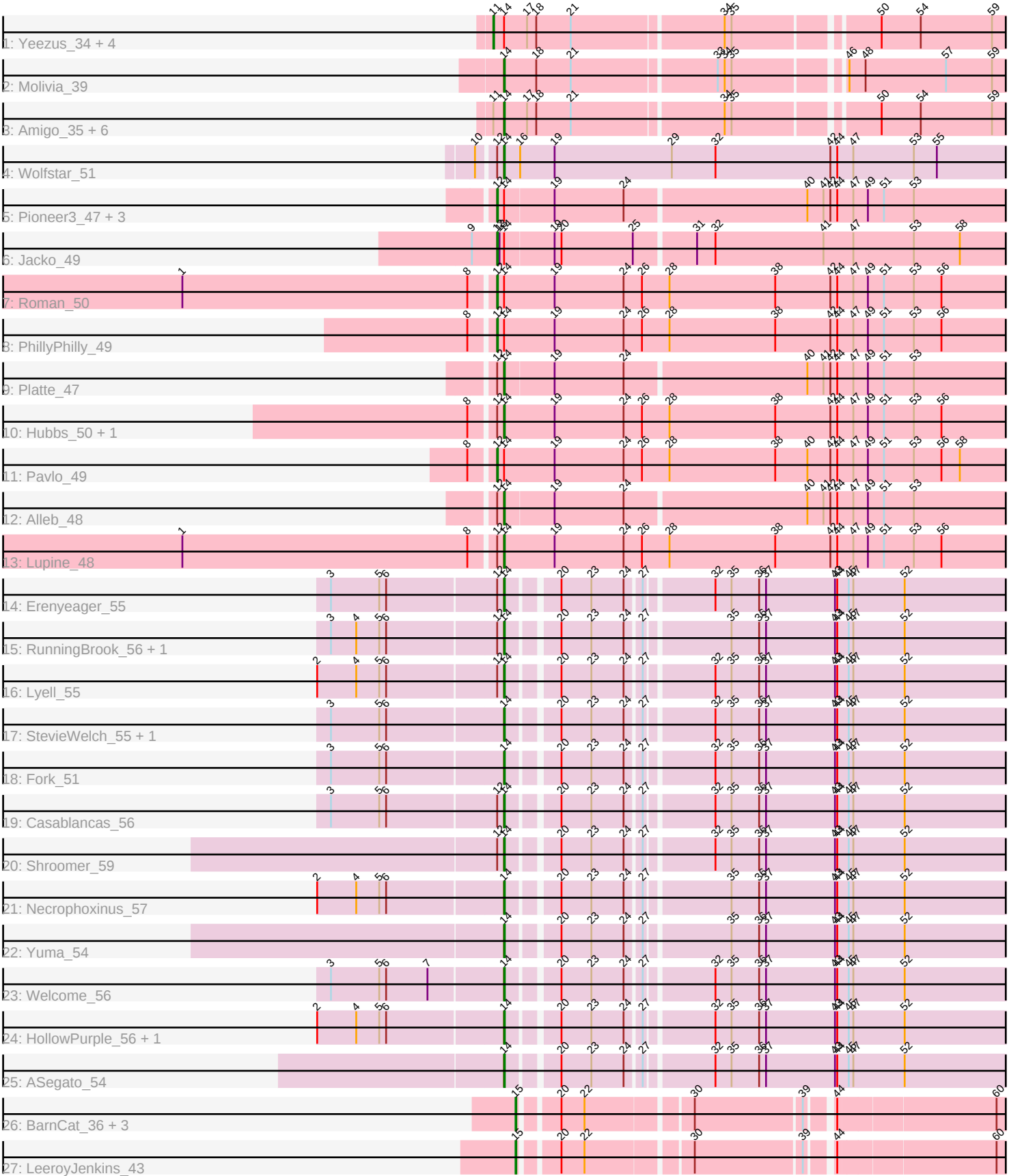


Zoomed Pham 327175



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 327175 Report

This analysis was run 09/05/26 on database version 662.

Pham number 327175 has 47 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Yeezus_34, Ichor_34, Amavida_38, Boersma_36, Jaek_34
- Track 2 : Molivia_39
- Track 3 : Amigo_35, Rings_34, Heylee_38, Gorgeous_35, Thunderclap_35, Anansi_35, SorJuana_35
- Track 4 : Wolfstar_51
- Track 5 : Pioneer3_47, Tandem_47, OlinDD_47, Hortus1_47
- Track 6 : Jacko_49
- Track 7 : Roman_50
- Track 8 : PhillyPhilly_49
- Track 9 : Platte_47
- Track 10 : Hubbs_50, DejaVu_51
- Track 11 : Pavlo_49
- Track 12 : Alleb_48
- Track 13 : Lupine_48
- Track 14 : Erenyeager_55
- Track 15 : RunningBrook_56, DustyDino_58
- Track 16 : Lyell_55
- Track 17 : StevieWelch_55, Musetta_55
- Track 18 : Fork_51
- Track 19 : Casablancas_56
- Track 20 : Shroomer_59
- Track 21 : Necrophoxinus_57
- Track 22 : Yuma_54
- Track 23 : Welcome_56
- Track 24 : HollowPurple_56, SteakFry_57
- Track 25 : ASegato_54
- Track 26 : BarnCat_36, Cassita_42, Lifes_38, WaterT_41
- Track 27 : LeeroyJenkins_43

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

The start number called the most often in the published annotations is 14, it was called in 29 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato_54, Alleb_48, Amigo_35, Anansi_35, Casablanacas_56, DejaVu_51, DustyDino_58, Erenyeager_55, Fork_51, Gorgeous_35, Heylee_38, HollowPurple_56, Hubbs_50, Lupine_48, Lyell_55, Molivia_39, Musetta_55, Necrophoxinus_57, Platte_47, Rings_34, RunningBrook_56, Shroomer_59, SorJuana_35, SteakFry_57, StevieWelch_55, Thunderclap_35, Welcome_56, Wolfstar_51, Yuma_54,

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

- Amavida_38, Boersma_36, Hortus1_47, Ichor_34, Jacko_49, Jaek_34, OlinDD_47, Pavlo_49, PhillyPhilly_49, Pioneer3_47, Roman_50, Tandem_47, Yeezus_34,

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

- BarnCat_36, Cassita_42, LeeroyJenkins_43, Lifes_38, WaterT_41,

Summary by start number:

Start 11:

- Found in 12 of 47 (25.5%) of genes in pham
- Manual Annotations of this start: 5 of 47
- Called 41.7% of time when present
- Phage (with cluster) where this start called: Amavida_38 (AQ), Boersma_36 (AQ), Ichor_34 (AQ), Jaek_34 (AQ), Yeezus_34 (AQ),

Start 12:

- Found in 20 of 47 (42.6%) of genes in pham
- Manual Annotations of this start: 8 of 47
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Hortus1_47 (ED1), Jacko_49 (ED1), OlinDD_47 (ED1), Pavlo_49 (ED1), PhillyPhilly_49 (ED1), Pioneer3_47 (ED1), Roman_50 (ED1), Tandem_47 (ED1),

Start 14:

- Found in 42 of 47 (89.4%) of genes in pham
- Manual Annotations of this start: 29 of 47
- Called 69.0% of time when present
- Phage (with cluster) where this start called: ASegato_54 (ED2), Alleb_48 (ED1), Amigo_35 (AQ), Anansi_35 (AQ), Casablanacas_56 (ED2), DejaVu_51 (ED1), DustyDino_58 (ED2), Erenyeager_55 (ED2), Fork_51 (ED2), Gorgeous_35 (AQ), Heylee_38 (AQ), HollowPurple_56 (ED2), Hubbs_50 (ED1), Lupine_48 (ED1), Lyell_55 (ED2), Molivia_39 (AQ), Musetta_55 (ED2), Necrophoxinus_57 (ED2), Platte_47 (ED1), Rings_34 (AQ), RunningBrook_56 (ED2), Shroomer_59 (ED2), SorJuana_35 (AQ), SteakFry_57 (ED2), StevieWelch_55 (ED2), Thunderclap_35 (AQ), Welcome_56 (ED2), Wolfstar_51 (ED), Yuma_54 (ED2),

Start 15:

- Found in 5 of 47 (10.6%) of genes in pham
- Manual Annotations of this start: 5 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarnCat_36 (GB), Cassita_42 (GB), LeeroyJenkins_43 (GB), Lifes_38 (GB), WaterT_41 (GB),

Summary by clusters:

There are 5 clusters represented in this pham: AQ, ED2, ED1, GB, ED,

Info for manual annotations of cluster AQ:

- Start number 11 was manually annotated 5 times for cluster AQ.
- Start number 14 was manually annotated 8 times for cluster AQ.

Info for manual annotations of cluster ED:

- Start number 14 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:

- Start number 12 was manually annotated 8 times for cluster ED1.
- Start number 14 was manually annotated 5 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 14 was manually annotated 15 times for cluster ED2.

Info for manual annotations of cluster GB:

- Start number 15 was manually annotated 5 times for cluster GB.

Gene Information:

Gene: ASegato_54 Start: 25411, Stop: 26558, Start Num: 14

Candidate Starts for ASegato_54:

(Start: 14 @25411 has 29 MA's), (20, 25468), (23, 25507), (24, 25549), (27, 25567), (32, 25648), (35, 25669), (36, 25705), (37, 25714), (43, 25804), (44, 25807), (45, 25822), (47, 25828), (52, 25894), (84, 26413), (91, 26470), (93, 26509), (94, 26533), (95, 26545),

Gene: Alleb_48 Start: 24469, Stop: 25643, Start Num: 14

Candidate Starts for Alleb_48:

(Start: 12 @24460 has 8 MA's), (Start: 14 @24469 has 29 MA's), (19, 24532), (24, 24622), (40, 24853), (41, 24874), (42, 24883), (44, 24892), (47, 24913), (49, 24931), (51, 24952), (53, 24991), (62, 25174), (75, 25408), (84, 25498),

Gene: Amavida_38 Start: 17852, Stop: 18936, Start Num: 11

Candidate Starts for Amavida_38:

(Start: 11 @17852 has 5 MA's), (Start: 14 @17864 has 29 MA's), (17, 17894), (18, 17906), (21, 17951), (34, 18140), (35, 18149), (50, 18320), (54, 18371), (59, 18464), (64, 18590), (66, 18623), (67, 18647), (68, 18665), (70, 18680), (71, 18707), (72, 18725), (73, 18731), (75, 18788), (79, 18812), (81, 18824), (86, 18878), (88, 18893),

Gene: Amigo_35 Start: 17738, Stop: 18810, Start Num: 14

Candidate Starts for Amigo_35:

(Start: 11 @17726 has 5 MA's), (Start: 14 @17738 has 29 MA's), (17, 17768), (18, 17780), (21, 17825), (34, 18014), (35, 18023), (50, 18194), (54, 18245), (59, 18338), (64, 18464), (66, 18497), (67, 18521), (68, 18539), (70, 18554), (71, 18581), (72, 18599), (73, 18605), (75, 18662), (79, 18686), (81, 18698), (86, 18752), (88, 18767),

Gene: Anansi_35 Start: 17747, Stop: 18819, Start Num: 14

Candidate Starts for Anansi_35:

(Start: 11 @17735 has 5 MA's), (Start: 14 @17747 has 29 MA's), (17, 17777), (18, 17789), (21, 17834), (34, 18023), (35, 18032), (50, 18203), (54, 18254), (59, 18347), (64, 18473), (66, 18506), (67, 18530), (68, 18548), (70, 18563), (71, 18590), (72, 18608), (73, 18614), (75, 18671), (79, 18695), (81, 18707), (86, 18761), (88, 18776),

Gene: BarnCat_36 Start: 18745, Stop: 19772, Start Num: 15

Candidate Starts for BarnCat_36:

(Start: 15 @18745 has 5 MA's), (20, 18787), (22, 18817), (30, 18943), (39, 19078), (44, 19105), (60, 19303), (63, 19402), (74, 19570), (77, 19609), (87, 19702),

Gene: Boersma_36 Start: 17726, Stop: 18810, Start Num: 11

Candidate Starts for Boersma_36:

(Start: 11 @17726 has 5 MA's), (Start: 14 @17738 has 29 MA's), (17, 17768), (18, 17780), (21, 17825), (34, 18014), (35, 18023), (50, 18194), (54, 18245), (59, 18338), (64, 18464), (66, 18497), (67, 18521), (68, 18539), (70, 18554), (71, 18581), (72, 18599), (73, 18605), (75, 18662), (79, 18686), (81, 18698), (86, 18752), (88, 18767),

Gene: Casablanclas_56 Start: 25496, Stop: 26643, Start Num: 14

Candidate Starts for Casablanclas_56:

(3, 25277), (5, 25340), (6, 25349), (Start: 12 @25487 has 8 MA's), (Start: 14 @25496 has 29 MA's), (20, 25553), (23, 25592), (24, 25634), (27, 25652), (32, 25733), (35, 25754), (36, 25790), (37, 25799), (43, 25889), (44, 25892), (45, 25907), (47, 25913), (52, 25979), (84, 26498), (91, 26555), (92, 26570), (93, 26594), (94, 26618), (95, 26630),

Gene: Cassita_42 Start: 21121, Stop: 22148, Start Num: 15

Candidate Starts for Cassita_42:

(Start: 15 @21121 has 5 MA's), (20, 21163), (22, 21193), (30, 21319), (39, 21454), (44, 21481), (60, 21679), (63, 21778), (74, 21946), (77, 21985), (87, 22078),

Gene: DejaVu_51 Start: 24677, Stop: 25863, Start Num: 14

Candidate Starts for DejaVu_51:

(8, 24638), (Start: 12 @24668 has 8 MA's), (Start: 14 @24677 has 29 MA's), (19, 24743), (24, 24833), (26, 24857), (28, 24893), (38, 25031), (42, 25103), (44, 25112), (47, 25133), (49, 25151), (51, 25172), (53, 25211), (56, 25247), (62, 25394), (65, 25439), (78, 25652), (89, 25754), (90, 25766), (91, 25781),

Gene: DustyDino_58 Start: 26354, Stop: 27501, Start Num: 14

Candidate Starts for DustyDino_58:

(3, 26135), (4, 26168), (5, 26198), (6, 26207), (Start: 12 @26345 has 8 MA's), (Start: 14 @26354 has 29 MA's), (20, 26411), (23, 26450), (24, 26492), (27, 26510), (35, 26612), (36, 26648), (37, 26657), (43, 26747), (44, 26750), (45, 26765), (47, 26771), (52, 26837), (84, 27356), (91, 27413), (93, 27452), (94, 27476), (95, 27488),

Gene: Erenyeager_55 Start: 25746, Stop: 26893, Start Num: 14

Candidate Starts for Erenyeager_55:

(3, 25527), (5, 25590), (6, 25599), (Start: 12 @25737 has 8 MA's), (Start: 14 @25746 has 29 MA's), (20, 25803), (23, 25842), (24, 25884), (27, 25902), (32, 25983), (35, 26004), (36, 26040), (37, 26049), (43, 26139), (44, 26142), (45, 26157), (47, 26163), (52, 26229), (83, 26745), (84, 26748), (91, 26805), (92, 26820), (93, 26844), (94, 26868), (95, 26880),

Gene: Fork_51 Start: 25061, Stop: 26208, Start Num: 14

Candidate Starts for Fork_51:

(3, 24842), (5, 24905), (6, 24914), (Start: 14 @25061 has 29 MA's), (20, 25118), (23, 25157), (24, 25199), (27, 25217), (32, 25298), (35, 25319), (36, 25355), (37, 25364), (43, 25454), (44, 25457), (45,

25472), (47, 25478), (52, 25544), (84, 26063), (91, 26120), (93, 26159), (94, 26183), (95, 26195),

Gene: Gorgeous_35 Start: 17747, Stop: 18819, Start Num: 14

Candidate Starts for Gorgeous_35:

(Start: 11 @17735 has 5 MA's), (Start: 14 @17747 has 29 MA's), (17, 17777), (18, 17789), (21, 17834), (34, 18023), (35, 18032), (50, 18203), (54, 18254), (59, 18347), (64, 18473), (66, 18506), (67, 18530), (68, 18548), (70, 18563), (71, 18590), (72, 18608), (73, 18614), (75, 18671), (79, 18695), (81, 18707), (86, 18761), (88, 18776),

Gene: Heylee_38 Start: 17864, Stop: 18936, Start Num: 14

Candidate Starts for Heylee_38:

(Start: 11 @17852 has 5 MA's), (Start: 14 @17864 has 29 MA's), (17, 17894), (18, 17906), (21, 17951), (34, 18140), (35, 18149), (50, 18320), (54, 18371), (59, 18464), (64, 18590), (66, 18623), (67, 18647), (68, 18665), (70, 18680), (71, 18707), (72, 18725), (73, 18731), (75, 18788), (79, 18812), (81, 18824), (86, 18878), (88, 18893),

Gene: HollowPurple_56 Start: 25617, Stop: 26764, Start Num: 14

Candidate Starts for HollowPurple_56:

(2, 25380), (4, 25431), (5, 25461), (6, 25470), (Start: 14 @25617 has 29 MA's), (20, 25674), (23, 25713), (24, 25755), (27, 25773), (32, 25854), (35, 25875), (36, 25911), (37, 25920), (43, 26010), (44, 26013), (45, 26028), (47, 26034), (52, 26100), (84, 26619), (91, 26676), (92, 26691), (93, 26715), (94, 26739), (95, 26751),

Gene: Hortus1_47 Start: 24450, Stop: 25633, Start Num: 12

Candidate Starts for Hortus1_47:

(Start: 12 @24450 has 8 MA's), (Start: 14 @24459 has 29 MA's), (19, 24522), (24, 24612), (40, 24843), (41, 24864), (42, 24873), (44, 24882), (47, 24903), (49, 24921), (51, 24942), (53, 24981), (61, 25110), (62, 25164), (75, 25398), (84, 25488),

Gene: Hubbs_50 Start: 24889, Stop: 26075, Start Num: 14

Candidate Starts for Hubbs_50:

(8, 24850), (Start: 12 @24880 has 8 MA's), (Start: 14 @24889 has 29 MA's), (19, 24955), (24, 25045), (26, 25069), (28, 25105), (38, 25243), (42, 25315), (44, 25324), (47, 25345), (49, 25363), (51, 25384), (53, 25423), (56, 25459), (62, 25606), (65, 25651), (78, 25864), (89, 25966), (90, 25978), (91, 25993),

Gene: Ichor_34 Start: 17726, Stop: 18810, Start Num: 11

Candidate Starts for Ichor_34:

(Start: 11 @17726 has 5 MA's), (Start: 14 @17738 has 29 MA's), (17, 17768), (18, 17780), (21, 17825), (34, 18014), (35, 18023), (50, 18194), (54, 18245), (59, 18338), (64, 18464), (66, 18497), (67, 18521), (68, 18539), (70, 18554), (71, 18581), (72, 18599), (73, 18605), (75, 18662), (79, 18686), (81, 18698), (86, 18752), (88, 18767),

Gene: Jacko_49 Start: 22655, Stop: 23829, Start Num: 12

Candidate Starts for Jacko_49:

(9, 22622), (Start: 12 @22655 has 8 MA's), (13, 22658), (Start: 14 @22664 has 29 MA's), (19, 22727), (20, 22736), (25, 22829), (31, 22904), (32, 22928), (41, 23069), (47, 23108), (53, 23186), (58, 23246), (62, 23369), (65, 23414), (72, 23543), (82, 23678), (84, 23696), (85, 23702), (91, 23750), (94, 23813),

Gene: Jaek_34 Start: 17726, Stop: 18810, Start Num: 11

Candidate Starts for Jaek_34:

(Start: 11 @17726 has 5 MA's), (Start: 14 @17738 has 29 MA's), (17, 17768), (18, 17780), (21, 17825), (34, 18014), (35, 18023), (50, 18194), (54, 18245), (59, 18338), (64, 18464), (66, 18497), (67, 18521), (68, 18539), (70, 18554), (71, 18581), (72, 18599), (73, 18605), (75, 18662), (79, 18686), (81, 18698),

(86, 18752), (88, 18767),

Gene: LeeroyJenkins_43 Start: 22004, Stop: 23031, Start Num: 15

Candidate Starts for LeeroyJenkins_43:

(Start: 15 @22004 has 5 MA's), (20, 22046), (22, 22076), (30, 22202), (39, 22337), (44, 22364), (60, 22562), (63, 22661), (74, 22829), (77, 22868), (87, 22961),

Gene: Lifes_38 Start: 18776, Stop: 19803, Start Num: 15

Candidate Starts for Lifes_38:

(Start: 15 @18776 has 5 MA's), (20, 18818), (22, 18848), (30, 18974), (39, 19109), (44, 19136), (60, 19334), (63, 19433), (74, 19601), (77, 19640), (87, 19733),

Gene: Lupine_48 Start: 24091, Stop: 25277, Start Num: 14

Candidate Starts for Lupine_48:

(1, 23680), (8, 24052), (Start: 12 @24082 has 8 MA's), (Start: 14 @24091 has 29 MA's), (19, 24157), (24, 24247), (26, 24271), (28, 24307), (38, 24445), (42, 24517), (44, 24526), (47, 24547), (49, 24565), (51, 24586), (53, 24625), (56, 24661), (61, 24754), (62, 24808), (65, 24853), (75, 25042), (78, 25066), (89, 25168), (90, 25180), (91, 25195),

Gene: Lyell_55 Start: 25665, Stop: 26812, Start Num: 14

Candidate Starts for Lyell_55:

(2, 25428), (4, 25479), (5, 25509), (6, 25518), (Start: 12 @25656 has 8 MA's), (Start: 14 @25665 has 29 MA's), (20, 25722), (23, 25761), (24, 25803), (27, 25821), (32, 25902), (35, 25923), (36, 25959), (37, 25968), (43, 26058), (44, 26061), (45, 26076), (47, 26082), (52, 26148), (84, 26667), (91, 26724), (92, 26739), (93, 26763), (94, 26787), (95, 26799),

Gene: Molivia_39 Start: 17990, Stop: 19065, Start Num: 14

Candidate Starts for Molivia_39:

(Start: 14 @17990 has 29 MA's), (18, 18032), (21, 18077), (33, 18257), (34, 18266), (35, 18275), (46, 18404), (48, 18425), (57, 18530), (59, 18590), (64, 18716), (66, 18749), (67, 18773), (68, 18791), (69, 18800), (76, 18917), (80, 18944), (85, 18992),

Gene: Musetta_55 Start: 25781, Stop: 26928, Start Num: 14

Candidate Starts for Musetta_55:

(3, 25562), (5, 25625), (6, 25634), (Start: 14 @25781 has 29 MA's), (20, 25838), (23, 25877), (24, 25919), (27, 25937), (32, 26018), (35, 26039), (36, 26075), (37, 26084), (43, 26174), (44, 26177), (45, 26192), (47, 26198), (52, 26264), (84, 26783), (91, 26840), (92, 26855), (93, 26879), (94, 26903), (95, 26915),

Gene: Necrophoxinus_57 Start: 26360, Stop: 27507, Start Num: 14

Candidate Starts for Necrophoxinus_57:

(2, 26123), (4, 26174), (5, 26204), (6, 26213), (Start: 14 @26360 has 29 MA's), (20, 26417), (23, 26456), (24, 26498), (27, 26516), (35, 26618), (36, 26654), (37, 26663), (43, 26753), (44, 26756), (45, 26771), (47, 26777), (52, 26843), (84, 27362), (91, 27419), (93, 27458), (94, 27482), (95, 27494),

Gene: OlinDD_47 Start: 24449, Stop: 25632, Start Num: 12

Candidate Starts for OlinDD_47:

(Start: 12 @24449 has 8 MA's), (Start: 14 @24458 has 29 MA's), (19, 24521), (24, 24611), (40, 24842), (41, 24863), (42, 24872), (44, 24881), (47, 24902), (49, 24920), (51, 24941), (53, 24980), (61, 25109), (62, 25163), (75, 25397), (84, 25487),

Gene: Pavlo_49 Start: 24727, Stop: 25922, Start Num: 12

Candidate Starts for Pavlo_49:

(8, 24697), (Start: 12 @24727 has 8 MA's), (Start: 14 @24736 has 29 MA's), (19, 24802), (24, 24892), (26, 24916), (28, 24952), (38, 25090), (40, 25132), (42, 25162), (44, 25171), (47, 25192), (49, 25210), (51, 25231), (53, 25270), (56, 25306), (58, 25330), (62, 25453), (65, 25498), (78, 25711), (89, 25813), (90, 25825), (91, 25840),

Gene: PhillyPhilly_49 Start: 24261, Stop: 25456, Start Num: 12

Candidate Starts for PhillyPhilly_49:

(8, 24231), (Start: 12 @24261 has 8 MA's), (Start: 14 @24270 has 29 MA's), (19, 24336), (24, 24426), (26, 24450), (28, 24486), (38, 24624), (42, 24696), (44, 24705), (47, 24726), (49, 24744), (51, 24765), (53, 24804), (56, 24840), (62, 24987), (65, 25032), (78, 25245), (89, 25347), (90, 25359), (91, 25374),

Gene: Pioneer3_47 Start: 24457, Stop: 25640, Start Num: 12

Candidate Starts for Pioneer3_47:

(Start: 12 @24457 has 8 MA's), (Start: 14 @24466 has 29 MA's), (19, 24529), (24, 24619), (40, 24850), (41, 24871), (42, 24880), (44, 24889), (47, 24910), (49, 24928), (51, 24949), (53, 24988), (61, 25117), (62, 25171), (75, 25405), (84, 25495),

Gene: Platte_47 Start: 24251, Stop: 25425, Start Num: 14

Candidate Starts for Platte_47:

(Start: 12 @24242 has 8 MA's), (Start: 14 @24251 has 29 MA's), (19, 24314), (24, 24404), (40, 24635), (41, 24656), (42, 24665), (44, 24674), (47, 24695), (49, 24713), (51, 24734), (53, 24773), (61, 24902), (62, 24956), (75, 25190), (84, 25280),

Gene: Rings_34 Start: 17869, Stop: 18941, Start Num: 14

Candidate Starts for Rings_34:

(Start: 11 @17857 has 5 MA's), (Start: 14 @17869 has 29 MA's), (17, 17899), (18, 17911), (21, 17956), (34, 18145), (35, 18154), (50, 18325), (54, 18376), (59, 18469), (64, 18595), (66, 18628), (67, 18652), (68, 18670), (70, 18685), (71, 18712), (72, 18730), (73, 18736), (75, 18793), (79, 18817), (81, 18829), (86, 18883), (88, 18898),

Gene: Roman_50 Start: 24728, Stop: 25923, Start Num: 12

Candidate Starts for Roman_50:

(1, 24326), (8, 24698), (Start: 12 @24728 has 8 MA's), (Start: 14 @24737 has 29 MA's), (19, 24803), (24, 24893), (26, 24917), (28, 24953), (38, 25091), (42, 25163), (44, 25172), (47, 25193), (49, 25211), (51, 25232), (53, 25271), (56, 25307), (62, 25454), (65, 25499), (78, 25712), (89, 25814), (90, 25826), (91, 25841),

Gene: RunningBrook_56 Start: 26354, Stop: 27501, Start Num: 14

Candidate Starts for RunningBrook_56:

(3, 26135), (4, 26168), (5, 26198), (6, 26207), (Start: 12 @26345 has 8 MA's), (Start: 14 @26354 has 29 MA's), (20, 26411), (23, 26450), (24, 26492), (27, 26510), (35, 26612), (36, 26648), (37, 26657), (43, 26747), (44, 26750), (45, 26765), (47, 26771), (52, 26837), (84, 27356), (91, 27413), (93, 27452), (94, 27476), (95, 27488),

Gene: Shroomer_59 Start: 25896, Stop: 27043, Start Num: 14

Candidate Starts for Shroomer_59:

(Start: 12 @25887 has 8 MA's), (Start: 14 @25896 has 29 MA's), (20, 25953), (23, 25992), (24, 26034), (27, 26052), (32, 26133), (35, 26154), (36, 26190), (37, 26199), (43, 26289), (44, 26292), (45, 26307), (47, 26313), (52, 26379), (84, 26898), (91, 26955), (92, 26970), (93, 26994), (94, 27018), (95, 27030),

Gene: SorJuana_35 Start: 17747, Stop: 18819, Start Num: 14

Candidate Starts for SorJuana_35:

(Start: 11 @17735 has 5 MA's), (Start: 14 @17747 has 29 MA's), (17, 17777), (18, 17789), (21, 17834), (34, 18023), (35, 18032), (50, 18203), (54, 18254), (59, 18347), (64, 18473), (66, 18506), (67, 18530), (68, 18548), (70, 18563), (71, 18590), (72, 18608), (73, 18614), (75, 18671), (79, 18695), (81, 18707), (86, 18761), (88, 18776),

Gene: SteakFry_57 Start: 25617, Stop: 26764, Start Num: 14

Candidate Starts for SteakFry_57:

(2, 25380), (4, 25431), (5, 25461), (6, 25470), (Start: 14 @25617 has 29 MA's), (20, 25674), (23, 25713), (24, 25755), (27, 25773), (32, 25854), (35, 25875), (36, 25911), (37, 25920), (43, 26010), (44, 26013), (45, 26028), (47, 26034), (52, 26100), (84, 26619), (91, 26676), (92, 26691), (93, 26715), (94, 26739), (95, 26751),

Gene: StevieWelch_55 Start: 25746, Stop: 26893, Start Num: 14

Candidate Starts for StevieWelch_55:

(3, 25527), (5, 25590), (6, 25599), (Start: 14 @25746 has 29 MA's), (20, 25803), (23, 25842), (24, 25884), (27, 25902), (32, 25983), (35, 26004), (36, 26040), (37, 26049), (43, 26139), (44, 26142), (45, 26157), (47, 26163), (52, 26229), (84, 26748), (91, 26805), (92, 26820), (93, 26844), (94, 26868), (95, 26880),

Gene: Tandem_47 Start: 24396, Stop: 25579, Start Num: 12

Candidate Starts for Tandem_47:

(Start: 12 @24396 has 8 MA's), (Start: 14 @24405 has 29 MA's), (19, 24468), (24, 24558), (40, 24789), (41, 24810), (42, 24819), (44, 24828), (47, 24849), (49, 24867), (51, 24888), (53, 24927), (61, 25056), (62, 25110), (75, 25344), (84, 25434),

Gene: Thunderclap_35 Start: 17767, Stop: 18839, Start Num: 14

Candidate Starts for Thunderclap_35:

(Start: 11 @17755 has 5 MA's), (Start: 14 @17767 has 29 MA's), (17, 17797), (18, 17809), (21, 17854), (34, 18043), (35, 18052), (50, 18223), (54, 18274), (59, 18367), (64, 18493), (66, 18526), (67, 18550), (68, 18568), (70, 18583), (71, 18610), (72, 18628), (73, 18634), (75, 18691), (79, 18715), (81, 18727), (86, 18781), (88, 18796),

Gene: WaterT_41 Start: 20865, Stop: 21892, Start Num: 15

Candidate Starts for WaterT_41:

(Start: 15 @20865 has 5 MA's), (20, 20907), (22, 20937), (30, 21063), (39, 21198), (44, 21225), (60, 21423), (63, 21522), (74, 21690), (77, 21729), (87, 21822),

Gene: Welcome_56 Start: 25766, Stop: 26913, Start Num: 14

Candidate Starts for Welcome_56:

(3, 25547), (5, 25610), (6, 25619), (7, 25673), (Start: 14 @25766 has 29 MA's), (20, 25823), (23, 25862), (24, 25904), (27, 25922), (32, 26003), (35, 26024), (36, 26060), (37, 26069), (43, 26159), (44, 26162), (45, 26177), (47, 26183), (52, 26249), (84, 26768), (91, 26825), (93, 26864), (94, 26888), (95, 26900),

Gene: Wolfstar_51 Start: 24646, Stop: 25832, Start Num: 14

Candidate Starts for Wolfstar_51:

(10, 24616), (Start: 12 @24637 has 8 MA's), (Start: 14 @24646 has 29 MA's), (16, 24667), (19, 24712), (29, 24865), (32, 24922), (42, 25072), (44, 25081), (47, 25102), (53, 25180), (55, 25210), (62, 25363), (65, 25408), (84, 25687), (91, 25750),

Gene: Yeezus_34 Start: 17725, Stop: 18809, Start Num: 11

Candidate Starts for Yeezus_34:

(Start: 11 @17725 has 5 MA's), (Start: 14 @17737 has 29 MA's), (17, 17767), (18, 17779), (21, 17824), (34, 18013), (35, 18022), (50, 18193), (54, 18244), (59, 18337), (64, 18463), (66, 18496), (67, 18520), (68, 18538), (70, 18553), (71, 18580), (72, 18598), (73, 18604), (75, 18661), (79, 18685), (81, 18697), (86, 18751), (88, 18766),

Gene: Yuma_54 Start: 25680, Stop: 26827, Start Num: 14

Candidate Starts for Yuma_54:

(Start: 14 @25680 has 29 MA's), (20, 25737), (23, 25776), (24, 25818), (27, 25836), (35, 25938), (36, 25974), (37, 25983), (43, 26073), (44, 26076), (45, 26091), (47, 26097), (52, 26163), (84, 26682), (91, 26739), (92, 26754), (93, 26778), (94, 26802), (95, 26814),