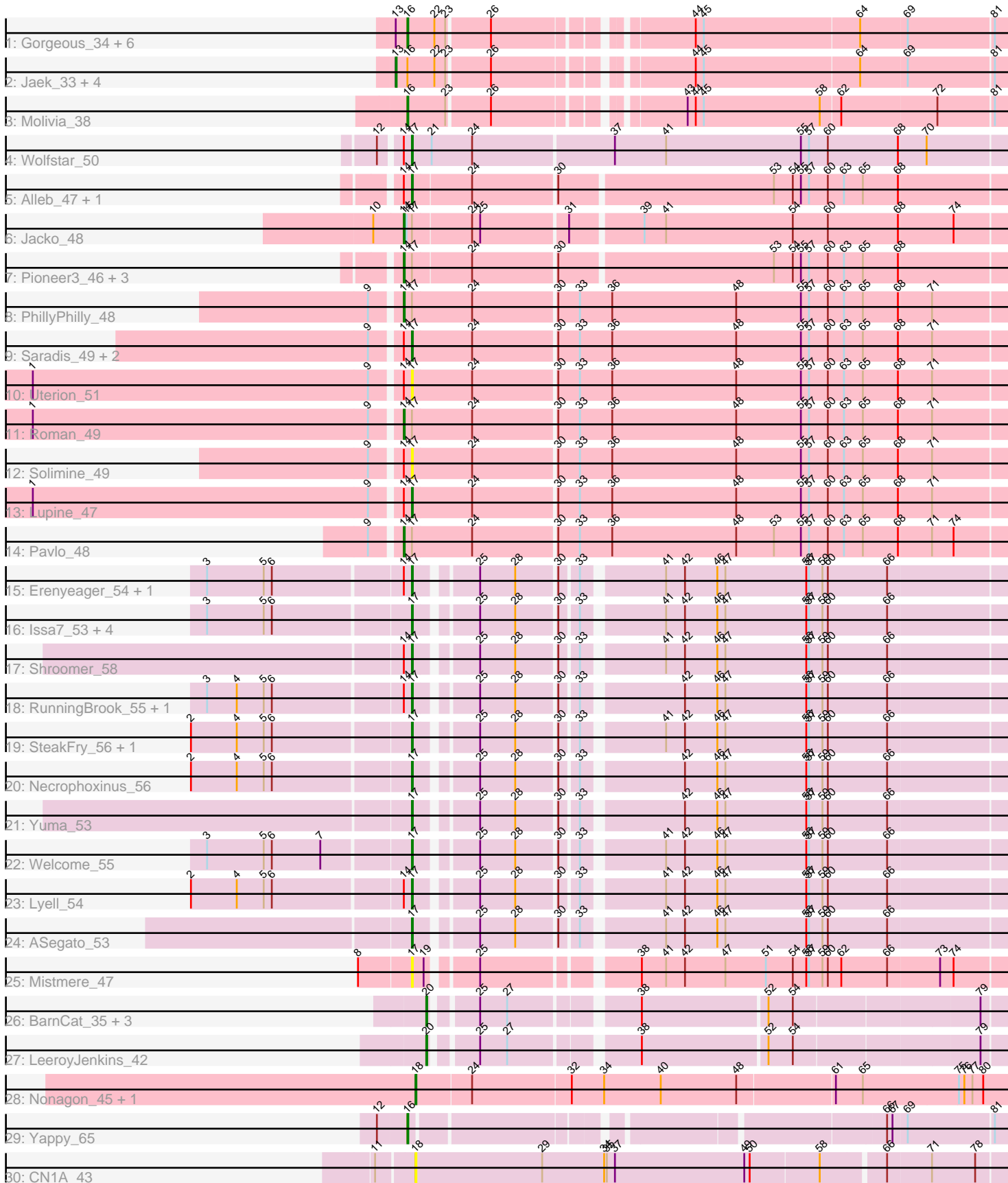


Pham 308659



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 308659 Report

This analysis was run 06/27/26 on database version 652.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 308659 has 57 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Gorgeous_34, Anansi_34, SorJuana_34, Heylee_37, Amigo_34, Thunderclap_34, Rings_33
- Track 2 : Jaek_33, Boersma_35, Amavida_37, Ichor_33, Yeezus_33
- Track 3 : Molivia_38
- Track 4 : Wolfstar_50
- Track 5 : Alleb_47, Platte_46
- Track 6 : Jacko_48
- Track 7 : Pioneer3_46, Tandem_46, Hortus1_46, OlinDD_46
- Track 8 : PhillyPhilly_48
- Track 9 : Saradis_49, Hubbs_49, DejaVu_50
- Track 10 : Uterion_51
- Track 11 : Roman_49
- Track 12 : Solimine_49
- Track 13 : Lupine_47
- Track 14 : Pavlo_48
- Track 15 : Erenyeager_54, Casablanacas_55
- Track 16 : Issa7_53, StevieWelch_54, Deschain_55, Musetta_54, Fork_50
- Track 17 : Shroomer_58
- Track 18 : RunningBrook_55, DustyDino_57
- Track 19 : SteakFry_56, HollowPurple_55
- Track 20 : Necrophoxinus_56
- Track 21 : Yuma_53
- Track 22 : Welcome_55
- Track 23 : Lyell_54
- Track 24 : ASegato_53
- Track 25 : Mistmere_47
- Track 26 : BarnCat_35, Cassita_41, Lifes_37, WaterT_40
- Track 27 : LeeroyJenkins_42
- Track 28 : Nonagon_45, Commonplace_46
- Track 29 : Yappy_65
- Track 30 : CN1A_43

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

The start number called the most often in the published annotations is 17, it was called in 21 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato_53, Alleb_47, Casablanacas_55, DejaVu_50, Deschain_55, DustyDino_57, Erenyeager_54, Fork_50, HollowPurple_55, Hubbs_49, Issa7_53, Lupine_47, Lyell_54, Mistmere_47, Musetta_54, Necrophoxinus_56, Platte_46, RunningBrook_55, Saradis_49, Shroomer_58, Solimine_49, SteakFry_56, StevieWelch_54, Uterion_51, Welcome_55, Wolfstar_50, Yuma_53,

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

- Hortus1_46, Jacko_48, OlinDD_46, Pavlo_48, PhillyPhilly_48, Pioneer3_46, Roman_49, Tandem_46,

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

- Amavida_37, Amigo_34, Anansi_34, BarnCat_35, Boersma_35, CN1A_43, Cassita_41, Commonplace_46, Gorgeous_34, Heylee_37, Ichor_33, Jaek_33, LeeroyJenkins_42, Lifes_37, Molivia_38, Nonagon_45, Rings_33, SorJuana_34, Thunderclap_34, WaterT_40, Yappy_65, Yeezus_33,

Summary by start number:

Start 13:

- Found in 12 of 57 (21.1%) of genes in pham
- Manual Annotations of this start: 5 of 50
- Called 41.7% of time when present
- Phage (with cluster) where this start called: Amavida_37 (AQ), Boersma_35 (AQ), Ichor_33 (AQ), Jaek_33 (AQ), Yeezus_33 (AQ),

Start 14:

- Found in 23 of 57 (40.4%) of genes in pham
- Manual Annotations of this start: 8 of 50
- Called 34.8% of time when present
- Phage (with cluster) where this start called: Hortus1_46 (ED1), Jacko_48 (ED1), OlinDD_46 (ED1), Pavlo_48 (ED1), PhillyPhilly_48 (ED1), Pioneer3_46 (ED1), Roman_49 (ED1), Tandem_46 (ED1),

Start 16:

- Found in 14 of 57 (24.6%) of genes in pham
- Manual Annotations of this start: 9 of 50
- Called 64.3% of time when present
- Phage (with cluster) where this start called: Amigo_34 (AQ), Anansi_34 (AQ), Gorgeous_34 (AQ), Heylee_37 (AQ), Molivia_38 (AQ), Rings_33 (AQ), SorJuana_34 (AQ), Thunderclap_34 (AQ), Yappy_65 (singleton),

Start 17:

- Found in 35 of 57 (61.4%) of genes in pham
- Manual Annotations of this start: 21 of 50
- Called 77.1% of time when present

- Phage (with cluster) where this start called: ASegato_53 (ED2), Alleb_47 (ED1), Casablanacas_55 (ED2), DejaVu_50 (ED1), Deschain_55 (ED2), DustyDino_57 (ED2), Erenyeager_54 (ED2), Fork_50 (ED2), HollowPurple_55 (ED2), Hubbs_49 (ED1), Issa7_53 (ED2), Lupine_47 (ED1), Lyell_54 (ED2), Mistmere_47 (ED3), Musetta_54 (ED2), Necrophoxinus_56 (ED2), Platte_46 (ED1), RunningBrook_55 (ED2), Saradis_49 (ED1), Shroomer_58 (ED2), Solimine_49 (ED1), SteakFry_56 (ED2), StevieWelch_54 (ED2), Uterion_51 (ED1), Welcome_55 (ED2), Wolfstar_50 (ED), Yuma_53 (ED2),

Start 18:

- Found in 3 of 57 (5.3%) of genes in pham
- Manual Annotations of this start: 2 of 50
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CN1A_43 (singleton), Commonplace_46 (JD), Nonagon_45 (JD),

Start 20:

- Found in 5 of 57 (8.8%) of genes in pham
- Manual Annotations of this start: 5 of 50
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarnCat_35 (GB), Cassita_41 (GB), LeeroyJenkins_42 (GB), Lifes_37 (GB), WaterT_40 (GB),

Summary by clusters:

There are 8 clusters represented in this pham: AQ, singleton, ED, ED2, ED3, ED1, GB, JD,

Info for manual annotations of cluster AQ:

- Start number 13 was manually annotated 5 times for cluster AQ.
- Start number 16 was manually annotated 8 times for cluster AQ.

Info for manual annotations of cluster ED:

- Start number 17 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:

- Start number 14 was manually annotated 8 times for cluster ED1.
- Start number 17 was manually annotated 5 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 17 was manually annotated 15 times for cluster ED2.

Info for manual annotations of cluster GB:

- Start number 20 was manually annotated 5 times for cluster GB.

Info for manual annotations of cluster JD:

- Start number 18 was manually annotated 2 times for cluster JD.

Gene Information:

Gene: ASegato_53 Start: 25411, Stop: 26022, Start Num: 17

Candidate Starts for ASegato_53:

(Start: 17 @25411 has 21 MA's), (25, 25468), (28, 25507), (30, 25549), (33, 25567), (41, 25648), (42, 25669), (46, 25705), (47, 25714), (56, 25804), (57, 25807), (59, 25822), (60, 25828), (66, 25894),

Gene: Alleb_47 Start: 24469, Stop: 25107, Start Num: 17

Candidate Starts for Alleb_47:

(Start: 14 @24460 has 8 MA's), (Start: 17 @24469 has 21 MA's), (24, 24532), (30, 24622), (53, 24853), (54, 24874), (55, 24883), (57, 24892), (60, 24913), (63, 24931), (65, 24952), (68, 24991),

Gene: Amavida_37 Start: 17852, Stop: 18478, Start Num: 13

Candidate Starts for Amavida_37:

(Start: 13 @17852 has 5 MA's), (Start: 16 @17864 has 9 MA's), (22, 17894), (23, 17906), (26, 17951), (44, 18140), (45, 18149), (64, 18320), (69, 18371), (81, 18464),

Gene: Amigo_34 Start: 17738, Stop: 18352, Start Num: 16

Candidate Starts for Amigo_34:

(Start: 13 @17726 has 5 MA's), (Start: 16 @17738 has 9 MA's), (22, 17768), (23, 17780), (26, 17825), (44, 18014), (45, 18023), (64, 18194), (69, 18245), (81, 18338),

Gene: Anansi_34 Start: 17747, Stop: 18361, Start Num: 16

Candidate Starts for Anansi_34:

(Start: 13 @17735 has 5 MA's), (Start: 16 @17747 has 9 MA's), (22, 17777), (23, 17789), (26, 17834), (44, 18023), (45, 18032), (64, 18203), (69, 18254), (81, 18347),

Gene: BarnCat_35 Start: 18745, Stop: 19329, Start Num: 20

Candidate Starts for BarnCat_35:

(Start: 20 @18745 has 5 MA's), (25, 18787), (27, 18817), (38, 18943), (52, 19078), (54, 19105), (79, 19303),

Gene: Boersma_35 Start: 17726, Stop: 18352, Start Num: 13

Candidate Starts for Boersma_35:

(Start: 13 @17726 has 5 MA's), (Start: 16 @17738 has 9 MA's), (22, 17768), (23, 17780), (26, 17825), (44, 18014), (45, 18023), (64, 18194), (69, 18245), (81, 18338),

Gene: CN1A_43 Start: 32005, Stop: 31364, Start Num: 18

Candidate Starts for CN1A_43:

(11, 32044), (Start: 18 @32005 has 2 MA's), (29, 31864), (34, 31795), (35, 31792), (37, 31783), (49, 31639), (50, 31633), (58, 31558), (66, 31492), (71, 31444), (78, 31396),

Gene: Casablancas_55 Start: 25496, Stop: 26107, Start Num: 17

Candidate Starts for Casablancas_55:

(3, 25277), (5, 25340), (6, 25349), (Start: 14 @25487 has 8 MA's), (Start: 17 @25496 has 21 MA's), (25, 25553), (28, 25592), (30, 25634), (33, 25652), (41, 25733), (42, 25754), (46, 25790), (47, 25799), (56, 25889), (57, 25892), (59, 25907), (60, 25913), (66, 25979),

Gene: Cassita_41 Start: 21121, Stop: 21705, Start Num: 20

Candidate Starts for Cassita_41:

(Start: 20 @21121 has 5 MA's), (25, 21163), (27, 21193), (38, 21319), (52, 21454), (54, 21481), (79, 21679),

Gene: Commonplace_46 Start: 25429, Stop: 26079, Start Num: 18

Candidate Starts for Commonplace_46:

(Start: 18 @25429 has 2 MA's), (24, 25489), (32, 25597), (34, 25633), (40, 25696), (48, 25780), (61, 25885), (65, 25915), (75, 26020), (76, 26026), (77, 26035), (80, 26047),

Gene: DejaVu_50 Start: 24677, Stop: 25327, Start Num: 17

Candidate Starts for DejaVu_50:

(9, 24638), (Start: 14 @24668 has 8 MA's), (Start: 17 @24677 has 21 MA's), (24, 24743), (30, 24833), (33, 24857), (36, 24893), (48, 25031), (55, 25103), (57, 25112), (60, 25133), (63, 25151), (65, 25172), (68, 25211), (71, 25247),

Gene: Deschain_55 Start: 26160, Stop: 26771, Start Num: 17

Candidate Starts for Deschain_55:

(3, 25941), (5, 26004), (6, 26013), (Start: 17 @26160 has 21 MA's), (25, 26217), (28, 26256), (30, 26298), (33, 26316), (41, 26397), (42, 26418), (46, 26454), (47, 26463), (56, 26553), (57, 26556), (59, 26571), (60, 26577), (66, 26643),

Gene: DustyDino_57 Start: 26354, Stop: 26965, Start Num: 17

Candidate Starts for DustyDino_57:

(3, 26135), (4, 26168), (5, 26198), (6, 26207), (Start: 14 @26345 has 8 MA's), (Start: 17 @26354 has 21 MA's), (25, 26411), (28, 26450), (30, 26492), (33, 26510), (42, 26612), (46, 26648), (47, 26657), (56, 26747), (57, 26750), (59, 26765), (60, 26771), (66, 26837),

Gene: Erenyeager_54 Start: 25746, Stop: 26357, Start Num: 17

Candidate Starts for Erenyeager_54:

(3, 25527), (5, 25590), (6, 25599), (Start: 14 @25737 has 8 MA's), (Start: 17 @25746 has 21 MA's), (25, 25803), (28, 25842), (30, 25884), (33, 25902), (41, 25983), (42, 26004), (46, 26040), (47, 26049), (56, 26139), (57, 26142), (59, 26157), (60, 26163), (66, 26229),

Gene: Fork_50 Start: 25061, Stop: 25672, Start Num: 17

Candidate Starts for Fork_50:

(3, 24842), (5, 24905), (6, 24914), (Start: 17 @25061 has 21 MA's), (25, 25118), (28, 25157), (30, 25199), (33, 25217), (41, 25298), (42, 25319), (46, 25355), (47, 25364), (56, 25454), (57, 25457), (59, 25472), (60, 25478), (66, 25544),

Gene: Gorgeous_34 Start: 17747, Stop: 18361, Start Num: 16

Candidate Starts for Gorgeous_34:

(Start: 13 @17735 has 5 MA's), (Start: 16 @17747 has 9 MA's), (22, 17777), (23, 17789), (26, 17834), (44, 18023), (45, 18032), (64, 18203), (69, 18254), (81, 18347),

Gene: Heylee_37 Start: 17864, Stop: 18478, Start Num: 16

Candidate Starts for Heylee_37:

(Start: 13 @17852 has 5 MA's), (Start: 16 @17864 has 9 MA's), (22, 17894), (23, 17906), (26, 17951), (44, 18140), (45, 18149), (64, 18320), (69, 18371), (81, 18464),

Gene: HollowPurple_55 Start: 25617, Stop: 26228, Start Num: 17

Candidate Starts for HollowPurple_55:

(2, 25380), (4, 25431), (5, 25461), (6, 25470), (Start: 17 @25617 has 21 MA's), (25, 25674), (28, 25713), (30, 25755), (33, 25773), (41, 25854), (42, 25875), (46, 25911), (47, 25920), (56, 26010), (57, 26013), (59, 26028), (60, 26034), (66, 26100),

Gene: Hortus1_46 Start: 24450, Stop: 25097, Start Num: 14

Candidate Starts for Hortus1_46:

(Start: 14 @24450 has 8 MA's), (Start: 17 @24459 has 21 MA's), (24, 24522), (30, 24612), (53, 24843), (54, 24864), (55, 24873), (57, 24882), (60, 24903), (63, 24921), (65, 24942), (68, 24981),

Gene: Hubbs_49 Start: 24889, Stop: 25539, Start Num: 17

Candidate Starts for Hubbs_49:

(9, 24850), (Start: 14 @24880 has 8 MA's), (Start: 17 @24889 has 21 MA's), (24, 24955), (30, 25045), (33, 25069), (36, 25105), (48, 25243), (55, 25315), (57, 25324), (60, 25345), (63, 25363), (65, 25384), (68, 25423), (71, 25459),

Gene: Ichor_33 Start: 17726, Stop: 18352, Start Num: 13

Candidate Starts for Ichor_33:

(Start: 13 @17726 has 5 MA's), (Start: 16 @17738 has 9 MA's), (22, 17768), (23, 17780), (26, 17825), (44, 18014), (45, 18023), (64, 18194), (69, 18245), (81, 18338),

Gene: Issa7_53 Start: 25065, Stop: 25676, Start Num: 17

Candidate Starts for Issa7_53:

(3, 24846), (5, 24909), (6, 24918), (Start: 17 @25065 has 21 MA's), (25, 25122), (28, 25161), (30, 25203), (33, 25221), (41, 25302), (42, 25323), (46, 25359), (47, 25368), (56, 25458), (57, 25461), (59, 25476), (60, 25482), (66, 25548),

Gene: Jacko_48 Start: 22655, Stop: 23302, Start Num: 14

Candidate Starts for Jacko_48:

(10, 22622), (Start: 14 @22655 has 8 MA's), (15, 22658), (Start: 17 @22664 has 21 MA's), (24, 22727), (25, 22736), (31, 22829), (39, 22904), (41, 22928), (54, 23069), (60, 23108), (68, 23186), (74, 23246),

Gene: Jaek_33 Start: 17726, Stop: 18352, Start Num: 13

Candidate Starts for Jaek_33:

(Start: 13 @17726 has 5 MA's), (Start: 16 @17738 has 9 MA's), (22, 17768), (23, 17780), (26, 17825), (44, 18014), (45, 18023), (64, 18194), (69, 18245), (81, 18338),

Gene: LeeroyJenkins_42 Start: 22004, Stop: 22588, Start Num: 20

Candidate Starts for LeeroyJenkins_42:

(Start: 20 @22004 has 5 MA's), (25, 22046), (27, 22076), (38, 22202), (52, 22337), (54, 22364), (79, 22562),

Gene: Lifes_37 Start: 18776, Stop: 19360, Start Num: 20

Candidate Starts for Lifes_37:

(Start: 20 @18776 has 5 MA's), (25, 18818), (27, 18848), (38, 18974), (52, 19109), (54, 19136), (79, 19334),

Gene: Lupine_47 Start: 24091, Stop: 24741, Start Num: 17

Candidate Starts for Lupine_47:

(1, 23680), (9, 24052), (Start: 14 @24082 has 8 MA's), (Start: 17 @24091 has 21 MA's), (24, 24157), (30, 24247), (33, 24271), (36, 24307), (48, 24445), (55, 24517), (57, 24526), (60, 24547), (63, 24565), (65, 24586), (68, 24625), (71, 24661),

Gene: Lyell_54 Start: 25665, Stop: 26276, Start Num: 17

Candidate Starts for Lyell_54:

(2, 25428), (4, 25479), (5, 25509), (6, 25518), (Start: 14 @25656 has 8 MA's), (Start: 17 @25665 has 21 MA's), (25, 25722), (28, 25761), (30, 25803), (33, 25821), (41, 25902), (42, 25923), (46, 25959), (47, 25968), (56, 26058), (57, 26061), (59, 26076), (60, 26082), (66, 26148),

Gene: Mistmere_47 Start: 23530, Stop: 24141, Start Num: 17

Candidate Starts for Mistmere_47:

(8, 23473), (Start: 17 @23530 has 21 MA's), (19, 23542), (25, 23587), (38, 23740), (41, 23767), (42, 23788), (47, 23833), (51, 23878), (54, 23908), (56, 23923), (57, 23926), (59, 23941), (60, 23947), (62, 23962), (66, 24013), (73, 24070), (74, 24085),

Gene: Molivia_38 Start: 17990, Stop: 18604, Start Num: 16

Candidate Starts for Molivia_38:

(Start: 16 @17990 has 9 MA's), (23, 18032), (26, 18077), (43, 18257), (44, 18266), (45, 18275), (58, 18404), (62, 18425), (72, 18530), (81, 18590),

Gene: Musetta_54 Start: 25781, Stop: 26392, Start Num: 17

Candidate Starts for Musetta_54:

(3, 25562), (5, 25625), (6, 25634), (Start: 17 @25781 has 21 MA's), (25, 25838), (28, 25877), (30, 25919), (33, 25937), (41, 26018), (42, 26039), (46, 26075), (47, 26084), (56, 26174), (57, 26177), (59, 26192), (60, 26198), (66, 26264),

Gene: Necrophoxinus_56 Start: 26360, Stop: 26971, Start Num: 17

Candidate Starts for Necrophoxinus_56:

(2, 26123), (4, 26174), (5, 26204), (6, 26213), (Start: 17 @26360 has 21 MA's), (25, 26417), (28, 26456), (30, 26498), (33, 26516), (42, 26618), (46, 26654), (47, 26663), (56, 26753), (57, 26756), (59, 26771), (60, 26777), (66, 26843),

Gene: Nonagon_45 Start: 25129, Stop: 25779, Start Num: 18

Candidate Starts for Nonagon_45:

(Start: 18 @25129 has 2 MA's), (24, 25189), (32, 25297), (34, 25333), (40, 25396), (48, 25480), (61, 25585), (65, 25615), (75, 25720), (76, 25726), (77, 25735), (80, 25747),

Gene: OlinDD_46 Start: 24449, Stop: 25096, Start Num: 14

Candidate Starts for OlinDD_46:

(Start: 14 @24449 has 8 MA's), (Start: 17 @24458 has 21 MA's), (24, 24521), (30, 24611), (53, 24842), (54, 24863), (55, 24872), (57, 24881), (60, 24902), (63, 24920), (65, 24941), (68, 24980),

Gene: Pavlo_48 Start: 24727, Stop: 25386, Start Num: 14

Candidate Starts for Pavlo_48:

(9, 24697), (Start: 14 @24727 has 8 MA's), (Start: 17 @24736 has 21 MA's), (24, 24802), (30, 24892), (33, 24916), (36, 24952), (48, 25090), (53, 25132), (55, 25162), (57, 25171), (60, 25192), (63, 25210), (65, 25231), (68, 25270), (71, 25306), (74, 25330),

Gene: PhillyPhilly_48 Start: 24261, Stop: 24920, Start Num: 14

Candidate Starts for PhillyPhilly_48:

(9, 24231), (Start: 14 @24261 has 8 MA's), (Start: 17 @24270 has 21 MA's), (24, 24336), (30, 24426), (33, 24450), (36, 24486), (48, 24624), (55, 24696), (57, 24705), (60, 24726), (63, 24744), (65, 24765), (68, 24804), (71, 24840),

Gene: Pioneer3_46 Start: 24457, Stop: 25104, Start Num: 14

Candidate Starts for Pioneer3_46:

(Start: 14 @24457 has 8 MA's), (Start: 17 @24466 has 21 MA's), (24, 24529), (30, 24619), (53, 24850), (54, 24871), (55, 24880), (57, 24889), (60, 24910), (63, 24928), (65, 24949), (68, 24988),

Gene: Platte_46 Start: 24251, Stop: 24889, Start Num: 17

Candidate Starts for Platte_46:

(Start: 14 @24242 has 8 MA's), (Start: 17 @24251 has 21 MA's), (24, 24314), (30, 24404), (53, 24635), (54, 24656), (55, 24665), (57, 24674), (60, 24695), (63, 24713), (65, 24734), (68, 24773),

Gene: Rings_33 Start: 17869, Stop: 18483, Start Num: 16

Candidate Starts for Rings_33:

(Start: 13 @17857 has 5 MA's), (Start: 16 @17869 has 9 MA's), (22, 17899), (23, 17911), (26, 17956), (44, 18145), (45, 18154), (64, 18325), (69, 18376), (81, 18469),

Gene: Roman_49 Start: 24728, Stop: 25387, Start Num: 14

Candidate Starts for Roman_49:

(1, 24326), (9, 24698), (Start: 14 @24728 has 8 MA's), (Start: 17 @24737 has 21 MA's), (24, 24803), (30, 24893), (33, 24917), (36, 24953), (48, 25091), (55, 25163), (57, 25172), (60, 25193), (63, 25211), (65, 25232), (68, 25271), (71, 25307),

Gene: RunningBrook_55 Start: 26354, Stop: 26965, Start Num: 17

Candidate Starts for RunningBrook_55:

(3, 26135), (4, 26168), (5, 26198), (6, 26207), (Start: 14 @26345 has 8 MA's), (Start: 17 @26354 has 21 MA's), (25, 26411), (28, 26450), (30, 26492), (33, 26510), (42, 26612), (46, 26648), (47, 26657), (56, 26747), (57, 26750), (59, 26765), (60, 26771), (66, 26837),

Gene: Saradis_49 Start: 24329, Stop: 24979, Start Num: 17

Candidate Starts for Saradis_49:

(9, 24290), (Start: 14 @24320 has 8 MA's), (Start: 17 @24329 has 21 MA's), (24, 24395), (30, 24485), (33, 24509), (36, 24545), (48, 24683), (55, 24755), (57, 24764), (60, 24785), (63, 24803), (65, 24824), (68, 24863), (71, 24899),

Gene: Shroomer_58 Start: 25896, Stop: 26507, Start Num: 17

Candidate Starts for Shroomer_58:

(Start: 14 @25887 has 8 MA's), (Start: 17 @25896 has 21 MA's), (25, 25953), (28, 25992), (30, 26034), (33, 26052), (41, 26133), (42, 26154), (46, 26190), (47, 26199), (56, 26289), (57, 26292), (59, 26307), (60, 26313), (66, 26379),

Gene: Solimine_49 Start: 24743, Stop: 25393, Start Num: 17

Candidate Starts for Solimine_49:

(9, 24704), (Start: 14 @24734 has 8 MA's), (Start: 17 @24743 has 21 MA's), (24, 24809), (30, 24899), (33, 24923), (36, 24959), (48, 25097), (55, 25169), (57, 25178), (60, 25199), (63, 25217), (65, 25238), (68, 25277), (71, 25313),

Gene: SorJuana_34 Start: 17747, Stop: 18361, Start Num: 16

Candidate Starts for SorJuana_34:

(Start: 13 @17735 has 5 MA's), (Start: 16 @17747 has 9 MA's), (22, 17777), (23, 17789), (26, 17834), (44, 18023), (45, 18032), (64, 18203), (69, 18254), (81, 18347),

Gene: SteakFry_56 Start: 25617, Stop: 26228, Start Num: 17

Candidate Starts for SteakFry_56:

(2, 25380), (4, 25431), (5, 25461), (6, 25470), (Start: 17 @25617 has 21 MA's), (25, 25674), (28, 25713), (30, 25755), (33, 25773), (41, 25854), (42, 25875), (46, 25911), (47, 25920), (56, 26010), (57, 26013), (59, 26028), (60, 26034), (66, 26100),

Gene: StevieWelch_54 Start: 25746, Stop: 26357, Start Num: 17

Candidate Starts for StevieWelch_54:

(3, 25527), (5, 25590), (6, 25599), (Start: 17 @25746 has 21 MA's), (25, 25803), (28, 25842), (30, 25884), (33, 25902), (41, 25983), (42, 26004), (46, 26040), (47, 26049), (56, 26139), (57, 26142), (59, 26157), (60, 26163), (66, 26229),

Gene: Tandem_46 Start: 24396, Stop: 25043, Start Num: 14

Candidate Starts for Tandem_46:

(Start: 14 @24396 has 8 MA's), (Start: 17 @24405 has 21 MA's), (24, 24468), (30, 24558), (53, 24789), (54, 24810), (55, 24819), (57, 24828), (60, 24849), (63, 24867), (65, 24888), (68, 24927),

Gene: Thunderclap_34 Start: 17767, Stop: 18381, Start Num: 16

Candidate Starts for Thunderclap_34:

(Start: 13 @17755 has 5 MA's), (Start: 16 @17767 has 9 MA's), (22, 17797), (23, 17809), (26, 17854), (44, 18043), (45, 18052), (64, 18223), (69, 18274), (81, 18367),

Gene: Uterion_51 Start: 24838, Stop: 25488, Start Num: 17

Candidate Starts for Uterion_51:

(1, 24427), (9, 24799), (Start: 14 @24829 has 8 MA's), (Start: 17 @24838 has 21 MA's), (24, 24904), (30, 24994), (33, 25018), (36, 25054), (48, 25192), (55, 25264), (57, 25273), (60, 25294), (63, 25312), (65, 25333), (68, 25372), (71, 25408),

Gene: WaterT_40 Start: 20865, Stop: 21449, Start Num: 20

Candidate Starts for WaterT_40:

(Start: 20 @20865 has 5 MA's), (25, 20907), (27, 20937), (38, 21063), (52, 21198), (54, 21225), (79, 21423),

Gene: Welcome_55 Start: 25766, Stop: 26377, Start Num: 17

Candidate Starts for Welcome_55:

(3, 25547), (5, 25610), (6, 25619), (7, 25673), (Start: 17 @25766 has 21 MA's), (25, 25823), (28, 25862), (30, 25904), (33, 25922), (41, 26003), (42, 26024), (46, 26060), (47, 26069), (56, 26159), (57, 26162), (59, 26177), (60, 26183), (66, 26249),

Gene: Wolfstar_50 Start: 24646, Stop: 25296, Start Num: 17

Candidate Starts for Wolfstar_50:

(12, 24616), (Start: 14 @24637 has 8 MA's), (Start: 17 @24646 has 21 MA's), (21, 24667), (24, 24712), (37, 24865), (41, 24922), (55, 25072), (57, 25081), (60, 25102), (68, 25180), (70, 25210),

Gene: Yappy_65 Start: 23276, Stop: 23878, Start Num: 16

Candidate Starts for Yappy_65:

(12, 23246), (Start: 16 @23276 has 9 MA's), (66, 23750), (67, 23756), (69, 23771), (81, 23864),

Gene: Yeezus_33 Start: 17725, Stop: 18351, Start Num: 13

Candidate Starts for Yeezus_33:

(Start: 13 @17725 has 5 MA's), (Start: 16 @17737 has 9 MA's), (22, 17767), (23, 17779), (26, 17824), (44, 18013), (45, 18022), (64, 18193), (69, 18244), (81, 18337),

Gene: Yuma_53 Start: 25680, Stop: 26291, Start Num: 17

Candidate Starts for Yuma_53:

(Start: 17 @25680 has 21 MA's), (25, 25737), (28, 25776), (30, 25818), (33, 25836), (42, 25938), (46, 25974), (47, 25983), (56, 26073), (57, 26076), (59, 26091), (60, 26097), (66, 26163),