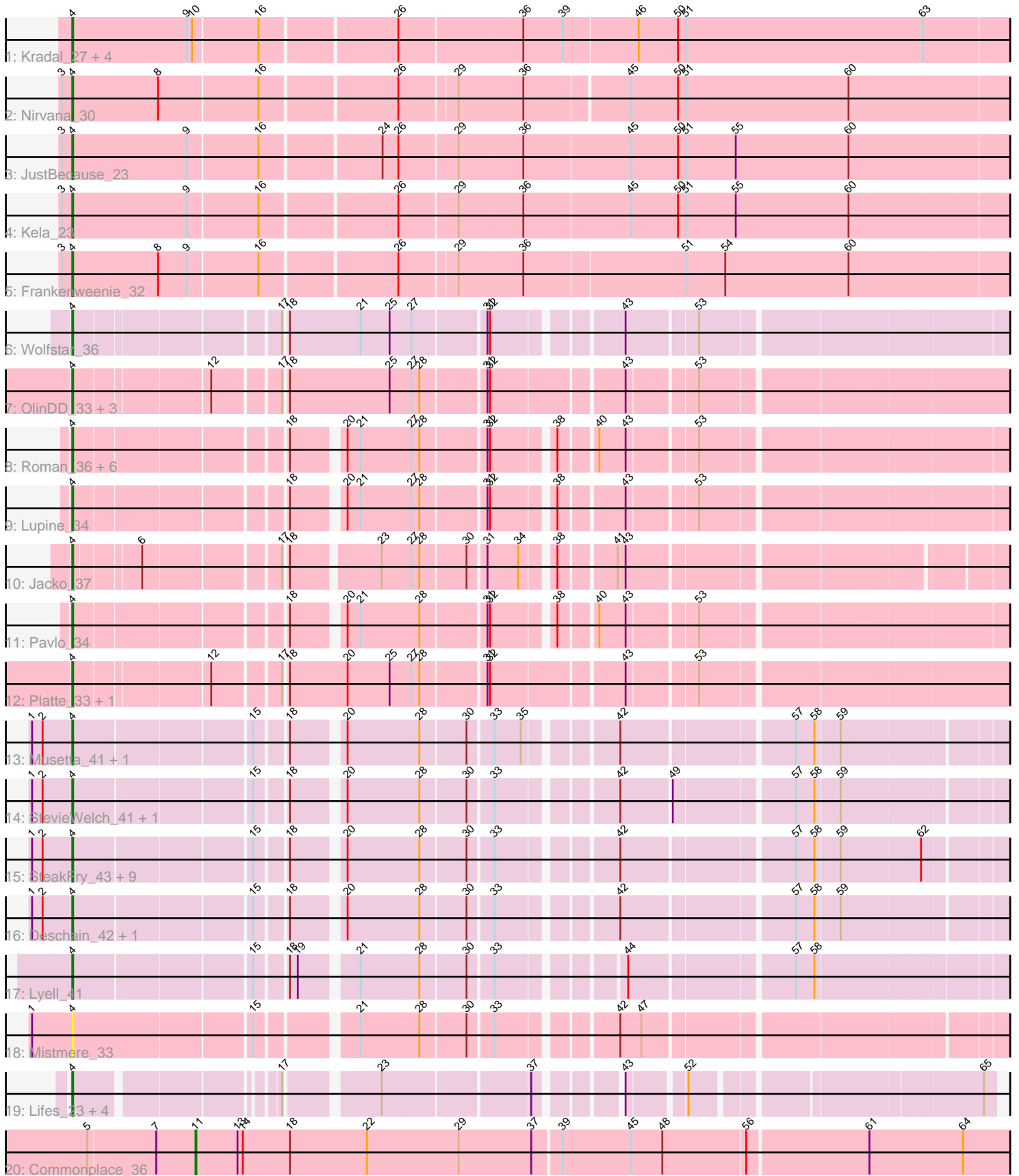


Pham 311686



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 311686 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 311686 has 50 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Kradal_27, Quantum_26, EhyElimayoE_27, Sarkar_27, Satis_27
- Track 2 : Nirvana_30
- Track 3 : JustBecause_23
- Track 4 : Kela_23
- Track 5 : Frankenweenie_32
- Track 6 : Wolfstar_36
- Track 7 : OlinDD_33, Hortus1_33, Pioneer3_33, Tandem_33
- Track 8 : Roman_36, Hubbs_36, Solimine_36, Uterion_38, Saradis_36, PhillyPhilly_35, DejaVu_37
- Track 9 : Lupine_34
- Track 10 : Jacko_37
- Track 11 : Pavlo_34
- Track 12 : Platte_33, Alleb_34
- Track 13 : Musetta_41, Issa7_40
- Track 14 : StevieWelch_41, Welcome_42
- Track 15 : SteakFry_43, RunningBrook_42, Erenyeager_41, Necrophoxinus_43, Shroomer_45, Casablanacas_42, DustyDino_44, Yuma_40, HollowPurple_42, ASegato_40
- Track 16 : Deschain_42, Fork_37
- Track 17 : Lyell_41
- Track 18 : Mistmere_33
- Track 19 : Lifes_23, LeeroyJenkins_25, Cassita_25, WaterT_24, BarnCat_21
- Track 20 : Commonplace_36

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

The start number called the most often in the published annotations is 4, it was called in 43 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato_40, Alleb_34, BarnCat_21, Casablanacas_42, Cassita_25, DejaVu_37, Deschain_42, DustyDino_44, EhyElimayoE_27, Erenyeager_41, Fork_37, Frankenweenie_32, HollowPurple_42, Hortus1_33, Hubbs_36, Issa7_40, Jacko_37, JustBecause_23, Kela_23, Kradal_27, LeeroyJenkins_25, Lifes_23, Lupine_34, Lyell_41, Mistmere_33, Musetta_41, Necrophoxinus_43, Nirvana_30, OlinDD_33, Pavlo_34, PhillyPhilly_35, Pioneer3_33, Platte_33, Quantum_26, Roman_36, RunningBrook_42, Saradis_36, Sarkar_27, Satis_27, Shroomer_45, Solimine_36, SteakFry_43, StevieWelch_41, Tandem_33, Uterion_38, WaterT_24, Welcome_42, Wolfstar_36, Yuma_40,

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

-

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

- Commonplace_36,

Summary by start number:

Start 4:

- Found in 49 of 50 (98.0%) of genes in pham
- Manual Annotations of this start: 43 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASegato_40 (ED2), Alleb_34 (ED1), BarnCat_21 (GB), Casablanacas_42 (ED2), Cassita_25 (GB), DejaVu_37 (ED1), Deschain_42 (ED2), DustyDino_44 (ED2), EhyElimayoE_27 (BM), Erenyeager_41 (ED2), Fork_37 (ED2), Frankenweenie_32 (BM), HollowPurple_42 (ED2), Hortus1_33 (ED1), Hubbs_36 (ED1), Issa7_40 (ED2), Jacko_37 (ED1), JustBecause_23 (BM), Kela_23 (BM), Kradal_27 (BM), LeeroyJenkins_25 (GB), Lifes_23 (GB), Lupine_34 (ED1), Lyell_41 (ED2), Mistmere_33 (ED3), Musetta_41 (ED2), Necrophoxinus_43 (ED2), Nirvana_30 (BM), OlinDD_33 (ED1), Pavlo_34 (ED1), PhillyPhilly_35 (ED1), Pioneer3_33 (ED1), Platte_33 (ED1), Quantum_26 (BM), Roman_36 (ED1), RunningBrook_42 (ED2), Saradis_36 (ED1), Sarkar_27 (BM), Satis_27 (BM), Shroomer_45 (ED2), Solimine_36 (ED1), SteakFry_43 (ED2), StevieWelch_41 (ED2), Tandem_33 (ED1), Uterion_38 (ED1), WaterT_24 (GB), Welcome_42 (ED2), Wolfstar_36 (ED), Yuma_40 (ED2),

Start 11:

- Found in 1 of 50 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Commonplace_36 (JD),

Summary by clusters:

There are 7 clusters represented in this pham: BM, ED2, ED3, ED1, GB, ED, JD,

Info for manual annotations of cluster BM:

- Start number 4 was manually annotated 9 times for cluster BM.

Info for manual annotations of cluster ED:

- Start number 4 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:

- Start number 4 was manually annotated 13 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 4 was manually annotated 15 times for cluster ED2.

Info for manual annotations of cluster GB:

- Start number 4 was manually annotated 5 times for cluster GB.

Info for manual annotations of cluster JD:

- Start number 11 was manually annotated 1 time for cluster JD.

Gene Information:

Gene: ASegato_40 Start: 16260, Stop: 17201, Start Num: 4

Candidate Starts for ASegato_40:

(1, 16215), (2, 16227), (Start: 4 @16260 has 43 MA's), (15, 16446), (18, 16476), (20, 16527), (28, 16608), (30, 16656), (33, 16680), (42, 16797), (57, 16977), (58, 16998), (59, 17025), (62, 17112),

Gene: Alleb_34 Start: 14751, Stop: 15737, Start Num: 4

Candidate Starts for Alleb_34:

(Start: 4 @14751 has 43 MA's), (12, 14892), (17, 14961), (18, 14964), (20, 15030), (25, 15078), (27, 15102), (28, 15111), (31, 15177), (32, 15180), (43, 15318), (53, 15390),

Gene: BarnCat_21 Start: 9678, Stop: 10562, Start Num: 4

Candidate Starts for BarnCat_21:

(Start: 4 @9678 has 43 MA's), (17, 9876), (23, 9969), (37, 10122), (43, 10197), (52, 10254), (65, 10551),

Gene: Casablancas_42 Start: 16344, Stop: 17285, Start Num: 4

Candidate Starts for Casablancas_42:

(1, 16299), (2, 16311), (Start: 4 @16344 has 43 MA's), (15, 16530), (18, 16560), (20, 16611), (28, 16692), (30, 16740), (33, 16764), (42, 16881), (57, 17061), (58, 17082), (59, 17109), (62, 17196),

Gene: Cassita_25 Start: 10239, Stop: 11123, Start Num: 4

Candidate Starts for Cassita_25:

(Start: 4 @10239 has 43 MA's), (17, 10437), (23, 10530), (37, 10683), (43, 10758), (52, 10815), (65, 11112),

Gene: Commonplace_36 Start: 16933, Stop: 17955, Start Num: 11

Candidate Starts for Commonplace_36:

(5, 16813), (7, 16888), (Start: 11 @16933 has 1 MA's), (13, 16981), (14, 16987), (18, 17041), (22, 17128), (29, 17233), (37, 17314), (39, 17344), (45, 17422), (48, 17458), (56, 17551), (61, 17686), (64, 17791),

Gene: DejaVu_37 Start: 15572, Stop: 16528, Start Num: 4

Candidate Starts for DejaVu_37:

(Start: 4 @15572 has 43 MA's), (18, 15788), (20, 15839), (21, 15854), (27, 15911), (28, 15920), (31, 15986), (32, 15989), (38, 16049), (40, 16085), (43, 16115), (53, 16187),

Gene: Deschain_42 Start: 17008, Stop: 17949, Start Num: 4

Candidate Starts for Deschain_42:

(1, 16963), (2, 16975), (Start: 4 @17008 has 43 MA's), (15, 17194), (18, 17224), (20, 17275), (28, 17356), (30, 17404), (33, 17428), (42, 17545), (57, 17725), (58, 17746), (59, 17773),

Gene: DustyDino_44 Start: 17199, Stop: 18140, Start Num: 4

Candidate Starts for DustyDino_44:

(1, 17154), (2, 17166), (Start: 4 @17199 has 43 MA's), (15, 17385), (18, 17415), (20, 17466), (28, 17547), (30, 17595), (33, 17619), (42, 17736), (57, 17916), (58, 17937), (59, 17964), (62, 18051),

Gene: EhyElimayoE_27 Start: 15317, Stop: 16402, Start Num: 4

Candidate Starts for EhyElimayoE_27:

(Start: 4 @15317 has 43 MA's), (9, 15446), (10, 15452), (16, 15524), (26, 15671), (36, 15806), (39, 15851), (46, 15935), (50, 15980), (51, 15989), (63, 16259),

Gene: Erenyeager_41 Start: 16594, Stop: 17535, Start Num: 4

Candidate Starts for Erenyeager_41:

(1, 16549), (2, 16561), (Start: 4 @16594 has 43 MA's), (15, 16780), (18, 16810), (20, 16861), (28, 16942), (30, 16990), (33, 17014), (42, 17131), (57, 17311), (58, 17332), (59, 17359), (62, 17446),

Gene: Fork_37 Start: 15909, Stop: 16850, Start Num: 4

Candidate Starts for Fork_37:

(1, 15864), (2, 15876), (Start: 4 @15909 has 43 MA's), (15, 16095), (18, 16125), (20, 16176), (28, 16257), (30, 16305), (33, 16329), (42, 16446), (57, 16626), (58, 16647), (59, 16674),

Gene: Frankenweenie_32 Start: 17212, Stop: 18291, Start Num: 4

Candidate Starts for Frankenweenie_32:

(3, 17200), (Start: 4 @17212 has 43 MA's), (8, 17308), (9, 17341), (16, 17419), (26, 17566), (29, 17626), (36, 17698), (51, 17878), (54, 17923), (60, 18064),

Gene: HollowPurple_42 Start: 16459, Stop: 17400, Start Num: 4

Candidate Starts for HollowPurple_42:

(1, 16414), (2, 16426), (Start: 4 @16459 has 43 MA's), (15, 16645), (18, 16675), (20, 16726), (28, 16807), (30, 16855), (33, 16879), (42, 16996), (57, 17176), (58, 17197), (59, 17224), (62, 17311),

Gene: Hortus1_33 Start: 14765, Stop: 15751, Start Num: 4

Candidate Starts for Hortus1_33:

(Start: 4 @14765 has 43 MA's), (12, 14906), (17, 14975), (18, 14978), (25, 15092), (27, 15116), (28, 15125), (31, 15191), (32, 15194), (43, 15332), (53, 15404),

Gene: Hubbs_36 Start: 15784, Stop: 16740, Start Num: 4

Candidate Starts for Hubbs_36:

(Start: 4 @15784 has 43 MA's), (18, 16000), (20, 16051), (21, 16066), (27, 16123), (28, 16132), (31, 16198), (32, 16201), (38, 16261), (40, 16297), (43, 16327), (53, 16399),

Gene: Issa7_40 Start: 15912, Stop: 16853, Start Num: 4

Candidate Starts for Issa7_40:

(1, 15867), (2, 15879), (Start: 4 @15912 has 43 MA's), (15, 16098), (18, 16128), (20, 16179), (28, 16260), (30, 16308), (33, 16332), (35, 16362), (42, 16449), (57, 16629), (58, 16650), (59, 16677),

Gene: Jacko_37 Start: 15287, Stop: 16231, Start Num: 4

Candidate Starts for Jacko_37:

(Start: 4 @15287 has 43 MA's), (6, 15353), (17, 15494), (18, 15497), (23, 15590), (27, 15623), (28, 15632), (30, 15680), (31, 15698), (34, 15731), (38, 15761), (41, 15818), (43, 15827),

Gene: JustBecause_23 Start: 14058, Stop: 15143, Start Num: 4

Candidate Starts for JustBecause_23:

(3, 14046), (Start: 4 @14058 has 43 MA's), (9, 14187), (16, 14265), (24, 14394), (26, 14412), (29, 14475), (36, 14547), (45, 14667), (50, 14721), (51, 14730), (55, 14787), (60, 14916),

Gene: Kela_23 Start: 14049, Stop: 15134, Start Num: 4

Candidate Starts for Kela_23:

(3, 14037), (Start: 4 @14049 has 43 MA's), (9, 14178), (16, 14256), (26, 14403), (29, 14466), (36, 14538), (45, 14658), (50, 14712), (51, 14721), (55, 14778), (60, 14907),

Gene: Kradal_27 Start: 15317, Stop: 16402, Start Num: 4

Candidate Starts for Kradal_27:

(Start: 4 @15317 has 43 MA's), (9, 15446), (10, 15452), (16, 15524), (26, 15671), (36, 15806), (39, 15851), (46, 15935), (50, 15980), (51, 15989), (63, 16259),

Gene: LeeroyJenkins_25 Start: 10157, Stop: 11041, Start Num: 4

Candidate Starts for LeeroyJenkins_25:

(Start: 4 @10157 has 43 MA's), (17, 10355), (23, 10448), (37, 10601), (43, 10676), (52, 10733), (65, 11030),

Gene: Lifes_23 Start: 9709, Stop: 10593, Start Num: 4

Candidate Starts for Lifes_23:

(Start: 4 @9709 has 43 MA's), (17, 9907), (23, 10000), (37, 10153), (43, 10228), (52, 10285), (65, 10582),

Gene: Lupine_34 Start: 14985, Stop: 15941, Start Num: 4

Candidate Starts for Lupine_34:

(Start: 4 @14985 has 43 MA's), (18, 15201), (20, 15252), (21, 15267), (27, 15324), (28, 15333), (31, 15399), (32, 15402), (38, 15462), (43, 15528), (53, 15600),

Gene: Lyell_41 Start: 16521, Stop: 17459, Start Num: 4

Candidate Starts for Lyell_41:

(Start: 4 @16521 has 43 MA's), (15, 16707), (18, 16737), (19, 16746), (21, 16803), (28, 16869), (30, 16917), (33, 16941), (44, 17061), (57, 17232), (58, 17253),

Gene: Mistmere_33 Start: 13839, Stop: 14786, Start Num: 4

Candidate Starts for Mistmere_33:

(1, 13794), (Start: 4 @13839 has 43 MA's), (15, 14031), (21, 14127), (28, 14193), (30, 14241), (33, 14265), (42, 14382), (47, 14406),

Gene: Musetta_41 Start: 16628, Stop: 17569, Start Num: 4

Candidate Starts for Musetta_41:

(1, 16583), (2, 16595), (Start: 4 @16628 has 43 MA's), (15, 16814), (18, 16844), (20, 16895), (28, 16976), (30, 17024), (33, 17048), (35, 17078), (42, 17165), (57, 17345), (58, 17366), (59, 17393),

Gene: Necrophoxinus_43 Start: 17207, Stop: 18148, Start Num: 4

Candidate Starts for Necrophoxinus_43:

(1, 17162), (2, 17174), (Start: 4 @17207 has 43 MA's), (15, 17393), (18, 17423), (20, 17474), (28, 17555), (30, 17603), (33, 17627), (42, 17744), (57, 17924), (58, 17945), (59, 17972), (62, 18059),

Gene: Nirvana_30 Start: 17412, Stop: 18488, Start Num: 4

Candidate Starts for Nirvana_30:

(3, 17400), (Start: 4 @17412 has 43 MA's), (8, 17508), (16, 17619), (26, 17766), (29, 17826), (36, 17898), (45, 18012), (50, 18066), (51, 18075), (60, 18261),

Gene: OlinDD_33 Start: 14764, Stop: 15750, Start Num: 4

Candidate Starts for OlinDD_33:

(Start: 4 @14764 has 43 MA's), (12, 14905), (17, 14974), (18, 14977), (25, 15091), (27, 15115), (28, 15124), (31, 15190), (32, 15193), (43, 15331), (53, 15403),

Gene: Pavlo_34 Start: 15260, Stop: 16216, Start Num: 4

Candidate Starts for Pavlo_34:

(Start: 4 @15260 has 43 MA's), (18, 15476), (20, 15527), (21, 15542), (28, 15608), (31, 15674), (32, 15677), (38, 15737), (40, 15773), (43, 15803), (53, 15875),

Gene: PhillyPhilly_35 Start: 15165, Stop: 16121, Start Num: 4

Candidate Starts for PhillyPhilly_35:

(Start: 4 @15165 has 43 MA's), (18, 15381), (20, 15432), (21, 15447), (27, 15504), (28, 15513), (31, 15579), (32, 15582), (38, 15642), (40, 15678), (43, 15708), (53, 15780),

Gene: Pioneer3_33 Start: 14748, Stop: 15734, Start Num: 4

Candidate Starts for Pioneer3_33:

(Start: 4 @14748 has 43 MA's), (12, 14889), (17, 14958), (18, 14961), (25, 15075), (27, 15099), (28, 15108), (31, 15174), (32, 15177), (43, 15315), (53, 15387),

Gene: Platte_33 Start: 14533, Stop: 15519, Start Num: 4

Candidate Starts for Platte_33:

(Start: 4 @14533 has 43 MA's), (12, 14674), (17, 14743), (18, 14746), (20, 14812), (25, 14860), (27, 14884), (28, 14893), (31, 14959), (32, 14962), (43, 15100), (53, 15172),

Gene: Quantum_26 Start: 15317, Stop: 16402, Start Num: 4

Candidate Starts for Quantum_26:

(Start: 4 @15317 has 43 MA's), (9, 15446), (10, 15452), (16, 15524), (26, 15671), (36, 15806), (39, 15851), (46, 15935), (50, 15980), (51, 15989), (63, 16259),

Gene: Roman_36 Start: 15631, Stop: 16587, Start Num: 4

Candidate Starts for Roman_36:

(Start: 4 @15631 has 43 MA's), (18, 15847), (20, 15898), (21, 15913), (27, 15970), (28, 15979), (31, 16045), (32, 16048), (38, 16108), (40, 16144), (43, 16174), (53, 16246),

Gene: RunningBrook_42 Start: 17199, Stop: 18140, Start Num: 4

Candidate Starts for RunningBrook_42:

(1, 17154), (2, 17166), (Start: 4 @17199 has 43 MA's), (15, 17385), (18, 17415), (20, 17466), (28, 17547), (30, 17595), (33, 17619), (42, 17736), (57, 17916), (58, 17937), (59, 17964), (62, 18051),

Gene: Saradis_36 Start: 15223, Stop: 16179, Start Num: 4

Candidate Starts for Saradis_36:

(Start: 4 @15223 has 43 MA's), (18, 15439), (20, 15490), (21, 15505), (27, 15562), (28, 15571), (31, 15637), (32, 15640), (38, 15700), (40, 15736), (43, 15766), (53, 15838),

Gene: Sarkar_27 Start: 15317, Stop: 16402, Start Num: 4

Candidate Starts for Sarkar_27:

(Start: 4 @15317 has 43 MA's), (9, 15446), (10, 15452), (16, 15524), (26, 15671), (36, 15806), (39, 15851), (46, 15935), (50, 15980), (51, 15989), (63, 16259),

Gene: Satis_27 Start: 15313, Stop: 16398, Start Num: 4

Candidate Starts for Satis_27:

(Start: 4 @15313 has 43 MA's), (9, 15442), (10, 15448), (16, 15520), (26, 15667), (36, 15802), (39, 15847), (46, 15931), (50, 15976), (51, 15985), (63, 16255),

Gene: Shroomer_45 Start: 16739, Stop: 17680, Start Num: 4

Candidate Starts for Shroomer_45:

(1, 16694), (2, 16706), (Start: 4 @16739 has 43 MA's), (15, 16925), (18, 16955), (20, 17006), (28, 17087), (30, 17135), (33, 17159), (42, 17276), (57, 17456), (58, 17477), (59, 17504), (62, 17591),

Gene: Solimine_36 Start: 15638, Stop: 16594, Start Num: 4

Candidate Starts for Solimine_36:

(Start: 4 @15638 has 43 MA's), (18, 15854), (20, 15905), (21, 15920), (27, 15977), (28, 15986), (31, 16052), (32, 16055), (38, 16115), (40, 16151), (43, 16181), (53, 16253),

Gene: SteakFry_43 Start: 16459, Stop: 17400, Start Num: 4

Candidate Starts for SteakFry_43:

(1, 16414), (2, 16426), (Start: 4 @16459 has 43 MA's), (15, 16645), (18, 16675), (20, 16726), (28, 16807), (30, 16855), (33, 16879), (42, 16996), (57, 17176), (58, 17197), (59, 17224), (62, 17311),

Gene: StevieWelch_41 Start: 16599, Stop: 17540, Start Num: 4

Candidate Starts for StevieWelch_41:

(1, 16554), (2, 16566), (Start: 4 @16599 has 43 MA's), (15, 16785), (18, 16815), (20, 16866), (28, 16947), (30, 16995), (33, 17019), (42, 17136), (49, 17190), (57, 17316), (58, 17337), (59, 17364),

Gene: Tandem_33 Start: 14687, Stop: 15673, Start Num: 4

Candidate Starts for Tandem_33:

(Start: 4 @14687 has 43 MA's), (12, 14828), (17, 14897), (18, 14900), (25, 15014), (27, 15038), (28, 15047), (31, 15113), (32, 15116), (43, 15254), (53, 15326),

Gene: Uterion_38 Start: 15730, Stop: 16686, Start Num: 4

Candidate Starts for Uterion_38:

(Start: 4 @15730 has 43 MA's), (18, 15946), (20, 15997), (21, 16012), (27, 16069), (28, 16078), (31, 16144), (32, 16147), (38, 16207), (40, 16243), (43, 16273), (53, 16345),

Gene: WaterT_24 Start: 9983, Stop: 10867, Start Num: 4

Candidate Starts for WaterT_24:

(Start: 4 @9983 has 43 MA's), (17, 10181), (23, 10274), (37, 10427), (43, 10502), (52, 10559), (65, 10856),

Gene: Welcome_42 Start: 16616, Stop: 17557, Start Num: 4

Candidate Starts for Welcome_42:

(1, 16571), (2, 16583), (Start: 4 @16616 has 43 MA's), (15, 16802), (18, 16832), (20, 16883), (28, 16964), (30, 17012), (33, 17036), (42, 17153), (49, 17207), (57, 17333), (58, 17354), (59, 17381),

Gene: Wolfstar_36 Start: 15552, Stop: 16523, Start Num: 4

Candidate Starts for Wolfstar_36:

(Start: 4 @15552 has 43 MA's), (17, 15762), (18, 15765), (21, 15846), (25, 15879), (27, 15903), (31, 15978), (32, 15981), (43, 16107), (53, 16182),

Gene: Yuma_40 Start: 16527, Stop: 17468, Start Num: 4

Candidate Starts for Yuma_40:

(1, 16482), (2, 16494), (Start: 4 @16527 has 43 MA's), (15, 16713), (18, 16743), (20, 16794), (28, 16875), (30, 16923), (33, 16947), (42, 17064), (57, 17244), (58, 17265), (59, 17292), (62, 17379),