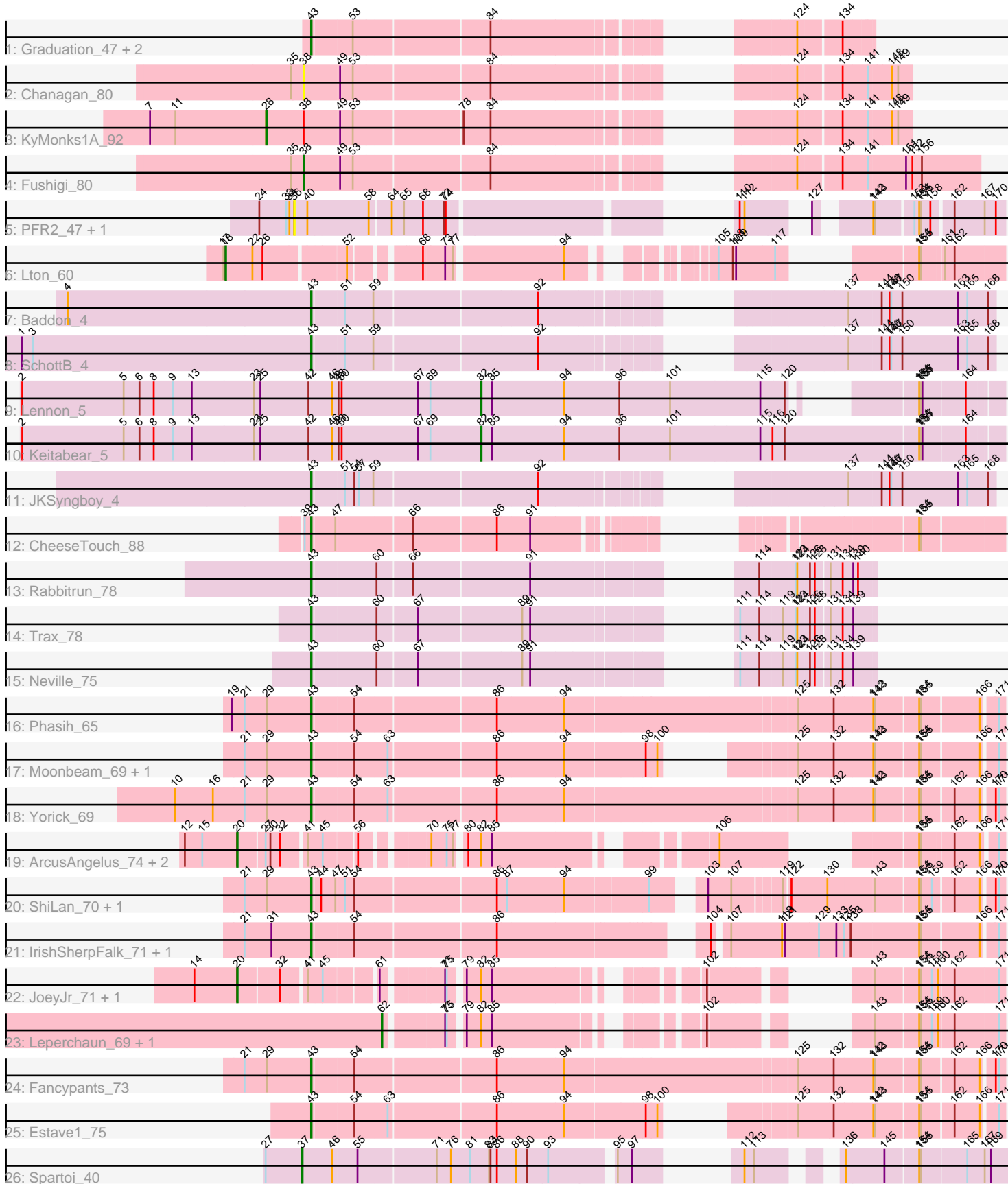


Pham 158036



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 158036 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158036 has 36 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Graduation_47, Papez_46, Magnar_43
- Track 2 : Chanagan_80
- Track 3 : KyMonks1A_92
- Track 4 : Fushigi_80
- Track 5 : PFR2_47, PFR1_45
- Track 6 : Lton_60
- Track 7 : Baddon_4
- Track 8 : SchottB_4
- Track 9 : Lennon_5
- Track 10 : Keitabear_5
- Track 11 : JKSyngboy_4
- Track 12 : CheeseTouch_88
- Track 13 : Rabbitrun_78
- Track 14 : Trax_78
- Track 15 : Neville_75
- Track 16 : Phasih_65
- Track 17 : Moonbeam_69, Starceвич_69
- Track 18 : Yorick_69
- Track 19 : ArcusAngelus_74, Chevrolet_80, Tweety_72
- Track 20 : ShiLan_70, Rita_76
- Track 21 : IrishSherpFalk_71, WillSterrel_71
- Track 22 : JoeyJr_71, RitaG_71
- Track 23 : Leperchaun_69, Polka14_75
- Track 24 : Fancypants_73
- Track 25 : Estave1_75
- Track 26 : Spartoi_40

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

The start number called the most often in the published annotations is 43, it was called in 20 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Baddon_4, CheeseTouch_88, Estave1_75, Fancypants_73, Graduation_47, IrishSherpFalk_71, JKSyngboy_4, Magnar_43, Moonbeam_69, Neville_75, Papez_46, Phasih_65, Rabbitrun_78, Rita_76, SchottB_4, ShiLan_70, Starcevich_69, Trax_78, WillSterrel_71, Yorick_69,

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

-

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

- ArcusAngelus_74, Chanagan_80, Chevrolet_80, Fushigi_80, JoeyJr_71, Keitabear_5, KyMonks1A_92, Lennon_5, Leperchaun_69, Lton_60, PFR1_45, PFR2_47, Polka14_75, RitaG_71, Spartoi_40, Tweety_72,

Summary by start number:

Start 18:

- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lton_60 (CZ),

Start 20:

- Found in 5 of 36 (13.9%) of genes in pham
- Manual Annotations of this start: 4 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArcusAngelus_74 (F1), Chevrolet_80 (F1), JoeyJr_71 (F1), RitaG_71 (F1), Tweety_72 (F1),

Start 28:

- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KyMonks1A_92 (A1),

Start 36:

- Found in 2 of 36 (5.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PFR1_45 (BX), PFR2_47 (BX),

Start 37:

- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Spartoi_40 (singleton),

Start 38:

- Found in 3 of 36 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Chanagan_80 (A1), Fushigi_80 (A1),

Start 43:

- Found in 20 of 36 (55.6%) of genes in pham
- Manual Annotations of this start: 20 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Baddon_4 (DE1), CheeseTouch_88 (DN1), Estave1_75 (F1), Fancypants_73 (F1), Graduation_47 (A1), IrishSherpFalk_71 (F1), JKSyngboy_4 (DE1), Magnar_43 (A1), Moonbeam_69 (F1), Neville_75 (DU2), Papez_46 (A1), Phasih_65 (F1), Rabbitrun_78 (DU2), Rita_76 (F1), SchottB_4 (DE1), ShiLan_70 (F1), Starcevich_69 (F1), Trax_78 (DU2), WillSterrel_71 (F1), Yorick_69 (F1),

Start 62:

- Found in 2 of 36 (5.6%) of genes in pham
- Manual Annotations of this start: 2 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Leperchaun_69 (F1), Polka14_75 (F1),

Start 82:

- Found in 9 of 36 (25.0%) of genes in pham
- Manual Annotations of this start: 2 of 32
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Keitabear_5 (DE1), Lennon_5 (DE1),

Summary by clusters:

There are 8 clusters represented in this pham: F1, singleton, DE1, A1, CZ, DN1, DU2, BX,

Info for manual annotations of cluster A1:

- Start number 28 was manually annotated 1 time for cluster A1.
- Start number 38 was manually annotated 1 time for cluster A1.
- Start number 43 was manually annotated 3 times for cluster A1.

Info for manual annotations of cluster CZ:

- Start number 18 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster DE1:

- Start number 43 was manually annotated 3 times for cluster DE1.
- Start number 82 was manually annotated 2 times for cluster DE1.

Info for manual annotations of cluster DN1:

- Start number 43 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DU2:

- Start number 43 was manually annotated 3 times for cluster DU2.

Info for manual annotations of cluster F1:

- Start number 20 was manually annotated 4 times for cluster F1.
- Start number 43 was manually annotated 10 times for cluster F1.
- Start number 62 was manually annotated 2 times for cluster F1.

Gene Information:

Gene: ArcusAngelus_74 Start: 44743, Stop: 45855, Start Num: 20

Candidate Starts for ArcusAngelus_74:

(12, 44644), (15, 44677), (Start: 20 @44743 has 4 MA's), (27, 44791), (30, 44800), (32, 44818), (41, 44854), (45, 44878), (56, 44935), (70, 45040), (75, 45067), (77, 45079), (80, 45091), (Start: 82 @45115 has 2 MA's), (85, 45136), (106, 45472), (154, 45712), (155, 45715), (162, 45772), (166, 45820), (171, 45844),

Gene: Baddon_4 Start: 2579, Stop: 3649, Start Num: 43

Candidate Starts for Baddon_4:

(4, 2123), (Start: 43 @2579 has 20 MA's), (51, 2636), (59, 2690), (92, 2984), (137, 3377), (144, 3437), (146, 3452), (147, 3455), (150, 3476), (163, 3581), (165, 3599), (168, 3635),

Gene: Chanagan_80 Start: 48048, Stop: 47131, Start Num: 38

Candidate Starts for Chanagan_80:

(35, 48069), (Start: 38 @48048 has 1 MA's), (49, 47982), (53, 47958), (84, 47712), (124, 47328), (134, 47253), (141, 47208), (148, 47169), (149, 47157),

Gene: CheeseTouch_88 Start: 43473, Stop: 44507, Start Num: 43

Candidate Starts for CheeseTouch_88:

(39, 43464), (Start: 43 @43473 has 20 MA's), (47, 43515), (66, 43650), (86, 43803), (91, 43863), (154, 44355), (155, 44358),

Gene: Chevrolet_80 Start: 44744, Stop: 45856, Start Num: 20

Candidate Starts for Chevrolet_80:

(12, 44645), (15, 44678), (Start: 20 @44744 has 4 MA's), (27, 44792), (30, 44801), (32, 44819), (41, 44855), (45, 44879), (56, 44936), (70, 45041), (75, 45068), (77, 45080), (80, 45092), (Start: 82 @45116 has 2 MA's), (85, 45137), (106, 45473), (154, 45713), (155, 45716), (162, 45773), (166, 45821), (171, 45845),

Gene: Estave1_75 Start: 47847, Stop: 48950, Start Num: 43

Candidate Starts for Estave1_75:

(Start: 43 @47847 has 20 MA's), (54, 47922), (63, 47982), (86, 48177), (94, 48300), (98, 48444), (100, 48465), (125, 48594), (132, 48660), (142, 48726), (143, 48729), (154, 48807), (155, 48810), (162, 48867), (166, 48915), (171, 48939),

Gene: Fancypants_73 Start: 46022, Stop: 47248, Start Num: 43

Candidate Starts for Fancypants_73:

(21, 45899), (29, 45941), (Start: 43 @46022 has 20 MA's), (54, 46097), (86, 46352), (94, 46475), (125, 46892), (132, 46958), (142, 47024), (143, 47027), (154, 47105), (155, 47108), (162, 47165), (166, 47213), (170, 47231), (171, 47237),

Gene: Fushigi_80 Start: 47333, Stop: 46284, Start Num: 38

Candidate Starts for Fushigi_80:

(35, 47354), (Start: 38 @47333 has 1 MA's), (49, 47267), (53, 47243), (84, 46997), (124, 46613), (134, 46538), (141, 46493), (151, 46424), (152, 46412), (156, 46394),

Gene: Graduation_47 Start: 34493, Stop: 33666, Start Num: 43

Candidate Starts for Graduation_47:

(Start: 43 @34493 has 20 MA's), (53, 34421), (84, 34175), (124, 33791), (134, 33716),

Gene: IrishSherpFalk_71 Start: 45147, Stop: 46322, Start Num: 43

Candidate Starts for IrishSherpFalk_71:

(21, 45024), (31, 45072), (Start: 43 @45147 has 20 MA's), (54, 45222), (86, 45477), (104, 45804), (107, 45828), (118, 45924), (121, 45930), (129, 45993), (133, 46026), (135, 46041), (138, 46053), (154, 46179), (155, 46182), (166, 46287), (171, 46311),

Gene: JKSyngboy_4 Start: 2579, Stop: 3643, Start Num: 43

Candidate Starts for JKSyngboy_4:

(Start: 43 @2579 has 20 MA's), (51, 2636), (54, 2654), (57, 2663), (59, 2690), (92, 2984), (137, 3371), (144, 3431), (146, 3446), (147, 3449), (150, 3470), (163, 3575), (165, 3593), (168, 3629),

Gene: JoeyJr_71 Start: 45459, Stop: 46547, Start Num: 20

Candidate Starts for JoeyJr_71:

(14, 45378), (Start: 20 @45459 has 4 MA's), (32, 45534), (41, 45570), (45, 45594), (61, 45681), (73, 45780), (75, 45783), (79, 45804), (Start: 82 @45831 has 2 MA's), (85, 45852), (102, 46155), (143, 46317), (154, 46395), (155, 46398), (159, 46419), (160, 46428), (162, 46455), (171, 46536),

Gene: Keitabear_5 Start: 4089, Stop: 5051, Start Num: 82

Candidate Starts for Keitabear_5:

(2, 3228), (5, 3420), (6, 3450), (8, 3477), (9, 3513), (13, 3549), (23, 3666), (25, 3678), (42, 3765), (46, 3807), (48, 3819), (50, 3825), (67, 3969), (69, 3993), (Start: 82 @4089 has 2 MA's), (85, 4110), (94, 4245), (96, 4350), (101, 4446), (115, 4614), (116, 4635), (120, 4656), (154, 4905), (155, 4908), (157, 4911), (164, 4989),

Gene: KyMonks1A_92 Start: 50898, Stop: 49912, Start Num: 28

Candidate Starts for KyMonks1A_92:

(7, 51117), (11, 51069), (Start: 28 @50898 has 1 MA's), (Start: 38 @50829 has 1 MA's), (49, 50763), (53, 50739), (78, 50544), (84, 50493), (124, 50109), (134, 50034), (141, 49989), (148, 49950), (149, 49938),

Gene: Lennon_5 Start: 3295, Stop: 4143, Start Num: 82

Candidate Starts for Lennon_5:

(2, 2434), (5, 2626), (6, 2656), (8, 2683), (9, 2719), (13, 2755), (23, 2872), (25, 2884), (42, 2971), (46, 3013), (48, 3025), (50, 3031), (67, 3175), (69, 3199), (Start: 82 @3295 has 2 MA's), (85, 3316), (94, 3451), (96, 3556), (101, 3652), (115, 3820), (120, 3862), (154, 3997), (155, 4000), (157, 4003), (164, 4081),

Gene: Leperchaun_69 Start: 44915, Stop: 45781, Start Num: 62

Candidate Starts for Leperchaun_69:

(Start: 62 @44915 has 2 MA's), (73, 45014), (75, 45017), (79, 45038), (Start: 82 @45065 has 2 MA's), (85, 45086), (102, 45389), (143, 45551), (154, 45629), (155, 45632), (159, 45653), (160, 45662), (162, 45689), (171, 45770),

Gene: Lton_60 Start: 35512, Stop: 36642, Start Num: 18

Candidate Starts for Lton_60:

(17, 35509), (Start: 18 @35512 has 1 MA's), (22, 35560), (26, 35578), (52, 35713), (68, 35821), (73, 35857), (77, 35872), (94, 36064), (105, 36241), (108, 36268), (109, 36274), (117, 36346), (154, 36490), (155, 36493), (161, 36532), (162, 36550),

Gene: Magnar_43 Start: 33305, Stop: 32478, Start Num: 43

Candidate Starts for Magnar_43:

(Start: 43 @33305 has 20 MA's), (53, 33233), (84, 32987), (124, 32603), (134, 32528),

Gene: Moonbeam_69 Start: 44939, Stop: 46042, Start Num: 43

Candidate Starts for Moonbeam_69:

(21, 44816), (29, 44858), (Start: 43 @44939 has 20 MA's), (54, 45014), (63, 45074), (86, 45269), (94, 45392), (98, 45536), (100, 45557), (125, 45686), (132, 45752), (142, 45818), (143, 45821), (154, 45899), (155, 45902), (166, 46007), (171, 46031),

Gene: Neville_75 Start: 47371, Stop: 48234, Start Num: 43

Candidate Starts for Neville_75:

(Start: 43 @47371 has 20 MA's), (60, 47485), (67, 47557), (89, 47746), (91, 47761), (111, 48001), (114, 48037), (119, 48076), (123, 48097), (124, 48100), (126, 48121), (128, 48130), (131, 48154), (134, 48175), (139, 48193),

Gene: PFR1_45 Start: 31715, Stop: 32761, Start Num: 36

Candidate Starts for PFR1_45:

(24, 31649), (33, 31700), (34, 31706), (36, 31715), (40, 31739), (58, 31850), (64, 31886), (65, 31907), (68, 31943), (72, 31979), (74, 31982), (110, 32363), (112, 32372), (127, 32453), (142, 32531), (143, 32534), (153, 32600), (154, 32609), (155, 32612), (158, 32630), (162, 32666), (167, 32723), (170, 32744),

Gene: PFR2_47 Start: 33284, Stop: 34330, Start Num: 36

Candidate Starts for PFR2_47:

(24, 33218), (33, 33269), (34, 33275), (36, 33284), (40, 33308), (58, 33419), (64, 33455), (65, 33476), (68, 33512), (72, 33548), (74, 33551), (110, 33932), (112, 33941), (127, 34022), (142, 34100), (143, 34103), (153, 34169), (154, 34178), (155, 34181), (158, 34199), (162, 34235), (167, 34292), (170, 34313),

Gene: Papez_46 Start: 35129, Stop: 34302, Start Num: 43

Candidate Starts for Papez_46:

(Start: 43 @35129 has 20 MA's), (53, 35057), (84, 34811), (124, 34427), (134, 34352),

Gene: Phasih_65 Start: 42908, Stop: 44134, Start Num: 43

Candidate Starts for Phasih_65:

(19, 42761), (21, 42785), (29, 42827), (Start: 43 @42908 has 20 MA's), (54, 42983), (86, 43238), (94, 43361), (125, 43778), (132, 43844), (142, 43910), (143, 43913), (154, 43991), (155, 43994), (166, 44099), (171, 44123),

Gene: Polka14_75 Start: 46662, Stop: 47525, Start Num: 62

Candidate Starts for Polka14_75:

(Start: 62 @46662 has 2 MA's), (73, 46758), (75, 46761), (79, 46782), (Start: 82 @46809 has 2 MA's), (85, 46830), (102, 47133), (143, 47295), (154, 47373), (155, 47376), (159, 47397), (160, 47406), (162, 47433), (171, 47514),

Gene: Rabbitrun_78 Start: 47636, Stop: 48499, Start Num: 43

Candidate Starts for Rabbitrun_78:

(Start: 43 @47636 has 20 MA's), (60, 47750), (66, 47813), (91, 48026), (114, 48302), (123, 48362), (124, 48365), (126, 48386), (128, 48395), (131, 48419), (134, 48440), (139, 48458), (140, 48467),

Gene: Rita_76 Start: 46350, Stop: 47519, Start Num: 43

Candidate Starts for Rita_76:

(21, 46227), (29, 46269), (Start: 43 @46350 has 20 MA's), (44, 46365), (47, 46392), (51, 46407), (54, 46425), (86, 46680), (87, 46698), (94, 46803), (99, 46950), (103, 47019), (107, 47061), (119, 47145), (122, 47154), (130, 47217), (143, 47298), (154, 47376), (155, 47379), (159, 47400), (162, 47436), (166, 47484), (170, 47502), (171, 47508),

Gene: RitaG_71 Start: 45580, Stop: 46668, Start Num: 20

Candidate Starts for RitaG_71:

(14, 45499), (Start: 20 @45580 has 4 MA's), (32, 45655), (41, 45691), (45, 45715), (61, 45802), (73, 45901), (75, 45904), (79, 45925), (Start: 82 @45952 has 2 MA's), (85, 45973), (102, 46276), (143, 46438), (154, 46516), (155, 46519), (159, 46540), (160, 46549), (162, 46576), (171, 46657),

Gene: SchottB_4 Start: 2583, Stop: 3653, Start Num: 43

Candidate Starts for SchottB_4:

(1, 2040), (3, 2061), (Start: 43 @2583 has 20 MA's), (51, 2640), (59, 2694), (92, 2988), (137, 3381), (144, 3441), (146, 3456), (147, 3459), (150, 3480), (163, 3585), (165, 3603), (168, 3639),

Gene: ShiLan_70 Start: 46343, Stop: 47512, Start Num: 43

Candidate Starts for ShiLan_70:

(21, 46220), (29, 46262), (Start: 43 @46343 has 20 MA's), (44, 46358), (47, 46385), (51, 46400), (54, 46418), (86, 46673), (87, 46691), (94, 46796), (99, 46943), (103, 47012), (107, 47054), (119, 47138), (122, 47147), (130, 47210), (143, 47291), (154, 47369), (155, 47372), (159, 47393), (162, 47429), (166, 47477), (170, 47495), (171, 47501),

Gene: Spartoi_40 Start: 27031, Stop: 28128, Start Num: 37

Candidate Starts for Spartoi_40:

(27, 26962), (Start: 37 @27031 has 1 MA's), (46, 27088), (55, 27133), (71, 27274), (76, 27301), (81, 27337), (83, 27373), (84, 27376), (86, 27388), (88, 27424), (90, 27445), (93, 27484), (95, 27592), (97, 27619), (112, 27700), (113, 27718), (136, 27823), (145, 27895), (154, 27955), (155, 27958), (165, 28042), (167, 28075), (169, 28087),

Gene: Starcevich_69 Start: 45704, Stop: 46807, Start Num: 43

Candidate Starts for Starcevich_69:

(21, 45581), (29, 45623), (Start: 43 @45704 has 20 MA's), (54, 45779), (63, 45839), (86, 46034), (94, 46157), (98, 46301), (100, 46322), (125, 46451), (132, 46517), (142, 46583), (143, 46586), (154, 46664), (155, 46667), (166, 46772), (171, 46796),

Gene: Trax_78 Start: 48336, Stop: 49199, Start Num: 43

Candidate Starts for Trax_78:

(Start: 43 @48336 has 20 MA's), (60, 48450), (67, 48522), (89, 48711), (91, 48726), (111, 48966), (114, 49002), (119, 49041), (123, 49062), (124, 49065), (126, 49086), (128, 49095), (131, 49119), (134, 49140), (139, 49158),

Gene: Tweety_72 Start: 45824, Stop: 46936, Start Num: 20

Candidate Starts for Tweety_72:

(12, 45725), (15, 45758), (Start: 20 @45824 has 4 MA's), (27, 45872), (30, 45881), (32, 45899), (41, 45935), (45, 45959), (56, 46016), (70, 46121), (75, 46148), (77, 46160), (80, 46172), (Start: 82 @46196 has 2 MA's), (85, 46217), (106, 46553), (154, 46793), (155, 46796), (162, 46853), (166, 46901), (171, 46925),

Gene: WillSterrel_71 Start: 45180, Stop: 46355, Start Num: 43

Candidate Starts for WillSterrel_71:

(21, 45057), (31, 45105), (Start: 43 @45180 has 20 MA's), (54, 45255), (86, 45510), (104, 45837), (107, 45861), (118, 45957), (121, 45963), (129, 46026), (133, 46059), (135, 46074), (138, 46086), (154, 46212), (155, 46215), (166, 46320), (171, 46344),

Gene: Yorick_69 Start: 45654, Stop: 46880, Start Num: 43

Candidate Starts for Yorick_69:

(10, 45402), (16, 45474), (21, 45531), (29, 45573), (Start: 43 @45654 has 20 MA's), (54, 45729), (63, 45789), (86, 45984), (94, 46107), (125, 46524), (132, 46590), (142, 46656), (143, 46659), (154, 46737), (155, 46740), (162, 46797), (166, 46845), (170, 46863), (171, 46869),