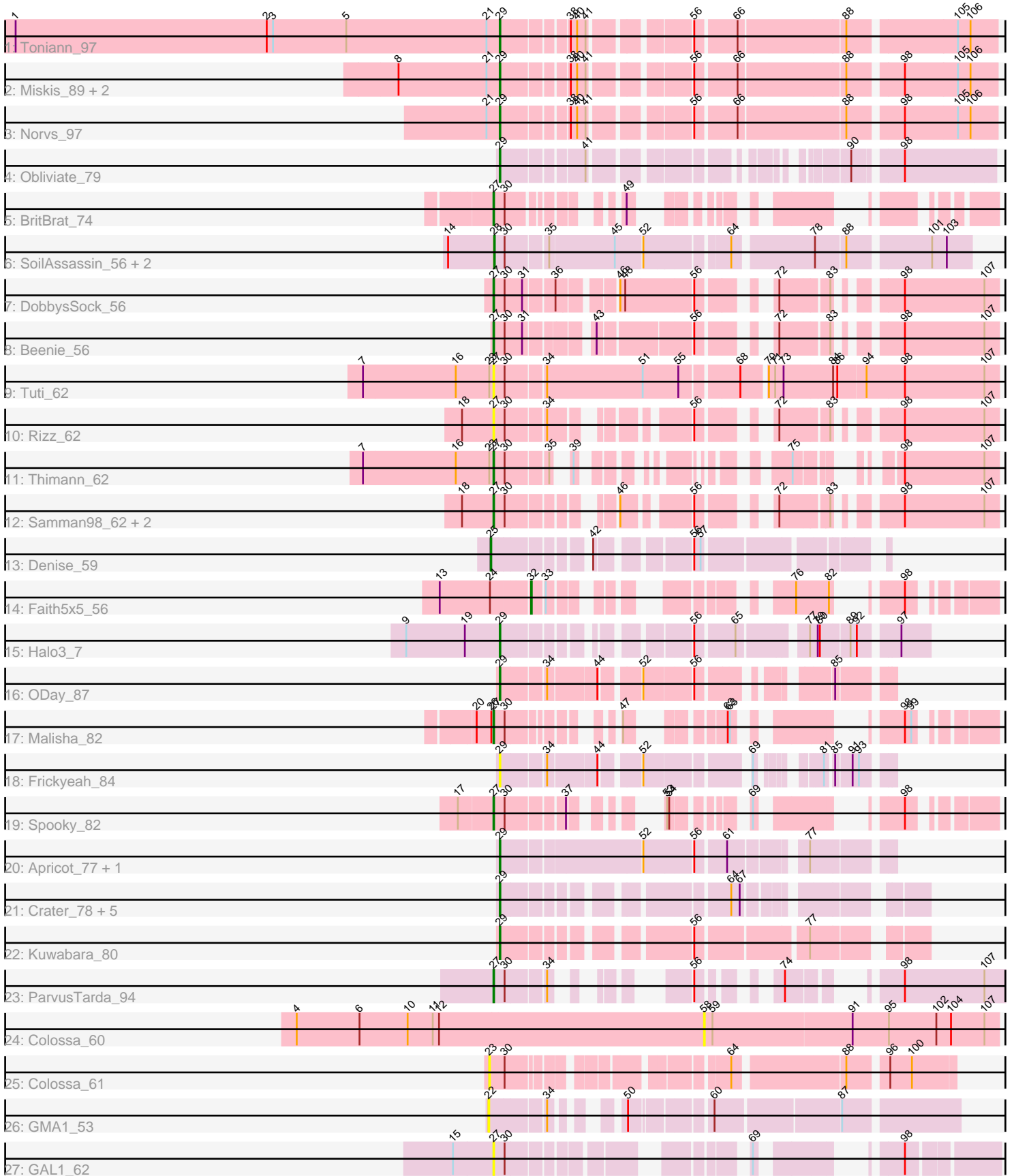


Pham 296731



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 296731 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296731 has 39 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Toniann_97
- Track 2 : Miskis_89, Dusty_93, Aphelion_96
- Track 3 : Norvs_97
- Track 4 : Obliviate_79
- Track 5 : BritBrat_74
- Track 6 : SoilAssassin_56, Attis_56, LordFarquaad_58
- Track 7 : DobbysSock_56
- Track 8 : Beenie_56
- Track 9 : Tuti_62
- Track 10 : Rizz_62
- Track 11 : Thimann_62
- Track 12 : Samman98_62, Invecetra_64, Clark_61
- Track 13 : Denise_59
- Track 14 : Faith5x5_56
- Track 15 : Halo3_7
- Track 16 : ODay_87
- Track 17 : Malisha_82
- Track 18 : Frickyeah_84
- Track 19 : Spooky_82
- Track 20 : Apricot_77, Lton_57
- Track 21 : Crater_78, Leroy_79, Pepperoni_56, Horus_80, Phistory_77, Ecliptus_84
- Track 22 : Kuwabara_80
- Track 23 : ParvusTarda_94
- Track 24 : Colossa_60
- Track 25 : Colossa_61
- Track 26 : GMA1_53
- Track 27 : GAL1_62

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

The start number called the most often in the published annotations is 29, it was called in 16 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aphelion_96, Apricot_77, Crater_78, Dusty_93, Ecliptus_84, Frickyeah_84, Halo3_7, Horus_80, Kuwabara_80, Leroy_79, Lton_57, Miskis_89, Norvs_97, ODay_87, Obliviate_79, Pepperoni_56, Phistory_77, Toniann_97,

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

-

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

- Attis_56, Beenie_56, BritBrat_74, Clark_61, Colossa_60, Colossa_61, Denise_59, DobbysSock_56, Faith5x5_56, GAL1_62, GMA1_53, Invecetra_64, LordFarquaad_58, Malisha_82, ParvusTarda_94, Rizz_62, Samman98_62, SoilAssassin_56, Spooky_82, Thimann_62, Tuti_62,

Summary by start number:

Start 22:

- Found in 1 of 39 (2.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA1_53 (singleton),

Start 23:

- Found in 3 of 39 (7.7%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Colossa_61 (KA),

Start 25:

- Found in 1 of 39 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Denise_59 (CZ5),

Start 27:

- Found in 13 of 39 (33.3%) of genes in pham
- Manual Annotations of this start: 10 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beenie_56 (CZ4), BritBrat_74 (CY2), Clark_61 (CZ4), DobbysSock_56 (CZ4), GAL1_62 (singleton), Invecetra_64 (CZ4), Malisha_82 (DN), ParvusTarda_94 (DV), Rizz_62 (CZ4), Samman98_62 (CZ4), Spooky_82 (DN2), Thimann_62 (CZ4), Tuti_62 (CZ4),

Start 28:

- Found in 3 of 39 (7.7%) of genes in pham
- Manual Annotations of this start: 3 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attis_56 (CZ2), LordFarquaad_58 (CZ2), SoilAssassin_56 (CZ2),

Start 29:

- Found in 18 of 39 (46.2%) of genes in pham
- Manual Annotations of this start: 16 of 31
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Aphelion_96 (CQ1), Apricot_77 (DN3), Crater_78 (DN3), Dusty_93 (CQ1), Ecliptus_84 (DN), Frickyeah_84 (DN1), Halo3_7 (DC1), Horus_80 (DN1), Kuwabara_80 (DN4), Leroy_79 (DN1), Lton_57 (CZ), Miskis_89 (CQ1), Norvs_97 (CQ1), ODay_87 (DN), Obliviate_79 (CV), Pepperoni_56 (CZ), Phistory_77 (DN1), Toniann_97 (CQ1),

Start 32:

- Found in 1 of 39 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Faith5x5_56 (CZ6),

Start 58:

- Found in 1 of 39 (2.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colossa_60 (KA),

Summary by clusters:

There are 17 clusters represented in this pham: DN, CY2, singleton, DN4, CZ2, CZ6, KA, CZ4, CZ5, CZ, DN1, DN3, DN2, DV, CQ1, CV, DC1,

Info for manual annotations of cluster CQ1:

- Start number 29 was manually annotated 5 times for cluster CQ1.

Info for manual annotations of cluster CV:

- Start number 29 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CY2:

- Start number 27 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

- Start number 29 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:

- Start number 28 was manually annotated 3 times for cluster CZ2.

Info for manual annotations of cluster CZ4:

- Start number 27 was manually annotated 6 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 25 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 32 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DC1:

- Start number 29 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DN:

- Start number 27 was manually annotated 1 time for cluster DN.
- Start number 29 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 29 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 27 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 29 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 29 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DV:

- Start number 27 was manually annotated 1 time for cluster DV.

Gene Information:

Gene: Aphelion_96 Start: 59234, Stop: 59845, Start Num: 29

Candidate Starts for Aphelion_96:

(8, 59090), (21, 59216), (Start: 29 @59234 has 16 MA's), (38, 59315), (40, 59324), (41, 59336), (56, 59450), (66, 59504), (88, 59645), (98, 59714), (105, 59789), (106, 59807),

Gene: Apricot_77 Start: 44433, Stop: 44912, Start Num: 29

Candidate Starts for Apricot_77:

(Start: 29 @44433 has 16 MA's), (52, 44619), (56, 44682), (61, 44721), (77, 44811),

Gene: Attis_56 Start: 39408, Stop: 40010, Start Num: 28

Candidate Starts for Attis_56:

(14, 39342), (Start: 28 @39408 has 3 MA's), (30, 39420), (35, 39474), (45, 39564), (52, 39600), (64, 39705), (78, 39807), (88, 39846), (101, 39954), (103, 39975),

Gene: Beenie_56 Start: 40503, Stop: 41057, Start Num: 27

Candidate Starts for Beenie_56:

(Start: 27 @40503 has 10 MA's), (30, 40515), (31, 40539), (43, 40614), (56, 40731), (72, 40797), (83, 40860), (98, 40923), (107, 41037),

Gene: BritBrat_74 Start: 46520, Stop: 46924, Start Num: 27

Candidate Starts for BritBrat_74:

(Start: 27 @46520 has 10 MA's), (30, 46532), (49, 46631),

Gene: Clark_61 Start: 40299, Stop: 40820, Start Num: 27

Candidate Starts for Clark_61:

(18, 40254), (Start: 27 @40299 has 10 MA's), (30, 40311), (46, 40419), (56, 40494), (72, 40560), (83, 40623), (98, 40686), (107, 40800),

Gene: Colossa_60 Start: 39464, Stop: 39880, Start Num: 58

Candidate Starts for Colossa_60:

(4, 38885), (6, 38975), (10, 39044), (11, 39080), (12, 39089), (58, 39464), (59, 39476), (91, 39674), (95, 39725), (102, 39791), (104, 39812), (107, 39860),

Gene: Colossa_61 Start: 39877, Stop: 40413, Start Num: 23
Candidate Starts for Colossa_61:
(23, 39877), (30, 39895), (64, 40135), (88, 40276), (96, 40324), (100, 40354),

Gene: Crater_78 Start: 45182, Stop: 45649, Start Num: 29
Candidate Starts for Crater_78:
(Start: 29 @45182 has 16 MA's), (64, 45437), (67, 45449),

Gene: Denise_59 Start: 37230, Stop: 37658, Start Num: 25
Candidate Starts for Denise_59:
(Start: 25 @37230 has 1 MA's), (42, 37338), (56, 37440), (57, 37449),

Gene: DobbysSock_56 Start: 39905, Stop: 40468, Start Num: 27
Candidate Starts for DobbysSock_56:
(Start: 27 @39905 has 10 MA's), (30, 39917), (31, 39941), (36, 39980), (46, 40046), (48, 40052), (56, 40142), (72, 40208), (83, 40271), (98, 40334), (107, 40448),

Gene: Dusty_93 Start: 57740, Stop: 58351, Start Num: 29
Candidate Starts for Dusty_93:
(8, 57596), (21, 57722), (Start: 29 @57740 has 16 MA's), (38, 57821), (40, 57830), (41, 57842), (56, 57956), (66, 58010), (88, 58151), (98, 58220), (105, 58295), (106, 58313),

Gene: Ecliptus_84 Start: 48151, Stop: 48618, Start Num: 29
Candidate Starts for Ecliptus_84:
(Start: 29 @48151 has 16 MA's), (64, 48406), (67, 48418),

Gene: Faith5x5_56 Start: 35249, Stop: 35653, Start Num: 32
Candidate Starts for Faith5x5_56:
(13, 35126), (24, 35198), (Start: 32 @35249 has 1 MA's), (33, 35264), (76, 35471), (82, 35516), (98, 35558),

Gene: Frickyeah_84 Start: 46460, Stop: 46879, Start Num: 29
Candidate Starts for Frickyeah_84:
(Start: 29 @46460 has 16 MA's), (34, 46517), (44, 46580), (52, 46625), (69, 46748), (81, 46802), (85, 46811), (91, 46832), (93, 46841),

Gene: GAL1_62 Start: 40466, Stop: 40969, Start Num: 27
Candidate Starts for GAL1_62:
(15, 40409), (Start: 27 @40466 has 10 MA's), (30, 40478), (69, 40727), (98, 40850),

Gene: GMA1_53 Start: 33138, Stop: 33686, Start Num: 22
Candidate Starts for GMA1_53:
(22, 33138), (34, 33210), (50, 33267), (60, 33363), (87, 33531),

Gene: Halo3_7 Start: 3546, Stop: 4028, Start Num: 29
Candidate Starts for Halo3_7:
(9, 3414), (19, 3498), (Start: 29 @3546 has 16 MA's), (56, 3744), (65, 3795), (77, 3879), (79, 3888), (80, 3891), (89, 3930), (92, 3939), (97, 3987),

Gene: Horus_80 Start: 47249, Stop: 47716, Start Num: 29
Candidate Starts for Horus_80:
(Start: 29 @47249 has 16 MA's), (64, 47504), (67, 47516),

Gene: Invecetra_64 Start: 41872, Stop: 42393, Start Num: 27

Candidate Starts for Invecetra_64:

(18, 41827), (Start: 27 @41872 has 10 MA's), (30, 41884), (46, 41992), (56, 42067), (72, 42133), (83, 42196), (98, 42259), (107, 42373),

Gene: Kuwabara_80 Start: 47595, Stop: 48080, Start Num: 29

Candidate Starts for Kuwabara_80:

(Start: 29 @47595 has 16 MA's), (56, 47805), (77, 47946),

Gene: Leroy_79 Start: 45444, Stop: 45911, Start Num: 29

Candidate Starts for Leroy_79:

(Start: 29 @45444 has 16 MA's), (64, 45699), (67, 45711),

Gene: LordFarquaad_58 Start: 39389, Stop: 39991, Start Num: 28

Candidate Starts for LordFarquaad_58:

(14, 39323), (Start: 28 @39389 has 3 MA's), (30, 39401), (35, 39455), (45, 39545), (52, 39581), (64, 39686), (78, 39788), (88, 39827), (101, 39935), (103, 39956),

Gene: Lton_57 Start: 34468, Stop: 34947, Start Num: 29

Candidate Starts for Lton_57:

(Start: 29 @34468 has 16 MA's), (52, 34654), (56, 34717), (61, 34756), (77, 34846),

Gene: Malisha_82 Start: 49477, Stop: 49902, Start Num: 27

Candidate Starts for Malisha_82:

(20, 49453), (26, 49474), (Start: 27 @49477 has 10 MA's), (30, 49489), (47, 49585), (62, 49669), (63, 49672), (98, 49807), (99, 49816),

Gene: Miskis_89 Start: 57403, Stop: 58014, Start Num: 29

Candidate Starts for Miskis_89:

(8, 57259), (21, 57385), (Start: 29 @57403 has 16 MA's), (38, 57484), (40, 57493), (41, 57505), (56, 57619), (66, 57673), (88, 57814), (98, 57883), (105, 57958), (106, 57976),

Gene: Norvs_97 Start: 58732, Stop: 59343, Start Num: 29

Candidate Starts for Norvs_97:

(21, 58714), (Start: 29 @58732 has 16 MA's), (38, 58813), (40, 58822), (41, 58834), (56, 58948), (66, 59002), (88, 59143), (98, 59212), (105, 59287), (106, 59305),

Gene: ODay_87 Start: 48574, Stop: 49005, Start Num: 29

Candidate Starts for ODay_87:

(Start: 29 @48574 has 16 MA's), (34, 48631), (44, 48694), (52, 48739), (56, 48802), (85, 48937),

Gene: Obliviate_79 Start: 48067, Stop: 48606, Start Num: 29

Candidate Starts for Obliviate_79:

(Start: 29 @48067 has 16 MA's), (41, 48169), (90, 48421), (98, 48478),

Gene: ParvusTarda_94 Start: 64352, Stop: 64807, Start Num: 27

Candidate Starts for ParvusTarda_94:

(Start: 27 @64352 has 10 MA's), (30, 64364), (34, 64415), (56, 64505), (74, 64568), (98, 64661), (107, 64775),

Gene: Pepperoni_56 Start: 35924, Stop: 36391, Start Num: 29

Candidate Starts for Pepperoni_56:

(Start: 29 @35924 has 16 MA's), (64, 36179), (67, 36191),

Gene: Phistory_77 Start: 44347, Stop: 44814, Start Num: 29

Candidate Starts for Phistory_77:

(Start: 29 @44347 has 16 MA's), (64, 44602), (67, 44614),

Gene: Rizz_62 Start: 41085, Stop: 41609, Start Num: 27

Candidate Starts for Rizz_62:

(18, 41040), (Start: 27 @41085 has 10 MA's), (30, 41097), (34, 41148), (56, 41283), (72, 41349), (83, 41412), (98, 41475), (107, 41589),

Gene: Samman98_62 Start: 40402, Stop: 40923, Start Num: 27

Candidate Starts for Samman98_62:

(18, 40357), (Start: 27 @40402 has 10 MA's), (30, 40414), (46, 40522), (56, 40597), (72, 40663), (83, 40726), (98, 40789), (107, 40903),

Gene: SoilAssassin_56 Start: 39407, Stop: 40009, Start Num: 28

Candidate Starts for SoilAssassin_56:

(14, 39341), (Start: 28 @39407 has 3 MA's), (30, 39419), (35, 39473), (45, 39563), (52, 39599), (64, 39704), (78, 39806), (88, 39845), (101, 39953), (103, 39974),

Gene: Spooky_82 Start: 46716, Stop: 47147, Start Num: 27

Candidate Starts for Spooky_82:

(17, 46671), (Start: 27 @46716 has 10 MA's), (30, 46728), (37, 46800), (53, 46857), (54, 46860), (69, 46929), (98, 47052),

Gene: Thimann_62 Start: 40740, Stop: 41195, Start Num: 27

Candidate Starts for Thimann_62:

(7, 40554), (16, 40686), (23, 40734), (Start: 27 @40740 has 10 MA's), (30, 40752), (35, 40806), (39, 40815), (75, 40983), (98, 41061), (107, 41175),

Gene: Toniann_97 Start: 58672, Stop: 59283, Start Num: 29

Candidate Starts for Toniann_97:

(1, 57979), (2, 58339), (3, 58348), (5, 58453), (21, 58654), (Start: 29 @58672 has 16 MA's), (38, 58753), (40, 58762), (41, 58774), (56, 58888), (66, 58942), (88, 59083), (105, 59227), (106, 59245),

Gene: Tuti_62 Start: 41262, Stop: 41939, Start Num: 27

Candidate Starts for Tuti_62:

(7, 41076), (16, 41208), (23, 41256), (Start: 27 @41262 has 10 MA's), (30, 41274), (34, 41325), (51, 41460), (55, 41511), (68, 41586), (70, 41616), (71, 41625), (73, 41637), (84, 41706), (86, 41712), (94, 41751), (98, 41805), (107, 41919),