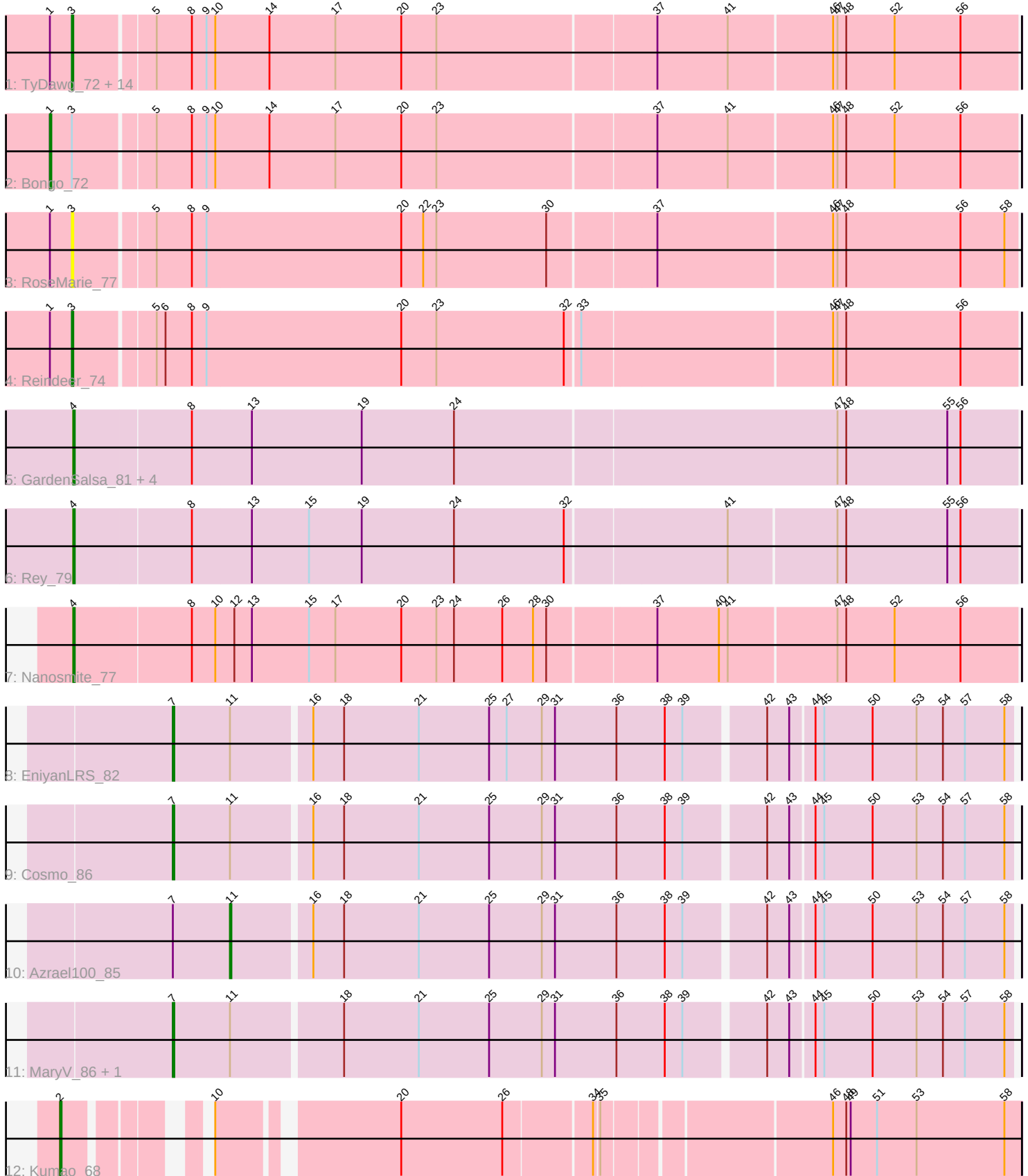


Pham 331098



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 331098 Report

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

Pham number 331098 has 31 members, 3 are drafts.

Phages represented in each track:

- Track 1 : TyDawg_72, Glaske16_74, Dulcita_73, Skinny_75, LilhomieP_72, FreakyGoo_74, IPhane7_72, Diminimus_73, KleverKiS_71, SlimJimmy_72, PegLeg_71, Auspice_72, TpudiCK_74, Izel_73, Bricole_71
- Track 2 : Bongo_72
- Track 3 : RoseMarie_77
- Track 4 : Reindeer_74
- Track 5 : GardenSalsa_81, Estes_81, Aziz_79, MrMagoo_82, GenevaB15_80
- Track 6 : Rey_79
- Track 7 : Nanosmite_77
- Track 8 : EniyanLRS_82
- Track 9 : Cosmo_86
- Track 10 : Azrael100_85
- Track 11 : MaryV_86, Wildcat_86
- Track 12 : Kumao_68

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

The start number called the most often in the published annotations is 3, it was called in 14 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice_72, Bricole_71, Diminimus_73, Dulcita_73, FreakyGoo_74, Glaske16_74, IPhane7_72, Izel_73, KleverKiS_71, LilhomieP_72, PegLeg_71, Reindeer_74, RoseMarie_77, Skinny_75, SlimJimmy_72, TpudiCK_74, TyDawg_72,

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

- Bongo_72,

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

- Aziz_79, Azrael100_85, Cosmo_86, EniyanLRS_82, Estes_81, GardenSalsa_81, GenevaB15_80, Kumao_68, MaryV_86, MrMagoo_82, Nanosmite_77, Rey_79, Wildcat_86,

Summary by start number:

Start 1:

- Found in 18 of 31 (58.1%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Bongo_72 (M1),

Start 2:

- Found in 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao_68 (singleton),

Start 3:

- Found in 18 of 31 (58.1%) of genes in pham
- Manual Annotations of this start: 14 of 28
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Auspice_72 (M1), Bricole_71 (M1), Diminimus_73 (M1), Dulcita_73 (M1), FreakyGoo_74 (M1), Glaske16_74 (M1), IPhane7_72 (M1), Izel_73 (M1), KleverKiS_71 (M1), LilhomieP_72 (M1), PegLeg_71 (M1), Reindeer_74 (M1), RoseMarie_77 (M1), Skinny_75 (M1), SlimJimmy_72 (M1), TpudiCK_74 (M1), TyDawg_72 (M1),

Start 4:

- Found in 7 of 31 (22.6%) of genes in pham
- Manual Annotations of this start: 7 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aziz_79 (M2), Estes_81 (M2), GardenSalsa_81 (M2), GenevaB15_80 (M2), MrMagoo_82 (M2), Nanosmite_77 (M3), Rey_79 (M2),

Start 7:

- Found in 5 of 31 (16.1%) of genes in pham
- Manual Annotations of this start: 4 of 28
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Cosmo_86 (V), EniyanLRS_82 (V), MaryV_86 (V), Wildcat_86 (V),

Start 11:

- Found in 5 of 31 (16.1%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Azrael100_85 (V),

Summary by clusters:

There are 5 clusters represented in this pham: singleton, V, M1, M3, M2,

Info for manual annotations of cluster M1:

- Start number 1 was manually annotated 1 time for cluster M1.
- Start number 3 was manually annotated 14 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 4 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 4 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

- Start number 7 was manually annotated 4 times for cluster V.
- Start number 11 was manually annotated 1 time for cluster V.

Gene Information:

Gene: Auspice_72 Start: 47073, Stop: 47699, Start Num: 3

Candidate Starts for Auspice_72:

(Start: 1 @47058 has 1 MA's), (Start: 3 @47073 has 14 MA's), (5, 47124), (8, 47148), (9, 47157), (10, 47163), (14, 47199), (17, 47244), (20, 47289), (23, 47313), (37, 47457), (41, 47505), (46, 47574), (47, 47577), (48, 47583), (52, 47616), (56, 47661),

Gene: Aziz_79 Start: 49117, Stop: 49749, Start Num: 4

Candidate Starts for Aziz_79:

(Start: 4 @49117 has 7 MA's), (8, 49195), (13, 49234), (19, 49309), (24, 49372), (47, 49627), (48, 49633), (55, 49702), (56, 49711),

Gene: Azrael100_85 Start: 52851, Stop: 53369, Start Num: 11

Candidate Starts for Azrael100_85:

(Start: 7 @52812 has 4 MA's), (Start: 11 @52851 has 1 MA's), (16, 52902), (18, 52923), (21, 52974), (25, 53022), (29, 53058), (31, 53067), (36, 53109), (38, 53142), (39, 53154), (42, 53205), (43, 53220), (44, 53235), (45, 53241), (50, 53274), (53, 53304), (54, 53322), (57, 53337), (58, 53364),

Gene: Bongo_72 Start: 47062, Stop: 47703, Start Num: 1

Candidate Starts for Bongo_72:

(Start: 1 @47062 has 1 MA's), (Start: 3 @47077 has 14 MA's), (5, 47128), (8, 47152), (9, 47161), (10, 47167), (14, 47203), (17, 47248), (20, 47293), (23, 47317), (37, 47461), (41, 47509), (46, 47578), (47, 47581), (48, 47587), (52, 47620), (56, 47665),

Gene: Bricole_71 Start: 46800, Stop: 47426, Start Num: 3

Candidate Starts for Bricole_71:

(Start: 1 @46785 has 1 MA's), (Start: 3 @46800 has 14 MA's), (5, 46851), (8, 46875), (9, 46884), (10, 46890), (14, 46926), (17, 46971), (20, 47016), (23, 47040), (37, 47184), (41, 47232), (46, 47301), (47, 47304), (48, 47310), (52, 47343), (56, 47388),

Gene: Cosmo_86 Start: 52813, Stop: 53370, Start Num: 7

Candidate Starts for Cosmo_86:

(Start: 7 @52813 has 4 MA's), (Start: 11 @52852 has 1 MA's), (16, 52903), (18, 52924), (21, 52975), (25, 53023), (29, 53059), (31, 53068), (36, 53110), (38, 53143), (39, 53155), (42, 53206), (43, 53221), (44, 53236), (45, 53242), (50, 53275), (53, 53305), (54, 53323), (57, 53338), (58, 53365),

Gene: Diminimus_73 Start: 47072, Stop: 47698, Start Num: 3

Candidate Starts for Diminimus_73:

(Start: 1 @47057 has 1 MA's), (Start: 3 @47072 has 14 MA's), (5, 47123), (8, 47147), (9, 47156), (10, 47162), (14, 47198), (17, 47243), (20, 47288), (23, 47312), (37, 47456), (41, 47504), (46, 47573), (47, 47576), (48, 47582), (52, 47615), (56, 47660),

Gene: Dulcita_73 Start: 47073, Stop: 47699, Start Num: 3

Candidate Starts for Dulcita_73:

(Start: 1 @47058 has 1 MA's), (Start: 3 @47073 has 14 MA's), (5, 47124), (8, 47148), (9, 47157), (10, 47163), (14, 47199), (17, 47244), (20, 47289), (23, 47313), (37, 47457), (41, 47505), (46, 47574), (47, 47577), (48, 47583), (52, 47616), (56, 47661),

Gene: EniyanLRS_82 Start: 52552, Stop: 53109, Start Num: 7

Candidate Starts for EniyanLRS_82:

(Start: 7 @52552 has 4 MA's), (Start: 11 @52591 has 1 MA's), (16, 52642), (18, 52663), (21, 52714), (25, 52762), (27, 52774), (29, 52798), (31, 52807), (36, 52849), (38, 52882), (39, 52894), (42, 52945), (43, 52960), (44, 52975), (45, 52981), (50, 53014), (53, 53044), (54, 53062), (57, 53077), (58, 53104),

Gene: Estes_81 Start: 49464, Stop: 50096, Start Num: 4

Candidate Starts for Estes_81:

(Start: 4 @49464 has 7 MA's), (8, 49542), (13, 49581), (19, 49656), (24, 49719), (47, 49974), (48, 49980), (55, 50049), (56, 50058),

Gene: FreakyGoo_74 Start: 47552, Stop: 48178, Start Num: 3

Candidate Starts for FreakyGoo_74:

(Start: 1 @47537 has 1 MA's), (Start: 3 @47552 has 14 MA's), (5, 47603), (8, 47627), (9, 47636), (10, 47642), (14, 47678), (17, 47723), (20, 47768), (23, 47792), (37, 47936), (41, 47984), (46, 48053), (47, 48056), (48, 48062), (52, 48095), (56, 48140),

Gene: GardenSalsa_81 Start: 49668, Stop: 50300, Start Num: 4

Candidate Starts for GardenSalsa_81:

(Start: 4 @49668 has 7 MA's), (8, 49746), (13, 49785), (19, 49860), (24, 49923), (47, 50178), (48, 50184), (55, 50253), (56, 50262),

Gene: GenevaB15_80 Start: 49117, Stop: 49749, Start Num: 4

Candidate Starts for GenevaB15_80:

(Start: 4 @49117 has 7 MA's), (8, 49195), (13, 49234), (19, 49309), (24, 49372), (47, 49627), (48, 49633), (55, 49702), (56, 49711),

Gene: Glaske16_74 Start: 47551, Stop: 48177, Start Num: 3

Candidate Starts for Glaske16_74:

(Start: 1 @47536 has 1 MA's), (Start: 3 @47551 has 14 MA's), (5, 47602), (8, 47626), (9, 47635), (10, 47641), (14, 47677), (17, 47722), (20, 47767), (23, 47791), (37, 47935), (41, 47983), (46, 48052), (47, 48055), (48, 48061), (52, 48094), (56, 48139),

Gene: IPHane7_72 Start: 47077, Stop: 47703, Start Num: 3

Candidate Starts for IPHane7_72:

(Start: 1 @47062 has 1 MA's), (Start: 3 @47077 has 14 MA's), (5, 47128), (8, 47152), (9, 47161), (10, 47167), (14, 47203), (17, 47248), (20, 47293), (23, 47317), (37, 47461), (41, 47509), (46, 47578), (47, 47581), (48, 47587), (52, 47620), (56, 47665),

Gene: Izel_73 Start: 47072, Stop: 47698, Start Num: 3

Candidate Starts for Izel_73:

(Start: 1 @47057 has 1 MA's), (Start: 3 @47072 has 14 MA's), (5, 47123), (8, 47147), (9, 47156), (10, 47162), (14, 47198), (17, 47243), (20, 47288), (23, 47312), (37, 47456), (41, 47504), (46, 47573), (47, 47576), (48, 47582), (52, 47615), (56, 47660),

Gene: KleverKiS_71 Start: 46794, Stop: 47420, Start Num: 3

Candidate Starts for KleverKiS_71:

(Start: 1 @46779 has 1 MA's), (Start: 3 @46794 has 14 MA's), (5, 46845), (8, 46869), (9, 46878), (10, 46884), (14, 46920), (17, 46965), (20, 47010), (23, 47034), (37, 47178), (41, 47226), (46, 47295), (47, 47298), (48, 47304), (52, 47337), (56, 47382),

Gene: Kumao_68 Start: 47619, Stop: 48197, Start Num: 2

Candidate Starts for Kumao_68:

(Start: 2 @47619 has 1 MA's), (10, 47688), (20, 47796), (26, 47865), (34, 47922), (35, 47925), (46, 48069), (48, 48078), (49, 48081), (51, 48099), (53, 48126), (58, 48186),

Gene: LilhomieP_72 Start: 47556, Stop: 48182, Start Num: 3

Candidate Starts for LilhomieP_72:

(Start: 1 @47541 has 1 MA's), (Start: 3 @47556 has 14 MA's), (5, 47607), (8, 47631), (9, 47640), (10, 47646), (14, 47682), (17, 47727), (20, 47772), (23, 47796), (37, 47940), (41, 47988), (46, 48057), (47, 48060), (48, 48066), (52, 48099), (56, 48144),

Gene: MaryV_86 Start: 52634, Stop: 53191, Start Num: 7

Candidate Starts for MaryV_86:

(Start: 7 @52634 has 4 MA's), (Start: 11 @52673 has 1 MA's), (18, 52745), (21, 52796), (25, 52844), (29, 52880), (31, 52889), (36, 52931), (38, 52964), (39, 52976), (42, 53027), (43, 53042), (44, 53057), (45, 53063), (50, 53096), (53, 53126), (54, 53144), (57, 53159), (58, 53186),

Gene: MrMagoo_82 Start: 49668, Stop: 50300, Start Num: 4

Candidate Starts for MrMagoo_82:

(Start: 4 @49668 has 7 MA's), (8, 49746), (13, 49785), (19, 49860), (24, 49923), (47, 50178), (48, 50184), (55, 50253), (56, 50262),

Gene: Nanosmite_77 Start: 48715, Stop: 49344, Start Num: 4

Candidate Starts for Nanosmite_77:

(Start: 4 @48715 has 7 MA's), (8, 48793), (10, 48808), (12, 48820), (13, 48832), (15, 48871), (17, 48889), (20, 48934), (23, 48958), (24, 48970), (26, 49003), (28, 49024), (30, 49033), (37, 49102), (40, 49144), (41, 49150), (47, 49222), (48, 49228), (52, 49261), (56, 49306),

Gene: PegLeg_71 Start: 46817, Stop: 47443, Start Num: 3

Candidate Starts for PegLeg_71:

(Start: 1 @46802 has 1 MA's), (Start: 3 @46817 has 14 MA's), (5, 46868), (8, 46892), (9, 46901), (10, 46907), (14, 46943), (17, 46988), (20, 47033), (23, 47057), (37, 47201), (41, 47249), (46, 47318), (47, 47321), (48, 47327), (52, 47360), (56, 47405),

Gene: Reindeer_74 Start: 48209, Stop: 48835, Start Num: 3

Candidate Starts for Reindeer_74:

(Start: 1 @48194 has 1 MA's), (Start: 3 @48209 has 14 MA's), (5, 48260), (6, 48266), (8, 48284), (9, 48293), (20, 48425), (23, 48449), (32, 48536), (33, 48545), (46, 48710), (47, 48713), (48, 48719), (56, 48797),

Gene: Rey_79 Start: 49341, Stop: 49970, Start Num: 4

Candidate Starts for Rey_79:

(Start: 4 @49341 has 7 MA's), (8, 49419), (13, 49458), (15, 49497), (19, 49533), (24, 49596), (32, 49671), (41, 49776), (47, 49848), (48, 49854), (55, 49923), (56, 49932),

Gene: RoseMarie_77 Start: 50434, Stop: 51060, Start Num: 3

Candidate Starts for RoseMarie_77:

(Start: 1 @50419 has 1 MA's), (Start: 3 @50434 has 14 MA's), (5, 50485), (8, 50509), (9, 50518), (20, 50650), (22, 50665), (23, 50674), (30, 50749), (37, 50818), (46, 50935), (47, 50938), (48, 50944), (56, 51022), (58, 51052),

Gene: Skinny_75 Start: 47985, Stop: 48611, Start Num: 3

Candidate Starts for Skinny_75:

(Start: 1 @47970 has 1 MA's), (Start: 3 @47985 has 14 MA's), (5, 48036), (8, 48060), (9, 48069), (10, 48075), (14, 48111), (17, 48156), (20, 48201), (23, 48225), (37, 48369), (41, 48417), (46, 48486), (47, 48489), (48, 48495), (52, 48528), (56, 48573),

Gene: SlimJimmy_72 Start: 47541, Stop: 48167, Start Num: 3

Candidate Starts for SlimJimmy_72:

(Start: 1 @47526 has 1 MA's), (Start: 3 @47541 has 14 MA's), (5, 47592), (8, 47616), (9, 47625), (10, 47631), (14, 47667), (17, 47712), (20, 47757), (23, 47781), (37, 47925), (41, 47973), (46, 48042), (47, 48045), (48, 48051), (52, 48084), (56, 48129),

Gene: TpudiCK_74 Start: 47076, Stop: 47702, Start Num: 3

Candidate Starts for TpudiCK_74:

(Start: 1 @47061 has 1 MA's), (Start: 3 @47076 has 14 MA's), (5, 47127), (8, 47151), (9, 47160), (10, 47166), (14, 47202), (17, 47247), (20, 47292), (23, 47316), (37, 47460), (41, 47508), (46, 47577), (47, 47580), (48, 47586), (52, 47619), (56, 47664),

Gene: TyDawg_72 Start: 47077, Stop: 47703, Start Num: 3

Candidate Starts for TyDawg_72:

(Start: 1 @47062 has 1 MA's), (Start: 3 @47077 has 14 MA's), (5, 47128), (8, 47152), (9, 47161), (10, 47167), (14, 47203), (17, 47248), (20, 47293), (23, 47317), (37, 47461), (41, 47509), (46, 47578), (47, 47581), (48, 47587), (52, 47620), (56, 47665),

Gene: Wildcat_86 Start: 52644, Stop: 53201, Start Num: 7

Candidate Starts for Wildcat_86:

(Start: 7 @52644 has 4 MA's), (Start: 11 @52683 has 1 MA's), (18, 52755), (21, 52806), (25, 52854), (29, 52890), (31, 52899), (36, 52941), (38, 52974), (39, 52986), (42, 53037), (43, 53052), (44, 53067), (45, 53073), (50, 53106), (53, 53136), (54, 53154), (57, 53169), (58, 53196),