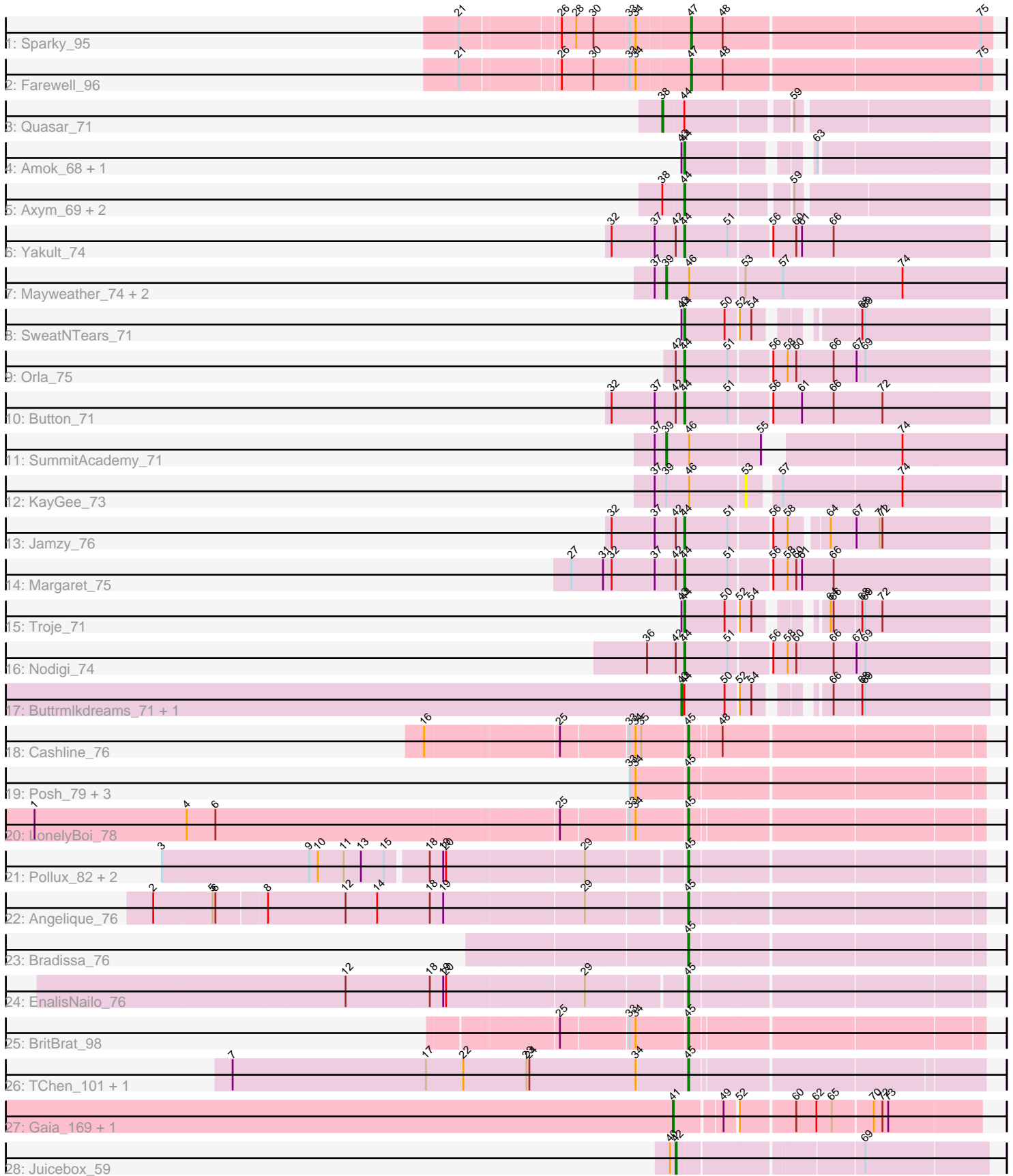


Pham 163732



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 163732 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163732 has 41 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Sparky_95
- Track 2 : Farewell_96
- Track 3 : Quasar_71
- Track 4 : Amok_68, Emalyn_67
- Track 5 : Axym_69, Agatha_71, Burnsey_70
- Track 6 : Yakult_74
- Track 7 : Mayweather_74, Vine_74, Elinal_76
- Track 8 : SweatNTears_71
- Track 9 : Orla_75
- Track 10 : Button_71
- Track 11 : SummitAcademy_71
- Track 12 : KayGee_73
- Track 13 : Jamzy_76
- Track 14 : Margaret_75
- Track 15 : Troje_71
- Track 16 : Nodigi_74
- Track 17 : Buttrmilkdreams_71, Horseradish_71
- Track 18 : Cashline_76
- Track 19 : Posh_79, Pytheas_83, Wrigley_81, Jablanski_82
- Track 20 : LonelyBoi_78
- Track 21 : Pollux_82, EMSquaredA_80, Floral_80
- Track 22 : Angelique_76
- Track 23 : Bradissa_76
- Track 24 : EnalisNailo_76
- Track 25 : BritBrat_98
- Track 26 : TChen_101, Renaud18_112
- Track 27 : Gaia_169, Nebkiss_165
- Track 28 : Juicebox_59

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

The start number called the most often in the published annotations is 45, it was called in 15 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Angelique_76, Bradissa_76, BritBrat_98, Cashline_76, EMSquaredA_80, EnalisNailo_76, Floral_80, Jablanski_82, LonelyBoi_78, Pollux_82, Posh_79, Pytheas_83, Renaud18_112, TChen_101, Wrigley_81,

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

-

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

- Agatha_71, Amok_68, Axym_69, Burnsey_70, Button_71, Buttrmlkdreams_71, Elinal_76, Emalyn_67, Farewell_96, Gaia_169, Horseradish_71, Jamzy_76, Juicebox_59, KayGee_73, Margaret_75, Mayweather_74, Nebkiss_165, Nodigi_74, Orla_75, Quasar_71, Sparky_95, SummitAcademy_71, SweatNTears_71, Troje_71, Vine_74, Yakult_74,

Summary by start number:

Start 38:

- Found in 4 of 41 (9.8%) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Quasar_71 (CT),

Start 39:

- Found in 5 of 41 (12.2%) of genes in pham
- Manual Annotations of this start: 4 of 40
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Elinal_76 (CT), Mayweather_74 (CT), SummitAcademy_71 (CT), Vine_74 (CT),

Start 41:

- Found in 2 of 41 (4.9%) of genes in pham
- Manual Annotations of this start: 2 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia_169 (X), Nebkiss_165 (X),

Start 42:

- Found in 7 of 41 (17.1%) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Juicebox_59 (singleton),

Start 43:

- Found in 6 of 41 (14.6%) of genes in pham
- Manual Annotations of this start: 2 of 40
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Buttrmlkdreams_71 (CT), Horseradish_71 (CT),

Start 44:

- Found in 16 of 41 (39.0%) of genes in pham
- Manual Annotations of this start: 13 of 40
- Called 81.2% of time when present

- Phage (with cluster) where this start called: Agatha_71 (CT), Amok_68 (CT), Axym_69 (CT), Burnsey_70 (CT), Button_71 (CT), Emalyn_67 (CT), Jamzy_76 (CT), Margaret_75 (CT), Nodigi_74 (CT), Orla_75 (CT), SweatNTears_71 (CT), Troje_71 (CT), Yakult_74 (CT),

Start 45:

- Found in 15 of 41 (36.6%) of genes in pham
- Manual Annotations of this start: 15 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique_76 (CY1), Bradissa_76 (CY1), BritBrat_98 (CY2), Cashline_76 (CY), EMsquaredA_80 (CY1), EnalisNailo_76 (CY1), Floral_80 (CY1), Jablanski_82 (CY), LonelyBoi_78 (CY), Pollux_82 (CY1), Posh_79 (CY), Pytheas_83 (CY), Renaud18_112 (F4), TChen_101 (F4), Wrigley_81 (CY),

Start 47:

- Found in 2 of 41 (4.9%) of genes in pham
- Manual Annotations of this start: 2 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell_96 (AF), Sparky_95 (AF),

Start 53:

- Found in 4 of 41 (9.8%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: KayGee_73 (CT),

Summary by clusters:

There are 8 clusters represented in this pham: CY2, CY1, F4, AF, singleton, CY, X, CT,

Info for manual annotations of cluster AF:

- Start number 47 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster CT:

- Start number 38 was manually annotated 1 time for cluster CT.
- Start number 39 was manually annotated 4 times for cluster CT.
- Start number 43 was manually annotated 2 times for cluster CT.
- Start number 44 was manually annotated 13 times for cluster CT.

Info for manual annotations of cluster CY:

- Start number 45 was manually annotated 6 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 45 was manually annotated 6 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 45 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster F4:

- Start number 45 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster X:

•Start number 41 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Agatha_71 Start: 46233, Stop: 46523, Start Num: 44

Candidate Starts for Agatha_71:

(Start: 38 @46212 has 1 MA's), (Start: 44 @46233 has 13 MA's), (59, 46332),

Gene: Amok_68 Start: 44983, Stop: 45258, Start Num: 44

Candidate Starts for Amok_68:

(Start: 43 @44980 has 2 MA's), (Start: 44 @44983 has 13 MA's), (63, 45088),

Gene: Angelique_76 Start: 50625, Stop: 50915, Start Num: 45

Candidate Starts for Angelique_76:

(2, 50097), (5, 50157), (6, 50160), (8, 50208), (12, 50289), (14, 50322), (18, 50376), (19, 50388), (29, 50526), (Start: 45 @50625 has 15 MA's),

Gene: Axym_69 Start: 46163, Stop: 46453, Start Num: 44

Candidate Starts for Axym_69:

(Start: 38 @46142 has 1 MA's), (Start: 44 @46163 has 13 MA's), (59, 46262),

Gene: Bradissa_76 Start: 51528, Stop: 51818, Start Num: 45

Candidate Starts for Bradissa_76:

(Start: 45 @51528 has 15 MA's),

Gene: BritBrat_98 Start: 55168, Stop: 55455, Start Num: 45

Candidate Starts for BritBrat_98:

(25, 55045), (33, 55111), (34, 55117), (Start: 45 @55168 has 15 MA's),

Gene: Burnsey_70 Start: 45875, Stop: 46165, Start Num: 44

Candidate Starts for Burnsey_70:

(Start: 38 @45854 has 1 MA's), (Start: 44 @45875 has 13 MA's), (59, 45974),

Gene: Button_71 Start: 45762, Stop: 46070, Start Num: 44

Candidate Starts for Button_71:

(32, 45687), (37, 45732), (Start: 42 @45753 has 1 MA's), (Start: 44 @45762 has 13 MA's), (51, 45807), (56, 45846), (61, 45876), (66, 45909), (72, 45960),

Gene: Buttrmlkdreams_71 Start: 45701, Stop: 45979, Start Num: 43

Candidate Starts for Buttrmlkdreams_71:

(Start: 43 @45701 has 2 MA's), (Start: 44 @45704 has 13 MA's), (50, 45746), (52, 45758), (54, 45770), (66, 45821), (68, 45848), (69, 45851),

Gene: Cashline_76 Start: 52028, Stop: 52315, Start Num: 45

Candidate Starts for Cashline_76:

(16, 51776), (25, 51905), (33, 51971), (34, 51977), (35, 51983), (Start: 45 @52028 has 15 MA's), (48, 52058),

Gene: EMSquaredA_80 Start: 50168, Stop: 50458, Start Num: 45

Candidate Starts for EMSquaredA_80:

(3, 49655), (9, 49805), (10, 49814), (11, 49841), (13, 49859), (15, 49883), (18, 49922), (19, 49934), (20, 49937), (29, 50072), (Start: 45 @50168 has 15 MA's),

Gene: Elinal_76 Start: 48006, Stop: 48332, Start Num: 39

Candidate Starts for Elinal_76:

(37, 47994), (Start: 39 @48006 has 4 MA's), (46, 48030), (53, 48084), (57, 48111), (74, 48231),

Gene: Emalyn_67 Start: 43687, Stop: 43962, Start Num: 44

Candidate Starts for Emalyn_67:

(Start: 43 @43684 has 2 MA's), (Start: 44 @43687 has 13 MA's), (63, 43792),

Gene: EnalisNailo_76 Start: 50668, Stop: 50958, Start Num: 45

Candidate Starts for EnalisNailo_76:

(12, 50335), (18, 50422), (19, 50434), (20, 50437), (29, 50572), (Start: 45 @50668 has 15 MA's),

Gene: Farewell_96 Start: 61361, Stop: 61663, Start Num: 47

Candidate Starts for Farewell_96:

(21, 61136), (26, 61232), (30, 61265), (33, 61301), (34, 61307), (Start: 47 @61361 has 2 MA's), (48, 61394), (75, 61652),

Gene: Floral_80 Start: 52125, Stop: 52415, Start Num: 45

Candidate Starts for Floral_80:

(3, 51612), (9, 51762), (10, 51771), (11, 51798), (13, 51816), (15, 51840), (18, 51879), (19, 51891), (20, 51894), (29, 52029), (Start: 45 @52125 has 15 MA's),

Gene: Gaia_169 Start: 83930, Stop: 84226, Start Num: 41

Candidate Starts for Gaia_169:

(Start: 41 @83930 has 2 MA's), (49, 83975), (52, 83987), (60, 84041), (62, 84062), (65, 84077), (70, 84116), (72, 84125), (73, 84131),

Gene: Horseradish_71 Start: 45465, Stop: 45743, Start Num: 43

Candidate Starts for Horseradish_71:

(Start: 43 @45465 has 2 MA's), (Start: 44 @45468 has 13 MA's), (50, 45510), (52, 45522), (54, 45534), (66, 45585), (68, 45612), (69, 45615),

Gene: Jablanski_82 Start: 53171, Stop: 53461, Start Num: 45

Candidate Starts for Jablanski_82:

(33, 53114), (34, 53120), (Start: 45 @53171 has 15 MA's),

Gene: Jamzy_76 Start: 46875, Stop: 47171, Start Num: 44

Candidate Starts for Jamzy_76:

(32, 46800), (37, 46845), (Start: 42 @46866 has 1 MA's), (Start: 44 @46875 has 13 MA's), (51, 46920), (56, 46959), (58, 46974), (64, 47007), (67, 47034), (71, 47058), (72, 47061),

Gene: Juicebox_59 Start: 41044, Stop: 41346, Start Num: 42

Candidate Starts for Juicebox_59:

(40, 41038), (Start: 42 @41044 has 1 MA's), (69, 41221),

Gene: KayGee_73 Start: 48113, Stop: 48361, Start Num: 53

Candidate Starts for KayGee_73:

(37, 48023), (Start: 39 @48035 has 4 MA's), (46, 48059), (53, 48113), (57, 48140), (74, 48260),

Gene: LonelyBoi_78 Start: 53256, Stop: 53543, Start Num: 45

Candidate Starts for LonelyBoi_78:

(1, 52596), (4, 52755), (6, 52785), (25, 53133), (33, 53199), (34, 53205), (Start: 45 @53256 has 15 MA's),

Gene: Margaret_75 Start: 46622, Stop: 46930, Start Num: 44

Candidate Starts for Margaret_75:

(27, 46505), (31, 46538), (32, 46547), (37, 46592), (Start: 42 @46613 has 1 MA's), (Start: 44 @46622 has 13 MA's), (51, 46667), (56, 46706), (58, 46721), (60, 46730), (61, 46736), (66, 46769),

Gene: Mayweather_74 Start: 48037, Stop: 48378, Start Num: 39

Candidate Starts for Mayweather_74:

(37, 48025), (Start: 39 @48037 has 4 MA's), (46, 48061), (53, 48115), (57, 48154), (74, 48274),

Gene: Nebkiss_165 Start: 79421, Stop: 79717, Start Num: 41

Candidate Starts for Nebkiss_165:

(Start: 41 @79421 has 2 MA's), (49, 79466), (52, 79478), (60, 79532), (62, 79553), (65, 79568), (70, 79607), (72, 79616), (73, 79622),

Gene: Nodigi_74 Start: 46877, Stop: 47185, Start Num: 44

Candidate Starts for Nodigi_74:

(36, 46838), (Start: 42 @46868 has 1 MA's), (Start: 44 @46877 has 13 MA's), (51, 46922), (56, 46961), (58, 46976), (60, 46985), (66, 47024), (67, 47048), (69, 47057),

Gene: Orla_75 Start: 47026, Stop: 47334, Start Num: 44

Candidate Starts for Orla_75:

(Start: 42 @47017 has 1 MA's), (Start: 44 @47026 has 13 MA's), (51, 47071), (56, 47110), (58, 47125), (60, 47134), (66, 47173), (67, 47197), (69, 47206),

Gene: Pollux_82 Start: 52125, Stop: 52415, Start Num: 45

Candidate Starts for Pollux_82:

(3, 51612), (9, 51762), (10, 51771), (11, 51798), (13, 51816), (15, 51840), (18, 51879), (19, 51891), (20, 51894), (29, 52029), (Start: 45 @52125 has 15 MA's),

Gene: Posh_79 Start: 51944, Stop: 52234, Start Num: 45

Candidate Starts for Posh_79:

(33, 51887), (34, 51893), (Start: 45 @51944 has 15 MA's),

Gene: Pytheas_83 Start: 53170, Stop: 53460, Start Num: 45

Candidate Starts for Pytheas_83:

(33, 53113), (34, 53119), (Start: 45 @53170 has 15 MA's),

Gene: Quasar_71 Start: 46628, Stop: 46939, Start Num: 38

Candidate Starts for Quasar_71:

(Start: 38 @46628 has 1 MA's), (Start: 44 @46649 has 13 MA's), (59, 46748),

Gene: Renaud18_112 Start: 57550, Stop: 57837, Start Num: 45

Candidate Starts for Renaud18_112:

(7, 57079), (17, 57280), (22, 57319), (23, 57385), (24, 57388), (34, 57499), (Start: 45 @57550 has 15 MA's),

Gene: Sparky_95 Start: 62955, Stop: 63257, Start Num: 47

Candidate Starts for Sparky_95:

(21, 62730), (26, 62826), (28, 62841), (30, 62859), (33, 62895), (34, 62901), (Start: 47 @62955 has 2 MA's), (48, 62988), (75, 63246),

Gene: SummitAcademy_71 Start: 47007, Stop: 47324, Start Num: 39

Candidate Starts for SummitAcademy_71:

(37, 46995), (Start: 39 @47007 has 4 MA's), (46, 47031), (55, 47100), (74, 47217),

Gene: SweatNTears_71 Start: 45622, Stop: 45897, Start Num: 44

Candidate Starts for SweatNTears_71:

(Start: 43 @45619 has 2 MA's), (Start: 44 @45622 has 13 MA's), (50, 45664), (52, 45676), (54, 45688), (68, 45766), (69, 45769),

Gene: TChen_101 Start: 57213, Stop: 57500, Start Num: 45

Candidate Starts for TChen_101:

(7, 56742), (17, 56943), (22, 56982), (23, 57048), (24, 57051), (34, 57162), (Start: 45 @57213 has 15 MA's),

Gene: Troje_71 Start: 45614, Stop: 45889, Start Num: 44

Candidate Starts for Troje_71:

(Start: 43 @45611 has 2 MA's), (Start: 44 @45614 has 13 MA's), (50, 45656), (52, 45668), (54, 45680), (64, 45728), (66, 45731), (68, 45758), (69, 45761), (72, 45779),

Gene: Vine_74 Start: 47747, Stop: 48088, Start Num: 39

Candidate Starts for Vine_74:

(37, 47735), (Start: 39 @47747 has 4 MA's), (46, 47771), (53, 47825), (57, 47864), (74, 47984),

Gene: Wrigley_81 Start: 51527, Stop: 51817, Start Num: 45

Candidate Starts for Wrigley_81:

(33, 51470), (34, 51476), (Start: 45 @51527 has 15 MA's),

Gene: Yakult_74 Start: 46869, Stop: 47177, Start Num: 44

Candidate Starts for Yakult_74:

(32, 46794), (37, 46839), (Start: 42 @46860 has 1 MA's), (Start: 44 @46869 has 13 MA's), (51, 46914), (56, 46953), (60, 46977), (61, 46983), (66, 47016),