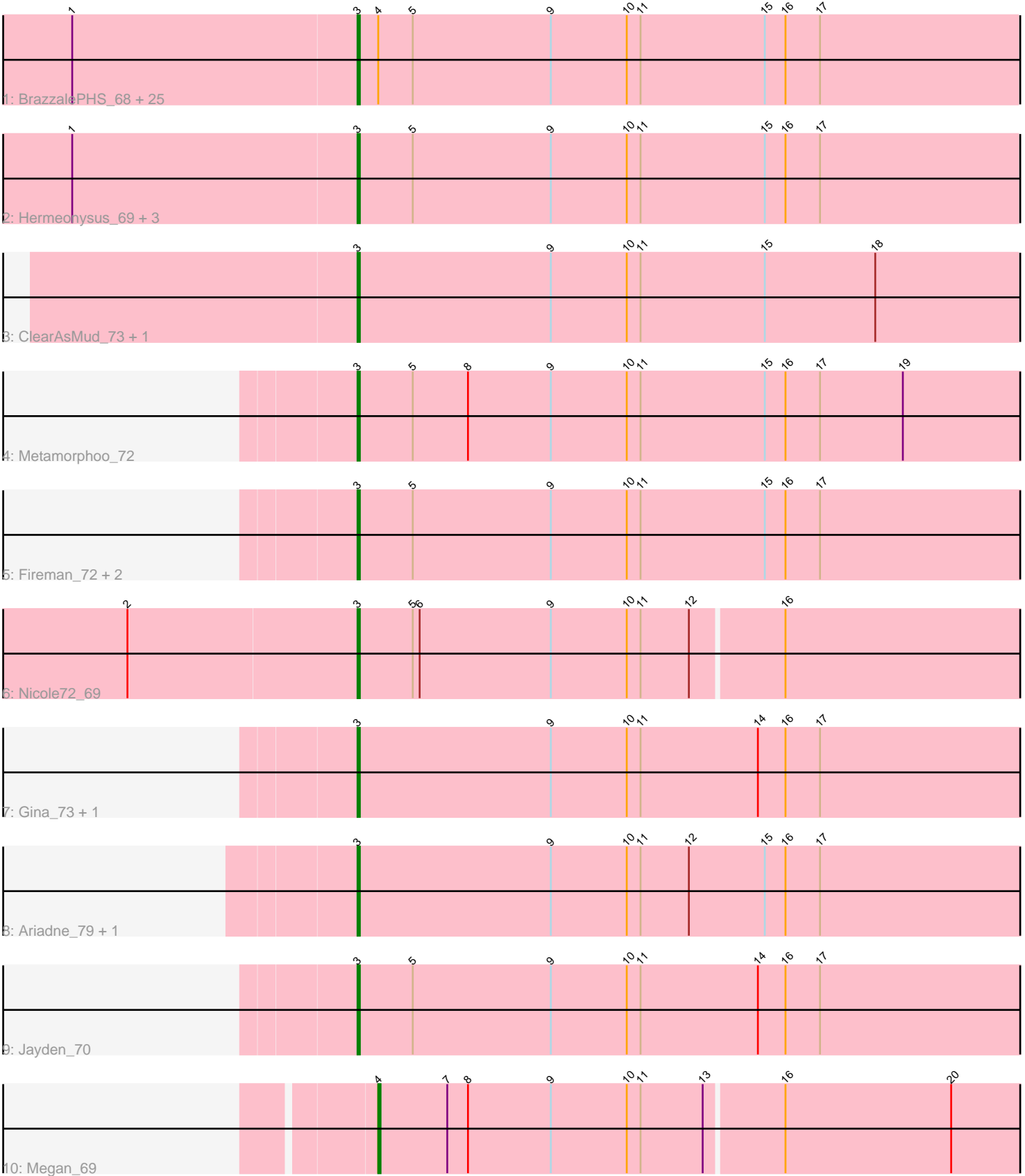


Pham 2403



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 2403 Report

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

Pham number 2403 has 43 members, 4 are drafts.

Phages represented in each track:

- Track 1 : BrazzalePHS_68, Crisis_70, Shotgun_69, Quhwah_73, Piperis_70, Cranjis_70, PiperSansNom_70, Ganandorf_68, Savannah_68, Busephilis_68, Jefe_69, Phorgeous_69, Selwyn23_70, EarickHC_70, Pulchra_71, KaiHaiDragon_70, Scumberland_71, Paschalis_69, Onika_68, Jollipop_69, PierreOrion_69, Phrancesco_69, Ramiel05_68, CrazyRich_68, Antares_69, Kowalski_68
- Track 2 : Hermeonysus_69, LittleFortune_71, Honeyfin_70, Yeti_69
- Track 3 : ClearAsMud_73, NoodlelyBoi_70
- Track 4 : Metamorphoo_72
- Track 5 : Fireman_72, Tyrumbra_68, RobsFeet_73
- Track 6 : Nicole72_69
- Track 7 : Gina_73, Teamocil_73
- Track 8 : Ariadne_79, Smarties_79
- Track 9 : Jayden_70
- Track 10 : Megan_69

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 38 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_69, Ariadne_79, BrazzalePHS_68, Busephilis_68, ClearAsMud_73, Cranjis_70, CrazyRich_68, Crisis_70, EarickHC_70, Fireman_72, Ganandorf_68, Gina_73, Hermeonysus_69, Honeyfin_70, Jayden_70, Jefe_69, Jollipop_69, KaiHaiDragon_70, Kowalski_68, LittleFortune_71, Metamorphoo_72, Nicole72_69, NoodlelyBoi_70, Onika_68, Paschalis_69, Phorgeous_69, Phrancesco_69, PierreOrion_69, PiperSansNom_70, Piperis_70, Pulchra_71, Quhwah_73, Ramiel05_68, RobsFeet_73, Savannah_68, Scumberland_71, Selwyn23_70, Shotgun_69, Smarties_79, Teamocil_73, Tyrumbra_68, Yeti_69,

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

-

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

- Megan_69,

Summary by start number:

Start 3:

- Found in 42 of 43 (97.7%) of genes in pham
- Manual Annotations of this start: 38 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares_69 (EC), Ariadne_79 (EC), BrazzalePHS_68 (EC), Busephilis_68 (EC), ClearAsMud_73 (EC), Cranjis_70 (EC), CrazyRich_68 (EC), Crisis_70 (EC), EarickHC_70 (EC), Fireman_72 (EC), Ganandorf_68 (EC), Gina_73 (EC), Hermeonysus_69 (EC), Honeyfin_70 (EC), Jayden_70 (EC), Jefe_69 (EC), Jollipop_69 (EC), KaiHaiDragon_70 (EC), Kowalski_68 (EC), LittleFortune_71 (EC), Metamorphoo_72 (EC), Nicole72_69 (EC), NoodlelyBoi_70 (EC), Onika_68 (EC), Paschalis_69 (EC), Phorgeous_69 (EC), Phrancesco_69 (EC), PierreOrion_69 (EC), PiperSansNom_70 (EC), Piperis_70 (EC), Pulchra_71 (EC), Quhwah_73 (EC), Ramiel05_68 (EC), RobsFeet_73 (EC), Savannah_68 (EC), Scumberland_71 (EC), Selwyn23_70 (EC), Shotgun_69 (EC), Smarties_79 (EC), Teamocil_73 (EC), Tyrumbra_68 (EC), Yeti_69 (EC),

Start 4:

- Found in 27 of 43 (62.8%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 3.7% of time when present
- Phage (with cluster) where this start called: Megan_69 (EC),

Summary by clusters:

There is one cluster represented in this pham: EC

Info for manual annotations of cluster EC:

- Start number 3 was manually annotated 38 times for cluster EC.
- Start number 4 was manually annotated 1 time for cluster EC.

Gene Information:

Gene: Antares_69 Start: 42944, Stop: 43243, Start Num: 3

Candidate Starts for Antares_69:

(1, 42821), (Start: 3 @42944 has 38 MA's), (Start: 4 @42953 has 1 MA's), (5, 42968), (9, 43028), (10, 43061), (11, 43067), (15, 43121), (16, 43130), (17, 43145),

Gene: Ariadne_79 Start: 44546, Stop: 44839, Start Num: 3

Candidate Starts for Ariadne_79:

(Start: 3 @44546 has 38 MA's), (9, 44630), (10, 44663), (11, 44669), (12, 44690), (15, 44723), (16, 44732), (17, 44747),

Gene: BrazzalePHS_68 Start: 42712, Stop: 43011, Start Num: 3

Candidate Starts for BrazzalePHS_68:

(1, 42589), (Start: 3 @42712 has 38 MA's), (Start: 4 @42721 has 1 MA's), (5, 42736), (9, 42796), (10, 42829), (11, 42835), (15, 42889), (16, 42898), (17, 42913),

Gene: Busephilis_68 Start: 42651, Stop: 42950, Start Num: 3

Candidate Starts for Busephilis_68:

(1, 42528), (Start: 3 @42651 has 38 MA's), (Start: 4 @42660 has 1 MA's), (5, 42675), (9, 42735), (10, 42768), (11, 42774), (15, 42828), (16, 42837), (17, 42852),

Gene: ClearAsMud_73 Start: 43232, Stop: 43531, Start Num: 3

Candidate Starts for ClearAsMud_73:

(Start: 3 @43232 has 38 MA's), (9, 43316), (10, 43349), (11, 43355), (15, 43409), (18, 43457),

Gene: Cranjis_70 Start: 42899, Stop: 43198, Start Num: 3

Candidate Starts for Cranjis_70:

(1, 42776), (Start: 3 @42899 has 38 MA's), (Start: 4 @42908 has 1 MA's), (5, 42923), (9, 42983), (10, 43016), (11, 43022), (15, 43076), (16, 43085), (17, 43100),

Gene: CrazyRich_68 Start: 42705, Stop: 43004, Start Num: 3

Candidate Starts for CrazyRich_68:

(1, 42582), (Start: 3 @42705 has 38 MA's), (Start: 4 @42714 has 1 MA's), (5, 42729), (9, 42789), (10, 42822), (11, 42828), (15, 42882), (16, 42891), (17, 42906),

Gene: Crisis_70 Start: 42714, Stop: 43013, Start Num: 3

Candidate Starts for Crisis_70:

(1, 42591), (Start: 3 @42714 has 38 MA's), (Start: 4 @42723 has 1 MA's), (5, 42738), (9, 42798), (10, 42831), (11, 42837), (15, 42891), (16, 42900), (17, 42915),

Gene: EarickHC_70 Start: 42636, Stop: 42935, Start Num: 3

Candidate Starts for EarickHC_70:

(1, 42513), (Start: 3 @42636 has 38 MA's), (Start: 4 @42645 has 1 MA's), (5, 42660), (9, 42720), (10, 42753), (11, 42759), (15, 42813), (16, 42822), (17, 42837),

Gene: Fireman_72 Start: 44688, Stop: 44981, Start Num: 3

Candidate Starts for Fireman_72:

(Start: 3 @44688 has 38 MA's), (5, 44712), (9, 44772), (10, 44805), (11, 44811), (15, 44865), (16, 44874), (17, 44889),

Gene: Ganandorf_68 Start: 42732, Stop: 43031, Start Num: 3

Candidate Starts for Ganandorf_68:

(1, 42609), (Start: 3 @42732 has 38 MA's), (Start: 4 @42741 has 1 MA's), (5, 42756), (9, 42816), (10, 42849), (11, 42855), (15, 42909), (16, 42918), (17, 42933),

Gene: Gina_73 Start: 42790, Stop: 43083, Start Num: 3

Candidate Starts for Gina_73:

(Start: 3 @42790 has 38 MA's), (9, 42874), (10, 42907), (11, 42913), (14, 42964), (16, 42976), (17, 42991),

Gene: Hermeonysus_69 Start: 42621, Stop: 42920, Start Num: 3

Candidate Starts for Hermeonysus_69:

(1, 42498), (Start: 3 @42621 has 38 MA's), (5, 42645), (9, 42705), (10, 42738), (11, 42744), (15, 42798), (16, 42807), (17, 42822),

Gene: Honeyfin_70 Start: 42881, Stop: 43180, Start Num: 3

Candidate Starts for Honeyfin_70:

(1, 42758), (Start: 3 @42881 has 38 MA's), (5, 42905), (9, 42965), (10, 42998), (11, 43004), (15, 43058), (16, 43067), (17, 43082),

Gene: Jayden_70 Start: 43146, Stop: 43439, Start Num: 3

Candidate Starts for Jayden_70:

(Start: 3 @43146 has 38 MA's), (5, 43170), (9, 43230), (10, 43263), (11, 43269), (14, 43320), (16, 43332), (17, 43347),

Gene: Jefe_69 Start: 42682, Stop: 42981, Start Num: 3

Candidate Starts for Jefe_69:

(1, 42559), (Start: 3 @42682 has 38 MA's), (Start: 4 @42691 has 1 MA's), (5, 42706), (9, 42766), (10, 42799), (11, 42805), (15, 42859), (16, 42868), (17, 42883),

Gene: Jollipop_69 Start: 43070, Stop: 43369, Start Num: 3

Candidate Starts for Jollipop_69:

(1, 42947), (Start: 3 @43070 has 38 MA's), (Start: 4 @43079 has 1 MA's), (5, 43094), (9, 43154), (10, 43187), (11, 43193), (15, 43247), (16, 43256), (17, 43271),

Gene: KaiHaiDragon_70 Start: 42636, Stop: 42935, Start Num: 3

Candidate Starts for KaiHaiDragon_70:

(1, 42513), (Start: 3 @42636 has 38 MA's), (Start: 4 @42645 has 1 MA's), (5, 42660), (9, 42720), (10, 42753), (11, 42759), (15, 42813), (16, 42822), (17, 42837),

Gene: Kowalski_68 Start: 42707, Stop: 43006, Start Num: 3

Candidate Starts for Kowalski_68:

(1, 42584), (Start: 3 @42707 has 38 MA's), (Start: 4 @42716 has 1 MA's), (5, 42731), (9, 42791), (10, 42824), (11, 42830), (15, 42884), (16, 42893), (17, 42908),

Gene: LittleFortune_71 Start: 42992, Stop: 43291, Start Num: 3

Candidate Starts for LittleFortune_71:

(1, 42869), (Start: 3 @42992 has 38 MA's), (5, 43016), (9, 43076), (10, 43109), (11, 43115), (15, 43169), (16, 43178), (17, 43193),

Gene: Megan_69 Start: 47817, Stop: 48110, Start Num: 4

Candidate Starts for Megan_69:

(Start: 4 @47817 has 1 MA's), (7, 47847), (8, 47856), (9, 47892), (10, 47925), (11, 47931), (13, 47958), (16, 47991), (20, 48063),

Gene: Metamorphoo_72 Start: 43982, Stop: 44275, Start Num: 3

Candidate Starts for Metamorphoo_72:

(Start: 3 @43982 has 38 MA's), (5, 44006), (8, 44030), (9, 44066), (10, 44099), (11, 44105), (15, 44159), (16, 44168), (17, 44183), (19, 44219),

Gene: Nicole72_69 Start: 47769, Stop: 48065, Start Num: 3

Candidate Starts for Nicole72_69:

(2, 47670), (Start: 3 @47769 has 38 MA's), (5, 47793), (6, 47796), (9, 47853), (10, 47886), (11, 47892), (12, 47913), (16, 47952),

Gene: NoodlelyBoi_70 Start: 43481, Stop: 43780, Start Num: 3

Candidate Starts for NoodlelyBoi_70:

(Start: 3 @43481 has 38 MA's), (9, 43565), (10, 43598), (11, 43604), (15, 43658), (18, 43706),

Gene: Onika_68 Start: 42710, Stop: 43009, Start Num: 3

Candidate Starts for Onika_68:

(1, 42587), (Start: 3 @42710 has 38 MA's), (Start: 4 @42719 has 1 MA's), (5, 42734), (9, 42794), (10, 42827), (11, 42833), (15, 42887), (16, 42896), (17, 42911),

Gene: Paschalis_69 Start: 42735, Stop: 43034, Start Num: 3

Candidate Starts for Paschalis_69:

(1, 42612), (Start: 3 @42735 has 38 MA's), (Start: 4 @42744 has 1 MA's), (5, 42759), (9, 42819), (10, 42852), (11, 42858), (15, 42912), (16, 42921), (17, 42936),

Gene: Phorgeous_69 Start: 42518, Stop: 42817, Start Num: 3

Candidate Starts for Phorgeous_69:

(1, 42395), (Start: 3 @42518 has 38 MA's), (Start: 4 @42527 has 1 MA's), (5, 42542), (9, 42602), (10, 42635), (11, 42641), (15, 42695), (16, 42704), (17, 42719),

Gene: Phrancesco_69 Start: 42841, Stop: 43140, Start Num: 3

Candidate Starts for Phrancesco_69:

(1, 42718), (Start: 3 @42841 has 38 MA's), (Start: 4 @42850 has 1 MA's), (5, 42865), (9, 42925), (10, 42958), (11, 42964), (15, 43018), (16, 43027), (17, 43042),

Gene: PierreOrion_69 Start: 42947, Stop: 43246, Start Num: 3

Candidate Starts for PierreOrion_69:

(1, 42824), (Start: 3 @42947 has 38 MA's), (Start: 4 @42956 has 1 MA's), (5, 42971), (9, 43031), (10, 43064), (11, 43070), (15, 43124), (16, 43133), (17, 43148),

Gene: PiperSansNom_70 Start: 43020, Stop: 43319, Start Num: 3

Candidate Starts for PiperSansNom_70:

(1, 42897), (Start: 3 @43020 has 38 MA's), (Start: 4 @43029 has 1 MA's), (5, 43044), (9, 43104), (10, 43137), (11, 43143), (15, 43197), (16, 43206), (17, 43221),

Gene: Piperis_70 Start: 42643, Stop: 42942, Start Num: 3

Candidate Starts for Piperis_70:

(1, 42520), (Start: 3 @42643 has 38 MA's), (Start: 4 @42652 has 1 MA's), (5, 42667), (9, 42727), (10, 42760), (11, 42766), (15, 42820), (16, 42829), (17, 42844),

Gene: Pulchra_71 Start: 43039, Stop: 43338, Start Num: 3

Candidate Starts for Pulchra_71:

(1, 42916), (Start: 3 @43039 has 38 MA's), (Start: 4 @43048 has 1 MA's), (5, 43063), (9, 43123), (10, 43156), (11, 43162), (15, 43216), (16, 43225), (17, 43240),

Gene: Quhwah_73 Start: 43328, Stop: 43627, Start Num: 3

Candidate Starts for Quhwah_73:

(1, 43205), (Start: 3 @43328 has 38 MA's), (Start: 4 @43337 has 1 MA's), (5, 43352), (9, 43412), (10, 43445), (11, 43451), (15, 43505), (16, 43514), (17, 43529),

Gene: Ramiel05_68 Start: 42707, Stop: 43006, Start Num: 3

Candidate Starts for Ramiel05_68:

(1, 42584), (Start: 3 @42707 has 38 MA's), (Start: 4 @42716 has 1 MA's), (5, 42731), (9, 42791), (10, 42824), (11, 42830), (15, 42884), (16, 42893), (17, 42908),

Gene: RobsFeet_73 Start: 44268, Stop: 44561, Start Num: 3

Candidate Starts for RobsFeet_73:

(Start: 3 @44268 has 38 MA's), (5, 44292), (9, 44352), (10, 44385), (11, 44391), (15, 44445), (16, 44454), (17, 44469),

Gene: Savannah_68 Start: 42758, Stop: 43057, Start Num: 3

Candidate Starts for Savannah_68:

(1, 42635), (Start: 3 @42758 has 38 MA's), (Start: 4 @42767 has 1 MA's), (5, 42782), (9, 42842), (10, 42875), (11, 42881), (15, 42935), (16, 42944), (17, 42959),

Gene: Scumberland_71 Start: 42953, Stop: 43252, Start Num: 3

Candidate Starts for Scumberland_71:

(1, 42830), (Start: 3 @42953 has 38 MA's), (Start: 4 @42962 has 1 MA's), (5, 42977), (9, 43037), (10, 43070), (11, 43076), (15, 43130), (16, 43139), (17, 43154),

Gene: Selwyn23_70 Start: 42870, Stop: 43169, Start Num: 3

Candidate Starts for Selwyn23_70:

(1, 42747), (Start: 3 @42870 has 38 MA's), (Start: 4 @42879 has 1 MA's), (5, 42894), (9, 42954), (10, 42987), (11, 42993), (15, 43047), (16, 43056), (17, 43071),

Gene: Shotgun_69 Start: 42637, Stop: 42936, Start Num: 3

Candidate Starts for Shotgun_69:

(1, 42514), (Start: 3 @42637 has 38 MA's), (Start: 4 @42646 has 1 MA's), (5, 42661), (9, 42721), (10, 42754), (11, 42760), (15, 42814), (16, 42823), (17, 42838),

Gene: Smarties_79 Start: 44546, Stop: 44839, Start Num: 3

Candidate Starts for Smarties_79:

(Start: 3 @44546 has 38 MA's), (9, 44630), (10, 44663), (11, 44669), (12, 44690), (15, 44723), (16, 44732), (17, 44747),

Gene: Teamocil_73 Start: 42883, Stop: 43176, Start Num: 3

Candidate Starts for Teamocil_73:

(Start: 3 @42883 has 38 MA's), (9, 42967), (10, 43000), (11, 43006), (14, 43057), (16, 43069), (17, 43084),

Gene: Tyrumbra_68 Start: 43493, Stop: 43786, Start Num: 3

Candidate Starts for Tyrumbra_68:

(Start: 3 @43493 has 38 MA's), (5, 43517), (9, 43577), (10, 43610), (11, 43616), (15, 43670), (16, 43679), (17, 43694),

Gene: Yeti_69 Start: 42669, Stop: 42968, Start Num: 3

Candidate Starts for Yeti_69:

(1, 42546), (Start: 3 @42669 has 38 MA's), (5, 42693), (9, 42753), (10, 42786), (11, 42792), (15, 42846), (16, 42855), (17, 42870),