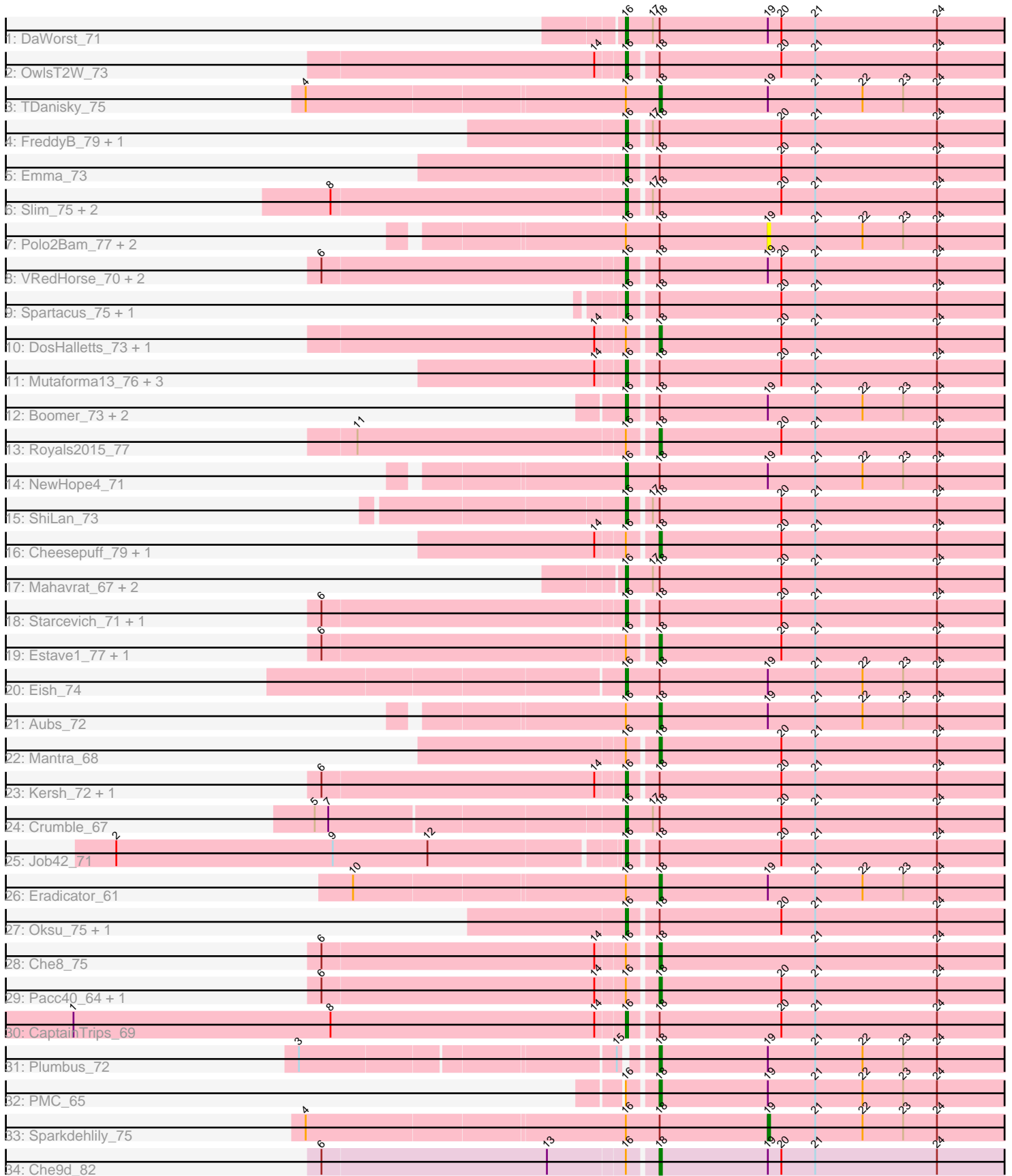


Pham 303409



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 303409 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303409 has 56 members, 5 are drafts.

Phages represented in each track:

- Track 1 : DaWorst_71
- Track 2 : OwlsT2W_73
- Track 3 : TDanisky_75
- Track 4 : FreddyB_79, Ramsey_74
- Track 5 : Emma_73
- Track 6 : Slim_75, Emmaloid_75, Rialto_78
- Track 7 : Polo2Bam_77, Enzomatic_78, SeaLumen_75
- Track 8 : VRedHorse_70, Cornucopia_72, Fancypants_75
- Track 9 : Spartacus_75, BodEinwohner17_76
- Track 10 : DosHalletts_73, Hades_71
- Track 11 : Mutaforma13_76, LunaBlu_73, Galactic_70, Sarma624_69
- Track 12 : Boomer_73, MilleniumForce_71, Rockne_69
- Track 13 : Royals2015_77
- Track 14 : NewHope4_71
- Track 15 : ShiLan_73
- Track 16 : Cheesepuff_79, BuzzLyseyear_77
- Track 17 : Mahavrat_67, RockyHorror_71, Grimmer_80
- Track 18 : Starcevich_71, Nitzel_67
- Track 19 : Estave1_77, Moonbeam_71
- Track 20 : Eish_74
- Track 21 : Aubs_72
- Track 22 : Mantra_68
- Track 23 : Kersh_72, LilMoolah_69
- Track 24 : Crumble_67
- Track 25 : Job42_71
- Track 26 : Eradicator_61
- Track 27 : Oksu_75, BlueCrab_73
- Track 28 : Che8_75
- Track 29 : Pacc40_64, Nivrat_67
- Track 30 : CaptainTrips_69
- Track 31 : Plumbus_72
- Track 32 : PMC_65
- Track 33 : Sparkdehlily_75
- Track 34 : Che9d_82

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

The start number called the most often in the published annotations is 16, it was called in 33 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlueCrab_73, BodEinwohner17_76, Boomer_73, CaptainTrips_69, Cornucopia_72, Crumble_67, DaWorst_71, Eish_74, Emma_73, Emmaloid_75, Fancypants_75, FreddyB_79, Galactic_70, Grimmer_80, Job42_71, Kersh_72, LilMoolah_69, LunaBlu_73, Mahavrat_67, MilleniumForce_71, Mutaforma13_76, NewHope4_71, Nitzel_67, Oksu_75, OwlsT2W_73, Ramsey_74, Rialto_78, Rockne_69, RockyHorror_71, Sarma624_69, ShiLan_73, Slim_75, Spartacus_75, Starcevich_71, VRedHorse_70,

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

- Aubs_72, BuzzLyseyear_77, Che8_75, Che9d_82, CheesePuff_79, DosHalletts_73, Enzomatic_78, Eradicator_61, Estave1_77, Hades_71, Mantra_68, Moonbeam_71, Nivrat_67, PMC_65, Pacc40_64, Polo2Bam_77, Royals2015_77, SeaLumen_75, Sparkdehlily_75, TDanisky_75,

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

- Plumbus_72,

Summary by start number:

Start 16:

- Found in 55 of 56 (98.2%) of genes in pham
- Manual Annotations of this start: 33 of 51
- Called 63.6% of time when present
- Phage (with cluster) where this start called: BlueCrab_73 (F1), BodEinwohner17_76 (F1), Boomer_73 (F1), CaptainTrips_69 (F1), Cornucopia_72 (F1), Crumble_67 (F1), DaWorst_71 (F1), Eish_74 (F1), Emma_73 (F1), Emmaloid_75 (F1), Fancypants_75 (F1), FreddyB_79 (F1), Galactic_70 (F1), Grimmer_80 (F1), Job42_71 (F1), Kersh_72 (F1), LilMoolah_69 (F1), LunaBlu_73 (F1), Mahavrat_67 (F1), MilleniumForce_71 (F1), Mutaforma13_76 (F1), NewHope4_71 (F1), Nitzel_67 (F1), Oksu_75 (F1), OwlsT2W_73 (F1), Ramsey_74 (F1), Rialto_78 (F1), Rockne_69 (F1), RockyHorror_71 (F1), Sarma624_69 (F1), ShiLan_73 (F1), Slim_75 (F1), Spartacus_75 (F1), Starcevich_71 (F1), VRedHorse_70 (F1),

Start 18:

- Found in 56 of 56 (100.0%) of genes in pham
- Manual Annotations of this start: 17 of 51
- Called 30.4% of time when present
- Phage (with cluster) where this start called: Aubs_72 (F1), BuzzLyseyear_77 (F1), Che8_75 (F1), Che9d_82 (F2), CheesePuff_79 (F1), DosHalletts_73 (F1), Eradicator_61 (F1), Estave1_77 (F1), Hades_71 (F1), Mantra_68 (F1), Moonbeam_71 (F1), Nivrat_67 (F1), PMC_65 (F1), Pacc40_64 (F1), Plumbus_72 (F1), Royals2015_77 (F1), TDanisky_75 (F1),

Start 19:

- Found in 19 of 56 (33.9%) of genes in pham
- Manual Annotations of this start: 1 of 51

- Called 21.1% of time when present
- Phage (with cluster) where this start called: Enzomatic_78 (F1), Polo2Bam_77 (F1), SeaLumen_75 (F1), Sparkdehlily_75 (F1),

Summary by clusters:

There are 2 clusters represented in this pham: F1, F2,

Info for manual annotations of cluster F1:

- Start number 16 was manually annotated 33 times for cluster F1.
- Start number 18 was manually annotated 16 times for cluster F1.
- Start number 19 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 18 was manually annotated 1 time for cluster F2.

Gene Information:

Gene: Aubs_72 Start: 46574, Stop: 46738, Start Num: 18

Candidate Starts for Aubs_72:

(Start: 16 @46559 has 33 MA's), (Start: 18 @46574 has 17 MA's), (Start: 19 @46622 has 1 MA's), (21, 46643), (22, 46664), (23, 46682), (24, 46697),

Gene: BlueCrab_73 Start: 46976, Stop: 47152, Start Num: 16

Candidate Starts for BlueCrab_73:

(Start: 16 @46976 has 33 MA's), (Start: 18 @46988 has 17 MA's), (20, 47042), (21, 47057), (24, 47111),

Gene: BodEinwohner17_76 Start: 48065, Stop: 48241, Start Num: 16

Candidate Starts for BodEinwohner17_76:

(Start: 16 @48065 has 33 MA's), (Start: 18 @48077 has 17 MA's), (20, 48131), (21, 48146), (24, 48200),

Gene: Boomer_73 Start: 46160, Stop: 46336, Start Num: 16

Candidate Starts for Boomer_73:

(Start: 16 @46160 has 33 MA's), (Start: 18 @46172 has 17 MA's), (Start: 19 @46220 has 1 MA's), (21, 46241), (22, 46262), (23, 46280), (24, 46295),

Gene: BuzzLyseyear_77 Start: 48122, Stop: 48286, Start Num: 18

Candidate Starts for BuzzLyseyear_77:

(14, 48098), (Start: 16 @48110 has 33 MA's), (Start: 18 @48122 has 17 MA's), (20, 48176), (21, 48191), (24, 48245),

Gene: CaptainTrips_69 Start: 45366, Stop: 45542, Start Num: 16

Candidate Starts for CaptainTrips_69:

(1, 45123), (8, 45237), (14, 45354), (Start: 16 @45366 has 33 MA's), (Start: 18 @45378 has 17 MA's), (20, 45432), (21, 45447), (24, 45501),

Gene: Che8_75 Start: 46187, Stop: 46351, Start Num: 18

Candidate Starts for Che8_75:

(6, 46043), (14, 46163), (Start: 16 @46175 has 33 MA's), (Start: 18 @46187 has 17 MA's), (21, 46256), (24, 46310),

Gene: Che9d_82 Start: 45911, Stop: 46075, Start Num: 18

Candidate Starts for Che9d_82:

(6, 45767), (13, 45866), (Start: 16 @45899 has 33 MA's), (Start: 18 @45911 has 17 MA's), (Start: 19 @45959 has 1 MA's), (20, 45965), (21, 45980), (24, 46034),

Gene: Cheese puff_79 Start: 45572, Stop: 45736, Start Num: 18

Candidate Starts for Cheese puff_79:

(14, 45548), (Start: 16 @45560 has 33 MA's), (Start: 18 @45572 has 17 MA's), (20, 45626), (21, 45641), (24, 45695),

Gene: Cornucopia_72 Start: 44790, Stop: 44966, Start Num: 16

Candidate Starts for Cornucopia_72:

(6, 44658), (Start: 16 @44790 has 33 MA's), (Start: 18 @44802 has 17 MA's), (Start: 19 @44850 has 1 MA's), (20, 44856), (21, 44871), (24, 44925),

Gene: Crumble_67 Start: 42381, Stop: 42560, Start Num: 16

Candidate Starts for Crumble_67:

(5, 42249), (7, 42255), (Start: 16 @42381 has 33 MA's), (17, 42393), (Start: 18 @42396 has 17 MA's), (20, 42450), (21, 42465), (24, 42519),

Gene: DaWorst_71 Start: 45136, Stop: 45315, Start Num: 16

Candidate Starts for DaWorst_71:

(Start: 16 @45136 has 33 MA's), (17, 45148), (Start: 18 @45151 has 17 MA's), (Start: 19 @45199 has 1 MA's), (20, 45205), (21, 45220), (24, 45274),

Gene: DosHalletts_73 Start: 47406, Stop: 47570, Start Num: 18

Candidate Starts for DosHalletts_73:

(14, 47382), (Start: 16 @47394 has 33 MA's), (Start: 18 @47406 has 17 MA's), (20, 47460), (21, 47475), (24, 47529),

Gene: Eish_74 Start: 46769, Stop: 46948, Start Num: 16

Candidate Starts for Eish_74:

(Start: 16 @46769 has 33 MA's), (Start: 18 @46784 has 17 MA's), (Start: 19 @46832 has 1 MA's), (21, 46853), (22, 46874), (23, 46892), (24, 46907),

Gene: Emma_73 Start: 45152, Stop: 45328, Start Num: 16

Candidate Starts for Emma_73:

(Start: 16 @45152 has 33 MA's), (Start: 18 @45164 has 17 MA's), (20, 45218), (21, 45233), (24, 45287),

Gene: Emmaloid_75 Start: 45890, Stop: 46066, Start Num: 16

Candidate Starts for Emmaloid_75:

(8, 45761), (Start: 16 @45890 has 33 MA's), (17, 45899), (Start: 18 @45902 has 17 MA's), (20, 45956), (21, 45971), (24, 46025),

Gene: Enzomatic_78 Start: 43893, Stop: 44009, Start Num: 19

Candidate Starts for Enzomatic_78:

(Start: 16 @43830 has 33 MA's), (Start: 18 @43845 has 17 MA's), (Start: 19 @43893 has 1 MA's), (21, 43914), (22, 43935), (23, 43953), (24, 43968),

Gene: Eradicator_61 Start: 43588, Stop: 43752, Start Num: 18

Candidate Starts for Eradicator_61:

(10, 43456), (Start: 16 @43573 has 33 MA's), (Start: 18 @43588 has 17 MA's), (Start: 19 @43636 has 1 MA's), (21, 43657), (22, 43678), (23, 43696), (24, 43711),

Gene: Estave1_77 Start: 49101, Stop: 49265, Start Num: 18

Candidate Starts for Estave1_77:

(6, 48957), (Start: 16 @49089 has 33 MA's), (Start: 18 @49101 has 17 MA's), (20, 49155), (21, 49170), (24, 49224),

Gene: Fancypants_75 Start: 47387, Stop: 47563, Start Num: 16

Candidate Starts for Fancypants_75:

(6, 47255), (Start: 16 @47387 has 33 MA's), (Start: 18 @47399 has 17 MA's), (Start: 19 @47447 has 1 MA's), (20, 47453), (21, 47468), (24, 47522),

Gene: FreddyB_79 Start: 47135, Stop: 47311, Start Num: 16

Candidate Starts for FreddyB_79:

(Start: 16 @47135 has 33 MA's), (17, 47144), (Start: 18 @47147 has 17 MA's), (20, 47201), (21, 47216), (24, 47270),

Gene: Galactic_70 Start: 45411, Stop: 45587, Start Num: 16

Candidate Starts for Galactic_70:

(14, 45399), (Start: 16 @45411 has 33 MA's), (Start: 18 @45423 has 17 MA's), (20, 45477), (21, 45492), (24, 45546),

Gene: Grimmer_80 Start: 45962, Stop: 46141, Start Num: 16

Candidate Starts for Grimmer_80:

(Start: 16 @45962 has 33 MA's), (17, 45974), (Start: 18 @45977 has 17 MA's), (20, 46031), (21, 46046), (24, 46100),

Gene: Hades_71 Start: 44162, Stop: 44326, Start Num: 18

Candidate Starts for Hades_71:

(14, 44138), (Start: 16 @44150 has 33 MA's), (Start: 18 @44162 has 17 MA's), (20, 44216), (21, 44231), (24, 44285),

Gene: Job42_71 Start: 48732, Stop: 48908, Start Num: 16

Candidate Starts for Job42_71:

(2, 48513), (9, 48609), (12, 48651), (Start: 16 @48732 has 33 MA's), (Start: 18 @48744 has 17 MA's), (20, 48798), (21, 48813), (24, 48867),

Gene: Kersh_72 Start: 47575, Stop: 47751, Start Num: 16

Candidate Starts for Kersh_72:

(6, 47443), (14, 47563), (Start: 16 @47575 has 33 MA's), (Start: 18 @47587 has 17 MA's), (20, 47641), (21, 47656), (24, 47710),

Gene: LilMoolah_69 Start: 45729, Stop: 45905, Start Num: 16

Candidate Starts for LilMoolah_69:

(6, 45597), (14, 45717), (Start: 16 @45729 has 33 MA's), (Start: 18 @45741 has 17 MA's), (20, 45795), (21, 45810), (24, 45864),

Gene: LunaBlu_73 Start: 46069, Stop: 46245, Start Num: 16

Candidate Starts for LunaBlu_73:

(14, 46057), (Start: 16 @46069 has 33 MA's), (Start: 18 @46081 has 17 MA's), (20, 46135), (21, 46150), (24, 46204),

Gene: Mahavrat_67 Start: 43531, Stop: 43710, Start Num: 16

Candidate Starts for Mahavrat_67:

(Start: 16 @43531 has 33 MA's), (17, 43543), (Start: 18 @43546 has 17 MA's), (20, 43600), (21, 43615), (24, 43669),

Gene: Mantra_68 Start: 45375, Stop: 45539, Start Num: 18

Candidate Starts for Mantra_68:

(Start: 16 @45363 has 33 MA's), (Start: 18 @45375 has 17 MA's), (20, 45429), (21, 45444), (24, 45498),

Gene: MilleniumForce_71 Start: 46034, Stop: 46210, Start Num: 16

Candidate Starts for MilleniumForce_71:

(Start: 16 @46034 has 33 MA's), (Start: 18 @46046 has 17 MA's), (Start: 19 @46094 has 1 MA's), (21, 46115), (22, 46136), (23, 46154), (24, 46169),

Gene: Moonbeam_71 Start: 46193, Stop: 46357, Start Num: 18

Candidate Starts for Moonbeam_71:

(6, 46049), (Start: 16 @46181 has 33 MA's), (Start: 18 @46193 has 17 MA's), (20, 46247), (21, 46262), (24, 46316),

Gene: Mutaforma13_76 Start: 46783, Stop: 46959, Start Num: 16

Candidate Starts for Mutaforma13_76:

(14, 46771), (Start: 16 @46783 has 33 MA's), (Start: 18 @46795 has 17 MA's), (20, 46849), (21, 46864), (24, 46918),

Gene: NewHope4_71 Start: 43976, Stop: 44155, Start Num: 16

Candidate Starts for NewHope4_71:

(Start: 16 @43976 has 33 MA's), (Start: 18 @43991 has 17 MA's), (Start: 19 @44039 has 1 MA's), (21, 44060), (22, 44081), (23, 44099), (24, 44114),

Gene: Nitzel_67 Start: 43134, Stop: 43310, Start Num: 16

Candidate Starts for Nitzel_67:

(6, 43002), (Start: 16 @43134 has 33 MA's), (Start: 18 @43146 has 17 MA's), (20, 43200), (21, 43215), (24, 43269),

Gene: Nivrat_67 Start: 45614, Stop: 45778, Start Num: 18

Candidate Starts for Nivrat_67:

(6, 45470), (14, 45590), (Start: 16 @45602 has 33 MA's), (Start: 18 @45614 has 17 MA's), (20, 45668), (21, 45683), (24, 45737),

Gene: Oksu_75 Start: 47529, Stop: 47705, Start Num: 16

Candidate Starts for Oksu_75:

(Start: 16 @47529 has 33 MA's), (Start: 18 @47541 has 17 MA's), (20, 47595), (21, 47610), (24, 47664),

Gene: OwlsT2W_73 Start: 45895, Stop: 46071, Start Num: 16

Candidate Starts for OwlsT2W_73:

(14, 45883), (Start: 16 @45895 has 33 MA's), (Start: 18 @45907 has 17 MA's), (20, 45961), (21, 45976), (24, 46030),

Gene: PMC_65 Start: 44396, Stop: 44560, Start Num: 18

Candidate Starts for PMC_65:

(Start: 16 @44384 has 33 MA's), (Start: 18 @44396 has 17 MA's), (Start: 19 @44444 has 1 MA's), (21, 44465), (22, 44486), (23, 44504), (24, 44519),

Gene: Pacc40_64 Start: 45641, Stop: 45805, Start Num: 18

Candidate Starts for Pacc40_64:

(6, 45497), (14, 45617), (Start: 16 @45629 has 33 MA's), (Start: 18 @45641 has 17 MA's), (20, 45695), (21, 45710), (24, 45764),

Gene: Plumbus_72 Start: 43333, Stop: 43497, Start Num: 18

Candidate Starts for Plumbus_72:

(3, 43189), (15, 43321), (Start: 18 @43333 has 17 MA's), (Start: 19 @43381 has 1 MA's), (21, 43402), (22, 43423), (23, 43441), (24, 43456),

Gene: Polo2Bam_77 Start: 43893, Stop: 44009, Start Num: 19

Candidate Starts for Polo2Bam_77:

(Start: 16 @43830 has 33 MA's), (Start: 18 @43845 has 17 MA's), (Start: 19 @43893 has 1 MA's), (21, 43914), (22, 43935), (23, 43953), (24, 43968),

Gene: Ramsey_74 Start: 47871, Stop: 48047, Start Num: 16

Candidate Starts for Ramsey_74:

(Start: 16 @47871 has 33 MA's), (17, 47880), (Start: 18 @47883 has 17 MA's), (20, 47937), (21, 47952), (24, 48006),

Gene: Rialto_78 Start: 47263, Stop: 47439, Start Num: 16

Candidate Starts for Rialto_78:

(8, 47134), (Start: 16 @47263 has 33 MA's), (17, 47272), (Start: 18 @47275 has 17 MA's), (20, 47329), (21, 47344), (24, 47398),

Gene: Rockne_69 Start: 44396, Stop: 44572, Start Num: 16

Candidate Starts for Rockne_69:

(Start: 16 @44396 has 33 MA's), (Start: 18 @44408 has 17 MA's), (Start: 19 @44456 has 1 MA's), (21, 44477), (22, 44498), (23, 44516), (24, 44531),

Gene: RockyHorror_71 Start: 44952, Stop: 45131, Start Num: 16

Candidate Starts for RockyHorror_71:

(Start: 16 @44952 has 33 MA's), (17, 44964), (Start: 18 @44967 has 17 MA's), (20, 45021), (21, 45036), (24, 45090),

Gene: Royals2015_77 Start: 45927, Stop: 46091, Start Num: 18

Candidate Starts for Royals2015_77:

(11, 45798), (Start: 16 @45915 has 33 MA's), (Start: 18 @45927 has 17 MA's), (20, 45981), (21, 45996), (24, 46050),

Gene: Sarma624_69 Start: 42529, Stop: 42705, Start Num: 16

Candidate Starts for Sarma624_69:

(14, 42517), (Start: 16 @42529 has 33 MA's), (Start: 18 @42541 has 17 MA's), (20, 42595), (21, 42610), (24, 42664),

Gene: SeaLumen_75 Start: 43893, Stop: 44009, Start Num: 19

Candidate Starts for SeaLumen_75:

(Start: 16 @43830 has 33 MA's), (Start: 18 @43845 has 17 MA's), (Start: 19 @43893 has 1 MA's), (21, 43914), (22, 43935), (23, 43953), (24, 43968),

Gene: ShiLan_73 Start: 48503, Stop: 48679, Start Num: 16

Candidate Starts for ShiLan_73:

(Start: 16 @48503 has 33 MA's), (17, 48512), (Start: 18 @48515 has 17 MA's), (20, 48569), (21, 48584), (24, 48638),

Gene: Slim_75 Start: 45881, Stop: 46057, Start Num: 16

Candidate Starts for Slim_75:

(8, 45752), (Start: 16 @45881 has 33 MA's), (17, 45890), (Start: 18 @45893 has 17 MA's), (20, 45947), (21, 45962), (24, 46016),

Gene: Sparkdehlily_75 Start: 44507, Stop: 44623, Start Num: 19

Candidate Starts for Sparkdehlily_75:

(4, 44306), (Start: 16 @44444 has 33 MA's), (Start: 18 @44459 has 17 MA's), (Start: 19 @44507 has 1 MA's), (21, 44528), (22, 44549), (23, 44567), (24, 44582),

Gene: Spartacus_75 Start: 48082, Stop: 48258, Start Num: 16

Candidate Starts for Spartacus_75:

(Start: 16 @48082 has 33 MA's), (Start: 18 @48094 has 17 MA's), (20, 48148), (21, 48163), (24, 48217),

Gene: Starcevich_71 Start: 46946, Stop: 47122, Start Num: 16

Candidate Starts for Starcevich_71:

(6, 46814), (Start: 16 @46946 has 33 MA's), (Start: 18 @46958 has 17 MA's), (20, 47012), (21, 47027), (24, 47081),

Gene: TDanisky_75 Start: 44459, Stop: 44623, Start Num: 18

Candidate Starts for TDanisky_75:

(4, 44306), (Start: 16 @44444 has 33 MA's), (Start: 18 @44459 has 17 MA's), (Start: 19 @44507 has 1 MA's), (21, 44528), (22, 44549), (23, 44567), (24, 44582),

Gene: VRedHorse_70 Start: 43608, Stop: 43784, Start Num: 16

Candidate Starts for VRedHorse_70:

(6, 43476), (Start: 16 @43608 has 33 MA's), (Start: 18 @43620 has 17 MA's), (Start: 19 @43668 has 1 MA's), (20, 43674), (21, 43689), (24, 43743),