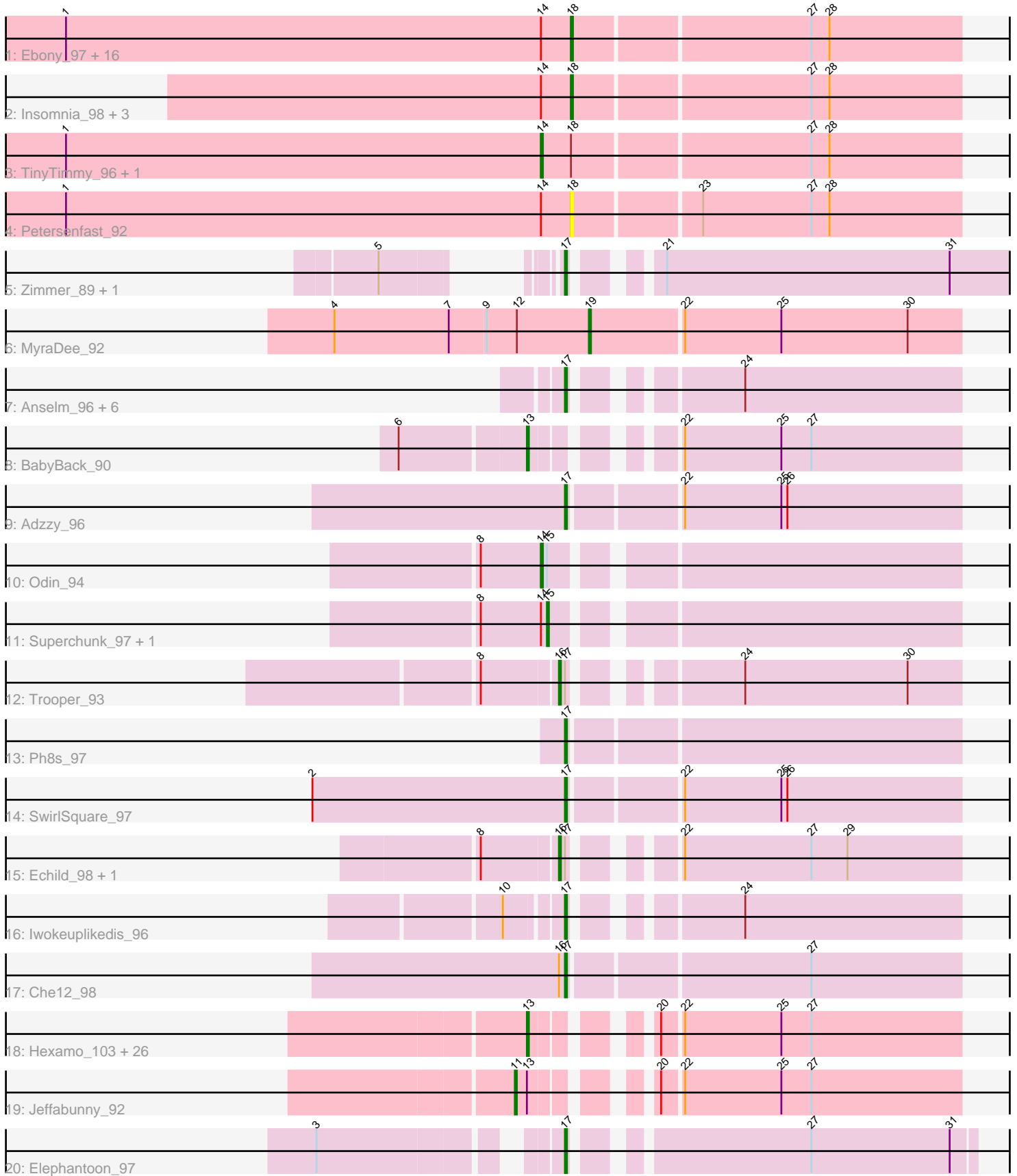


Pham 304970



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 304970 Report

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

Pham number 304970 has 75 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Ebony_97, Joselito_96, Snape_98, Mulciber_97, Bud_91, Aneem_99, Orange_98, Gilberta_96, Lucivia_99, Kimba_95, Bowtie_94, Flaverint_99, Bachome_96, Timothy_98, Mabel_98, Saskia_96, Munch_97
- Track 2 : Insomnia_98, Wolpertinger_98, Sham4_95, Fibonacci_98
- Track 3 : TinyTimmy_96, MaCh_98
- Track 4 : Petersenfast_92
- Track 5 : Zimmer_89, DarthPhader_90
- Track 6 : MyraDee_92
- Track 7 : Anselm_96, Fameo_92, QueenB2_92, Heffalump_90, DudeLittle_92, Retro23_94, Dalmatian_93
- Track 8 : BabyBack_90
- Track 9 : Adzzy_96
- Track 10 : Odin_94
- Track 11 : Superchunk_97, Caraxes_98
- Track 12 : Trooper_93
- Track 13 : Ph8s_97
- Track 14 : SwirlSquare_97
- Track 15 : Echild_98, Benvolio_93
- Track 16 : Iwokeuplikedis_96
- Track 17 : Che12_98
- Track 18 : Hexamo_103, Newrala_100, DelvinSonDorr_96, Hoot_96, Koko_103, Candra_99, Kazan_102, Gruunaga_102, Artemis2UCLA_103, Roksolana_104, BABullseye_94, Cookiedough_99, CloudWang3_104, Chartreuse_100, BennyP_103, Gladiator_98, Rifter_102, GreedyLawyer_90, SuperCallie99_96, Neeharika16_98, DaVinci_98, VohminGhazi_101, McFly_100, EricB_98, SmellyB_101, Isiphiwo_97, Hammer_102
- Track 19 : Jeffabunny_92
- Track 20 : Elephantoon_97

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

The start number called the most often in the published annotations is 13, it was called in 26 of the 68 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artemis2UCLA_103, BABullseye_94, BabyBack_90, BennyP_103, Candra_99, Chartreuse_100, CloudWang3_104, Cookiedough_99, DaVinci_98, DelvinSonDorr_96, EricB_98, Gladiator_98, GreedyLawyer_90, Gruunaga_102, Hammer_102, Hexamo_103, Hoot_96, Isiphiwo_97, Kazan_102, Koko_103, McFly_100, Neeharika16_98, Newrala_100, Rifter_102, Roksolana_104, SmellyB_101, SuperCallie99_96, VohminGhazi_101,

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

- Jeffabunny_92,

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

- Adzzy_96, Aneem_99, Anselm_96, Bachome_96, Benvolio_93, Bowtie_94, Bud_91, Caraxes_98, Che12_98, Dalmatian_93, DARTHPhader_90, DudeLittle_92, Ebony_97, Echild_98, Elephantoon_97, Fameo_92, Fibonacci_98, Flaverint_99, Gilberta_96, Heffalump_90, Insomnia_98, Iwokeuplikedis_96, Joselito_96, Kimba_95, Lucivia_99, MaCh_98, Mabel_98, Mulciber_97, Munch_97, MyraDee_92, Odin_94, Orange_98, Petersenfast_92, Ph8s_97, QueenB2_92, Retro23_94, Saskia_96, Sham4_95, Snape_98, Superchunk_97, SwirlSquare_97, Timothy_98, TinyTimmy_96, Trooper_93, Wolpertinger_98, Zimmer_89,

Summary by start number:

Start 11:

- Found in 1 of 75 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jeffabunny_92 (A6),

Start 13:

- Found in 29 of 75 (38.7%) of genes in pham
- Manual Annotations of this start: 26 of 68
- Called 96.6% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_103 (A6), BABullseye_94 (A6), BabyBack_90 (A2), BennyP_103 (A6), Candra_99 (A6), Chartreuse_100 (A6), CloudWang3_104 (A6), Cookiedough_99 (A6), DaVinci_98 (A6), DelvinSonDorr_96 (A6), EricB_98 (A6), Gladiator_98 (A6), GreedyLawyer_90 (A6), Gruunaga_102 (A6), Hammer_102 (A6), Hexamo_103 (A6), Hoot_96 (A6), Isiphiwo_97 (A6), Kazan_102 (A6), Koko_103 (A6), McFly_100 (A6), Neeharika16_98 (A6), Newrala_100 (A6), Rifter_102 (A6), Roksolana_104 (A6), SmellyB_101 (A6), SuperCallie99_96 (A6), VohminGhazi_101 (A6),

Start 14:

- Found in 27 of 75 (36.0%) of genes in pham
- Manual Annotations of this start: 3 of 68
- Called 11.1% of time when present
- Phage (with cluster) where this start called: MaCh_98 (A11), Odin_94 (A2), TinyTimmy_96 (A11),

Start 15:

- Found in 3 of 75 (4.0%) of genes in pham
- Manual Annotations of this start: 1 of 68
- Called 66.7% of time when present

- Phage (with cluster) where this start called: Caraxes_98 (A2), Superchunk_97 (A2),

Start 16:

- Found in 4 of 75 (5.3%) of genes in pham
- Manual Annotations of this start: 3 of 68
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Benvolio_93 (A2), Echild_98 (A2), Trooper_93 (A2),

Start 17:

- Found in 18 of 75 (24.0%) of genes in pham
- Manual Annotations of this start: 15 of 68
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Adzzy_96 (A2), Anselm_96 (A2), Che12_98 (A2), Dalmatian_93 (A2), DarthPhader_90 (A12), DudeLittle_92 (A2), Elephantoon_97 (A9), Fameo_92 (A2), Heffalump_90 (A2), Iwokeuplikedis_96 (A2), Ph8s_97 (A2), QueenB2_92 (A2), Retro23_94 (A2), SwirlSquare_97 (A2), Zimmer_89 (A12),

Start 18:

- Found in 24 of 75 (32.0%) of genes in pham
- Manual Annotations of this start: 18 of 68
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Aneem_99 (A11), Bachome_96 (A11), Bowtie_94 (A11), Bud_91 (A11), Ebony_97 (A11), Fibonacci_98 (A11), Flaverint_99 (A11), Gilberta_96 (A11), Insomnia_98 (A11), Joselito_96 (A11), Kimba_95 (A11), Lucivia_99 (A11), Mabel_98 (A11), Mulciber_97 (A11), Munch_97 (A11), Orange_98 (A11), Petersenfast_92 (A11), Saskia_96 (A11), Sham4_95 (A11), Snape_98 (A11), Timothy_98 (A11), Wolpertinger_98 (A11),

Start 19:

- Found in 1 of 75 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee_92 (A18),

Summary by clusters:

There are 6 clusters represented in this pham: A11, A12, A18, A2, A6, A9,

Info for manual annotations of cluster A11:

- Start number 14 was manually annotated 2 times for cluster A11.
- Start number 18 was manually annotated 18 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 17 was manually annotated 2 times for cluster A12.

Info for manual annotations of cluster A18:

- Start number 19 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

- Start number 13 was manually annotated 1 time for cluster A2.
- Start number 14 was manually annotated 1 time for cluster A2.

- Start number 15 was manually annotated 1 time for cluster A2.
- Start number 16 was manually annotated 3 times for cluster A2.
- Start number 17 was manually annotated 12 times for cluster A2.

Info for manual annotations of cluster A6:

- Start number 11 was manually annotated 1 time for cluster A6.
- Start number 13 was manually annotated 25 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 17 was manually annotated 1 time for cluster A9.

Gene Information:

Gene: Adzzy_96 Start: 50624, Stop: 50436, Start Num: 17

Candidate Starts for Adzzy_96:

(Start: 17 @50624 has 15 MA's), (22, 50573), (25, 50525), (26, 50522),

Gene: Aneem_99 Start: 50978, Stop: 50790, Start Num: 18

Candidate Starts for Aneem_99:

(1, 51230), (Start: 14 @50993 has 3 MA's), (Start: 18 @50978 has 18 MA's), (27, 50864), (28, 50855),

Gene: Anselm_96 Start: 51904, Stop: 51731, Start Num: 17

Candidate Starts for Anselm_96:

(Start: 17 @51904 has 15 MA's), (24, 51838),

Gene: Artemis2UCLA_103 Start: 50643, Stop: 50455, Start Num: 13

Candidate Starts for Artemis2UCLA_103:

(Start: 13 @50643 has 26 MA's), (20, 50601), (22, 50592), (25, 50544), (27, 50529),

Gene: BABullseye_94 Start: 48781, Stop: 48593, Start Num: 13

Candidate Starts for BABullseye_94:

(Start: 13 @48781 has 26 MA's), (20, 48739), (22, 48730), (25, 48682), (27, 48667),

Gene: BabyBack_90 Start: 51813, Stop: 51625, Start Num: 13

Candidate Starts for BabyBack_90:

(6, 51873), (Start: 13 @51813 has 26 MA's), (22, 51762), (25, 51714), (27, 51699),

Gene: Bachome_96 Start: 50026, Stop: 49838, Start Num: 18

Candidate Starts for Bachome_96:

(1, 50278), (Start: 14 @50041 has 3 MA's), (Start: 18 @50026 has 18 MA's), (27, 49912), (28, 49903),

Gene: BennyP_103 Start: 50627, Stop: 50439, Start Num: 13

Candidate Starts for BennyP_103:

(Start: 13 @50627 has 26 MA's), (20, 50585), (22, 50576), (25, 50528), (27, 50513),

Gene: Benvolio_93 Start: 51526, Stop: 51350, Start Num: 16

Candidate Starts for Benvolio_93:

(8, 51562), (Start: 16 @51526 has 3 MA's), (Start: 17 @51523 has 15 MA's), (22, 51487), (27, 51424), (29, 51406),

Gene: Bowtie_94 Start: 49585, Stop: 49397, Start Num: 18

Candidate Starts for Bowtie_94:

(1, 49837), (Start: 14 @49600 has 3 MA's), (Start: 18 @49585 has 18 MA's), (27, 49471), (28, 49462),

Gene: Bud_91 Start: 49684, Stop: 49496, Start Num: 18

Candidate Starts for Bud_91:

(1, 49936), (Start: 14 @49699 has 3 MA's), (Start: 18 @49684 has 18 MA's), (27, 49570), (28, 49561),

Gene: Candra_99 Start: 50489, Stop: 50301, Start Num: 13

Candidate Starts for Candra_99:

(Start: 13 @50489 has 26 MA's), (20, 50447), (22, 50438), (25, 50390), (27, 50375),

Gene: Caraxes_98 Start: 51158, Stop: 50970, Start Num: 15

Candidate Starts for Caraxes_98:

(8, 51191), (Start: 14 @51161 has 3 MA's), (Start: 15 @51158 has 1 MA's),

Gene: Chartreuse_100 Start: 49790, Stop: 49602, Start Num: 13

Candidate Starts for Chartreuse_100:

(Start: 13 @49790 has 26 MA's), (20, 49748), (22, 49739), (25, 49691), (27, 49676),

Gene: Che12_98 Start: 51094, Stop: 50906, Start Num: 17

Candidate Starts for Che12_98:

(Start: 16 @51097 has 3 MA's), (Start: 17 @51094 has 15 MA's), (27, 50980),

Gene: CloudWang3_104 Start: 51172, Stop: 50984, Start Num: 13

Candidate Starts for CloudWang3_104:

(Start: 13 @51172 has 26 MA's), (20, 51130), (22, 51121), (25, 51073), (27, 51058),

Gene: Cookiedough_99 Start: 50764, Stop: 50576, Start Num: 13

Candidate Starts for Cookiedough_99:

(Start: 13 @50764 has 26 MA's), (20, 50722), (22, 50713), (25, 50665), (27, 50650),

Gene: DaVinci_98 Start: 49844, Stop: 49656, Start Num: 13

Candidate Starts for DaVinci_98:

(Start: 13 @49844 has 26 MA's), (20, 49802), (22, 49793), (25, 49745), (27, 49730),

Gene: Dalmatian_93 Start: 51205, Stop: 51032, Start Num: 17

Candidate Starts for Dalmatian_93:

(Start: 17 @51205 has 15 MA's), (24, 51139),

Gene: DarthPhader_90 Start: 51559, Stop: 51353, Start Num: 17

Candidate Starts for DarthPhader_90:

(5, 51604), (Start: 17 @51559 has 15 MA's), (21, 51529), (31, 51388),

Gene: DelvinSonDorr_96 Start: 50246, Stop: 50058, Start Num: 13

Candidate Starts for DelvinSonDorr_96:

(Start: 13 @50246 has 26 MA's), (20, 50204), (22, 50195), (25, 50147), (27, 50132),

Gene: DudeLittle_92 Start: 51271, Stop: 51098, Start Num: 17

Candidate Starts for DudeLittle_92:

(Start: 17 @51271 has 15 MA's), (24, 51205),

Gene: Ebony_97 Start: 50549, Stop: 50361, Start Num: 18

Candidate Starts for Ebony_97:

(1, 50801), (Start: 14 @50564 has 3 MA's), (Start: 18 @50549 has 18 MA's), (27, 50435), (28, 50426),

Gene: Echild_98 Start: 51550, Stop: 51374, Start Num: 16

Candidate Starts for Echild_98:

(8, 51586), (Start: 16 @51550 has 3 MA's), (Start: 17 @51547 has 15 MA's), (22, 51511), (27, 51448), (29, 51430),

Gene: Elephantoon_97 Start: 51166, Stop: 50984, Start Num: 17

Candidate Starts for Elephantoon_97:

(3, 51268), (Start: 17 @51166 has 15 MA's), (27, 51064), (31, 50995),

Gene: EricB_98 Start: 49989, Stop: 49801, Start Num: 13

Candidate Starts for EricB_98:

(Start: 13 @49989 has 26 MA's), (20, 49947), (22, 49938), (25, 49890), (27, 49875),

Gene: Fameo_92 Start: 50977, Stop: 50804, Start Num: 17

Candidate Starts for Fameo_92:

(Start: 17 @50977 has 15 MA's), (24, 50911),

Gene: Fibonacci_98 Start: 50832, Stop: 50644, Start Num: 18

Candidate Starts for Fibonacci_98:

(Start: 14 @50847 has 3 MA's), (Start: 18 @50832 has 18 MA's), (27, 50718), (28, 50709),

Gene: Flaverint_99 Start: 50976, Stop: 50788, Start Num: 18

Candidate Starts for Flaverint_99:

(1, 51228), (Start: 14 @50991 has 3 MA's), (Start: 18 @50976 has 18 MA's), (27, 50862), (28, 50853),

Gene: Gilberta_96 Start: 49852, Stop: 49664, Start Num: 18

Candidate Starts for Gilberta_96:

(1, 50104), (Start: 14 @49867 has 3 MA's), (Start: 18 @49852 has 18 MA's), (27, 49738), (28, 49729),

Gene: Gladiator_98 Start: 50501, Stop: 50313, Start Num: 13

Candidate Starts for Gladiator_98:

(Start: 13 @50501 has 26 MA's), (20, 50459), (22, 50450), (25, 50402), (27, 50387),

Gene: GreedyLawyer_90 Start: 50422, Stop: 50234, Start Num: 13

Candidate Starts for GreedyLawyer_90:

(Start: 13 @50422 has 26 MA's), (20, 50380), (22, 50371), (25, 50323), (27, 50308),

Gene: Gruunaga_102 Start: 50457, Stop: 50269, Start Num: 13

Candidate Starts for Gruunaga_102:

(Start: 13 @50457 has 26 MA's), (20, 50415), (22, 50406), (25, 50358), (27, 50343),

Gene: Hammer_102 Start: 50154, Stop: 49966, Start Num: 13

Candidate Starts for Hammer_102:

(Start: 13 @50154 has 26 MA's), (20, 50112), (22, 50103), (25, 50055), (27, 50040),

Gene: Heffalump_90 Start: 51446, Stop: 51273, Start Num: 17

Candidate Starts for Heffalump_90:

(Start: 17 @51446 has 15 MA's), (24, 51380),

Gene: Hexamo_103 Start: 50658, Stop: 50470, Start Num: 13

Candidate Starts for Hexamo_103:

(Start: 13 @50658 has 26 MA's), (20, 50616), (22, 50607), (25, 50559), (27, 50544),

Gene: Hoot_96 Start: 48306, Stop: 48118, Start Num: 13

Candidate Starts for Hoot_96:

(Start: 13 @48306 has 26 MA's), (20, 48264), (22, 48255), (25, 48207), (27, 48192),

Gene: Insomnia_98 Start: 51010, Stop: 50822, Start Num: 18

Candidate Starts for Insomnia_98:

(Start: 14 @51025 has 3 MA's), (Start: 18 @51010 has 18 MA's), (27, 50896), (28, 50887),

Gene: Isiphiwo_97 Start: 50208, Stop: 50020, Start Num: 13

Candidate Starts for Isiphiwo_97:

(Start: 13 @50208 has 26 MA's), (20, 50166), (22, 50157), (25, 50109), (27, 50094),

Gene: Iwokeuplikedis_96 Start: 51616, Stop: 51443, Start Num: 17

Candidate Starts for Iwokeuplikedis_96:

(10, 51640), (Start: 17 @51616 has 15 MA's), (24, 51550),

Gene: Jeffabunny_92 Start: 47267, Stop: 47073, Start Num: 11

Candidate Starts for Jeffabunny_92:

(Start: 11 @47267 has 1 MA's), (Start: 13 @47261 has 26 MA's), (20, 47219), (22, 47210), (25, 47162), (27, 47147),

Gene: Joselito_96 Start: 50730, Stop: 50542, Start Num: 18

Candidate Starts for Joselito_96:

(1, 50982), (Start: 14 @50745 has 3 MA's), (Start: 18 @50730 has 18 MA's), (27, 50616), (28, 50607),

Gene: Kazan_102 Start: 50459, Stop: 50271, Start Num: 13

Candidate Starts for Kazan_102:

(Start: 13 @50459 has 26 MA's), (20, 50417), (22, 50408), (25, 50360), (27, 50345),

Gene: Kimba_95 Start: 50034, Stop: 49846, Start Num: 18

Candidate Starts for Kimba_95:

(1, 50286), (Start: 14 @50049 has 3 MA's), (Start: 18 @50034 has 18 MA's), (27, 49920), (28, 49911),

Gene: Koko_103 Start: 51171, Stop: 50983, Start Num: 13

Candidate Starts for Koko_103:

(Start: 13 @51171 has 26 MA's), (20, 51129), (22, 51120), (25, 51072), (27, 51057),

Gene: Lucivia_99 Start: 51009, Stop: 50821, Start Num: 18

Candidate Starts for Lucivia_99:

(1, 51261), (Start: 14 @51024 has 3 MA's), (Start: 18 @51009 has 18 MA's), (27, 50895), (28, 50886),

Gene: MaCh_98 Start: 50988, Stop: 50785, Start Num: 14

Candidate Starts for MaCh_98:

(1, 51225), (Start: 14 @50988 has 3 MA's), (Start: 18 @50973 has 18 MA's), (27, 50859), (28, 50850),

Gene: Mabel_98 Start: 50974, Stop: 50786, Start Num: 18

Candidate Starts for Mabel_98:

(1, 51226), (Start: 14 @50989 has 3 MA's), (Start: 18 @50974 has 18 MA's), (27, 50860), (28, 50851),

Gene: McFly_100 Start: 50798, Stop: 50610, Start Num: 13

Candidate Starts for McFly_100:

(Start: 13 @50798 has 26 MA's), (20, 50756), (22, 50747), (25, 50699), (27, 50684),

Gene: Mulciber_97 Start: 50829, Stop: 50641, Start Num: 18

Candidate Starts for Mulciber_97:

(1, 51081), (Start: 14 @50844 has 3 MA's), (Start: 18 @50829 has 18 MA's), (27, 50715), (28, 50706),

Gene: Munch_97 Start: 50978, Stop: 50790, Start Num: 18

Candidate Starts for Munch_97:

(1, 51230), (Start: 14 @50993 has 3 MA's), (Start: 18 @50978 has 18 MA's), (27, 50864), (28, 50855),

Gene: MyraDee_92 Start: 48828, Stop: 48646, Start Num: 19

Candidate Starts for MyraDee_92:

(4, 48954), (7, 48897), (9, 48879), (12, 48864), (Start: 19 @48828 has 1 MA's), (22, 48783), (25, 48735), (30, 48672),

Gene: Neeharika16_98 Start: 50215, Stop: 50027, Start Num: 13

Candidate Starts for Neeharika16_98:

(Start: 13 @50215 has 26 MA's), (20, 50173), (22, 50164), (25, 50116), (27, 50101),

Gene: Newrala_100 Start: 50897, Stop: 50709, Start Num: 13

Candidate Starts for Newrala_100:

(Start: 13 @50897 has 26 MA's), (20, 50855), (22, 50846), (25, 50798), (27, 50783),

Gene: Odin_94 Start: 51072, Stop: 50881, Start Num: 14

Candidate Starts for Odin_94:

(8, 51102), (Start: 14 @51072 has 3 MA's), (Start: 15 @51069 has 1 MA's),

Gene: Orange_98 Start: 50528, Stop: 50340, Start Num: 18

Candidate Starts for Orange_98:

(1, 50780), (Start: 14 @50543 has 3 MA's), (Start: 18 @50528 has 18 MA's), (27, 50414), (28, 50405),

Gene: Petersenfast_92 Start: 49409, Stop: 49221, Start Num: 18

Candidate Starts for Petersenfast_92:

(1, 49661), (Start: 14 @49424 has 3 MA's), (Start: 18 @49409 has 18 MA's), (23, 49349), (27, 49295), (28, 49286),

Gene: Ph8s_97 Start: 50955, Stop: 50767, Start Num: 17

Candidate Starts for Ph8s_97:

(Start: 17 @50955 has 15 MA's),

Gene: QueenB2_92 Start: 51097, Stop: 50924, Start Num: 17

Candidate Starts for QueenB2_92:

(Start: 17 @51097 has 15 MA's), (24, 51031),

Gene: Retro23_94 Start: 51395, Stop: 51222, Start Num: 17

Candidate Starts for Retro23_94:

(Start: 17 @51395 has 15 MA's), (24, 51329),

Gene: Rifter_102 Start: 49949, Stop: 49761, Start Num: 13

Candidate Starts for Rifter_102:

(Start: 13 @49949 has 26 MA's), (20, 49907), (22, 49898), (25, 49850), (27, 49835),

Gene: Roksolana_104 Start: 51001, Stop: 50813, Start Num: 13

Candidate Starts for Roksolana_104:

(Start: 13 @51001 has 26 MA's), (20, 50959), (22, 50950), (25, 50902), (27, 50887),

Gene: Saskia_96 Start: 50197, Stop: 50009, Start Num: 18

Candidate Starts for Saskia_96:

(1, 50449), (Start: 14 @50212 has 3 MA's), (Start: 18 @50197 has 18 MA's), (27, 50083), (28, 50074),

Gene: Sham4_95 Start: 49724, Stop: 49536, Start Num: 18

Candidate Starts for Sham4_95:

(Start: 14 @49739 has 3 MA's), (Start: 18 @49724 has 18 MA's), (27, 49610), (28, 49601),

Gene: SmellyB_101 Start: 50453, Stop: 50265, Start Num: 13

Candidate Starts for SmellyB_101:

(Start: 13 @50453 has 26 MA's), (20, 50411), (22, 50402), (25, 50354), (27, 50339),

Gene: Snape_98 Start: 50517, Stop: 50329, Start Num: 18

Candidate Starts for Snape_98:

(1, 50769), (Start: 14 @50532 has 3 MA's), (Start: 18 @50517 has 18 MA's), (27, 50403), (28, 50394),

Gene: SuperCallie99_96 Start: 50373, Stop: 50185, Start Num: 13

Candidate Starts for SuperCallie99_96:

(Start: 13 @50373 has 26 MA's), (20, 50331), (22, 50322), (25, 50274), (27, 50259),

Gene: Superchunk_97 Start: 51158, Stop: 50970, Start Num: 15

Candidate Starts for Superchunk_97:

(8, 51191), (Start: 14 @51161 has 3 MA's), (Start: 15 @51158 has 1 MA's),

Gene: SwirlSquare_97 Start: 50315, Stop: 50127, Start Num: 17

Candidate Starts for SwirlSquare_97:

(2, 50441), (Start: 17 @50315 has 15 MA's), (22, 50264), (25, 50216), (26, 50213),

Gene: Timothy_98 Start: 50494, Stop: 50306, Start Num: 18

Candidate Starts for Timothy_98:

(1, 50746), (Start: 14 @50509 has 3 MA's), (Start: 18 @50494 has 18 MA's), (27, 50380), (28, 50371),

Gene: TinyTimmy_96 Start: 50238, Stop: 50035, Start Num: 14

Candidate Starts for TinyTimmy_96:

(1, 50475), (Start: 14 @50238 has 3 MA's), (Start: 18 @50223 has 18 MA's), (27, 50109), (28, 50100),

Gene: Trooper_93 Start: 50915, Stop: 50739, Start Num: 16

Candidate Starts for Trooper_93:

(8, 50951), (Start: 16 @50915 has 3 MA's), (Start: 17 @50912 has 15 MA's), (24, 50846), (30, 50765),

Gene: VohminGhazi_101 Start: 50454, Stop: 50266, Start Num: 13

Candidate Starts for VohminGhazi_101:

(Start: 13 @50454 has 26 MA's), (20, 50412), (22, 50403), (25, 50355), (27, 50340),

Gene: Wolpertinger_98 Start: 50843, Stop: 50655, Start Num: 18

Candidate Starts for Wolpertinger_98:

(Start: 14 @50858 has 3 MA's), (Start: 18 @50843 has 18 MA's), (27, 50729), (28, 50720),

Gene: Zimmer_89 Start: 51230, Stop: 51024, Start Num: 17

Candidate Starts for Zimmer_89:

(5, 51275), (Start: 17 @51230 has 15 MA's), (21, 51200), (31, 51059),