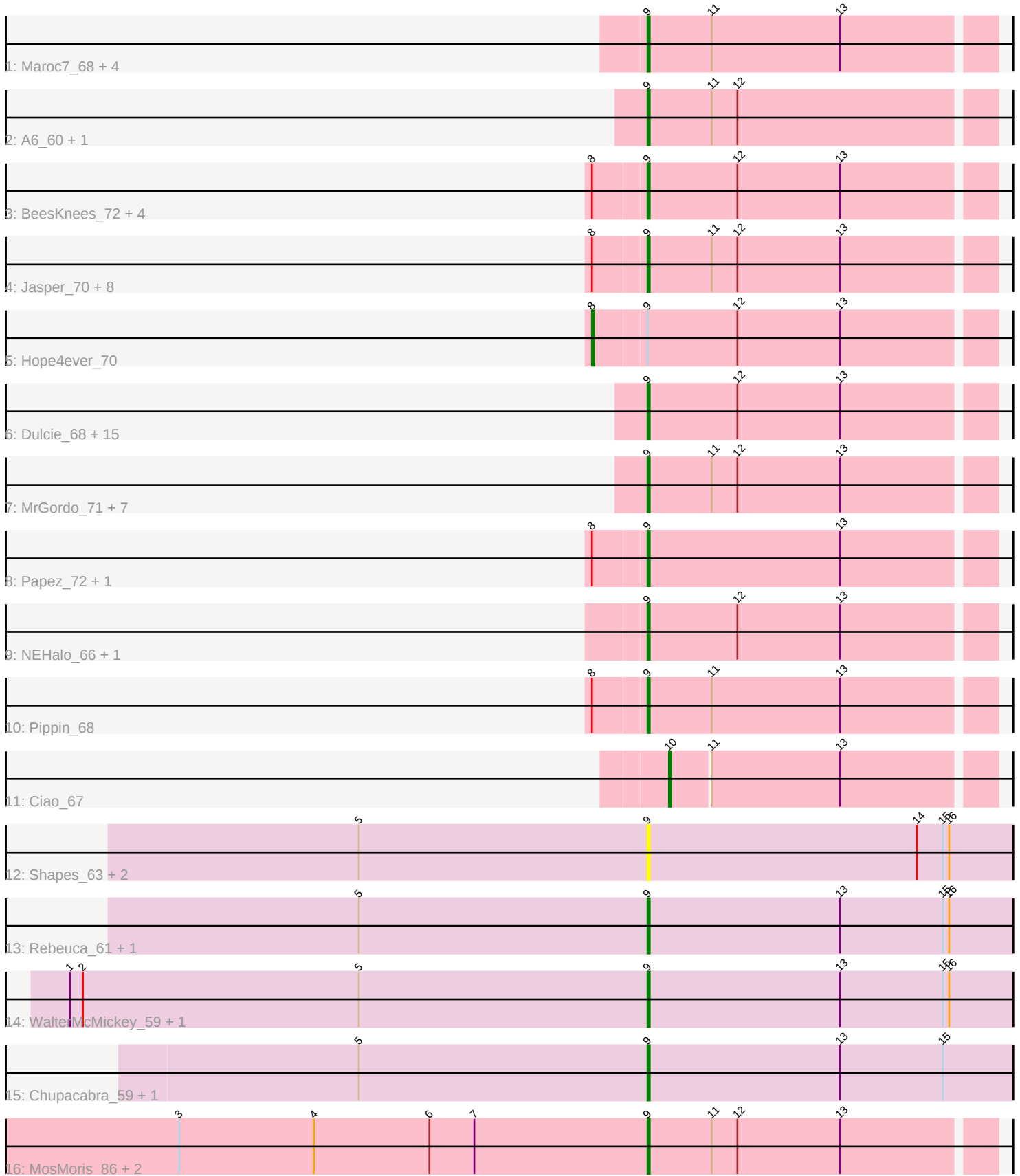


Pham 321406



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 321406 Report

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

Pham number 321406 has 64 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Maroc7_68, Fascinus_64, Graduation_74, Bigfoot_62, CactusRose_70
- Track 2 : A6_60, BK1_60
- Track 3 : BeesKnees_72, Molly_70, Killigrew_67, Fushigi_64, SpikeBT_67
- Track 4 : Jasper_70, Thor_68, Applejack_69, Dreamboat_71, PherrisBueller_70, ShortQueendom_62, SarFire_68, McSinger_66, Sanya_67
- Track 5 : Hope4ever_70
- Track 6 : Dulcie_68, Phlippers_65, Zeuska_73, Traft412_71, GMonster_68, Anglerfish_69, Kugel_73, Rhynn_64, Kykar_70, Rutherford_69, BigPaolini_65, Dynamix_71, Wilkins_68, TwoPeat_70, Topgun_67, Seanderson_70
- Track 7 : MrGordo_71, Atkinbua_72, ProMouse_70, Slagathor_71, Gwendoluna_73, Arcanine_71, Abrogate_680, Big3_69
- Track 8 : Papez_72, Mkhuseli_64
- Track 9 : NEHalo_66, Rajelicia_69
- Track 10 : Pippin_68
- Track 11 : Ciao_67
- Track 12 : Shapes_63, DustyMartin_63, Rowdy_63
- Track 13 : Rebeuca_61, Kristoff_60
- Track 14 : WalterMcMickey_59, Twister_59
- Track 15 : Chupacabra_59, Goose_61
- Track 16 : MosMoris_86, Gattaca_89, GoongGoong_91

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

The start number called the most often in the published annotations is 9, it was called in 56 of the 58 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A6_60, Abrogate_680, Anglerfish_69, Applejack_69, Arcanine_71, Atkinbua_72, BK1_60, BeesKnees_72, Big3_69, BigPaolini_65, Bigfoot_62, CactusRose_70, Chupacabra_59, Dreamboat_71, Dulcie_68, DustyMartin_63, Dynamix_71, Fascinus_64, Fushigi_64, GMonster_68, Gattaca_89, GoongGoong_91, Goose_61, Graduation_74, Gwendoluna_73, Jasper_70, Killigrew_67, Kristoff_60, Kugel_73, Kykar_70, Maroc7_68, McSinger_66, Mkhuseli_64, Molly_70, MosMoris_86, MrGordo_71, NEHalo_66, Papez_72, PherrisBueller_70, Phlippers_65, Pippin_68,

ProMouse_70, Rajelicia_69, Rebeuca_61, Rhynn_64, Rowdy_63, Rutherford_69, Sanya_67, SarFire_68, Seanderson_70, Shapes_63, ShortQueendom_62, Slagathor_71, SpikeBT_67, Thor_68, Topgun_67, Traft412_71, Twister_59, TwoPeat_70, WalterMcMickey_59, Wilkins_68, Zeuska_73,

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

- Hope4ever_70,

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

- Ciao_67,

Summary by start number:

Start 8:

- Found in 18 of 64 (28.1%) of genes in pham
- Manual Annotations of this start: 1 of 58
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Hope4ever_70 (A1),

Start 9:

- Found in 63 of 64 (98.4%) of genes in pham
- Manual Annotations of this start: 56 of 58
- Called 98.4% of time when present
- Phage (with cluster) where this start called: A6_60 (A1), Abrogate_680 (A1), Anglerfish_69 (A1), Applejack_69 (A1), Arcanine_71 (A1), Atkinbua_72 (A1), BK1_60 (A1), BeesKnees_72 (A1), Big3_69 (A1), BigPaolini_65 (A1), Bigfoot_62 (A1), CactusRose_70 (A1), Chupacabra_59 (A10), Dreamboat_71 (A1), Dulcie_68 (A1), DustyMartin_63 (A10), Dynamix_71 (A1), Fascinus_64 (A1), Fushigi_64 (A1), GMonster_68 (A1), Gattaca_89 (S), GoongGoong_91 (S), Goose_61 (A10), Graduation_74 (A1), Gwendoluna_73 (A1), Jasper_70 (A1), Killigrew_67 (A1), Kristoff_60 (A10), Kugel_73 (A1), Kykar_70 (A1), Maroc7_68 (A1), McSinger_66 (A1), Mkhuseleli_64 (A1), Molly_70 (A1), MosMoris_86 (S), MrGordo_71 (A1), NEHalo_66 (A1), Papez_72 (A1), PherrisBuell_70 (A1), Phlippers_65 (A1), Pippin_68 (A1), ProMouse_70 (A1), Rajelicia_69 (A1), Rebeuca_61 (A10), Rhynn_64 (A1), Rowdy_63 (A10), Rutherford_69 (A1), Sanya_67 (A1), SarFire_68 (A1), Seanderson_70 (A1), Shapes_63 (A10), ShortQueendom_62 (A1), Slagathor_71 (A1), SpikeBT_67 (A1), Thor_68 (A1), Topgun_67 (A1), Traft412_71 (A1), Twister_59 (A10), TwoPeat_70 (A1), WalterMcMickey_59 (A10), Wilkins_68 (A1), Zeuska_73 (A1),

Start 10:

- Found in 1 of 64 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 58
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ciao_67 (A1),

Summary by clusters:

There are 3 clusters represented in this pham: A1, S, A10,

Info for manual annotations of cluster A1:

- Start number 8 was manually annotated 1 time for cluster A1.
- Start number 9 was manually annotated 47 times for cluster A1.
- Start number 10 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A10:

- Start number 9 was manually annotated 6 times for cluster A10.

Info for manual annotations of cluster S:

- Start number 9 was manually annotated 3 times for cluster S.

Gene Information:

Gene: A6_60 Start: 40654, Stop: 40496, Start Num: 9

Candidate Starts for A6_60:

(Start: 9 @40654 has 56 MA's), (11, 40624), (12, 40612),

Gene: Abrogate_680 Start: 44702, Stop: 44544, Start Num: 9

Candidate Starts for Abrogate_680:

(Start: 9 @44702 has 56 MA's), (11, 44672), (12, 44660), (13, 44612),

Gene: Anglerfish_69 Start: 43633, Stop: 43475, Start Num: 9

Candidate Starts for Anglerfish_69:

(Start: 9 @43633 has 56 MA's), (12, 43591), (13, 43543),

Gene: Applejack_69 Start: 42031, Stop: 41873, Start Num: 9

Candidate Starts for Applejack_69:

(Start: 8 @42055 has 1 MA's), (Start: 9 @42031 has 56 MA's), (11, 42001), (12, 41989), (13, 41941),

Gene: Arcanine_71 Start: 44357, Stop: 44199, Start Num: 9

Candidate Starts for Arcanine_71:

(Start: 9 @44357 has 56 MA's), (11, 44327), (12, 44315), (13, 44267),

Gene: Atkinbua_72 Start: 43308, Stop: 43150, Start Num: 9

Candidate Starts for Atkinbua_72:

(Start: 9 @43308 has 56 MA's), (11, 43278), (12, 43266), (13, 43218),

Gene: BK1_60 Start: 40654, Stop: 40496, Start Num: 9

Candidate Starts for BK1_60:

(Start: 9 @40654 has 56 MA's), (11, 40624), (12, 40612),

Gene: BeesKnees_72 Start: 43271, Stop: 43113, Start Num: 9

Candidate Starts for BeesKnees_72:

(Start: 8 @43295 has 1 MA's), (Start: 9 @43271 has 56 MA's), (12, 43229), (13, 43181),

Gene: Big3_69 Start: 45192, Stop: 45034, Start Num: 9

Candidate Starts for Big3_69:

(Start: 9 @45192 has 56 MA's), (11, 45162), (12, 45150), (13, 45102),

Gene: BigPaolini_65 Start: 41391, Stop: 41233, Start Num: 9

Candidate Starts for BigPaolini_65:

(Start: 9 @41391 has 56 MA's), (12, 41349), (13, 41301),

Gene: Bigfoot_62 Start: 42484, Stop: 42326, Start Num: 9

Candidate Starts for Bigfoot_62:

(Start: 9 @42484 has 56 MA's), (11, 42454), (13, 42394),

Gene: CactusRose_70 Start: 43504, Stop: 43346, Start Num: 9

Candidate Starts for CactusRose_70:

(Start: 9 @43504 has 56 MA's), (11, 43474), (13, 43414),

Gene: Chupacabra_59 Start: 39866, Stop: 39669, Start Num: 9

Candidate Starts for Chupacabra_59:

(5, 40001), (Start: 9 @39866 has 56 MA's), (13, 39776), (15, 39728),

Gene: Ciao_67 Start: 42669, Stop: 42523, Start Num: 10

Candidate Starts for Ciao_67:

(Start: 10 @42669 has 1 MA's), (11, 42651), (13, 42591),

Gene: Dreamboat_71 Start: 42731, Stop: 42573, Start Num: 9

Candidate Starts for Dreamboat_71:

(Start: 8 @42755 has 1 MA's), (Start: 9 @42731 has 56 MA's), (11, 42701), (12, 42689), (13, 42641),

Gene: Dulcie_68 Start: 44649, Stop: 44491, Start Num: 9

Candidate Starts for Dulcie_68:

(Start: 9 @44649 has 56 MA's), (12, 44607), (13, 44559),

Gene: DustyMartin_63 Start: 39972, Stop: 39796, Start Num: 9

Candidate Starts for DustyMartin_63:

(5, 40107), (Start: 9 @39972 has 56 MA's), (14, 39846), (15, 39834), (16, 39831),

Gene: Dynamix_71 Start: 43175, Stop: 43017, Start Num: 9

Candidate Starts for Dynamix_71:

(Start: 9 @43175 has 56 MA's), (12, 43133), (13, 43085),

Gene: Fascinus_64 Start: 42998, Stop: 42840, Start Num: 9

Candidate Starts for Fascinus_64:

(Start: 9 @42998 has 56 MA's), (11, 42968), (13, 42908),

Gene: Fushigi_64 Start: 41064, Stop: 40906, Start Num: 9

Candidate Starts for Fushigi_64:

(Start: 8 @41088 has 1 MA's), (Start: 9 @41064 has 56 MA's), (12, 41022), (13, 40974),

Gene: GMonster_68 Start: 43522, Stop: 43364, Start Num: 9

Candidate Starts for GMonster_68:

(Start: 9 @43522 has 56 MA's), (12, 43480), (13, 43432),

Gene: Gattaca_89 Start: 48602, Stop: 48760, Start Num: 9

Candidate Starts for Gattaca_89:

(3, 48383), (4, 48446), (6, 48500), (7, 48521), (Start: 9 @48602 has 56 MA's), (11, 48632), (12, 48644), (13, 48692),

Gene: GoongGoong_91 Start: 48407, Stop: 48565, Start Num: 9

Candidate Starts for GoongGoong_91:

(3, 48188), (4, 48251), (6, 48305), (7, 48326), (Start: 9 @48407 has 56 MA's), (11, 48437), (12, 48449), (13, 48497),

Gene: Goose_61 Start: 39682, Stop: 39485, Start Num: 9

Candidate Starts for Goose_61:

(5, 39817), (Start: 9 @39682 has 56 MA's), (13, 39592), (15, 39544),

Gene: Graduation_74 Start: 44809, Stop: 44651, Start Num: 9

Candidate Starts for Graduation_74:

(Start: 9 @44809 has 56 MA's), (11, 44779), (13, 44719),

Gene: Gwendoluna_73 Start: 45287, Stop: 45129, Start Num: 9

Candidate Starts for Gwendoluna_73:

(Start: 9 @45287 has 56 MA's), (11, 45257), (12, 45245), (13, 45197),

Gene: Hope4ever_70 Start: 43364, Stop: 43182, Start Num: 8

Candidate Starts for Hope4ever_70:

(Start: 8 @43364 has 1 MA's), (Start: 9 @43340 has 56 MA's), (12, 43298), (13, 43250),

Gene: Jasper_70 Start: 42617, Stop: 42459, Start Num: 9

Candidate Starts for Jasper_70:

(Start: 8 @42641 has 1 MA's), (Start: 9 @42617 has 56 MA's), (11, 42587), (12, 42575), (13, 42527),

Gene: Killigrew_67 Start: 43283, Stop: 43125, Start Num: 9

Candidate Starts for Killigrew_67:

(Start: 8 @43307 has 1 MA's), (Start: 9 @43283 has 56 MA's), (12, 43241), (13, 43193),

Gene: Kristoff_60 Start: 40258, Stop: 40082, Start Num: 9

Candidate Starts for Kristoff_60:

(5, 40393), (Start: 9 @40258 has 56 MA's), (13, 40168), (15, 40120), (16, 40117),

Gene: Kugel_73 Start: 45096, Stop: 44938, Start Num: 9

Candidate Starts for Kugel_73:

(Start: 9 @45096 has 56 MA's), (12, 45054), (13, 45006),

Gene: Kykar_70 Start: 44029, Stop: 43871, Start Num: 9

Candidate Starts for Kykar_70:

(Start: 9 @44029 has 56 MA's), (12, 43987), (13, 43939),

Gene: Maroc7_68 Start: 43988, Stop: 43830, Start Num: 9

Candidate Starts for Maroc7_68:

(Start: 9 @43988 has 56 MA's), (11, 43958), (13, 43898),

Gene: McSinger_66 Start: 42174, Stop: 42016, Start Num: 9

Candidate Starts for McSinger_66:

(Start: 8 @42198 has 1 MA's), (Start: 9 @42174 has 56 MA's), (11, 42144), (12, 42132), (13, 42084),

Gene: Mkhuseleli_64 Start: 41388, Stop: 41230, Start Num: 9

Candidate Starts for Mkhuseleli_64:

(Start: 8 @41412 has 1 MA's), (Start: 9 @41388 has 56 MA's), (13, 41298),

Gene: Molly_70 Start: 43621, Stop: 43463, Start Num: 9

Candidate Starts for Molly_70:

(Start: 8 @43645 has 1 MA's), (Start: 9 @43621 has 56 MA's), (12, 43579), (13, 43531),

Gene: MosMoris_86 Start: 48608, Stop: 48766, Start Num: 9

Candidate Starts for MosMoris_86:

(3, 48389), (4, 48452), (6, 48506), (7, 48527), (Start: 9 @48608 has 56 MA's), (11, 48638), (12, 48650), (13, 48698),

Gene: MrGordo_71 Start: 43543, Stop: 43385, Start Num: 9
Candidate Starts for MrGordo_71:
(Start: 9 @43543 has 56 MA's), (11, 43513), (12, 43501), (13, 43453),

Gene: NEHalo_66 Start: 43494, Stop: 43336, Start Num: 9
Candidate Starts for NEHalo_66:
(Start: 9 @43494 has 56 MA's), (12, 43452), (13, 43404),

Gene: Papez_72 Start: 45006, Stop: 44848, Start Num: 9
Candidate Starts for Papez_72:
(Start: 8 @45030 has 1 MA's), (Start: 9 @45006 has 56 MA's), (13, 44916),

Gene: PherrisBueller_70 Start: 42268, Stop: 42110, Start Num: 9
Candidate Starts for PherrisBueller_70:
(Start: 8 @42292 has 1 MA's), (Start: 9 @42268 has 56 MA's), (11, 42238), (12, 42226), (13, 42178),

Gene: Phlippers_65 Start: 43891, Stop: 43733, Start Num: 9
Candidate Starts for Phlippers_65:
(Start: 9 @43891 has 56 MA's), (12, 43849), (13, 43801),

Gene: Pippin_68 Start: 42464, Stop: 42306, Start Num: 9
Candidate Starts for Pippin_68:
(Start: 8 @42488 has 1 MA's), (Start: 9 @42464 has 56 MA's), (11, 42434), (13, 42374),

Gene: ProMouse_70 Start: 43753, Stop: 43595, Start Num: 9
Candidate Starts for ProMouse_70:
(Start: 9 @43753 has 56 MA's), (11, 43723), (12, 43711), (13, 43663),

Gene: Rajelicia_69 Start: 44867, Stop: 44709, Start Num: 9
Candidate Starts for Rajelicia_69:
(Start: 9 @44867 has 56 MA's), (12, 44825), (13, 44777),

Gene: Rebeuca_61 Start: 40259, Stop: 40083, Start Num: 9
Candidate Starts for Rebeuca_61:
(5, 40394), (Start: 9 @40259 has 56 MA's), (13, 40169), (15, 40121), (16, 40118),

Gene: Rhynn_64 Start: 42450, Stop: 42292, Start Num: 9
Candidate Starts for Rhynn_64:
(Start: 9 @42450 has 56 MA's), (12, 42408), (13, 42360),

Gene: Rowdy_63 Start: 39972, Stop: 39796, Start Num: 9
Candidate Starts for Rowdy_63:
(5, 40107), (Start: 9 @39972 has 56 MA's), (14, 39846), (15, 39834), (16, 39831),

Gene: Rutherferd_69 Start: 44266, Stop: 44108, Start Num: 9
Candidate Starts for Rutherferd_69:
(Start: 9 @44266 has 56 MA's), (12, 44224), (13, 44176),

Gene: Sanya_67 Start: 44121, Stop: 43963, Start Num: 9
Candidate Starts for Sanya_67:

(Start: 8 @44145 has 1 MA's), (Start: 9 @44121 has 56 MA's), (11, 44091), (12, 44079), (13, 44031),

Gene: SarFire_68 Start: 43203, Stop: 43045, Start Num: 9

Candidate Starts for SarFire_68:

(Start: 8 @43227 has 1 MA's), (Start: 9 @43203 has 56 MA's), (11, 43173), (12, 43161), (13, 43113),

Gene: Seanderson_70 Start: 45615, Stop: 45457, Start Num: 9

Candidate Starts for Seanderson_70:

(Start: 9 @45615 has 56 MA's), (12, 45573), (13, 45525),

Gene: Shapes_63 Start: 39972, Stop: 39796, Start Num: 9

Candidate Starts for Shapes_63:

(5, 40107), (Start: 9 @39972 has 56 MA's), (14, 39846), (15, 39834), (16, 39831),

Gene: ShortQueendom_62 Start: 40573, Stop: 40415, Start Num: 9

Candidate Starts for ShortQueendom_62:

(Start: 8 @40597 has 1 MA's), (Start: 9 @40573 has 56 MA's), (11, 40543), (12, 40531), (13, 40483),

Gene: Slagathor_71 Start: 45253, Stop: 45095, Start Num: 9

Candidate Starts for Slagathor_71:

(Start: 9 @45253 has 56 MA's), (11, 45223), (12, 45211), (13, 45163),

Gene: SpikeBT_67 Start: 43351, Stop: 43193, Start Num: 9

Candidate Starts for SpikeBT_67:

(Start: 8 @43375 has 1 MA's), (Start: 9 @43351 has 56 MA's), (12, 43309), (13, 43261),

Gene: Thor_68 Start: 42561, Stop: 42403, Start Num: 9

Candidate Starts for Thor_68:

(Start: 8 @42585 has 1 MA's), (Start: 9 @42561 has 56 MA's), (11, 42531), (12, 42519), (13, 42471),

Gene: Topgun_67 Start: 42804, Stop: 42646, Start Num: 9

Candidate Starts for Topgun_67:

(Start: 9 @42804 has 56 MA's), (12, 42762), (13, 42714),

Gene: Traft412_71 Start: 43883, Stop: 43725, Start Num: 9

Candidate Starts for Traft412_71:

(Start: 9 @43883 has 56 MA's), (12, 43841), (13, 43793),

Gene: Twister_59 Start: 39820, Stop: 39644, Start Num: 9

Candidate Starts for Twister_59:

(1, 40090), (2, 40084), (5, 39955), (Start: 9 @39820 has 56 MA's), (13, 39730), (15, 39682), (16, 39679),

Gene: TwoPeat_70 Start: 43976, Stop: 43818, Start Num: 9

Candidate Starts for TwoPeat_70:

(Start: 9 @43976 has 56 MA's), (12, 43934), (13, 43886),

Gene: WalterMcMickey_59 Start: 39820, Stop: 39644, Start Num: 9

Candidate Starts for WalterMcMickey_59:

(1, 40090), (2, 40084), (5, 39955), (Start: 9 @39820 has 56 MA's), (13, 39730), (15, 39682), (16, 39679),

Gene: Wilkins_68 Start: 42734, Stop: 42576, Start Num: 9

Candidate Starts for Wilkins_68:

(Start: 9 @42734 has 56 MA's), (12, 42692), (13, 42644),

Gene: Zeuska_73 Start: 45732, Stop: 45574, Start Num: 9

Candidate Starts for Zeuska_73:

(Start: 9 @45732 has 56 MA's), (12, 45690), (13, 45642),