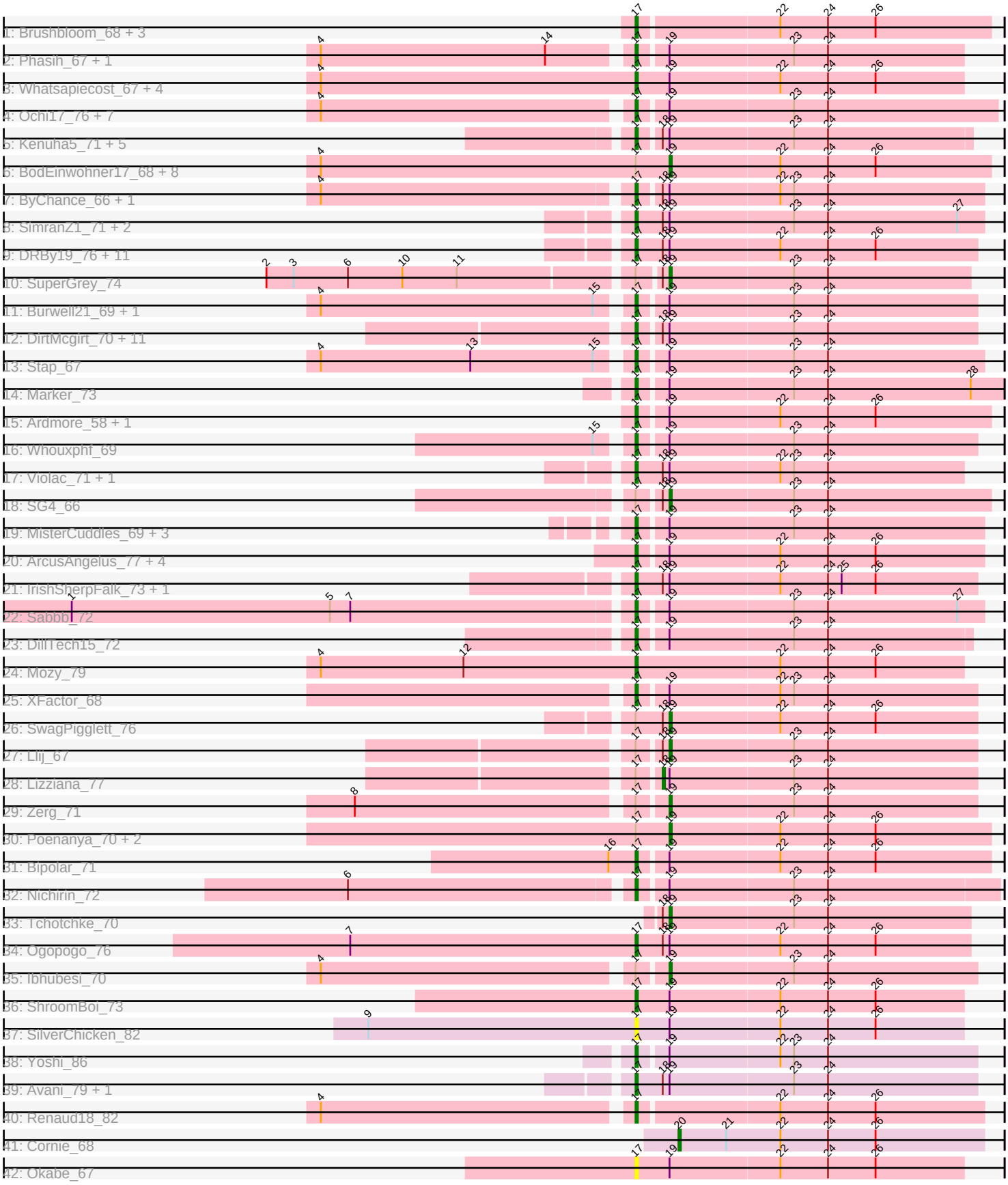
Pham 347437


1: Brushbloom_68 + 3
2: Phasih_67 + 1
3: Whatsapiecost_67 + 4
4: Ochi17_76 + 7
5: Kenuha5_71 + 5
6: BodEinwohner17_68 + 8
7: ByChance_66 + 1
8: SimranZ1_71 + 2
9: DRBy19_76 + 11
10: SuperGrey_74
11: Burwell21_69 + 1
12: DirtMcgirt_70 + 11
13: Stap_67
14: Marker_73
15: Ardmore_58 + 1
16: Whouxphi_69
17: Violac_71 + 1
18: SG4_66
19: MisterCuddles_69 + 3
20: ArcusAngelus_77 + 4
21: IrishSherpFalk_73 + 1
22: Sabbb172
23: DillTech15_72
24: Mozy_79
25: XFactor_68
26: SwagPigglett_76
27: Lilj_67
28: Lizziana_77
29: Zerg_71
30: Poenanya_70 + 2
31: Bipolar_71
32: Nichirin_72
33: Tchotchke_70
34: Ogopogo_76
35: Ibhubesi_70
36: ShroomBoi_73
37: SilverChicken_82
38: Yoshi_86
39: Avani_79 + 1
40: Renaud18_82
41: Cornie_68
42: Okabe_67

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 347437 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347437 has 109 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Brushbloom_68, Byougenkin_66, Bobi_70, Batiatus_64
• Track 2 : Phasih_67, Byougenkin_71
• Track 3 : Whatsapiecost_67, KingJulian_70, Gandalph_72, Corium_65, PatoPoderoso_65
• Track 4 : Ochi17_76, Llama_77, Jinglebell_77, AlpineSix_77, MadMen_70, Bubbles123_68, Seabastian_78, OfUltron_78
• Track 5 : Kenuha5_71, Vivum_74, Totinger_70, GigiOuiOui_68, Tweety_73, Madiba_76
• Track 6 : BodEinwohner17_68, Florinda_78, Girafales_75, IbOuu_67, Peridot_67, MilanaBonita_57, OldBen_65, Phanphagia_63, DeadP_74
• Track 7 : ByChance_66, ShowerHandel_76
• Track 8 : SimranZ1_71, Radiance_69, Karhdo_69
• Track 9 : DRBy19_76, Zizzle_75, Jennelsea_69, Jarcob_72, Saal_72, Clifton_65, BobaPhett_75, LastJedi_64, Philus_75, Gorge_74, OlympiaSaint_72, Mattes_74
• Track 10 : SuperGrey_74
• Track 11 : Burwell21_69, DoRead_74
• Track 12 : DirtMcgirt_70, UncleRicky_70, Demsculpinboyz_83, Topiatin_77, Leozinho_72, Martik_74, Lucia_70, Alexphander_74, Enby_72, Maravista_74, Drago_68, Lorde_71
• Track 13 : Stap_67
• Track 14 : Marker_73
• Track 15 : Ardmore_58, Hamulus_66
• Track 16 : Whouxphf_69
• Track 17 : Violac_71, Mwanjiwa_76
• Track 18 : SG4_66
• Track 19 : MisterCuddles_69, Girr_69, Krakatau_67, Ruby_67
• Track 20 : ArcusAngelus_77, Flathead_70, Dante_68, Chevrolet_79, ThetaBob_76
• Track 21 : IrishSherpFalk_73, WillSterrel_73
• Track 22 : Sabbb_72
• Track 23 : DillTech15_72
• Track 24 : Mozy_79
• Track 25 : XFactor_68
• Track 26 : SwagPigglett_76
• Track 27 : Llij_67
• Track 28 : Lizziana_77
• Track 29 : Zerg_71
• Track 30 : Poenanya_70, Leperchaun_65, Polka14_71

• Track 31 : Bipolar_71
• Track 32 : Nichirin_72
• Track 33 : Tchotchke_70
• Track 34 : Ogopogo_76
• Track 35 : Ibhubesi_70
• Track 36 : ShroomBoi_73
• Track 37 : SilverChicken_82
• Track 38 : Yoshi_86
• Track 39 : Avani_79, Wachhund_71
• Track 40 : Renaud18_82
• Track 41 : Cornie_68
• Track 42 : Okabe_67

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

The start number called the most often in the published annotations is 17, it was called in 81 of the 102 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alexphander_74, AlpineSix_77, ArcusAngelus_77, Ardmore_58, Avani_79, Batiatus_64, Bipolar_71, BobaPhett_75, Bobi_70, Brushbloom_68, Bubbles123_68, Burwell21_69, ByChance_66, Byougenkin_66, Byougenkin_71, Chevrolet_79, Clifton_65, Corium_65, DRBy19_76, Dante_68, Demsculpinboyz_83, DillTech15_72, DirtMcgirt_70, DoRead_74, Drago_68, Enby_72, Flathead_70, Gandalph_72, GigiOuiOui_68, Girr_69, Gorge_74, Hamulus_66, IrishSherpFalk_73, Jarcob_72, Jennelsea_69, Jinglebell_77, Karhdo_69, Kenuha5_71, KingJulian_70, Krakatau_67, LastJedi_64, Leozinho_72, Llama_77, Lorde_71, Lucia_70, MadMen_70, Madiba_76, Maravista_74, Marker_73, Martik_74, Mattes_74, MisterCuddles_69, Mozy_79, Mwanjiwa_76, Nichirin_72, Ochi17_76, OfUltron_78, Ogopogo_76, Okabe_67, OlympiaSaint_72, PatoPoderoso_65, Phasih_67, Philus_75, Radiance_69, Renaud18_82, Ruby_67, Saal_72, Sabbb_72, Seabastian_78, ShowerHandel_76, ShroomBoi_73, SilverChicken_82, SimranZ1_71, Stap_67, ThetaBob_76, Topiatin_77, Totinger_70, Tweety_73, UncleRicky_70, Violac_71, Vivum_74, Wachhund_71, Whatsapiecost_67, Whouxphf_69, WillSterrel_73, XFactor_68, Yoshi_86, Zizzle_75,

Genes that have the "Most Annotated" start but do not call it:
• BodEinwohner17_68, DeadP_74, Florinda_78, Girafales_75, IbOuu_67, Ibhubesi_70, Leperchaun_65, Lizziana_77, Llij_67, MilanaBonita_57, OldBen_65, Peridot_67, Phanphagia_63, Poenanya_70, Polka14_71, SG4_66, SuperGrey_74, SwagPigglett_76, Zerg_71,

Genes that do not have the "Most Annotated" start:
• Cornie_68, Tchotchke_70,

Summary by start number:

Start 17:
• Found in 107 of 109 (98.2%) of genes in pham
• Manual Annotations of this start: 81 of 102

• Called 82.2% of time when present
• Phage (with cluster) where this start called: Alexphander_74 (F1), AlpineSix_77 (F1), ArcusAngelus_77 (F1), Ardmore_58 (F1), Avani_79 (F2), Batiatus_64 (F1), Bipolar_71 (F1), BobaPhett_75 (F1), Bobi_70 (F1), Brushbloom_68 (F1), Bubbles123_68 (F1), Burwell21_69 (F1), ByChance_66 (F1), Byougenkin_66 (F1), Byougenkin_71 (F1), Chevrolet_79 (F1), Clifton_65 (F1), Corium_65 (F1), DRBy19_76 (F1), Dante_68 (F1), Demsculpinboyz_83 (F2), DillTech15_72 (F1), DirtMcgirt_70 (F1), DoRead_74 (F1), Drago_68 (F1), Enby_72 (F1), Flathead_70 (F1), Gandalph_72 (F1), GigiOuiOui_68 (F1), Girr_69 (F1), Gorge_74 (F1), Hamulus_66 (F1), IrishSherpFalk_73 (F1), Jarcob_72 (F1), Jennelsea_69 (F1), Jinglebell_77 (F1), Karhdo_69 (F1), Kenuha5_71 (F1), KingJulian_70 (F1), Krakatau_67 (F1), LastJedi_64 (F1), Leozinho_72 (F1), Llama_77 (F1), Lorde_71 (F1), Lucia_70 (F1), MadMen_70 (F1), Madiba_76 (F1), Maravista_74 (F1), Marker_73 (F1), Martik_74 (F1), Mattes_74 (F1), MisterCuddles_69 (F1), Mozy_79 (F1), Mwanjiwa_76 (F1), Nichirin_72 (F1), Ochi17_76 (F1), OfUltron_78 (F1), Ogopogo_76 (F1), Okabe_67 (F8), OlympiaSaint_72 (F1), PatoPoderoso_65 (F1), Phasih_67 (F1), Philus_75 (F1), Radiance_69 (F1), Renaud18_82 (F4), Ruby_67 (F1), Saal_72 (F1), Sabbb_72 (F1), Seabastian_78 (F1), ShowerHandel_76 (F1), ShroomBoi_73 (F1), SilverChicken_82 (F2), SimranZ1_71 (F1), Stap_67 (F1), ThetaBob_76 (F4), Topiatin_77 (F1), Totinger_70 (F1), Tweety_73 (F1), UncleRicky_70 (F1), Violac_71 (F1), Vivum_74 (F1), Wachhund_71 (F1), Whatsapiecost_67 (F1), Whouxphf_69 (F1), WillSterrel_73 (F1), XFactor_68 (F1), Yoshi_86 (F2), Zizzle_75 (F1),

Start 18:
• Found in 48 of 109 (44.0%) of genes in pham
• Manual Annotations of this start: 1 of 102
• Called 2.1% of time when present
• Phage (with cluster) where this start called: Lizziana_77 (F1),

Start 19:
• Found in 102 of 109 (93.6%) of genes in pham
• Manual Annotations of this start: 19 of 102
• Called 18.6% of time when present
• Phage (with cluster) where this start called: BodEinwohner17_68 (F1), DeadP_74 (F1), Florinda_78 (F1), Girafales_75 (F1), IbOuu_67 (F1), Ibhubesi_70 (F1), Leperchaun_65 (F1), Llij_67 (F1), MilanaBonita_57 (F1), OldBen_65 (F1), Peridot_67 (F1), Phanphagia_63 (F1), Poenanya_70 (F1), Polka14_71 (F1), SG4_66 (F1), SuperGrey_74 (F1), SwagPigglett_76 (F1), Tchotchke_70 (F1), Zerg_71 (F1),

Start 20:
• Found in 1 of 109 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cornie_68 (F5),

Summary by clusters:

There are 5 clusters represented in this pham: F8, F1, F2, F4, F5,

Info for manual annotations of cluster F1:
•Start number 17 was manually annotated 76 times for cluster F1.
•Start number 18 was manually annotated 1 time for cluster F1.

•Start number 19 was manually annotated 19 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 17 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F4:
•Start number 17 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster F5:
•Start number 20 was manually annotated 1 time for cluster F5.

Gene Information:

Gene: Alexphander_74 Start: 46512, Stop: 46661, Start Num: 17
Candidate Starts for Alexphander_74:
(Start: 17 @46512 has 81 MA's), (Start: 18 @46521 has 1 MA's), (Start: 19 @46524 has 19 MA's), (23, 46578), (24, 46593),

Gene: AlpineSix_77 Start: 47155, Stop: 47310, Start Num: 17
Candidate Starts for AlpineSix_77:
(4, 47023), (Start: 17 @47155 has 81 MA's), (Start: 19 @47167 has 19 MA's), (23, 47221), (24, 47236),

Gene: ArcusAngelus_77 Start: 47419, Stop: 47568, Start Num: 17
Candidate Starts for ArcusAngelus_77:
(Start: 17 @47419 has 81 MA's), (Start: 19 @47431 has 19 MA's), (22, 47479), (24, 47500), (26, 47521),

Gene: Ardmore_58 Start: 40412, Stop: 40564, Start Num: 17
Candidate Starts for Ardmore_58:
(Start: 17 @40412 has 81 MA's), (Start: 19 @40424 has 19 MA's), (22, 40472), (24, 40493), (26, 40514),

Gene: Avani_79 Start: 44144, Stop: 44293, Start Num: 17
Candidate Starts for Avani_79:
(Start: 17 @44144 has 81 MA's), (Start: 18 @44156 has 1 MA's), (Start: 19 @44159 has 19 MA's), (23, 44213), (24, 44228),

Gene: Batiatus_64 Start: 42288, Stop: 42440, Start Num: 17
Candidate Starts for Batiatus_64:
(Start: 17 @42288 has 81 MA's), (22, 42348), (24, 42369), (26, 42390),

Gene: Bipolar_71 Start: 44507, Stop: 44659, Start Num: 17
Candidate Starts for Bipolar_71:
(16, 44495), (Start: 17 @44507 has 81 MA's), (Start: 19 @44519 has 19 MA's), (22, 44567), (24, 44588), (26, 44609),

Gene: BobaPhett_75 Start: 48236, Stop: 48385, Start Num: 17
Candidate Starts for BobaPhett_75:
(Start: 17 @48236 has 81 MA's), (Start: 18 @48248 has 1 MA's), (Start: 19 @48251 has 19 MA's), (22, 48299), (24, 48320), (26, 48341),

Gene: Bobi_70 Start: 43891, Stop: 44043, Start Num: 17
Candidate Starts for Bobi_70:
(Start: 17 @43891 has 81 MA's), (22, 43951), (24, 43972), (26, 43993),

Gene: BodEinwohner17_68 Start: 43061, Stop: 43201, Start Num: 19
Candidate Starts for BodEinwohner17_68:
(4, 42908), (Start: 17 @43046 has 81 MA's), (Start: 19 @43061 has 19 MA's), (22, 43109), (24, 43130), (26, 43151),

Gene: Brushbloom_68 Start: 43220, Stop: 43372, Start Num: 17
Candidate Starts for Brushbloom_68:
(Start: 17 @43220 has 81 MA's), (22, 43280), (24, 43301), (26, 43322),

Gene: Bubbles123_68 Start: 45742, Stop: 45888, Start Num: 17
Candidate Starts for Bubbles123_68:
(4, 45610), (Start: 17 @45742 has 81 MA's), (Start: 19 @45754 has 19 MA's), (23, 45808), (24, 45823),

Gene: Burwell21_69 Start: 45551, Stop: 45697, Start Num: 17
Candidate Starts for Burwell21_69:
(4, 45419), (15, 45539), (Start: 17 @45551 has 81 MA's), (Start: 19 @45563 has 19 MA's), (23, 45617), (24, 45632),

Gene: ByChance_66 Start: 42651, Stop: 42800, Start Num: 17
Candidate Starts for ByChance_66:
(4, 42519), (Start: 17 @42651 has 81 MA's), (Start: 18 @42660 has 1 MA's), (Start: 19 @42663 has 19 MA's), (22, 42711), (23, 42717), (24, 42732),

Gene: Byougenkin_71 Start: 43611, Stop: 43757, Start Num: 17
Candidate Starts for Byougenkin_71:
(4, 43479), (14, 43578), (Start: 17 @43611 has 81 MA's), (Start: 19 @43623 has 19 MA's), (23, 43677), (24, 43692),

Gene: Byougenkin_66 Start: 42551, Stop: 42703, Start Num: 17
Candidate Starts for Byougenkin_66:
(Start: 17 @42551 has 81 MA's), (22, 42611), (24, 42632), (26, 42653),

Gene: Chevrolet_79 Start: 47420, Stop: 47569, Start Num: 17
Candidate Starts for Chevrolet_79:
(Start: 17 @47420 has 81 MA's), (Start: 19 @47432 has 19 MA's), (22, 47480), (24, 47501), (26, 47522),

Gene: Clifton_65 Start: 44067, Stop: 44216, Start Num: 17
Candidate Starts for Clifton_65:
(Start: 17 @44067 has 81 MA's), (Start: 18 @44079 has 1 MA's), (Start: 19 @44082 has 19 MA's), (22, 44130), (24, 44151), (26, 44172),

Gene: Corium_65 Start: 44016, Stop: 44159, Start Num: 17
Candidate Starts for Corium_65:
(4, 43878), (Start: 17 @44016 has 81 MA's), (Start: 19 @44031 has 19 MA's), (22, 44079), (24, 44100), (26, 44121),

Gene: Cornie_68 Start: 44347, Stop: 44481, Start Num: 20

Candidate Starts for Cornie_68:
(Start: 20 @44347 has 1 MA's), (21, 44368), (22, 44392), (24, 44413), (26, 44434),

Gene: DRBy19_76 Start: 47796, Stop: 47945, Start Num: 17
Candidate Starts for DRBy19_76:
(Start: 17 @47796 has 81 MA's), (Start: 18 @47808 has 1 MA's), (Start: 19 @47811 has 19 MA's), (22, 47859), (24, 47880), (26, 47901),

Gene: Dante_68 Start: 43688, Stop: 43840, Start Num: 17
Candidate Starts for Dante_68:
(Start: 17 @43688 has 81 MA's), (Start: 19 @43700 has 19 MA's), (22, 43748), (24, 43769), (26, 43790),

Gene: DeadP_74 Start: 45444, Stop: 45578, Start Num: 19
Candidate Starts for DeadP_74:
(4, 45291), (Start: 17 @45429 has 81 MA's), (Start: 19 @45444 has 19 MA's), (22, 45492), (24, 45513), (26, 45534),

Gene: Demsculpinboyz_83 Start: 44211, Stop: 44369, Start Num: 17
Candidate Starts for Demsculpinboyz_83:
(Start: 17 @44211 has 81 MA's), (Start: 18 @44223 has 1 MA's), (Start: 19 @44226 has 19 MA's), (23, 44280), (24, 44295),

Gene: DillTech15_72 Start: 44035, Stop: 44178, Start Num: 17
Candidate Starts for DillTech15_72:
(Start: 17 @44035 has 81 MA's), (Start: 19 @44047 has 19 MA's), (23, 44101), (24, 44116),

Gene: DirtMcgirt_70 Start: 42990, Stop: 43136, Start Num: 17
Candidate Starts for DirtMcgirt_70:
(Start: 17 @42990 has 81 MA's), (Start: 18 @42999 has 1 MA's), (Start: 19 @43002 has 19 MA's), (23, 43056), (24, 43071),

Gene: DoRead_74 Start: 44318, Stop: 44464, Start Num: 17
Candidate Starts for DoRead_74:
(4, 44186), (15, 44306), (Start: 17 @44318 has 81 MA's), (Start: 19 @44330 has 19 MA's), (23, 44384), (24, 44399),

Gene: Drago_68 Start: 42993, Stop: 43139, Start Num: 17
Candidate Starts for Drago_68:
(Start: 17 @42993 has 81 MA's), (Start: 18 @43002 has 1 MA's), (Start: 19 @43005 has 19 MA's), (23, 43059), (24, 43074),

Gene: Enby_72 Start: 43269, Stop: 43415, Start Num: 17
Candidate Starts for Enby_72:
(Start: 17 @43269 has 81 MA's), (Start: 18 @43278 has 1 MA's), (Start: 19 @43281 has 19 MA's), (23, 43335), (24, 43350),

Gene: Flathead_70 Start: 44683, Stop: 44823, Start Num: 17
Candidate Starts for Flathead_70:
(Start: 17 @44683 has 81 MA's), (Start: 19 @44695 has 19 MA's), (22, 44743), (24, 44764), (26, 44785),

Gene: Florinda_78 Start: 44511, Stop: 44651, Start Num: 19

Candidate Starts for Florinda_78:
(4, 44358), (Start: 17 @44496 has 81 MA's), (Start: 19 @44511 has 19 MA's), (22, 44559), (24, 44580), (26, 44601),

Gene: Gandalph_72 Start: 43639, Stop: 43785, Start Num: 17
Candidate Starts for Gandalph_72:
(4, 43501), (Start: 17 @43639 has 81 MA's), (Start: 19 @43654 has 19 MA's), (22, 43702), (24, 43723), (26, 43744),

Gene: GigiOuiOui_68 Start: 45285, Stop: 45428, Start Num: 17
Candidate Starts for GigiOuiOui_68:
(Start: 17 @45285 has 81 MA's), (Start: 18 @45294 has 1 MA's), (Start: 19 @45297 has 19 MA's), (23, 45351), (24, 45366),

Gene: Girafales_75 Start: 44302, Stop: 44442, Start Num: 19
Candidate Starts for Girafales_75:
(4, 44149), (Start: 17 @44287 has 81 MA's), (Start: 19 @44302 has 19 MA's), (22, 44350), (24, 44371), (26, 44392),

Gene: Girr_69 Start: 45990, Stop: 46139, Start Num: 17
Candidate Starts for Girr_69:
(Start: 17 @45990 has 81 MA's), (Start: 19 @46002 has 19 MA's), (23, 46056), (24, 46071),

Gene: Gorge_74 Start: 47006, Stop: 47155, Start Num: 17
Candidate Starts for Gorge_74:
(Start: 17 @47006 has 81 MA's), (Start: 18 @47018 has 1 MA's), (Start: 19 @47021 has 19 MA's), (22, 47069), (24, 47090), (26, 47111),

Gene: Hamulus_66 Start: 42697, Stop: 42849, Start Num: 17
Candidate Starts for Hamulus_66:
(Start: 17 @42697 has 81 MA's), (Start: 19 @42709 has 19 MA's), (22, 42757), (24, 42778), (26, 42799),

Gene: IbOuu_67 Start: 43885, Stop: 44019, Start Num: 19
Candidate Starts for IbOuu_67:
(4, 43732), (Start: 17 @43870 has 81 MA's), (Start: 19 @43885 has 19 MA's), (22, 43933), (24, 43954), (26, 43975),

Gene: Ibhubesi_70 Start: 43411, Stop: 43545, Start Num: 19
Candidate Starts for Ibhubesi_70:
(4, 43267), (Start: 17 @43399 has 81 MA's), (Start: 19 @43411 has 19 MA's), (23, 43465), (24, 43480),

Gene: IrishSherpFalk_73 Start: 46468, Stop: 46617, Start Num: 17
Candidate Starts for IrishSherpFalk_73:
(Start: 17 @46468 has 81 MA's), (Start: 18 @46480 has 1 MA's), (Start: 19 @46483 has 19 MA's), (22, 46531), (24, 46552), (25, 46558), (26, 46573),

Gene: Jarcob_72 Start: 46728, Stop: 46877, Start Num: 17
Candidate Starts for Jarcob_72:
(Start: 17 @46728 has 81 MA's), (Start: 18 @46740 has 1 MA's), (Start: 19 @46743 has 19 MA's), (22, 46791), (24, 46812), (26, 46833),

Gene: Jennelsea_69 Start: 44289, Stop: 44438, Start Num: 17

Candidate Starts for Jennelsea_69:
(Start: 17 @44289 has 81 MA's), (Start: 18 @44301 has 1 MA's), (Start: 19 @44304 has 19 MA's), (22, 44352), (24, 44373), (26, 44394),

Gene: Jinglebell_77 Start: 47154, Stop: 47309, Start Num: 17
Candidate Starts for Jinglebell_77:
(4, 47022), (Start: 17 @47154 has 81 MA's), (Start: 19 @47166 has 19 MA's), (23, 47220), (24, 47235),

Gene: Karhdo_69 Start: 44419, Stop: 44571, Start Num: 17
Candidate Starts for Karhdo_69:
(Start: 17 @44419 has 81 MA's), (Start: 18 @44431 has 1 MA's), (Start: 19 @44434 has 19 MA's), (23, 44488), (24, 44503), (27, 44560),

Gene: Kenuha5_71 Start: 47003, Stop: 47146, Start Num: 17
Candidate Starts for Kenuha5_71:
(Start: 17 @47003 has 81 MA's), (Start: 18 @47012 has 1 MA's), (Start: 19 @47015 has 19 MA's), (23, 47069), (24, 47084),

Gene: KingJulian_70 Start: 44016, Stop: 44159, Start Num: 17
Candidate Starts for KingJulian_70:
(4, 43878), (Start: 17 @44016 has 81 MA's), (Start: 19 @44031 has 19 MA's), (22, 44079), (24, 44100), (26, 44121),

Gene: Krakatau_67 Start: 42370, Stop: 42519, Start Num: 17
Candidate Starts for Krakatau_67:
(Start: 17 @42370 has 81 MA's), (Start: 19 @42382 has 19 MA's), (23, 42436), (24, 42451),

Gene: LastJedi_64 Start: 44110, Stop: 44259, Start Num: 17
Candidate Starts for LastJedi_64:
(Start: 17 @44110 has 81 MA's), (Start: 18 @44122 has 1 MA's), (Start: 19 @44125 has 19 MA's), (22, 44173), (24, 44194), (26, 44215),

Gene: Leozinho_72 Start: 43788, Stop: 43934, Start Num: 17
Candidate Starts for Leozinho_72:
(Start: 17 @43788 has 81 MA's), (Start: 18 @43797 has 1 MA's), (Start: 19 @43800 has 19 MA's), (23, 43854), (24, 43869),

Gene: Leperchaun_65 Start: 43514, Stop: 43654, Start Num: 19
Candidate Starts for Leperchaun_65:
(Start: 17 @43499 has 81 MA's), (Start: 19 @43514 has 19 MA's), (22, 43562), (24, 43583), (26, 43604),

Gene: Lizziana_77 Start: 47466, Stop: 47603, Start Num: 18
Candidate Starts for Lizziana_77:
(Start: 17 @47457 has 81 MA's), (Start: 18 @47466 has 1 MA's), (Start: 19 @47469 has 19 MA's), (23, 47523), (24, 47538),

Gene: Llama_77 Start: 47009, Stop: 47164, Start Num: 17
Candidate Starts for Llama_77:
(4, 46877), (Start: 17 @47009 has 81 MA's), (Start: 19 @47021 has 19 MA's), (23, 47075), (24, 47090),

Gene: Llij_67 Start: 43159, Stop: 43293, Start Num: 19
Candidate Starts for Llij_67:

(Start: 17 @43147 has 81 MA's), (Start: 18 @43156 has 1 MA's), (Start: 19 @43159 has 19 MA's), (23, 43213), (24, 43228),

Gene: Lorde_71 Start: 42434, Stop: 42580, Start Num: 17
Candidate Starts for Lorde_71:
(Start: 17 @42434 has 81 MA's), (Start: 18 @42443 has 1 MA's), (Start: 19 @42446 has 19 MA's), (23, 42500), (24, 42515),

Gene: Lucia_70 Start: 43282, Stop: 43428, Start Num: 17
Candidate Starts for Lucia_70:
(Start: 17 @43282 has 81 MA's), (Start: 18 @43291 has 1 MA's), (Start: 19 @43294 has 19 MA's), (23, 43348), (24, 43363),

Gene: MadMen_70 Start: 44751, Stop: 44891, Start Num: 17
Candidate Starts for MadMen_70:
(4, 44619), (Start: 17 @44751 has 81 MA's), (Start: 19 @44763 has 19 MA's), (23, 44817), (24, 44832),

Gene: Madiba_76 Start: 47567, Stop: 47716, Start Num: 17
Candidate Starts for Madiba_76:
(Start: 17 @47567 has 81 MA's), (Start: 18 @47576 has 1 MA's), (Start: 19 @47579 has 19 MA's), (23, 47633), (24, 47648),

Gene: Maravista_74 Start: 48467, Stop: 48613, Start Num: 17
Candidate Starts for Maravista_74:
(Start: 17 @48467 has 81 MA's), (Start: 18 @48476 has 1 MA's), (Start: 19 @48479 has 19 MA's), (23, 48533), (24, 48548),

Gene: Marker_73 Start: 45397, Stop: 45555, Start Num: 17
Candidate Starts for Marker_73:
(Start: 17 @45397 has 81 MA's), (Start: 19 @45409 has 19 MA's), (23, 45463), (24, 45478), (28, 45541),

Gene: Martik_74 Start: 47948, Stop: 48094, Start Num: 17
Candidate Starts for Martik_74:
(Start: 17 @47948 has 81 MA's), (Start: 18 @47957 has 1 MA's), (Start: 19 @47960 has 19 MA's), (23, 48014), (24, 48029),

Gene: Mattes_74 Start: 47131, Stop: 47280, Start Num: 17
Candidate Starts for Mattes_74:
(Start: 17 @47131 has 81 MA's), (Start: 18 @47143 has 1 MA's), (Start: 19 @47146 has 19 MA's), (22, 47194), (24, 47215), (26, 47236),

Gene: MilanaBonita_57 Start: 38486, Stop: 38626, Start Num: 19
Candidate Starts for MilanaBonita_57:
(4, 38333), (Start: 17 @38471 has 81 MA's), (Start: 19 @38486 has 19 MA's), (22, 38534), (24, 38555), (26, 38576),

Gene: MisterCuddles_69 Start: 45990, Stop: 46139, Start Num: 17
Candidate Starts for MisterCuddles_69:
(Start: 17 @45990 has 81 MA's), (Start: 19 @46002 has 19 MA's), (23, 46056), (24, 46071),

Gene: Mozy_79 Start: 45595, Stop: 45738, Start Num: 17
Candidate Starts for Mozy_79:

(4, 45457), (12, 45520), (Start: 17 @45595 has 81 MA's), (22, 45658), (24, 45679), (26, 45700),

Gene: Mwanjiwa_76 Start: 46928, Stop: 47077, Start Num: 17
Candidate Starts for Mwanjiwa_76:
(Start: 17 @46928 has 81 MA's), (Start: 18 @46940 has 1 MA's), (Start: 19 @46943 has 19 MA's), (22, 46991), (23, 46997), (24, 47012),

Gene: Nichirin_72 Start: 46372, Stop: 46527, Start Num: 17
Candidate Starts for Nichirin_72:
(6, 46252), (Start: 17 @46372 has 81 MA's), (Start: 19 @46384 has 19 MA's), (23, 46438), (24, 46453),

Gene: Ochi17_76 Start: 46605, Stop: 46760, Start Num: 17
Candidate Starts for Ochi17_76:
(4, 46473), (Start: 17 @46605 has 81 MA's), (Start: 19 @46617 has 19 MA's), (23, 46671), (24, 46686),

Gene: OfUltron_78 Start: 47154, Stop: 47309, Start Num: 17
Candidate Starts for OfUltron_78:
(4, 47022), (Start: 17 @47154 has 81 MA's), (Start: 19 @47166 has 19 MA's), (23, 47220), (24, 47235),

Gene: Ogopogo_76 Start: 44956, Stop: 45102, Start Num: 17
Candidate Starts for Ogopogo_76:
(7, 44830), (Start: 17 @44956 has 81 MA's), (Start: 18 @44968 has 1 MA's), (Start: 19 @44971 has 19 MA's), (22, 45019), (24, 45040), (26, 45061),

Gene: Okabe_67 Start: 41306, Stop: 41449, Start Num: 17
Candidate Starts for Okabe_67:
(Start: 17 @41306 has 81 MA's), (Start: 19 @41321 has 19 MA's), (22, 41369), (24, 41390), (26, 41411),

Gene: OldBen_65 Start: 43231, Stop: 43371, Start Num: 19
Candidate Starts for OldBen_65:
(4, 43078), (Start: 17 @43216 has 81 MA's), (Start: 19 @43231 has 19 MA's), (22, 43279), (24, 43300), (26, 43321),

Gene: OlympiaSaint_72 Start: 46073, Stop: 46222, Start Num: 17
Candidate Starts for OlympiaSaint_72:
(Start: 17 @46073 has 81 MA's), (Start: 18 @46085 has 1 MA's), (Start: 19 @46088 has 19 MA's), (22, 46136), (24, 46157), (26, 46178),

Gene: PatoPoderoso_65 Start: 44016, Stop: 44159, Start Num: 17
Candidate Starts for PatoPoderoso_65:
(4, 43878), (Start: 17 @44016 has 81 MA's), (Start: 19 @44031 has 19 MA's), (22, 44079), (24, 44100), (26, 44121),

Gene: Peridot_67 Start: 43223, Stop: 43363, Start Num: 19
Candidate Starts for Peridot_67:
(4, 43070), (Start: 17 @43208 has 81 MA's), (Start: 19 @43223 has 19 MA's), (22, 43271), (24, 43292), (26, 43313),

Gene: Phanphagia_63 Start: 42771, Stop: 42911, Start Num: 19
Candidate Starts for Phanphagia_63:
(4, 42618), (Start: 17 @42756 has 81 MA's), (Start: 19 @42771 has 19 MA's), (22, 42819), (24, 42840), (26, 42861),

Gene: Phasih_67 Start: 44273, Stop: 44413, Start Num: 17
Candidate Starts for Phasih_67:
(4, 44141), (14, 44240), (Start: 17 @44273 has 81 MA's), (Start: 19 @44285 has 19 MA's), (23, 44339), (24, 44354),

Gene: Philus_75 Start: 47772, Stop: 47921, Start Num: 17
Candidate Starts for Philus_75:
(Start: 17 @47772 has 81 MA's), (Start: 18 @47784 has 1 MA's), (Start: 19 @47787 has 19 MA's), (22, 47835), (24, 47856), (26, 47877),

Gene: Poenanya_70 Start: 44545, Stop: 44685, Start Num: 19
Candidate Starts for Poenanya_70:
(Start: 17 @44530 has 81 MA's), (Start: 19 @44545 has 19 MA's), (22, 44593), (24, 44614), (26, 44635),

Gene: Polka14_71 Start: 45261, Stop: 45401, Start Num: 19
Candidate Starts for Polka14_71:
(Start: 17 @45246 has 81 MA's), (Start: 19 @45261 has 19 MA's), (22, 45309), (24, 45330), (26, 45351),

Gene: Radiance_69 Start: 46419, Stop: 46571, Start Num: 17
Candidate Starts for Radiance_69:
(Start: 17 @46419 has 81 MA's), (Start: 18 @46431 has 1 MA's), (Start: 19 @46434 has 19 MA's), (23, 46488), (24, 46503), (27, 46560),

Gene: Renaud18_82 Start: 46991, Stop: 47140, Start Num: 17
Candidate Starts for Renaud18_82:
(4, 46859), (Start: 17 @46991 has 81 MA's), (22, 47051), (24, 47072), (26, 47093),

Gene: Ruby_67 Start: 45991, Stop: 46140, Start Num: 17
Candidate Starts for Ruby_67:
(Start: 17 @45991 has 81 MA's), (Start: 19 @46003 has 19 MA's), (23, 46057), (24, 46072),

Gene: SG4_66 Start: 42817, Stop: 42957, Start Num: 19
Candidate Starts for SG4_66:
(Start: 17 @42805 has 81 MA's), (Start: 18 @42814 has 1 MA's), (Start: 19 @42817 has 19 MA's), (23, 42871), (24, 42886),

Gene: Saal_72 Start: 46825, Stop: 46974, Start Num: 17
Candidate Starts for Saal_72:
(Start: 17 @46825 has 81 MA's), (Start: 18 @46837 has 1 MA's), (Start: 19 @46840 has 19 MA's), (22, 46888), (24, 46909), (26, 46930),

Gene: Sabbb_72 Start: 43583, Stop: 43732, Start Num: 17
Candidate Starts for Sabbb_72:
(1, 43340), (5, 43454), (7, 43463), (Start: 17 @43583 has 81 MA's), (Start: 19 @43595 has 19 MA's), (23, 43649), (24, 43664), (27, 43721),

Gene: Seabastian_78 Start: 47155, Stop: 47310, Start Num: 17
Candidate Starts for Seabastian_78:
(4, 47023), (Start: 17 @47155 has 81 MA's), (Start: 19 @47167 has 19 MA's), (23, 47221), (24, 47236),

Gene: ShowerHandel_76 Start: 46591, Stop: 46740, Start Num: 17
Candidate Starts for ShowerHandel_76:
(4, 46459), (Start: 17 @46591 has 81 MA's), (Start: 18 @46600 has 1 MA's), (Start: 19 @46603 has 19 MA's), (22, 46651), (23, 46657), (24, 46672),

Gene: ShroomBoi_73 Start: 46320, Stop: 46463, Start Num: 17
Candidate Starts for ShroomBoi_73:
(Start: 17 @46320 has 81 MA's), (Start: 19 @46335 has 19 MA's), (22, 46383), (24, 46404), (26, 46425),

Gene: SilverChicken_82 Start: 46256, Stop: 46399, Start Num: 17
Candidate Starts for SilverChicken_82:
(9, 46139), (Start: 17 @46256 has 81 MA's), (Start: 19 @46271 has 19 MA's), (22, 46319), (24, 46340), (26, 46361),

Gene: SimranZ1_71 Start: 45018, Stop: 45170, Start Num: 17
Candidate Starts for SimranZ1_71:
(Start: 17 @45018 has 81 MA's), (Start: 18 @45030 has 1 MA's), (Start: 19 @45033 has 19 MA's), (23, 45087), (24, 45102), (27, 45159),

Gene: Stap_67 Start: 43236, Stop: 43385, Start Num: 17
Candidate Starts for Stap_67:
(4, 43104), (13, 43170), (15, 43224), (Start: 17 @43236 has 81 MA's), (Start: 19 @43248 has 19 MA's), (23, 43302), (24, 43317),

Gene: SuperGrey_74 Start: 48498, Stop: 48629, Start Num: 19
Candidate Starts for SuperGrey_74:
(2, 48330), (3, 48342), (6, 48366), (10, 48390), (11, 48414), (Start: 17 @48486 has 81 MA's), (Start: 18 @48495 has 1 MA's), (Start: 19 @48498 has 19 MA's), (23, 48552), (24, 48567),

Gene: SwagPigglett_76 Start: 47881, Stop: 48015, Start Num: 19
Candidate Starts for SwagPigglett_76:
(Start: 17 @47866 has 81 MA's), (Start: 18 @47878 has 1 MA's), (Start: 19 @47881 has 19 MA's), (22, 47929), (24, 47950), (26, 47971),

Gene: Tchotchke_70 Start: 45105, Stop: 45236, Start Num: 19
Candidate Starts for Tchotchke_70:
(Start: 18 @45102 has 1 MA's), (Start: 19 @45105 has 19 MA's), (23, 45159), (24, 45174),

Gene: ThetaBob_76 Start: 46222, Stop: 46368, Start Num: 17
Candidate Starts for ThetaBob_76:
(Start: 17 @46222 has 81 MA's), (Start: 19 @46234 has 19 MA's), (22, 46282), (24, 46303), (26, 46324),

Gene: Topiatin_77 Start: 46717, Stop: 46866, Start Num: 17
Candidate Starts for Topiatin_77:
(Start: 17 @46717 has 81 MA's), (Start: 18 @46726 has 1 MA's), (Start: 19 @46729 has 19 MA's), (23, 46783), (24, 46798),

Gene: Totinger_70 Start: 44700, Stop: 44843, Start Num: 17
Candidate Starts for Totinger_70:
(Start: 17 @44700 has 81 MA's), (Start: 18 @44709 has 1 MA's), (Start: 19 @44712 has 19 MA's), (23, 44766), (24, 44781),

Gene: Tweety_73 Start: 47076, Stop: 47234, Start Num: 17
Candidate Starts for Tweety_73:
(Start: 17 @47076 has 81 MA's), (Start: 18 @47085 has 1 MA's), (Start: 19 @47088 has 19 MA's), (23, 47142), (24, 47157),

Gene: UncleRicky_70 Start: 44490, Stop: 44636, Start Num: 17
Candidate Starts for UncleRicky_70:
(Start: 17 @44490 has 81 MA's), (Start: 18 @44499 has 1 MA's), (Start: 19 @44502 has 19 MA's), (23, 44556), (24, 44571),

Gene: Violac_71 Start: 46315, Stop: 46458, Start Num: 17
Candidate Starts for Violac_71:
(Start: 17 @46315 has 81 MA's), (Start: 18 @46327 has 1 MA's), (Start: 19 @46330 has 19 MA's), (22, 46378), (23, 46384), (24, 46399),

Gene: Vivum_74 Start: 48329, Stop: 48472, Start Num: 17
Candidate Starts for Vivum_74:
(Start: 17 @48329 has 81 MA's), (Start: 18 @48338 has 1 MA's), (Start: 19 @48341 has 19 MA's), (23, 48395), (24, 48410),

Gene: Wachhund_71 Start: 44201, Stop: 44362, Start Num: 17
Candidate Starts for Wachhund_71:
(Start: 17 @44201 has 81 MA's), (Start: 18 @44213 has 1 MA's), (Start: 19 @44216 has 19 MA's), (23, 44270), (24, 44285),

Gene: Whatsapiecost_67 Start: 41846, Stop: 41989, Start Num: 17
Candidate Starts for Whatsapiecost_67:
(4, 41708), (Start: 17 @41846 has 81 MA's), (Start: 19 @41861 has 19 MA's), (22, 41909), (24, 41930), (26, 41951),

Gene: Whouxphf_69 Start: 45627, Stop: 45773, Start Num: 17
Candidate Starts for Whouxphf_69:
(15, 45615), (Start: 17 @45627 has 81 MA's), (Start: 19 @45639 has 19 MA's), (23, 45693), (24, 45708),

Gene: WillSterrel_73 Start: 46501, Stop: 46650, Start Num: 17
Candidate Starts for WillSterrel_73:
(Start: 17 @46501 has 81 MA's), (Start: 18 @46513 has 1 MA's), (Start: 19 @46516 has 19 MA's), (22, 46564), (24, 46585), (25, 46591), (26, 46606),

Gene: XFactor_68 Start: 44921, Stop: 45067, Start Num: 17
Candidate Starts for XFactor_68:
(Start: 17 @44921 has 81 MA's), (Start: 19 @44933 has 19 MA's), (22, 44981), (23, 44987), (24, 45002),

Gene: Yoshi_86 Start: 46688, Stop: 46834, Start Num: 17
Candidate Starts for Yoshi_86:
(Start: 17 @46688 has 81 MA's), (Start: 19 @46700 has 19 MA's), (22, 46748), (23, 46754), (24, 46769),

Gene: Zerg_71 Start: 45778, Stop: 45912, Start Num: 19
Candidate Starts for Zerg_71:

(8, 45649), (Start: 17 @45766 has 81 MA's), (Start: 19 @45778 has 19 MA's), (23, 45832), (24, 45847),

Gene: Zizzle_75 Start: 47154, Stop: 47303, Start Num: 17
Candidate Starts for Zizzle_75:
(Start: 17 @47154 has 81 MA's), (Start: 18 @47166 has 1 MA's), (Start: 19 @47169 has 19 MA's), (22, 47217), (24, 47238), (26, 47259),