



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 157695 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157695 has 127 members, 11 are drafts.

Phages represented in each track:

- Track 1 : MadamMonkfish_113, Gage_116, Eureka_114, Misfit_115, Traaww1_111, HanKaySha_114, Kimchi_119, Contagion_111, PhatBacter_117, Adnama_118, Lilizi_114, Murica_118, JeTaime_113, Nimrod_115, TBrady12_118, Lilpickle_113, Petra64142_118, Teaspoon_110, Hopey_114, Murphy_113, Phaux_116, Stark_114, BaboJay_114, Moldemort_116, Emmina_114, Pumpkin_115, Bruin_111, Xandras_112, Sassay_109, CrystalP_115, GoldenSpark_118, Miniwave_109, Barbarian_114, xkcd_118, Maxxinista_116, 244_116, BilboSwaggins_114, Bench_116, StolenFromERC_116, Tarkin_113, Manda_115, Buck_115, Asriel_113, Command613_117, Ukulele_109, Stank_117, Flypotenuse_111, Dumbo_114, MISSy_115, Saints25_110, Elite2014_113, Cjw1_114, Wiggin_117, YassJohnny_111, Qualification_115, MPhalcon_115, Easy2Say_114, AmericanBeauty_121, Hoonter_117, Youngblood_118, Rimmer_112, Gemini_119, Simpliphy_112, FireRed_117, Lilac_115, Czyszczo1_114, Elph10_113, Thresher_115, Filch_117, Argent26_118, Goku_114, Goldilocks_118, BigBubba_113, StellaBean_111, Myrale_115, Terminus_117, Porky_113, OrionPax_112, Highbury_110, Balomoji_115, NoSleep_114, Willez_109, Toto_113, Mosby_111, Rakim_116, NelitzaMV_111, HufflyPuff_116, Phrux_110, ShereKhan_112, Paperbeatsrock_113, Nala_116, Holt_120, RiverMonster_113, Tomaszewski_109, ShamWow_115, ChosenOne_114, GooberAzure_117, Kanye_111
- Track 2 : Marshmallow_116, Pat3_114, Bask21_118, Inca_114, Cookies_115, Phaja_116, Amao_118, Dusk_115, SirDuracell_118
- Track 3 : Henry_116, Glexan_117, Harella_119, ChotaBhai_118, Gator_116, IHOP_116, DrDrey_118
- Track 4 : DoctorDiddles_113, Daikon_116, SophKB_113
- Track 5 : TeardropMSU_114, Sotrice96_119, Mindy_117, Icee_119, BadStone_115, ABCat_115, Cactus_122, Tuco_119, Pharsalus_114
- Track 6 : Kostya_117

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 115 of the 116 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_116, ABCat_115, Adnama_118, Amao_118, AmericanBeauty_121, Argent26_118, Asriel_113, BaboJay_114, BadStone_115, Balomoji_115, Barbarian_114, Bask21_118, Bench_116, BigBubba_113, BilboSwaggins_114, Bruin_111, Buck_115, Cactus_122, ChosenOne_114, ChotaBhai_118, Cjw1_114, Command613_117, Contagion_111, Cookies_115, CrystalP_115, Czystczon1_114, Daikon_116, DoctorDiddles_113, DrDrey_118, Dumbo_114, Dusk_115, Easy2Say_114, Elite2014_113, Elph10_113, Emmina_114, Eureka_114, Filch_117, FireRed_117, Flypotenuse_111, Gage_116, Gator_116, Gemini_119, Glexan_117, Goku_114, GoldenSpark_118, Goldilocks_118, GooberAzure_117, HanKaySha_114, Harella_119, Henry_116, Highbury_110, Holt_120, Hoonter_117, Hopey_114, HufflyPuff_116, IHOP_116, Icee_119, Inca_114, JeTaime_113, Kanye_111, Kimchi_119, Lilac_115, Lilizi_114, Lilpickle_113, MISSy_115, MPhalcon_115, MadamMonkfish_113, Manda_115, Marshmallow_116, Maxxinista_116, Mindy_117, Miniwave_109, Misfit_115, Moldemort_116, Mosby_111, Murica_118, Murphy_113, Myrale_115, Nala_116, NelitzaMV_111, Nimrod_115, NoSleep_114, OrionPax_112, Paperbeatsrock_113, Pat3_114, Petra64142_118, Phaja_116, Pharsalus_114, PhatBacter_117, Phaux_116, Phrux_110, Porky_113, Pumpkin_115, Quallification_115, Rakim_116, Rimmer_112, RiverMonster_113, Saints25_110, Sassay_109, ShamWow_115, ShereKhan_112, Simpliphy_112, SirDuracell_118, SophKB_113, Sotrice96_119, Stank_117, Stark_114, StellaBean_111, StolenFromERC_116, TBrady12_118, Tarkin_113, TeardropMSU_114, Teaspoon_110, Terminus_117, Thresher_115, Tomaszewski_109, Toto_113, Traaww1_111, Tuco_119, Ukulele_109, Wiggin_117, Willez_109, Xandras_112, YassJohnny_111, Youngblood_118, xkcd_118,

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

- Kostya_117,

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

-

Summary by start number:

Start 2:

- Found in 17 of 127 (13.4%) of genes in pham
- Manual Annotations of this start: 1 of 116
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Kostya_117 (E),

Start 3:

- Found in 127 of 127 (100.0%) of genes in pham
- Manual Annotations of this start: 115 of 116
- Called 99.2% of time when present
- Phage (with cluster) where this start called: 244_116 (E), ABCat_115 (E), Adnama_118 (E), Amao_118 (E), AmericanBeauty_121 (E), Argent26_118 (E), Asriel_113 (E), BaboJay_114 (E), BadStone_115 (E), Balomoji_115 (E), Barbarian_114 (E), Bask21_118 (E), Bench_116 (E), BigBubba_113 (E), BilboSwaggins_114 (E), Bruin_111 (E), Buck_115 (E), Cactus_122 (E), ChosenOne_114 (E), ChotaBhai_118 (E), Cjw1_114 (E), Command613_117 (E), Contagion_111 (E), Cookies_115 (E), CrystalP_115 (E), Czystczon1_114 (E), Daikon_116 (E), DoctorDiddles_113 (E), DrDrey_118 (E), Dumbo_114 (E), Dusk_115 (E), Easy2Say_114 (E), Elite2014_113 (E), Elph10_113 (E), Emmina_114 (E), Eureka_114 (E), Filch_117 (E), FireRed_117 (E), Flypotenuse_111 (E), Gage_116

(E), Gator_116 (E), Gemini_119 (E), Glexan_117 (E), Goku_114 (E), GoldenSpark_118 (E), Goldilocks_118 (E), GooberAzure_117 (E), HanKaySha_114 (E), Harella_119 (E), Henry_116 (E), Highbury_110 (E), Holt_120 (E), Hoonter_117 (E), Hopey_114 (E), HufflyPuff_116 (E), IHOP_116 (E), Icee_119 (E), Inca_114 (E), JeTaime_113 (E), Kanye_111 (E), Kimchi_119 (E), Lilac_115 (E), Lilizi_114 (E), Lilpickle_113 (E), MISSy_115 (E), MPhalcon_115 (E), MadamMonkfish_113 (E), Manda_115 (E), Marshmallow_116 (E), Maxxinista_116 (E), Mindy_117 (E), Miniwave_109 (E), Misfit_115 (E), Moldemort_116 (E), Mosby_111 (E), Murica_118 (E), Murphy_113 (E), Myrale_115 (E), Nala_116 (E), NelitzaMV_111 (E), Nimrod_115 (E), NoSleep_114 (E), OrionPax_112 (E), Paperbeatsrock_113 (E), Pat3_114 (E), Petra64142_118 (E), Phaja_116 (E), Pharsalus_114 (E), PhatBacter_117 (E), Phaux_116 (E), Phrux_110 (E), Porky_113 (E), Pumpkin_115 (E), Qualification_115 (E), Rakim_116 (E), Rimmer_112 (E), RiverMonster_113 (E), Saints25_110 (E), Sassay_109 (E), ShamWow_115 (E), ShereKhan_112 (E), Simpliphy_112 (E), SirDuracell_118 (E), SophKB_113 (E), Sotrice96_119 (E), Stank_117 (E), Stark_114 (E), StellaBean_111 (E), StolenFromERC_116 (E), TBrady12_118 (E), Tarkin_113 (E), TeardropMSU_114 (E), Teaspoon_110 (E), Terminus_117 (E), Thresher_115 (E), Tomaszewski_109 (E), Toto_113 (E), Traaww1_111 (E), Tuco_119 (E), Ukulele_109 (E), Wiggin_117 (E), Willez_109 (E), Xandras_112 (E), YassJohnny_111 (E), Youngblood_118 (E), xkcd_118 (E),

Summary by clusters:

There is one cluster represented in this pham: E

Info for manual annotations of cluster E:

- Start number 2 was manually annotated 1 time for cluster E.
- Start number 3 was manually annotated 115 times for cluster E.

Gene Information:

Gene: 244_116 Start: 65056, Stop: 65298, Start Num: 3

Candidate Starts for 244_116:

(1, 64978), (Start: 3 @65056 has 115 MA's), (4, 65164), (6, 65242),

Gene: ABCat_115 Start: 66539, Stop: 66781, Start Num: 3

Candidate Starts for ABCat_115:

(Start: 3 @66539 has 115 MA's), (4, 66647), (6, 66725),

Gene: Adnama_118 Start: 64969, Stop: 65211, Start Num: 3

Candidate Starts for Adnama_118:

(1, 64891), (Start: 3 @64969 has 115 MA's), (4, 65077), (6, 65155),

Gene: Amao_118 Start: 66102, Stop: 66344, Start Num: 3

Candidate Starts for Amao_118:

(Start: 2 @66060 has 1 MA's), (Start: 3 @66102 has 115 MA's), (4, 66210), (6, 66288),

Gene: AmericanBeauty_121 Start: 65011, Stop: 65253, Start Num: 3

Candidate Starts for AmericanBeauty_121:

(1, 64933), (Start: 3 @65011 has 115 MA's), (4, 65119), (6, 65197),

Gene: Argent26_118 Start: 64893, Stop: 65135, Start Num: 3
Candidate Starts for Argent26_118:
(1, 64815), (Start: 3 @64893 has 115 MA's), (4, 65001), (6, 65079),

Gene: Asriel_113 Start: 63844, Stop: 64086, Start Num: 3
Candidate Starts for Asriel_113:
(1, 63766), (Start: 3 @63844 has 115 MA's), (4, 63952), (6, 64030),

Gene: BaboJay_114 Start: 66229, Stop: 66471, Start Num: 3
Candidate Starts for BaboJay_114:
(1, 66151), (Start: 3 @66229 has 115 MA's), (4, 66337), (6, 66415),

Gene: BadStone_115 Start: 66087, Stop: 66329, Start Num: 3
Candidate Starts for BadStone_115:
(Start: 3 @66087 has 115 MA's), (4, 66195), (6, 66273),

Gene: Balomoji_115 Start: 65627, Stop: 65869, Start Num: 3
Candidate Starts for Balomoji_115:
(1, 65549), (Start: 3 @65627 has 115 MA's), (4, 65735), (6, 65813),

Gene: Barbarian_114 Start: 63844, Stop: 64086, Start Num: 3
Candidate Starts for Barbarian_114:
(1, 63766), (Start: 3 @63844 has 115 MA's), (4, 63952), (6, 64030),

Gene: Bask21_118 Start: 64904, Stop: 65146, Start Num: 3
Candidate Starts for Bask21_118:
(Start: 2 @64862 has 1 MA's), (Start: 3 @64904 has 115 MA's), (4, 65012), (6, 65090),

Gene: Bench_116 Start: 65650, Stop: 65892, Start Num: 3
Candidate Starts for Bench_116:
(1, 65572), (Start: 3 @65650 has 115 MA's), (4, 65758), (6, 65836),

Gene: BigBubba_113 Start: 64702, Stop: 64944, Start Num: 3
Candidate Starts for BigBubba_113:
(1, 64624), (Start: 3 @64702 has 115 MA's), (4, 64810), (6, 64888),

Gene: BilboSwaggins_114 Start: 66124, Stop: 66366, Start Num: 3
Candidate Starts for BilboSwaggins_114:
(1, 66046), (Start: 3 @66124 has 115 MA's), (4, 66232), (6, 66310),

Gene: Bruin_111 Start: 64334, Stop: 64576, Start Num: 3
Candidate Starts for Bruin_111:
(1, 64256), (Start: 3 @64334 has 115 MA's), (4, 64442), (6, 64520),

Gene: Buck_115 Start: 66150, Stop: 66392, Start Num: 3
Candidate Starts for Buck_115:
(1, 66072), (Start: 3 @66150 has 115 MA's), (4, 66258), (6, 66336),

Gene: Cactus_122 Start: 65447, Stop: 65689, Start Num: 3
Candidate Starts for Cactus_122:
(Start: 3 @65447 has 115 MA's), (4, 65555), (6, 65633),

Gene: ChosenOne_114 Start: 64534, Stop: 64776, Start Num: 3

Candidate Starts for ChosenOne_114:

(1, 64456), (Start: 3 @64534 has 115 MA's), (4, 64642), (6, 64720),

Gene: ChotaBhai_118 Start: 65846, Stop: 66088, Start Num: 3

Candidate Starts for ChotaBhai_118:

(Start: 2 @65804 has 1 MA's), (Start: 3 @65846 has 115 MA's), (4, 65954), (5, 65981), (6, 66032),

Gene: Cjw1_114 Start: 66343, Stop: 66585, Start Num: 3

Candidate Starts for Cjw1_114:

(1, 66265), (Start: 3 @66343 has 115 MA's), (4, 66451), (6, 66529),

Gene: Command613_117 Start: 65620, Stop: 65862, Start Num: 3

Candidate Starts for Command613_117:

(1, 65542), (Start: 3 @65620 has 115 MA's), (4, 65728), (6, 65806),

Gene: Contagion_111 Start: 64696, Stop: 64938, Start Num: 3

Candidate Starts for Contagion_111:

(1, 64618), (Start: 3 @64696 has 115 MA's), (4, 64804), (6, 64882),

Gene: Cookies_115 Start: 65832, Stop: 66074, Start Num: 3

Candidate Starts for Cookies_115:

(Start: 2 @65790 has 1 MA's), (Start: 3 @65832 has 115 MA's), (4, 65940), (6, 66018),

Gene: CrystalP_115 Start: 66124, Stop: 66366, Start Num: 3

Candidate Starts for CrystalP_115:

(1, 66046), (Start: 3 @66124 has 115 MA's), (4, 66232), (6, 66310),

Gene: Czyszczone1_114 Start: 64689, Stop: 64931, Start Num: 3

Candidate Starts for Czyszczone1_114:

(1, 64611), (Start: 3 @64689 has 115 MA's), (4, 64797), (6, 64875),

Gene: Daikon_116 Start: 64923, Stop: 65165, Start Num: 3

Candidate Starts for Daikon_116:

(Start: 3 @64923 has 115 MA's), (4, 65031), (6, 65109),

Gene: DoctorDiddles_113 Start: 64583, Stop: 64825, Start Num: 3

Candidate Starts for DoctorDiddles_113:

(Start: 3 @64583 has 115 MA's), (4, 64691), (6, 64769),

Gene: DrDrey_118 Start: 67225, Stop: 67467, Start Num: 3

Candidate Starts for DrDrey_118:

(Start: 2 @67183 has 1 MA's), (Start: 3 @67225 has 115 MA's), (4, 67333), (5, 67360), (6, 67411),

Gene: Dumbo_114 Start: 64726, Stop: 64968, Start Num: 3

Candidate Starts for Dumbo_114:

(1, 64648), (Start: 3 @64726 has 115 MA's), (4, 64834), (6, 64912),

Gene: Dusk_115 Start: 65747, Stop: 65989, Start Num: 3

Candidate Starts for Dusk_115:

(Start: 2 @65705 has 1 MA's), (Start: 3 @65747 has 115 MA's), (4, 65855), (6, 65933),

Gene: Easy2Say_114 Start: 65360, Stop: 65602, Start Num: 3

Candidate Starts for Easy2Say_114:

(1, 65282), (Start: 3 @65360 has 115 MA's), (4, 65468), (6, 65546),

Gene: Elite2014_113 Start: 64533, Stop: 64775, Start Num: 3

Candidate Starts for Elite2014_113:

(1, 64455), (Start: 3 @64533 has 115 MA's), (4, 64641), (6, 64719),

Gene: Elph10_113 Start: 64372, Stop: 64614, Start Num: 3

Candidate Starts for Elph10_113:

(1, 64294), (Start: 3 @64372 has 115 MA's), (4, 64480), (6, 64558),

Gene: Emmina_114 Start: 64311, Stop: 64553, Start Num: 3

Candidate Starts for Emmina_114:

(1, 64233), (Start: 3 @64311 has 115 MA's), (4, 64419), (6, 64497),

Gene: Eureka_114 Start: 65499, Stop: 65741, Start Num: 3

Candidate Starts for Eureka_114:

(1, 65421), (Start: 3 @65499 has 115 MA's), (4, 65607), (6, 65685),

Gene: Filch_117 Start: 65265, Stop: 65507, Start Num: 3

Candidate Starts for Filch_117:

(1, 65187), (Start: 3 @65265 has 115 MA's), (4, 65373), (6, 65451),

Gene: FireRed_117 Start: 65775, Stop: 66017, Start Num: 3

Candidate Starts for FireRed_117:

(1, 65697), (Start: 3 @65775 has 115 MA's), (4, 65883), (6, 65961),

Gene: Flypotenuse_111 Start: 64498, Stop: 64740, Start Num: 3

Candidate Starts for Flypotenuse_111:

(1, 64420), (Start: 3 @64498 has 115 MA's), (4, 64606), (6, 64684),

Gene: Gage_116 Start: 65031, Stop: 65273, Start Num: 3

Candidate Starts for Gage_116:

(1, 64953), (Start: 3 @65031 has 115 MA's), (4, 65139), (6, 65217),

Gene: Gator_116 Start: 65799, Stop: 66041, Start Num: 3

Candidate Starts for Gator_116:

(Start: 2 @65757 has 1 MA's), (Start: 3 @65799 has 115 MA's), (4, 65907), (5, 65934), (6, 65985),

Gene: Gemini_119 Start: 65410, Stop: 65652, Start Num: 3

Candidate Starts for Gemini_119:

(1, 65332), (Start: 3 @65410 has 115 MA's), (4, 65518), (6, 65596),

Gene: Glexan_117 Start: 65949, Stop: 66191, Start Num: 3

Candidate Starts for Glexan_117:

(Start: 2 @65907 has 1 MA's), (Start: 3 @65949 has 115 MA's), (4, 66057), (5, 66084), (6, 66135),

Gene: Goku_114 Start: 65808, Stop: 66050, Start Num: 3

Candidate Starts for Goku_114:

(1, 65730), (Start: 3 @65808 has 115 MA's), (4, 65916), (6, 65994),

Gene: GoldenSpark_118 Start: 64893, Stop: 65135, Start Num: 3

Candidate Starts for GoldenSpark_118:

(1, 64815), (Start: 3 @64893 has 115 MA's), (4, 65001), (6, 65079),

Gene: Goldilocks_118 Start: 65489, Stop: 65731, Start Num: 3
Candidate Starts for Goldilocks_118:
(1, 65411), (Start: 3 @65489 has 115 MA's), (4, 65597), (6, 65675),

Gene: GooberAzure_117 Start: 64893, Stop: 65135, Start Num: 3
Candidate Starts for GooberAzure_117:
(1, 64815), (Start: 3 @64893 has 115 MA's), (4, 65001), (6, 65079),

Gene: HanKaySha_114 Start: 65081, Stop: 65323, Start Num: 3
Candidate Starts for HanKaySha_114:
(1, 65003), (Start: 3 @65081 has 115 MA's), (4, 65189), (6, 65267),

Gene: Harella_119 Start: 66465, Stop: 66707, Start Num: 3
Candidate Starts for Harella_119:
(Start: 2 @66423 has 1 MA's), (Start: 3 @66465 has 115 MA's), (4, 66573), (5, 66600), (6, 66651),

Gene: Henry_116 Start: 65750, Stop: 65992, Start Num: 3
Candidate Starts for Henry_116:
(Start: 2 @65708 has 1 MA's), (Start: 3 @65750 has 115 MA's), (4, 65858), (5, 65885), (6, 65936),

Gene: Highbury_110 Start: 63238, Stop: 63480, Start Num: 3
Candidate Starts for Highbury_110:
(1, 63160), (Start: 3 @63238 has 115 MA's), (4, 63346), (6, 63424),

Gene: Holt_120 Start: 65887, Stop: 66129, Start Num: 3
Candidate Starts for Holt_120:
(1, 65809), (Start: 3 @65887 has 115 MA's), (4, 65995), (6, 66073),

Gene: Hoonter_117 Start: 65386, Stop: 65628, Start Num: 3
Candidate Starts for Hoonter_117:
(1, 65308), (Start: 3 @65386 has 115 MA's), (4, 65494), (6, 65572),

Gene: Hokey_114 Start: 65692, Stop: 65934, Start Num: 3
Candidate Starts for Hokey_114:
(1, 65614), (Start: 3 @65692 has 115 MA's), (4, 65800), (6, 65878),

Gene: HufflyPuff_116 Start: 66001, Stop: 66243, Start Num: 3
Candidate Starts for HufflyPuff_116:
(1, 65923), (Start: 3 @66001 has 115 MA's), (4, 66109), (6, 66187),

Gene: IHOP_116 Start: 65468, Stop: 65710, Start Num: 3
Candidate Starts for IHOP_116:
(Start: 2 @65426 has 1 MA's), (Start: 3 @65468 has 115 MA's), (4, 65576), (5, 65603), (6, 65654),

Gene: Icee_119 Start: 65438, Stop: 65680, Start Num: 3
Candidate Starts for Icee_119:
(Start: 3 @65438 has 115 MA's), (4, 65546), (6, 65624),

Gene: Inca_114 Start: 63647, Stop: 63889, Start Num: 3
Candidate Starts for Inca_114:
(Start: 2 @63605 has 1 MA's), (Start: 3 @63647 has 115 MA's), (4, 63755), (6, 63833),

Gene: JeTaime_113 Start: 65099, Stop: 65341, Start Num: 3
Candidate Starts for JeTaime_113:
(1, 65021), (Start: 3 @65099 has 115 MA's), (4, 65207), (6, 65285),

Gene: Kanye_111 Start: 65142, Stop: 65384, Start Num: 3
Candidate Starts for Kanye_111:
(1, 65064), (Start: 3 @65142 has 115 MA's), (4, 65250), (6, 65328),

Gene: Kimchi_119 Start: 65614, Stop: 65856, Start Num: 3
Candidate Starts for Kimchi_119:
(1, 65536), (Start: 3 @65614 has 115 MA's), (4, 65722), (6, 65800),

Gene: Kostya_117 Start: 65528, Stop: 65812, Start Num: 2
Candidate Starts for Kostya_117:
(Start: 2 @65528 has 1 MA's), (Start: 3 @65570 has 115 MA's), (4, 65678), (5, 65705), (6, 65756),

Gene: Lilac_115 Start: 65835, Stop: 66077, Start Num: 3
Candidate Starts for Lilac_115:
(1, 65757), (Start: 3 @65835 has 115 MA's), (4, 65943), (6, 66021),

Gene: Lilizi_114 Start: 65121, Stop: 65363, Start Num: 3
Candidate Starts for Lilizi_114:
(1, 65043), (Start: 3 @65121 has 115 MA's), (4, 65229), (6, 65307),

Gene: Lilpickle_113 Start: 64533, Stop: 64775, Start Num: 3
Candidate Starts for Lilpickle_113:
(1, 64455), (Start: 3 @64533 has 115 MA's), (4, 64641), (6, 64719),

Gene: MISSy_115 Start: 65818, Stop: 66060, Start Num: 3
Candidate Starts for MISSy_115:
(1, 65740), (Start: 3 @65818 has 115 MA's), (4, 65926), (6, 66004),

Gene: MPhalcon_115 Start: 65236, Stop: 65478, Start Num: 3
Candidate Starts for MPhalcon_115:
(1, 65158), (Start: 3 @65236 has 115 MA's), (4, 65344), (6, 65422),

Gene: MadamMonkfish_113 Start: 64543, Stop: 64785, Start Num: 3
Candidate Starts for MadamMonkfish_113:
(1, 64465), (Start: 3 @64543 has 115 MA's), (4, 64651), (6, 64729),

Gene: Manda_115 Start: 65273, Stop: 65515, Start Num: 3
Candidate Starts for Manda_115:
(1, 65195), (Start: 3 @65273 has 115 MA's), (4, 65381), (6, 65459),

Gene: Marshmallow_116 Start: 66252, Stop: 66494, Start Num: 3
Candidate Starts for Marshmallow_116:
(Start: 2 @66210 has 1 MA's), (Start: 3 @66252 has 115 MA's), (4, 66360), (6, 66438),

Gene: Maxxinista_116 Start: 65020, Stop: 65262, Start Num: 3
Candidate Starts for Maxxinista_116:
(1, 64942), (Start: 3 @65020 has 115 MA's), (4, 65128), (6, 65206),

Gene: Mindy_117 Start: 65411, Stop: 65653, Start Num: 3

Candidate Starts for Mindy_117:

(Start: 3 @65411 has 115 MA's), (4, 65519), (6, 65597),

Gene: Miniwave_109 Start: 64729, Stop: 64971, Start Num: 3

Candidate Starts for Miniwave_109:

(1, 64651), (Start: 3 @64729 has 115 MA's), (4, 64837), (6, 64915),

Gene: Misfit_115 Start: 66332, Stop: 66574, Start Num: 3

Candidate Starts for Misfit_115:

(1, 66254), (Start: 3 @66332 has 115 MA's), (4, 66440), (6, 66518),

Gene: Moldemort_116 Start: 65001, Stop: 65243, Start Num: 3

Candidate Starts for Moldemort_116:

(1, 64923), (Start: 3 @65001 has 115 MA's), (4, 65109), (6, 65187),

Gene: Mosby_111 Start: 64696, Stop: 64938, Start Num: 3

Candidate Starts for Mosby_111:

(1, 64618), (Start: 3 @64696 has 115 MA's), (4, 64804), (6, 64882),

Gene: Murica_118 Start: 67035, Stop: 67277, Start Num: 3

Candidate Starts for Murica_118:

(1, 66957), (Start: 3 @67035 has 115 MA's), (4, 67143), (6, 67221),

Gene: Murphy_113 Start: 65393, Stop: 65635, Start Num: 3

Candidate Starts for Murphy_113:

(1, 65315), (Start: 3 @65393 has 115 MA's), (4, 65501), (6, 65579),

Gene: Myrale_115 Start: 65908, Stop: 66150, Start Num: 3

Candidate Starts for Myrale_115:

(1, 65830), (Start: 3 @65908 has 115 MA's), (4, 66016), (6, 66094),

Gene: Nala_116 Start: 65745, Stop: 65987, Start Num: 3

Candidate Starts for Nala_116:

(1, 65667), (Start: 3 @65745 has 115 MA's), (4, 65853), (6, 65931),

Gene: NelitzaMV_111 Start: 63718, Stop: 63960, Start Num: 3

Candidate Starts for NelitzaMV_111:

(1, 63640), (Start: 3 @63718 has 115 MA's), (4, 63826), (6, 63904),

Gene: Nimrod_115 Start: 65959, Stop: 66201, Start Num: 3

Candidate Starts for Nimrod_115:

(1, 65881), (Start: 3 @65959 has 115 MA's), (4, 66067), (6, 66145),

Gene: NoSleep_114 Start: 64553, Stop: 64795, Start Num: 3

Candidate Starts for NoSleep_114:

(1, 64475), (Start: 3 @64553 has 115 MA's), (4, 64661), (6, 64739),

Gene: OrionPax_112 Start: 64626, Stop: 64868, Start Num: 3

Candidate Starts for OrionPax_112:

(1, 64548), (Start: 3 @64626 has 115 MA's), (4, 64734), (6, 64812),

Gene: Paperbeatsrock_113 Start: 65407, Stop: 65649, Start Num: 3

Candidate Starts for Paperbeatsrock_113:

(1, 65329), (Start: 3 @65407 has 115 MA's), (4, 65515), (6, 65593),

Gene: Pat3_114 Start: 64905, Stop: 65147, Start Num: 3

Candidate Starts for Pat3_114:

(Start: 2 @64863 has 1 MA's), (Start: 3 @64905 has 115 MA's), (4, 65013), (6, 65091),

Gene: Petra64142_118 Start: 65875, Stop: 66117, Start Num: 3

Candidate Starts for Petra64142_118:

(1, 65797), (Start: 3 @65875 has 115 MA's), (4, 65983), (6, 66061),

Gene: Phaja_116 Start: 65473, Stop: 65715, Start Num: 3

Candidate Starts for Phaja_116:

(Start: 2 @65431 has 1 MA's), (Start: 3 @65473 has 115 MA's), (4, 65581), (6, 65659),

Gene: Pharsalus_114 Start: 65547, Stop: 65789, Start Num: 3

Candidate Starts for Pharsalus_114:

(Start: 3 @65547 has 115 MA's), (4, 65655), (6, 65733),

Gene: PhatBacter_117 Start: 65775, Stop: 66017, Start Num: 3

Candidate Starts for PhatBacter_117:

(1, 65697), (Start: 3 @65775 has 115 MA's), (4, 65883), (6, 65961),

Gene: Phaux_116 Start: 66335, Stop: 66577, Start Num: 3

Candidate Starts for Phaux_116:

(1, 66257), (Start: 3 @66335 has 115 MA's), (4, 66443), (6, 66521),

Gene: Phrux_110 Start: 64413, Stop: 64655, Start Num: 3

Candidate Starts for Phrux_110:

(1, 64335), (Start: 3 @64413 has 115 MA's), (4, 64521), (6, 64599),

Gene: Porky_113 Start: 64737, Stop: 64979, Start Num: 3

Candidate Starts for Porky_113:

(1, 64659), (Start: 3 @64737 has 115 MA's), (4, 64845), (6, 64923),

Gene: Pumpkin_115 Start: 64753, Stop: 64995, Start Num: 3

Candidate Starts for Pumpkin_115:

(1, 64675), (Start: 3 @64753 has 115 MA's), (4, 64861), (6, 64939),

Gene: Quallification_115 Start: 65821, Stop: 66063, Start Num: 3

Candidate Starts for Quallification_115:

(1, 65743), (Start: 3 @65821 has 115 MA's), (4, 65929), (6, 66007),

Gene: Rakim_116 Start: 65241, Stop: 65483, Start Num: 3

Candidate Starts for Rakim_116:

(1, 65163), (Start: 3 @65241 has 115 MA's), (4, 65349), (6, 65427),

Gene: Rimmer_112 Start: 65212, Stop: 65454, Start Num: 3

Candidate Starts for Rimmer_112:

(1, 65134), (Start: 3 @65212 has 115 MA's), (4, 65320), (6, 65398),

Gene: RiverMonster_113 Start: 65308, Stop: 65550, Start Num: 3

Candidate Starts for RiverMonster_113:

(1, 65230), (Start: 3 @65308 has 115 MA's), (4, 65416), (6, 65494),

Gene: Saints25_110 Start: 63238, Stop: 63480, Start Num: 3
Candidate Starts for Saints25_110:
(1, 63160), (Start: 3 @63238 has 115 MA's), (4, 63346), (6, 63424),

Gene: Sassay_109 Start: 63658, Stop: 63900, Start Num: 3
Candidate Starts for Sassay_109:
(1, 63580), (Start: 3 @63658 has 115 MA's), (4, 63766), (6, 63844),

Gene: ShamWow_115 Start: 66124, Stop: 66366, Start Num: 3
Candidate Starts for ShamWow_115:
(1, 66046), (Start: 3 @66124 has 115 MA's), (4, 66232), (6, 66310),

Gene: ShereKhan_112 Start: 66067, Stop: 66309, Start Num: 3
Candidate Starts for ShereKhan_112:
(1, 65989), (Start: 3 @66067 has 115 MA's), (4, 66175), (6, 66253),

Gene: Simpliphy_112 Start: 64879, Stop: 65121, Start Num: 3
Candidate Starts for Simpliphy_112:
(1, 64801), (Start: 3 @64879 has 115 MA's), (4, 64987), (6, 65065),

Gene: SirDuracell_118 Start: 65404, Stop: 65646, Start Num: 3
Candidate Starts for SirDuracell_118:
(Start: 2 @65362 has 1 MA's), (Start: 3 @65404 has 115 MA's), (4, 65512), (6, 65590),

Gene: SophKB_113 Start: 65289, Stop: 65531, Start Num: 3
Candidate Starts for SophKB_113:
(Start: 3 @65289 has 115 MA's), (4, 65397), (6, 65475),

Gene: Sotrice96_119 Start: 66191, Stop: 66433, Start Num: 3
Candidate Starts for Sotrice96_119:
(Start: 3 @66191 has 115 MA's), (4, 66299), (6, 66377),

Gene: Stank_117 Start: 65686, Stop: 65928, Start Num: 3
Candidate Starts for Stank_117:
(1, 65608), (Start: 3 @65686 has 115 MA's), (4, 65794), (6, 65872),

Gene: Stark_114 Start: 65192, Stop: 65434, Start Num: 3
Candidate Starts for Stark_114:
(1, 65114), (Start: 3 @65192 has 115 MA's), (4, 65300), (6, 65378),

Gene: StellaBean_111 Start: 65489, Stop: 65731, Start Num: 3
Candidate Starts for StellaBean_111:
(1, 65411), (Start: 3 @65489 has 115 MA's), (4, 65597), (6, 65675),

Gene: StolenFromERC_116 Start: 65031, Stop: 65273, Start Num: 3
Candidate Starts for StolenFromERC_116:
(1, 64953), (Start: 3 @65031 has 115 MA's), (4, 65139), (6, 65217),

Gene: TBrady12_118 Start: 65123, Stop: 65365, Start Num: 3
Candidate Starts for TBrady12_118:
(1, 65045), (Start: 3 @65123 has 115 MA's), (4, 65231), (6, 65309),

Gene: Tarkin_113 Start: 65932, Stop: 66174, Start Num: 3
Candidate Starts for Tarkin_113:
(1, 65854), (Start: 3 @65932 has 115 MA's), (4, 66040), (6, 66118),

Gene: TeardropMSU_114 Start: 65293, Stop: 65535, Start Num: 3
Candidate Starts for TeardropMSU_114:
(Start: 3 @65293 has 115 MA's), (4, 65401), (6, 65479),

Gene: Teaspoon_110 Start: 65671, Stop: 65913, Start Num: 3
Candidate Starts for Teaspoon_110:
(1, 65593), (Start: 3 @65671 has 115 MA's), (4, 65779), (6, 65857),

Gene: Terminus_117 Start: 66332, Stop: 66574, Start Num: 3
Candidate Starts for Terminus_117:
(1, 66254), (Start: 3 @66332 has 115 MA's), (4, 66440), (6, 66518),

Gene: Thresher_115 Start: 65972, Stop: 66214, Start Num: 3
Candidate Starts for Thresher_115:
(1, 65894), (Start: 3 @65972 has 115 MA's), (4, 66080), (6, 66158),

Gene: Tomaszewski_109 Start: 64870, Stop: 65112, Start Num: 3
Candidate Starts for Tomaszewski_109:
(1, 64792), (Start: 3 @64870 has 115 MA's), (4, 64978), (6, 65056),

Gene: Toto_113 Start: 66124, Stop: 66366, Start Num: 3
Candidate Starts for Toto_113:
(1, 66046), (Start: 3 @66124 has 115 MA's), (4, 66232), (6, 66310),

Gene: Traaww1_111 Start: 64673, Stop: 64915, Start Num: 3
Candidate Starts for Traaww1_111:
(1, 64595), (Start: 3 @64673 has 115 MA's), (4, 64781), (6, 64859),

Gene: Tuco_119 Start: 67352, Stop: 67594, Start Num: 3
Candidate Starts for Tuco_119:
(Start: 3 @67352 has 115 MA's), (4, 67460), (6, 67538),

Gene: Ukulele_109 Start: 64689, Stop: 64931, Start Num: 3
Candidate Starts for Ukulele_109:
(1, 64611), (Start: 3 @64689 has 115 MA's), (4, 64797), (6, 64875),

Gene: Wiggin_117 Start: 65116, Stop: 65358, Start Num: 3
Candidate Starts for Wiggin_117:
(1, 65038), (Start: 3 @65116 has 115 MA's), (4, 65224), (6, 65302),

Gene: Willez_109 Start: 63658, Stop: 63900, Start Num: 3
Candidate Starts for Willez_109:
(1, 63580), (Start: 3 @63658 has 115 MA's), (4, 63766), (6, 63844),

Gene: Xandras_112 Start: 64939, Stop: 65181, Start Num: 3
Candidate Starts for Xandras_112:
(1, 64861), (Start: 3 @64939 has 115 MA's), (4, 65047), (6, 65125),

Gene: YassJohnny_111 Start: 63679, Stop: 63921, Start Num: 3

Candidate Starts for YassJohnny_111:

(1, 63601), (Start: 3 @63679 has 115 MA's), (4, 63787), (6, 63865),

Gene: Youngblood_118 Start: 65828, Stop: 66070, Start Num: 3

Candidate Starts for Youngblood_118:

(1, 65750), (Start: 3 @65828 has 115 MA's), (4, 65936), (6, 66014),

Gene: xkcd_118 Start: 66013, Stop: 66255, Start Num: 3

Candidate Starts for xkcd_118:

(1, 65935), (Start: 3 @66013 has 115 MA's), (4, 66121), (6, 66199),