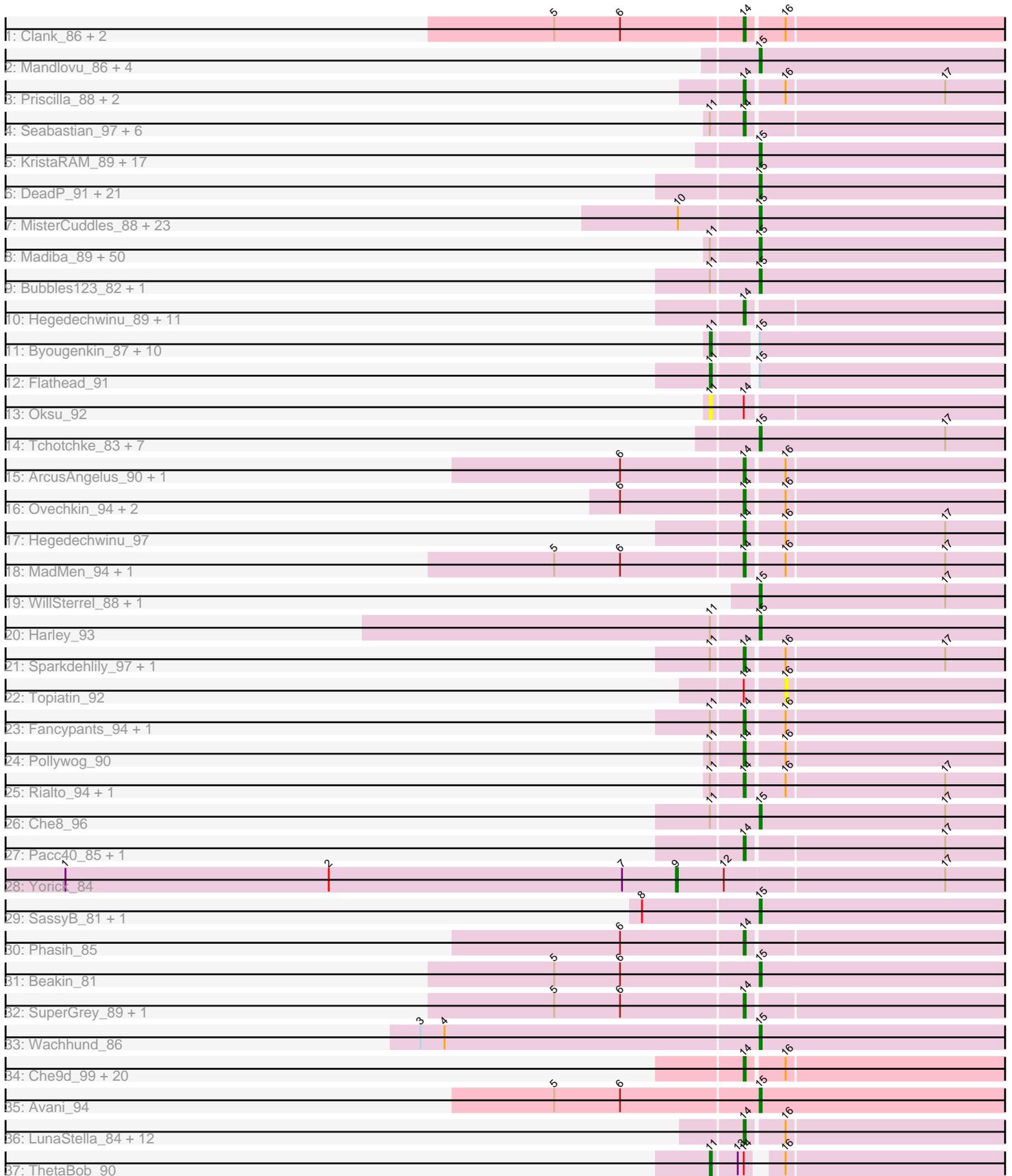# Pham 283465

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 283465 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283465 has 234 members, 24 are drafts.

Phages represented in each track:
• Track 1 : Clank_86, Doug_86, Gandalph_88
• Track 2 : Mandlovu_86, Hlubikazi_86, Phatniss_86, Strokeseat_86, Mozy_96
• Track 3 : Priscilla_88, NormanBulbieJr_86, Koella_80
• Track 4 : Seabastian_97, OfUltron_97, AlpineSix_88, Jinglebell_96, Modragons_94, Llama_96, Ochi17_95
• Track 5 : KristaRAM_89, James_91, Peridot_92, Jarcob_90, BodEinwohner17_97, Squirty_89, SG4_91, Inventum_86, VRedHorse_90, Plumbus_89, Radiance_85, Leperchaun_90, Dorothy_89, RedBird_90, Constella_60, Sassafras_90, Stap_85, Whouxphf_89
• Track 6 : DeadP_91, Brookers_85, Taj_97, Jabbawokkie_96, Nivrat_87, Cerasum_84, Wee_95, EleanorGeorge_90, Phanphagia_91, DaWorst_88, Coco12_87, Yorick_81, BigPhil_83, Velveteen_84, LilMoolah_89, Filuzino_90, Blarby_96, Zapner_95, Kingsley_94, Karhdo_85, Sarma624_89, Shauna1_88
• Track 7 : MisterCuddles_88, PatoPoderoso_85, Geralt_82, PHappiness_89, Veteran_82, KingJulian_91, RitaG_89, MulchExplorer_94, DillTech15_93, Mantra_87, Totinger_90, Fastidio_90, Deb65_82, Leozinho_87, Corium_85, LittleShirley_94, SiSi_86, Girr_87, Kimberlium_92, OldBen_86, Juice456_88, Nimbo_81, Ruby_85, QuickMath_90
• Track 8 : Madiba_89, DirtMcgirt_88, Kenuha5_84, JalFarm20_96, Guppsters_82, BlueCrab_90, DaddyRickover_92, Tweety_90, IMpilo_83, Ms6_90, Phalconet_87, Crumble_83, FreddyB_96, Bobi_92, Pippy_83, Lorde_89, Jennelsea_83, PhesterPhotato_93, Lucia_88, Burwell21_82, BobaPhett_88, Cabrinians_84, Saal_84, DLane_88, Philus_90, UncleRicky_88, MilleniumForce_89, Lizziana_89, Mwanjiwa_90, LastJedi_78, Hamulus_89, Enby_90, StAnnes_93, DRBy19_91, Girafales_96, Zizzle_91, Ramsey_93, SwagPigglett_89, Whatsapiecost_81, Donkeykong_95, MinionDave_87, PMC_86, Maravista_85, Mova_92, Rockne_90, Jant_94, Florinda_99, DotProduct_83, Chuckly_81, Drago_86, Gorge_86
• Track 9 : Bubbles123_82, Nitzel_83
• Track 10 : Hegedechwinu_89, Emma_92, Eradicator_81, Clifton_80, Brushbloom_89, Firehouse51_84, Spartacus_95, OwlsT2W_88, CaptainTrips_91, Renaud18_97, Cornucopia_89, Mutaforma13_91
• Track 11 : Byougenkin_87, Batiatus_87, Boomer_91, Quico_96, Eish_94, Soul22_89, Ardmore_74, Brocalys_78, XFactor_81, Medindi_93, Hades_87
• Track 12 : Flathead_91
• Track 13 : Oksu_92
• Track 14 : Tchotchke_83, Krakatau_82, OlympiaSaint_90, Spoonbill_86, ShroomBoi_87, ShiLan_90, GUmbie_87, Mattes_87

- Track 15 : ArcusAngelus_90, Chevrolet_93
- Track 16 : Ovechkin_94, Seagreen_89, Violac_92
- Track 17 : Hegedechwinu_97
- Track 18 : MadMen_94, Bipolar_90
- Track 19 : WillSterrel_88, IrishSherpFalk_89
- Track 20 : Harley_93
- Track 21 : Sparkdehlily_97, TDanisky_98
- Track 22 : Topiatin_92
- Track 23 : Fancypants_94, STLscum_66
- Track 24 : Pollywog_90
- Track 25 : Rialto_94, Moonbeam_91
- Track 26 : Che8_96
- Track 27 : Pacc40_85, Ogopogo_94
- Track 28 : Yorick_84
- Track 29 : SassyB_81, PopTart_81
- Track 30 : Phasih_85
- Track 31 : Beakin_81
- Track 32 : SuperGrey_89, Blexus_85
- Track 33 : Wachhund_86
- Track 34 : Che9d_99, Zerg_89, Galactic_89, Royals2015_94, Aubs_89, Doomslug_105, IbOuu_85, DoRead_91, MilanaBonita_83, Ibhubesi_87, Enzomatic_99, Llij_86, Job42_89, Starcevich_89, BuzzLyseyear_97, Estave1_97, Akhila_84, NewHope4_93, LunaBlu_92, Polo2Bam_98, Beanstalk_86
- Track 35 : Avani_94
- Track 36 : LunaStella_84, GigiOuiOui_84, Kersh_93, ByChance_77, BAKA_78, Alexphander_91, Vivum_92, TChen_86, Martik_85, Duke13_76, Dante_87, Sabbb_93, ShowerHandel_86
- Track 37 : ThetaBob_90

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

The start number called the most often in the published annotations is 15, it was called in 126 of the 210 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Avani_94, Beakin_81, BigPhil_83, Blarby_96, BlueCrab_90, BobaPhett_88, Bobi_92, BodEinwohner17_97, Brookers_85, Bubbles123_82, Burwell21_82, Cabrinians_84, Cerasum_84, Che8_96, Chuckly_81, Coco12_87, Constella_60, Corium_85, Crumble_83, DLane_88, DRBy19_91, DirtMcgirt_88, Donkeykong_95, Dorothy_89, DotProduct_83, Drago_86, EleanorGeorge_90, Enby_90, Fastidio_90, Filuzino_90, Florinda_99, FreddyB_96, GUmbie_87, Geralt_82, Girafales_96, Girr_87, Gorge_86, Guppsters_82, Hamulus_89, Harley_93, Hlubikazi_86, IMpilo_83, Inventum_86, IrishSherpFalk_89, Jabbawokkie_96, JalFarm20_96, James_91, Jant_94, Jarcob_90, Jennelsea_83, Juice456_88, Karhdo_85, Kenuha5_84, Kimberlium_92, KingJulian_91, Kingsley_94, Krakatau_82, KristaRAM_89, LastJedi_78, Leozinho_87, Leperchaun_90, LilMoolah_89, LittleShirley_94, Lizziana_89, Lorde_89, Lucia_88, Madiba_89, Mandlovu_86, Mantra_87, Maravista_85, Mattes_87, MilleniumForce_89, MinionDave_87, MisterCuddles_88, Mova_92, Mozy_96, Ms6_90, MulchExplorer_94, Mwanjiwa_90, Nimbo_81, Nitzel_83, Nivrat_87, OldBen_86, OlympiaSaint_90,

PHappiness_89, PMC_86, PatoPoderoso_85, Peridot_92, Phalconet_87, Phanphagia_91, Phatniss_86, PhesterPhotato_93, Philus_90, Pippy_83, Plumbus_89, PopTart_81, QuickMath_90, Radiance_85, Ramsey_93, RedBird_90, RitaG_89, Rockne_90, Ruby_85, SG4_91, Saal_84, Sarma624_89, Sassafras_90, SassyB_81, Shauna1_88, ShiLan_90, ShroomBoi_87, SiSi_86, Spoonbill_86, Squirty_89, StAnnes_93, Stap_85, Strokeseat_86, SwagPigglett_89, Taj_97, Tchotchke_83, Totinger_90, Tweety_90, UncleRicky_88, VRedHorse_90, Velveteen_84, Veteran_82, Wachhund_86, Wee_95, Whatsapiecost_81, Whouxphf_89, WillSterrel_88, Yorick_81, Zapner_95, Zizzle_91,

Genes that have the "Most Annotated" start but do not call it:
• Ardmore_74, Batiatus_87, Boomer_91, Brocalys_78, Byougenkin_87, Eish_94, Flathead_91, Hades_87, Medindi_93, Quico_96, Soul22_89, XFactor_81,

Genes that do not have the "Most Annotated" start:
• Akhila_84, Alexphander_91, AlpineSix_88, ArcusAngelus_90, Aubs_89, BAKA_78, Beanstalk_86, Bipolar_90, Blexus_85, Brushbloom_89, BuzzLyseyear_97, ByChance_77, CaptainTrips_91, Che9d_99, Chevrolet_93, Clank_86, Clifton_80, Cornucopia_89, Dante_87, DoRead_91, Doomslug_105, Doug_86, Duke13_76, Emma_92, Enzomatic_99, Eradicator_81, Estave1_97, Fancypants_94, Firehouse51_84, Galactic_89, Gandalph_88, GigiOuiOui_84, Hegedechwinu_89, Hegedechwinu_97, IbOuu_85, Ibhubesi_87, Jinglebell_96, Job42_89, Kersh_93, Koella_80, Llama_96, Llij_86, LunaBlu_92, LunaStella_84, MadMen_94, Martik_85, MilanaBonita_83, Modragons_94, Moonbeam_91, Mutaforma13_91, NewHope4_93, NormanBulbieJr_86, Ochi17_95, OfUltron_97, Ogopogo_94, Oksu_92, Ovechkin_94, OwlsT2W_88, Pacc40_85, Phasih_85, Pollywog_90, Polo2Bam_98, Priscilla_88, Renaud18_97, Rialto_94, Royals2015_94, STLscum_66, Sabbb_93, Seabastian_97, Seagreen_89, ShowerHandel_86, Sparkdehlily_97, Spartacus_95, Starcevich_89, SuperGrey_89, TChen_86, TDanisky_98, ThetaBob_90, Topiatin_92, Violac_92, Vivum_92, Yorick_84, Zerg_89,

Summary by start number:

Start 9:
• Found in 1 of 234 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 210
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yorick_84 (F1),

Start 11:
• Found in 83 of 234 (35.5%) of genes in pham
• Manual Annotations of this start: 11 of 210
• Called 16.9% of time when present
• Phage (with cluster) where this start called: Ardmore_74 (F1), Batiatus_87 (F1), Boomer_91 (F1), Brocalys_78 (F1), Byougenkin_87 (F1), Eish_94 (F1), Flathead_91 (F1), Hades_87 (F1), Medindi_93 (F1), Oksu_92 (F1), Quico_96 (F1), Soul22_89 (F2), ThetaBob_90 (F4), XFactor_81 (F1),

Start 14:
• Found in 82 of 234 (35.0%) of genes in pham
• Manual Annotations of this start: 72 of 210
• Called 96.3% of time when present

• Phage (with cluster) where this start called: Akhila_84 (F1), Alexphander_91 (F1), AlpineSix_88 (F1), ArcusAngelus_90 (F1), Aubs_89 (F1), BAKA_78 (J), Beanstalk_86 (F1), Bipolar_90 (F1), Blexus_85 (F1), Brushbloom_89 (F1), BuzzLyseyear_97 (F1), ByChance_77 (F1), CaptainTrips_91 (F1), Che9d_99 (F2), Chevrolet_93 (F1), Clank_86 (F), Clifton_80 (F1), Cornucopia_89 (F1), Dante_87 (F1), DoRead_91 (F1), Doomslug_105 (F), Doug_86 (F1), Duke13_76 (J), Emma_92 (F1), Enzomatic_99 (F1), Eradicator_81 (F1), Estave1_97 (F1), Fancypants_94 (F1), Firehouse51_84 (F1), Galactic_89 (F1), Gandalph_88 (F1), GigiOuiOui_84 (F1), Hegedechwinu_89 (F1), Hegedechwinu_97 (F1), IbOuu_85 (F1), Ibhubesi_87 (F1), Jinglebell_96 (F1), Job42_89 (F1), Kersh_93 (F1), Koella_80 (F1), Llama_96 (F1), Llij_86 (F1), LunaBlu_92 (F1), LunaStella_84 (F4), MadMen_94 (F1), Martik_85 (F1), MilanaBonita_83 (F1), Modragons_94 (F1), Moonbeam_91 (F1), Mutaforma13_91 (F1), NewHope4_93 (F1), NormanBulbieJr_86 (F1), Ochi17_95 (F1), OfUltron_97 (F1), Ogopogo_94 (F1), Ovechkin_94 (F1), OwlsT2W_88 (F1), Pacc40_85 (F1), Phasih_85 (F1), Pollywog_90 (F1), Polo2Bam_98 (F1), Priscilla_88 (F1), Renaud18_97 (F4), Rialto_94 (F1), Royals2015_94 (F1), STLscum_66 (A1), Sabbb_93 (F1), Seabastian_97 (F1), Seagreen_89 (F1), ShowerHandel_86 (F1), Sparkdehlily_97 (F1), Spartacus_95 (F1), Starcevich_89 (F1), SuperGrey_89 (F1), TChen_86 (F4), TDanisky_98 (F1), Violac_92 (F1), Vivum_92 (F1), Zerg_89 (F1),

Start 15:
• Found in 151 of 234 (64.5%) of genes in pham
• Manual Annotations of this start: 126 of 210
• Called 92.1% of time when present
• Phage (with cluster) where this start called: Avani_94 (F2), Beakin_81 (F1), BigPhil_83 (F1), Blarby_96 (F), BlueCrab_90 (F1), BobaPhett_88 (F1), Bobi_92 (F1), BodEinwohner17_97 (F1), Brookers_85 (F1), Bubbles123_82 (F1), Burwell21_82 (F1), Cabrinians_84 (F1), Cerasum_84 (F1), Che8_96 (F1), Chuckly_81 (F1), Coco12_87 (F1), Constella_60 (J), Corium_85 (F1), Crumble_83 (F1), DLane_88 (F1), DRBy19_91 (F1), DaWorst_88 (F1), DaddyRickover_92 (F1), DeadP_91 (F1), Deb65_82 (F1), DillTech15_93 (F1), DirtMcgirt_88 (F1), Donkeykong_95 (F1), Dorothy_89 (F1), DotProduct_83 (F1), Drago_86 (F1), EleanorGeorge_90 (F1), Enby_90 (F1), Fastidio_90 (F1), Filuzino_90 (F1), Florinda_99 (F1), FreddyB_96 (F1), GUmbie_87 (F1), Geralt_82 (F1), Girafales_96 (F1), Girr_87 (F1), Gorge_86 (F1), Guppsters_82 (F1), Hamulus_89 (F1), Harley_93 (F1), Hlubikazi_86 (F1), IMpilo_83 (F1), Inventum_86 (F1), IrishSherpFalk_89 (F1), Jabbawokkie_96 (F2), JalFarm20_96 (F1), James_91 (F1), Jant_94 (F1), Jarcob_90 (F1), Jennelsea_83 (F1), Juice456_88 (F1), Karhdo_85 (F1), Kenuha5_84 (F1), Kimberlium_92 (F1), KingJulian_91 (F1), Kingsley_94 (F1), Krakatau_82 (F1), KristaRAM_89 (F1), LastJedi_78 (F1), Leozinho_87 (F1), Leperchaun_90 (F1), LilMoolah_89 (F1), LittleShirley_94 (F1), Lizziana_89 (F1), Lorde_89 (F1), Lucia_88 (F1), Madiba_89 (F1), Mandlovu_86 (F1), Mantra_87 (F1), Maravista_85 (F1), Mattes_87 (F1), MilleniumForce_89 (F1), MinionDave_87 (F1), MisterCuddles_88 (F1), Mova_92 (F1), Mozy_96 (F1), Ms6_90 (F1), MulchExplorer_94 (F1), Mwanjiwa_90 (F1), Nimbo_81 (F1), Nitzel_83 (F1), Nivrat_87 (F1), OldBen_86 (F1), OlympiaSaint_90 (F1), PHappiness_89 (F1), PMC_86 (F1), PatoPoderoso_85 (F1), Peridot_92 (F1), Phalconet_87 (F1), Phanphagia_91 (F1), Phatniss_86 (F1), PhesterPhotato_93 (F1), Philus_90 (F1), Pippy_83 (F1), Plumbus_89 (F1), PopTart_81 (F1), QuickMath_90 (F1), Radiance_85 (F1), Ramsey_93 (F1), RedBird_90 (F1), RitaG_89 (F1), Rockne_90 (F1), Ruby_85 (F1), SG4_91 (F1), Saal_84 (F1), Sarma624_89 (F1), Sassafras_90 (F1), SassyB_81 (F1), Shauna1_88 (F1), ShiLan_90 (F1), ShroomBoi_87 (F1), SiSi_86 (F1), Spoonbill_86 (F1), Squirty_89 (F3), StAnnes_93 (F1), Stap_85 (F1), Strokeseat_86 (F1), SwagPigglett_89 (F1), Taj_97 (F1),

Tchotchke_83 (F1), Totinger_90 (F1), Tweety_90 (F1), UncleRicky_88 (F1), VRedHorse_90 (F1), Velveteen_84 (F1), Veteran_82 (F1), Wachhund_86 (F1), Wee_95 (F1), Whatsapiecost_81 (F1), Whouxphf_89 (F1), WillSterrel_88 (F1), Yorick_81 (F1), Zapner_95 (F2), Zizzle_91 (F1),

Start 16:
• Found in 57 of 234 (24.4%) of genes in pham
• No Manual Annotations of this start.
• Called 1.8% of time when present
• Phage (with cluster) where this start called: Topiatin_92 (F1),

Summary by clusters:

There are 7 clusters represented in this pham: F1, F2, F3, F4, F, J, A1,

Info for manual annotations of cluster A1:
•Start number 14 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster F1:
•Start number 9 was manually annotated 1 time for cluster F1.
•Start number 11 was manually annotated 9 times for cluster F1.
•Start number 14 was manually annotated 65 times for cluster F1.
•Start number 15 was manually annotated 121 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 11 was manually annotated 1 time for cluster F2.
•Start number 14 was manually annotated 1 time for cluster F2.
•Start number 15 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F3:
•Start number 15 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:
•Start number 11 was manually annotated 1 time for cluster F4.
•Start number 14 was manually annotated 3 times for cluster F4.

Info for manual annotations of cluster J:
•Start number 14 was manually annotated 2 times for cluster J.
•Start number 15 was manually annotated 1 time for cluster J.

Gene Information:
Gene: Akhila_84 Start: 49522, Stop: 49662, Start Num: 14
Candidate Starts for Akhila_84:
(Start: 14 @49522 has 72 MA's), (16, 49540),

Gene: Alexphander_91 Start: 51938, Stop: 52078, Start Num: 14
Candidate Starts for Alexphander_91:
(Start: 14 @51938 has 72 MA's), (16, 51956),

Gene: AlpineSix_88 Start: 50321, Stop: 50461, Start Num: 14
Candidate Starts for AlpineSix_88:
(Start: 11 @50306 has 11 MA's), (Start: 14 @50321 has 72 MA's),

Gene: ArcusAngelus_90 Start: 51734, Stop: 51874, Start Num: 14
Candidate Starts for ArcusAngelus_90:
(6, 51674), (Start: 14 @51734 has 72 MA's), (16, 51752),

Gene: Ardmore_74 Start: 45631, Stop: 45786, Start Num: 11
Candidate Starts for Ardmore_74:
(Start: 11 @45631 has 11 MA's), (Start: 15 @45649 has 126 MA's),

Gene: Aubs_89 Start: 51742, Stop: 51882, Start Num: 14
Candidate Starts for Aubs_89:
(Start: 14 @51742 has 72 MA's), (16, 51760),

Gene: Avani_94 Start: 48402, Stop: 48539, Start Num: 15
Candidate Starts for Avani_94:
(5, 48306), (6, 48339), (Start: 15 @48402 has 126 MA's),

Gene: BAKA_78 Start: 51467, Stop: 51327, Start Num: 14
Candidate Starts for BAKA_78:
(Start: 14 @51467 has 72 MA's), (16, 51449),

Gene: Batiatus_87 Start: 50505, Stop: 50660, Start Num: 11
Candidate Starts for Batiatus_87:
(Start: 11 @50505 has 11 MA's), (Start: 15 @50523 has 126 MA's),

Gene: Beakin_81 Start: 47274, Stop: 47411, Start Num: 15
Candidate Starts for Beakin_81:
(5, 47178), (6, 47211), (Start: 15 @47274 has 126 MA's),

Gene: Beanstalk_86 Start: 50005, Stop: 50145, Start Num: 14
Candidate Starts for Beanstalk_86:
(Start: 14 @50005 has 72 MA's), (16, 50023),

Gene: BigPhil_83 Start: 47141, Stop: 47278, Start Num: 15
Candidate Starts for BigPhil_83:
(Start: 15 @47141 has 126 MA's),

Gene: Bipolar_90 Start: 52437, Stop: 52577, Start Num: 14
Candidate Starts for Bipolar_90:
(5, 52344), (6, 52377), (Start: 14 @52437 has 72 MA's), (16, 52455), (17, 52533),

Gene: Blarby_96 Start: 49169, Stop: 49306, Start Num: 15
Candidate Starts for Blarby_96:
(Start: 15 @49169 has 126 MA's),

Gene: Blexus_85 Start: 51046, Stop: 51186, Start Num: 14
Candidate Starts for Blexus_85:
(5, 50953), (6, 50986), (Start: 14 @51046 has 72 MA's),

Gene: BlueCrab_90 Start: 51733, Stop: 51870, Start Num: 15

Candidate Starts for BlueCrab_90:
(Start: 11 @51715 has 11 MA's), (Start: 15 @51733 has 126 MA's),

Gene: BobaPhett_88 Start: 52465, Stop: 52602, Start Num: 15
Candidate Starts for BobaPhett_88:
(Start: 11 @52447 has 11 MA's), (Start: 15 @52465 has 126 MA's),

Gene: Bobi_92 Start: 52268, Stop: 52405, Start Num: 15
Candidate Starts for Bobi_92:
(Start: 11 @52250 has 11 MA's), (Start: 15 @52268 has 126 MA's),

Gene: BodEinwohner17_97 Start: 53542, Stop: 53679, Start Num: 15
Candidate Starts for BodEinwohner17_97:
(Start: 15 @53542 has 126 MA's),

Gene: Boomer_91 Start: 51589, Stop: 51744, Start Num: 11
Candidate Starts for Boomer_91:
(Start: 11 @51589 has 11 MA's), (Start: 15 @51607 has 126 MA's),

Gene: Brocalys_78 Start: 47927, Stop: 48082, Start Num: 11
Candidate Starts for Brocalys_78:
(Start: 11 @47927 has 11 MA's), (Start: 15 @47945 has 126 MA's),

Gene: Brookers_85 Start: 50092, Stop: 50229, Start Num: 15
Candidate Starts for Brookers_85:
(Start: 15 @50092 has 126 MA's),

Gene: Brushbloom_89 Start: 51715, Stop: 51855, Start Num: 14
Candidate Starts for Brushbloom_89:
(Start: 14 @51715 has 72 MA's),

Gene: Bubbles123_82 Start: 50242, Stop: 50379, Start Num: 15
Candidate Starts for Bubbles123_82:
(Start: 11 @50224 has 11 MA's), (Start: 15 @50242 has 126 MA's),

Gene: Burwell21_82 Start: 50231, Stop: 50368, Start Num: 15
Candidate Starts for Burwell21_82:
(Start: 11 @50213 has 11 MA's), (Start: 15 @50231 has 126 MA's),

Gene: BuzzLyseyear_97 Start: 53702, Stop: 53842, Start Num: 14
Candidate Starts for BuzzLyseyear_97:
(Start: 14 @53702 has 72 MA's), (16, 53720),

Gene: ByChance_77 Start: 45854, Stop: 45994, Start Num: 14
Candidate Starts for ByChance_77:
(Start: 14 @45854 has 72 MA's), (16, 45872),

Gene: Byougenkin_87 Start: 48434, Stop: 48589, Start Num: 11
Candidate Starts for Byougenkin_87:
(Start: 11 @48434 has 11 MA's), (Start: 15 @48452 has 126 MA's),

Gene: Cabrinians_84 Start: 49865, Stop: 50002, Start Num: 15
Candidate Starts for Cabrinians_84:

(Start: 11 @49847 has 11 MA's), (Start: 15 @49865 has 126 MA's),

Gene: CaptainTrips_91 Start: 51151, Stop: 51291, Start Num: 14
Candidate Starts for CaptainTrips_91:
(Start: 14 @51151 has 72 MA's),

Gene: Cerasum_84 Start: 47159, Stop: 47296, Start Num: 15
Candidate Starts for Cerasum_84:
(Start: 15 @47159 has 126 MA's),

Gene: Che8_96 Start: 52401, Stop: 52538, Start Num: 15
Candidate Starts for Che8_96:
(Start: 11 @52383 has 11 MA's), (Start: 15 @52401 has 126 MA's), (17, 52494),

Gene: Che9d_99 Start: 50613, Stop: 50753, Start Num: 14
Candidate Starts for Che9d_99:
(Start: 14 @50613 has 72 MA's), (16, 50631),

Gene: Chevrolet_93 Start: 51735, Stop: 51875, Start Num: 14
Candidate Starts for Chevrolet_93:
(6, 51675), (Start: 14 @51735 has 72 MA's), (16, 51753),

Gene: Chuckly_81 Start: 46984, Stop: 47121, Start Num: 15
Candidate Starts for Chuckly_81:
(Start: 11 @46966 has 11 MA's), (Start: 15 @46984 has 126 MA's),

Gene: Clank_86 Start: 48021, Stop: 48161, Start Num: 14
Candidate Starts for Clank_86:
(5, 47928), (6, 47961), (Start: 14 @48021 has 72 MA's), (16, 48039),

Gene: Clifton_80 Start: 49034, Stop: 49174, Start Num: 14
Candidate Starts for Clifton_80:
(Start: 14 @49034 has 72 MA's),

Gene: Coco12_87 Start: 51216, Stop: 51353, Start Num: 15
Candidate Starts for Coco12_87:
(Start: 15 @51216 has 126 MA's),

Gene: Constella_60 Start: 45130, Stop: 44993, Start Num: 15
Candidate Starts for Constella_60:
(Start: 15 @45130 has 126 MA's),

Gene: Corium_85 Start: 51800, Stop: 51937, Start Num: 15
Candidate Starts for Corium_85:
(10, 51761), (Start: 15 @51800 has 126 MA's),

Gene: Cornucopia_89 Start: 49388, Stop: 49528, Start Num: 14
Candidate Starts for Cornucopia_89:
(Start: 14 @49388 has 72 MA's),

Gene: Crumble_83 Start: 46590, Stop: 46727, Start Num: 15
Candidate Starts for Crumble_83:
(Start: 11 @46572 has 11 MA's), (Start: 15 @46590 has 126 MA's),

Gene: DLane_88 Start: 51845, Stop: 51982, Start Num: 15
Candidate Starts for DLane_88:
(Start: 11 @51827 has 11 MA's), (Start: 15 @51845 has 126 MA's),

Gene: DRBy19_91 Start: 52573, Stop: 52710, Start Num: 15
Candidate Starts for DRBy19_91:
(Start: 11 @52555 has 11 MA's), (Start: 15 @52573 has 126 MA's),

Gene: DaWorst_88 Start: 50158, Stop: 50295, Start Num: 15
Candidate Starts for DaWorst_88:
(Start: 15 @50158 has 126 MA's),

Gene: DaddyRickover_92 Start: 52080, Stop: 52217, Start Num: 15
Candidate Starts for DaddyRickover_92:
(Start: 11 @52062 has 11 MA's), (Start: 15 @52080 has 126 MA's),

Gene: Dante_87 Start: 52413, Stop: 52553, Start Num: 14
Candidate Starts for Dante_87:
(Start: 14 @52413 has 72 MA's), (16, 52431),

Gene: DeadP_91 Start: 50240, Stop: 50377, Start Num: 15
Candidate Starts for DeadP_91:
(Start: 15 @50240 has 126 MA's),

Gene: Deb65_82 Start: 49968, Stop: 50105, Start Num: 15
Candidate Starts for Deb65_82:
(10, 49929), (Start: 15 @49968 has 126 MA's),

Gene: DillTech15_93 Start: 50355, Stop: 50492, Start Num: 15
Candidate Starts for DillTech15_93:
(10, 50316), (Start: 15 @50355 has 126 MA's),

Gene: DirtMcgirt_88 Start: 48217, Stop: 48354, Start Num: 15
Candidate Starts for DirtMcgirt_88:
(Start: 11 @48199 has 11 MA's), (Start: 15 @48217 has 126 MA's),

Gene: DoRead_91 Start: 49571, Stop: 49711, Start Num: 14
Candidate Starts for DoRead_91:
(Start: 14 @49571 has 72 MA's), (16, 49589),

Gene: Donkeykong_95 Start: 53158, Stop: 53295, Start Num: 15
Candidate Starts for Donkeykong_95:
(Start: 11 @53140 has 11 MA's), (Start: 15 @53158 has 126 MA's),

Gene: Doomslug_105 Start: 53328, Stop: 53468, Start Num: 14
Candidate Starts for Doomslug_105:
(Start: 14 @53328 has 72 MA's), (16, 53346),

Gene: Dorothy_89 Start: 52728, Stop: 52865, Start Num: 15
Candidate Starts for Dorothy_89:
(Start: 15 @52728 has 126 MA's),

Gene: DotProduct_83 Start: 48747, Stop: 48884, Start Num: 15
Candidate Starts for DotProduct_83:
(Start: 11 @48729 has 11 MA's), (Start: 15 @48747 has 126 MA's),

Gene: Doug_86 Start: 51746, Stop: 51886, Start Num: 14
Candidate Starts for Doug_86:
(5, 51653), (6, 51686), (Start: 14 @51746 has 72 MA's), (16, 51764),

Gene: Drago_86 Start: 48220, Stop: 48357, Start Num: 15
Candidate Starts for Drago_86:
(Start: 11 @48202 has 11 MA's), (Start: 15 @48220 has 126 MA's),

Gene: Duke13_76 Start: 50679, Stop: 50539, Start Num: 14
Candidate Starts for Duke13_76:
(Start: 14 @50679 has 72 MA's), (16, 50661),

Gene: Eish_94 Start: 52253, Stop: 52408, Start Num: 11
Candidate Starts for Eish_94:
(Start: 11 @52253 has 11 MA's), (Start: 15 @52271 has 126 MA's),

Gene: EleanorGeorge_90 Start: 51928, Stop: 52065, Start Num: 15
Candidate Starts for EleanorGeorge_90:
(Start: 15 @51928 has 126 MA's),

Gene: Emma_92 Start: 49966, Stop: 50106, Start Num: 14
Candidate Starts for Emma_92:
(Start: 14 @49966 has 72 MA's),

Gene: Enby_90 Start: 48496, Stop: 48633, Start Num: 15
Candidate Starts for Enby_90:
(Start: 11 @48478 has 11 MA's), (Start: 15 @48496 has 126 MA's),

Gene: Enzomatic_99 Start: 49770, Stop: 49910, Start Num: 14
Candidate Starts for Enzomatic_99:
(Start: 14 @49770 has 72 MA's), (16, 49788),

Gene: Eradicator_81 Start: 49148, Stop: 49288, Start Num: 14
Candidate Starts for Eradicator_81:
(Start: 14 @49148 has 72 MA's),

Gene: Estave1_97 Start: 54757, Stop: 54897, Start Num: 14
Candidate Starts for Estave1_97:
(Start: 14 @54757 has 72 MA's), (16, 54775),

Gene: Fancypants_94 Start: 53203, Stop: 53343, Start Num: 14
Candidate Starts for Fancypants_94:
(Start: 11 @53188 has 11 MA's), (Start: 14 @53203 has 72 MA's), (16, 53221),

Gene: Fastidio_90 Start: 48250, Stop: 48387, Start Num: 15
Candidate Starts for Fastidio_90:
(10, 48211), (Start: 15 @48250 has 126 MA's),

Gene: Filuzino_90 Start: 53154, Stop: 53291, Start Num: 15

Candidate Starts for Filuzino_90:
(Start: 15 @53154 has 126 MA's),

Gene: Firehouse51_84 Start: 51782, Stop: 51922, Start Num: 14
Candidate Starts for Firehouse51_84:
(Start: 14 @51782 has 72 MA's),

Gene: Flathead_91 Start: 51085, Stop: 51240, Start Num: 11
Candidate Starts for Flathead_91:
(Start: 11 @51085 has 11 MA's), (Start: 15 @51103 has 126 MA's),

Gene: Florinda_99 Start: 52657, Stop: 52794, Start Num: 15
Candidate Starts for Florinda_99:
(Start: 11 @52639 has 11 MA's), (Start: 15 @52657 has 126 MA's),

Gene: FreddyB_96 Start: 51512, Stop: 51649, Start Num: 15
Candidate Starts for FreddyB_96:
(Start: 11 @51494 has 11 MA's), (Start: 15 @51512 has 126 MA's),

Gene: GUmbie_87 Start: 50971, Stop: 51108, Start Num: 15
Candidate Starts for GUmbie_87:
(Start: 15 @50971 has 126 MA's), (17, 51064),

Gene: Galactic_89 Start: 50522, Stop: 50662, Start Num: 14
Candidate Starts for Galactic_89:
(Start: 14 @50522 has 72 MA's), (16, 50540),

Gene: Gandalph_88 Start: 48281, Stop: 48421, Start Num: 14
Candidate Starts for Gandalph_88:
(5, 48188), (6, 48221), (Start: 14 @48281 has 72 MA's), (16, 48299),

Gene: Geralt_82 Start: 49966, Stop: 50103, Start Num: 15
Candidate Starts for Geralt_82:
(10, 49927), (Start: 15 @49966 has 126 MA's),

Gene: GigiOuiOui_84 Start: 50090, Stop: 50230, Start Num: 14
Candidate Starts for GigiOuiOui_84:
(Start: 14 @50090 has 72 MA's), (16, 50108),

Gene: Girafales_96 Start: 52262, Stop: 52399, Start Num: 15
Candidate Starts for Girafales_96:
(Start: 11 @52244 has 11 MA's), (Start: 15 @52262 has 126 MA's),

Gene: Girr_87 Start: 51363, Stop: 51500, Start Num: 15
Candidate Starts for Girr_87:
(10, 51324), (Start: 15 @51363 has 126 MA's),

Gene: Gorge_86 Start: 51139, Stop: 51276, Start Num: 15
Candidate Starts for Gorge_86:
(Start: 11 @51121 has 11 MA's), (Start: 15 @51139 has 126 MA's),

Gene: Guppsters_82 Start: 48196, Stop: 48333, Start Num: 15
Candidate Starts for Guppsters_82:

(Start: 11 @48178 has 11 MA's), (Start: 15 @48196 has 126 MA's),

Gene: Hades_87 Start: 48668, Stop: 48823, Start Num: 11
Candidate Starts for Hades_87:
(Start: 11 @48668 has 11 MA's), (Start: 15 @48686 has 126 MA's),

Gene: Hamulus_89 Start: 50612, Stop: 50749, Start Num: 15
Candidate Starts for Hamulus_89:
(Start: 11 @50594 has 11 MA's), (Start: 15 @50612 has 126 MA's),

Gene: Harley_93 Start: 51949, Stop: 52086, Start Num: 15
Candidate Starts for Harley_93:
(Start: 11 @51931 has 11 MA's), (Start: 15 @51949 has 126 MA's),

Gene: Hegedechwinu_89 Start: 49621, Stop: 49761, Start Num: 14
Candidate Starts for Hegedechwinu_89:
(Start: 14 @49621 has 72 MA's),

Gene: Hegedechwinu_97 Start: 51655, Stop: 51798, Start Num: 14
Candidate Starts for Hegedechwinu_97:
(Start: 14 @51655 has 72 MA's), (16, 51673), (17, 51751),

Gene: Hlubikazi_86 Start: 48806, Stop: 48943, Start Num: 15
Candidate Starts for Hlubikazi_86:
(Start: 15 @48806 has 126 MA's),

Gene: IMpilo_83 Start: 48530, Stop: 48667, Start Num: 15
Candidate Starts for IMpilo_83:
(Start: 11 @48512 has 11 MA's), (Start: 15 @48530 has 126 MA's),

Gene: IbOuu_85 Start: 48940, Stop: 49080, Start Num: 14
Candidate Starts for IbOuu_85:
(Start: 14 @48940 has 72 MA's), (16, 48958),

Gene: Ibhubesi_87 Start: 48994, Stop: 49134, Start Num: 14
Candidate Starts for Ibhubesi_87:
(Start: 14 @48994 has 72 MA's), (16, 49012),

Gene: Inventum_86 Start: 50913, Stop: 51050, Start Num: 15
Candidate Starts for Inventum_86:
(Start: 15 @50913 has 126 MA's),

Gene: IrishSherpFalk_89 Start: 51733, Stop: 51870, Start Num: 15
Candidate Starts for IrishSherpFalk_89:
(Start: 15 @51733 has 126 MA's), (17, 51826),

Gene: Jabbawokkie_96 Start: 49089, Stop: 49226, Start Num: 15
Candidate Starts for Jabbawokkie_96:
(Start: 15 @49089 has 126 MA's),

Gene: JalFarm20_96 Start: 51753, Stop: 51890, Start Num: 15
Candidate Starts for JalFarm20_96:
(Start: 11 @51735 has 11 MA's), (Start: 15 @51753 has 126 MA's),

Gene: James_91 Start: 52662, Stop: 52799, Start Num: 15
Candidate Starts for James_91:
(Start: 15 @52662 has 126 MA's),

Gene: Jant_94 Start: 50759, Stop: 50896, Start Num: 15
Candidate Starts for Jant_94:
(Start: 11 @50741 has 11 MA's), (Start: 15 @50759 has 126 MA's),

Gene: Jarcob_90 Start: 52261, Stop: 52398, Start Num: 15
Candidate Starts for Jarcob_90:
(Start: 15 @52261 has 126 MA's),

Gene: Jennelsea_83 Start: 49370, Stop: 49507, Start Num: 15
Candidate Starts for Jennelsea_83:
(Start: 11 @49352 has 11 MA's), (Start: 15 @49370 has 126 MA's),

Gene: Jinglebell_96 Start: 52218, Stop: 52358, Start Num: 14
Candidate Starts for Jinglebell_96:
(Start: 11 @52203 has 11 MA's), (Start: 14 @52218 has 72 MA's),

Gene: Job42_89 Start: 53454, Stop: 53594, Start Num: 14
Candidate Starts for Job42_89:
(Start: 14 @53454 has 72 MA's), (16, 53472),

Gene: Juice456_88 Start: 50872, Stop: 51009, Start Num: 15
Candidate Starts for Juice456_88:
(10, 50833), (Start: 15 @50872 has 126 MA's),

Gene: Karhdo_85 Start: 48772, Stop: 48909, Start Num: 15
Candidate Starts for Karhdo_85:
(Start: 15 @48772 has 126 MA's),

Gene: Kenuha5_84 Start: 51203, Stop: 51340, Start Num: 15
Candidate Starts for Kenuha5_84:
(Start: 11 @51185 has 11 MA's), (Start: 15 @51203 has 126 MA's),

Gene: Kersh_93 Start: 53643, Stop: 53783, Start Num: 14
Candidate Starts for Kersh_93:
(Start: 14 @53643 has 72 MA's), (16, 53661),

Gene: Kimberlium_92 Start: 50972, Stop: 51109, Start Num: 15
Candidate Starts for Kimberlium_92:
(10, 50933), (Start: 15 @50972 has 126 MA's),

Gene: KingJulian_91 Start: 51800, Stop: 51937, Start Num: 15
Candidate Starts for KingJulian_91:
(10, 51761), (Start: 15 @51800 has 126 MA's),

Gene: Kingsley_94 Start: 53823, Stop: 53960, Start Num: 15
Candidate Starts for Kingsley_94:
(Start: 15 @53823 has 126 MA's),

Gene: Koella_80 Start: 47348, Stop: 47491, Start Num: 14
Candidate Starts for Koella_80:
(Start: 14 @47348 has 72 MA's), (16, 47366), (17, 47444),

Gene: Krakatau_82 Start: 46771, Stop: 46908, Start Num: 15
Candidate Starts for Krakatau_82:
(Start: 15 @46771 has 126 MA's), (17, 46864),

Gene: KristaRAM_89 Start: 50559, Stop: 50696, Start Num: 15
Candidate Starts for KristaRAM_89:
(Start: 15 @50559 has 126 MA's),

Gene: LastJedi_78 Start: 48339, Stop: 48476, Start Num: 15
Candidate Starts for LastJedi_78:
(Start: 11 @48321 has 11 MA's), (Start: 15 @48339 has 126 MA's),

Gene: Leozinho_87 Start: 48413, Stop: 48550, Start Num: 15
Candidate Starts for Leozinho_87:
(10, 48374), (Start: 15 @48413 has 126 MA's),

Gene: Leperchaun_90 Start: 52055, Stop: 52192, Start Num: 15
Candidate Starts for Leperchaun_90:
(Start: 15 @52055 has 126 MA's),

Gene: LilMoolah_89 Start: 51545, Stop: 51682, Start Num: 15
Candidate Starts for LilMoolah_89:
(Start: 15 @51545 has 126 MA's),

Gene: LittleShirley_94 Start: 51526, Stop: 51663, Start Num: 15
Candidate Starts for LittleShirley_94:
(10, 51487), (Start: 15 @51526 has 126 MA's),

Gene: Lizziana_89 Start: 51588, Stop: 51725, Start Num: 15
Candidate Starts for Lizziana_89:
(Start: 11 @51570 has 11 MA's), (Start: 15 @51588 has 126 MA's),

Gene: Llama_96 Start: 52074, Stop: 52214, Start Num: 14
Candidate Starts for Llama_96:
(Start: 11 @52059 has 11 MA's), (Start: 14 @52074 has 72 MA's),

Gene: Llij_86 Start: 49936, Stop: 50076, Start Num: 14
Candidate Starts for Llij_86:
(Start: 14 @49936 has 72 MA's), (16, 49954),

Gene: Lorde_89 Start: 47661, Stop: 47798, Start Num: 15
Candidate Starts for Lorde_89:
(Start: 11 @47643 has 11 MA's), (Start: 15 @47661 has 126 MA's),

Gene: Lucia_88 Start: 48509, Stop: 48646, Start Num: 15
Candidate Starts for Lucia_88:
(Start: 11 @48491 has 11 MA's), (Start: 15 @48509 has 126 MA's),

Gene: LunaBlu_92 Start: 51846, Stop: 51986, Start Num: 14

Candidate Starts for LunaBlu_92:
(Start: 14 @51846 has 72 MA's), (16, 51864),

Gene: LunaStella_84 Start: 49395, Stop: 49535, Start Num: 14
Candidate Starts for LunaStella_84:
(Start: 14 @49395 has 72 MA's), (16, 49413),

Gene: MadMen_94 Start: 51500, Stop: 51643, Start Num: 14
Candidate Starts for MadMen_94:
(5, 51407), (6, 51440), (Start: 14 @51500 has 72 MA's), (16, 51518), (17, 51596),

Gene: Madiba_89 Start: 50789, Stop: 50926, Start Num: 15
Candidate Starts for Madiba_89:
(Start: 11 @50771 has 11 MA's), (Start: 15 @50789 has 126 MA's),

Gene: Mandlovu_86 Start: 48748, Stop: 48885, Start Num: 15
Candidate Starts for Mandlovu_86:
(Start: 15 @48748 has 126 MA's),

Gene: Mantra_87 Start: 50935, Stop: 51072, Start Num: 15
Candidate Starts for Mantra_87:
(10, 50896), (Start: 15 @50935 has 126 MA's),

Gene: Maravista_85 Start: 52196, Stop: 52333, Start Num: 15
Candidate Starts for Maravista_85:
(Start: 11 @52178 has 11 MA's), (Start: 15 @52196 has 126 MA's),

Gene: Martik_85 Start: 51865, Stop: 52005, Start Num: 14
Candidate Starts for Martik_85:
(Start: 14 @51865 has 72 MA's), (16, 51883),

Gene: Mattes_87 Start: 51394, Stop: 51531, Start Num: 15
Candidate Starts for Mattes_87:
(Start: 15 @51394 has 126 MA's), (17, 51487),

Gene: Medindi_93 Start: 52069, Stop: 52224, Start Num: 11
Candidate Starts for Medindi_93:
(Start: 11 @52069 has 11 MA's), (Start: 15 @52087 has 126 MA's),

Gene: MilanaBonita_83 Start: 49522, Stop: 49662, Start Num: 14
Candidate Starts for MilanaBonita_83:
(Start: 14 @49522 has 72 MA's), (16, 49540),

Gene: MilleniumForce_89 Start: 51490, Stop: 51627, Start Num: 15
Candidate Starts for MilleniumForce_89:
(Start: 11 @51472 has 11 MA's), (Start: 15 @51490 has 126 MA's),

Gene: MinionDave_87 Start: 51154, Stop: 51291, Start Num: 15
Candidate Starts for MinionDave_87:
(Start: 11 @51136 has 11 MA's), (Start: 15 @51154 has 126 MA's),

Gene: MisterCuddles_88 Start: 51363, Stop: 51500, Start Num: 15
Candidate Starts for MisterCuddles_88:

(10, 51324), (Start: 15 @51363 has 126 MA's),

Gene: Modragons_94 Start: 52062, Stop: 52202, Start Num: 14
Candidate Starts for Modragons_94:
(Start: 11 @52047 has 11 MA's), (Start: 14 @52062 has 72 MA's),

Gene: Moonbeam_91 Start: 51835, Stop: 51978, Start Num: 14
Candidate Starts for Moonbeam_91:
(Start: 11 @51820 has 11 MA's), (Start: 14 @51835 has 72 MA's), (16, 51853), (17, 51931),

Gene: Mova_92 Start: 51328, Stop: 51465, Start Num: 15
Candidate Starts for Mova_92:
(Start: 11 @51310 has 11 MA's), (Start: 15 @51328 has 126 MA's),

Gene: Mozy_96 Start: 51099, Stop: 51236, Start Num: 15
Candidate Starts for Mozy_96:
(Start: 15 @51099 has 126 MA's),

Gene: Ms6_90 Start: 47659, Stop: 47796, Start Num: 15
Candidate Starts for Ms6_90:
(Start: 11 @47641 has 11 MA's), (Start: 15 @47659 has 126 MA's),

Gene: MulchExplorer_94 Start: 50643, Stop: 50780, Start Num: 15
Candidate Starts for MulchExplorer_94:
(10, 50604), (Start: 15 @50643 has 126 MA's),

Gene: Mutaforma13_91 Start: 50625, Stop: 50765, Start Num: 14
Candidate Starts for Mutaforma13_91:
(Start: 14 @50625 has 72 MA's),

Gene: Mwanjiwa_90 Start: 51320, Stop: 51457, Start Num: 15
Candidate Starts for Mwanjiwa_90:
(Start: 11 @51302 has 11 MA's), (Start: 15 @51320 has 126 MA's),

Gene: NewHope4_93 Start: 49916, Stop: 50056, Start Num: 14
Candidate Starts for NewHope4_93:
(Start: 14 @49916 has 72 MA's), (16, 49934),

Gene: Nimbo_81 Start: 49968, Stop: 50105, Start Num: 15
Candidate Starts for Nimbo_81:
(10, 49929), (Start: 15 @49968 has 126 MA's),

Gene: Nitzel_83 Start: 48059, Stop: 48196, Start Num: 15
Candidate Starts for Nitzel_83:
(Start: 11 @48041 has 11 MA's), (Start: 15 @48059 has 126 MA's),

Gene: Nivrat_87 Start: 51418, Stop: 51555, Start Num: 15
Candidate Starts for Nivrat_87:
(Start: 15 @51418 has 126 MA's),

Gene: NormanBulbieJr_86 Start: 51362, Stop: 51505, Start Num: 14
Candidate Starts for NormanBulbieJr_86:
(Start: 14 @51362 has 72 MA's), (16, 51380), (17, 51458),

Gene: Ochi17_95 Start: 51669, Stop: 51809, Start Num: 14
Candidate Starts for Ochi17_95:
(Start: 11 @51654 has 11 MA's), (Start: 14 @51669 has 72 MA's),

Gene: OfUltron_97 Start: 52218, Stop: 52358, Start Num: 14
Candidate Starts for OfUltron_97:
(Start: 11 @52203 has 11 MA's), (Start: 14 @52218 has 72 MA's),

Gene: Ogopogo_94 Start: 50684, Stop: 50824, Start Num: 14
Candidate Starts for Ogopogo_94:
(Start: 14 @50684 has 72 MA's), (17, 50780),

Gene: Oksu_92 Start: 52784, Stop: 52939, Start Num: 11
Candidate Starts for Oksu_92:
(Start: 11 @52784 has 11 MA's), (Start: 14 @52799 has 72 MA's),

Gene: OldBen_86 Start: 51360, Stop: 51497, Start Num: 15
Candidate Starts for OldBen_86:
(10, 51321), (Start: 15 @51360 has 126 MA's),

Gene: OlympiaSaint_90 Start: 51604, Stop: 51741, Start Num: 15
Candidate Starts for OlympiaSaint_90:
(Start: 15 @51604 has 126 MA's), (17, 51697),

Gene: Ovechkin_94 Start: 52189, Stop: 52329, Start Num: 14
Candidate Starts for Ovechkin_94:
(6, 52129), (Start: 14 @52189 has 72 MA's), (16, 52207),

Gene: OwlsT2W_88 Start: 50027, Stop: 50167, Start Num: 14
Candidate Starts for OwlsT2W_88:
(Start: 14 @50027 has 72 MA's),

Gene: PHappiness_89 Start: 52189, Stop: 52326, Start Num: 15
Candidate Starts for PHappiness_89:
(10, 52150), (Start: 15 @52189 has 126 MA's),

Gene: PMC_86 Start: 49831, Stop: 49968, Start Num: 15
Candidate Starts for PMC_86:
(Start: 11 @49813 has 11 MA's), (Start: 15 @49831 has 126 MA's),

Gene: Pacc40_85 Start: 51781, Stop: 51921, Start Num: 14
Candidate Starts for Pacc40_85:
(Start: 14 @51781 has 72 MA's), (17, 51877),

Gene: PatoPoderoso_85 Start: 51800, Stop: 51937, Start Num: 15
Candidate Starts for PatoPoderoso_85:
(10, 51761), (Start: 15 @51800 has 126 MA's),

Gene: Peridot_92 Start: 51489, Stop: 51626, Start Num: 15
Candidate Starts for Peridot_92:
(Start: 15 @51489 has 126 MA's),

Gene: Phalconet_87 Start: 50160, Stop: 50297, Start Num: 15
Candidate Starts for Phalconet_87:
(Start: 11 @50142 has 11 MA's), (Start: 15 @50160 has 126 MA's),

Gene: Phanphagia_91 Start: 52062, Stop: 52199, Start Num: 15
Candidate Starts for Phanphagia_91:
(Start: 15 @52062 has 126 MA's),

Gene: Phasih_85 Start: 49545, Stop: 49685, Start Num: 14
Candidate Starts for Phasih_85:
(6, 49485), (Start: 14 @49545 has 72 MA's),

Gene: Phatniss_86 Start: 50222, Stop: 50359, Start Num: 15
Candidate Starts for Phatniss_86:
(Start: 15 @50222 has 126 MA's),

Gene: PhesterPhotato_93 Start: 51035, Stop: 51172, Start Num: 15
Candidate Starts for PhesterPhotato_93:
(Start: 11 @51017 has 11 MA's), (Start: 15 @51035 has 126 MA's),

Gene: Philus_90 Start: 52549, Stop: 52686, Start Num: 15
Candidate Starts for Philus_90:
(Start: 11 @52531 has 11 MA's), (Start: 15 @52549 has 126 MA's),

Gene: Pippy_83 Start: 49248, Stop: 49385, Start Num: 15
Candidate Starts for Pippy_83:
(Start: 11 @49230 has 11 MA's), (Start: 15 @49248 has 126 MA's),

Gene: Plumbus_89 Start: 48406, Stop: 48543, Start Num: 15
Candidate Starts for Plumbus_89:
(Start: 15 @48406 has 126 MA's),

Gene: Pollywog_90 Start: 52290, Stop: 52430, Start Num: 14
Candidate Starts for Pollywog_90:
(Start: 11 @52275 has 11 MA's), (Start: 14 @52290 has 72 MA's), (16, 52308),

Gene: Polo2Bam_98 Start: 49770, Stop: 49910, Start Num: 14
Candidate Starts for Polo2Bam_98:
(Start: 14 @49770 has 72 MA's), (16, 49788),

Gene: PopTart_81 Start: 48055, Stop: 48192, Start Num: 15
Candidate Starts for PopTart_81:
(8, 47998), (Start: 15 @48055 has 126 MA's),

Gene: Priscilla_88 Start: 51460, Stop: 51603, Start Num: 14
Candidate Starts for Priscilla_88:
(Start: 14 @51460 has 72 MA's), (16, 51478), (17, 51556),

Gene: QuickMath_90 Start: 51224, Stop: 51361, Start Num: 15
Candidate Starts for QuickMath_90:
(10, 51185), (Start: 15 @51224 has 126 MA's),

Gene: Quico_96 Start: 52459, Stop: 52614, Start Num: 11

Candidate Starts for Quico_96:
(Start: 11 @52459 has 11 MA's), (Start: 15 @52477 has 126 MA's),

Gene: Radiance_85 Start: 50579, Stop: 50716, Start Num: 15
Candidate Starts for Radiance_85:
(Start: 15 @50579 has 126 MA's),

Gene: Ramsey_93 Start: 52715, Stop: 52852, Start Num: 15
Candidate Starts for Ramsey_93:
(Start: 11 @52697 has 11 MA's), (Start: 15 @52715 has 126 MA's),

Gene: RedBird_90 Start: 52598, Stop: 52735, Start Num: 15
Candidate Starts for RedBird_90:
(Start: 15 @52598 has 126 MA's),

Gene: Renaud18_97 Start: 51491, Stop: 51631, Start Num: 14
Candidate Starts for Renaud18_97:
(Start: 14 @51491 has 72 MA's),

Gene: Rialto_94 Start: 51931, Stop: 52074, Start Num: 14
Candidate Starts for Rialto_94:
(Start: 11 @51916 has 11 MA's), (Start: 14 @51931 has 72 MA's), (16, 51949), (17, 52027),

Gene: RitaG_89 Start: 51991, Stop: 52128, Start Num: 15
Candidate Starts for RitaG_89:
(10, 51952), (Start: 15 @51991 has 126 MA's),

Gene: Rockne_90 Start: 49843, Stop: 49980, Start Num: 15
Candidate Starts for Rockne_90:
(Start: 11 @49825 has 11 MA's), (Start: 15 @49843 has 126 MA's),

Gene: Royals2015_94 Start: 50529, Stop: 50669, Start Num: 14
Candidate Starts for Royals2015_94:
(Start: 14 @50529 has 72 MA's), (16, 50547),

Gene: Ruby_85 Start: 51364, Stop: 51501, Start Num: 15
Candidate Starts for Ruby_85:
(10, 51325), (Start: 15 @51364 has 126 MA's),

Gene: SG4_91 Start: 52200, Stop: 52337, Start Num: 15
Candidate Starts for SG4_91:
(Start: 15 @52200 has 126 MA's),

Gene: STLscum_66 Start: 42108, Stop: 41968, Start Num: 14
Candidate Starts for STLscum_66:
(Start: 11 @42123 has 11 MA's), (Start: 14 @42108 has 72 MA's), (16, 42090),

Gene: Saal_84 Start: 50959, Stop: 51096, Start Num: 15
Candidate Starts for Saal_84:
(Start: 11 @50941 has 11 MA's), (Start: 15 @50959 has 126 MA's),

Gene: Sabbb_93 Start: 49661, Stop: 49801, Start Num: 14
Candidate Starts for Sabbb_93:

(Start: 14 @49661 has 72 MA's), (16, 49679),

Gene: Sarma624_89 Start: 47835, Stop: 47972, Start Num: 15
Candidate Starts for Sarma624_89:
(Start: 15 @47835 has 126 MA's),

Gene: Sassafras_90 Start: 50912, Stop: 51049, Start Num: 15
Candidate Starts for Sassafras_90:
(Start: 15 @50912 has 126 MA's),

Gene: SassyB_81 Start: 48055, Stop: 48192, Start Num: 15
Candidate Starts for SassyB_81:
(8, 47998), (Start: 15 @48055 has 126 MA's),

Gene: Seabastian_97 Start: 52219, Stop: 52359, Start Num: 14
Candidate Starts for Seabastian_97:
(Start: 11 @52204 has 11 MA's), (Start: 14 @52219 has 72 MA's),

Gene: Seagreen_89 Start: 51527, Stop: 51667, Start Num: 14
Candidate Starts for Seagreen_89:
(6, 51467), (Start: 14 @51527 has 72 MA's), (16, 51545),

Gene: Shauna1_88 Start: 51678, Stop: 51815, Start Num: 15
Candidate Starts for Shauna1_88:
(Start: 15 @51678 has 126 MA's),

Gene: ShiLan_90 Start: 53117, Stop: 53254, Start Num: 15
Candidate Starts for ShiLan_90:
(Start: 15 @53117 has 126 MA's), (17, 53210),

Gene: ShowerHandel_86 Start: 49792, Stop: 49932, Start Num: 14
Candidate Starts for ShowerHandel_86:
(Start: 14 @49792 has 72 MA's), (16, 49810),

Gene: ShroomBoi_87 Start: 50625, Stop: 50762, Start Num: 15
Candidate Starts for ShroomBoi_87:
(Start: 15 @50625 has 126 MA's), (17, 50718),

Gene: SiSi_86 Start: 50460, Stop: 50597, Start Num: 15
Candidate Starts for SiSi_86:
(10, 50421), (Start: 15 @50460 has 126 MA's),

Gene: Soul22_89 Start: 48859, Stop: 49014, Start Num: 11
Candidate Starts for Soul22_89:
(Start: 11 @48859 has 11 MA's), (Start: 15 @48877 has 126 MA's),

Gene: Sparkdehlily_97 Start: 50202, Stop: 50345, Start Num: 14
Candidate Starts for Sparkdehlily_97:
(Start: 11 @50187 has 11 MA's), (Start: 14 @50202 has 72 MA's), (16, 50220), (17, 50298),

Gene: Spartacus_95 Start: 53498, Stop: 53638, Start Num: 14
Candidate Starts for Spartacus_95:
(Start: 14 @53498 has 72 MA's),

Gene: Spoonbill_86 Start: 49030, Stop: 49167, Start Num: 15
Candidate Starts for Spoonbill_86:
(Start: 15 @49030 has 126 MA's), (17, 49123),

Gene: Squirty_89 Start: 54845, Stop: 54982, Start Num: 15
Candidate Starts for Squirty_89:
(Start: 15 @54845 has 126 MA's),

Gene: StAnnes_93 Start: 52543, Stop: 52680, Start Num: 15
Candidate Starts for StAnnes_93:
(Start: 11 @52525 has 11 MA's), (Start: 15 @52543 has 126 MA's),

Gene: Stap_85 Start: 48560, Stop: 48697, Start Num: 15
Candidate Starts for Stap_85:
(Start: 15 @48560 has 126 MA's),

Gene: Starcevich_89 Start: 52046, Stop: 52186, Start Num: 14
Candidate Starts for Starcevich_89:
(Start: 14 @52046 has 72 MA's), (16, 52064),

Gene: Strokeseat_86 Start: 48805, Stop: 48942, Start Num: 15
Candidate Starts for Strokeseat_86:
(Start: 15 @48805 has 126 MA's),

Gene: SuperGrey_89 Start: 53029, Stop: 53169, Start Num: 14
Candidate Starts for SuperGrey_89:
(5, 52936), (6, 52969), (Start: 14 @53029 has 72 MA's),

Gene: SwagPigglett_89 Start: 52095, Stop: 52232, Start Num: 15
Candidate Starts for SwagPigglett_89:
(Start: 11 @52077 has 11 MA's), (Start: 15 @52095 has 126 MA's),

Gene: TChen_86 Start: 51346, Stop: 51486, Start Num: 14
Candidate Starts for TChen_86:
(Start: 14 @51346 has 72 MA's), (16, 51364),

Gene: TDanisky_98 Start: 50202, Stop: 50345, Start Num: 14
Candidate Starts for TDanisky_98:
(Start: 11 @50187 has 11 MA's), (Start: 14 @50202 has 72 MA's), (16, 50220), (17, 50298),

Gene: Taj_97 Start: 53077, Stop: 53214, Start Num: 15
Candidate Starts for Taj_97:
(Start: 15 @53077 has 126 MA's),

Gene: Tchotchke_83 Start: 49665, Stop: 49802, Start Num: 15
Candidate Starts for Tchotchke_83:
(Start: 15 @49665 has 126 MA's), (17, 49758),

Gene: ThetaBob_90 Start: 50151, Stop: 50300, Start Num: 11
Candidate Starts for ThetaBob_90:
(Start: 11 @50151 has 11 MA's), (13, 50163), (Start: 14 @50166 has 72 MA's), (16, 50178),

Gene: Topiatin_92 Start: 51919, Stop: 52053, Start Num: 16
Candidate Starts for Topiatin_92:
(Start: 14 @51901 has 72 MA's), (16, 51919),

Gene: Totinger_90 Start: 50603, Stop: 50740, Start Num: 15
Candidate Starts for Totinger_90:
(10, 50564), (Start: 15 @50603 has 126 MA's),

Gene: Tweety_90 Start: 52127, Stop: 52264, Start Num: 15
Candidate Starts for Tweety_90:
(Start: 11 @52109 has 11 MA's), (Start: 15 @52127 has 126 MA's),

Gene: UncleRicky_88 Start: 49717, Stop: 49854, Start Num: 15
Candidate Starts for UncleRicky_88:
(Start: 11 @49699 has 11 MA's), (Start: 15 @49717 has 126 MA's),

Gene: VRedHorse_90 Start: 48904, Stop: 49041, Start Num: 15
Candidate Starts for VRedHorse_90:
(Start: 15 @48904 has 126 MA's),

Gene: Velveteen_84 Start: 47835, Stop: 47972, Start Num: 15
Candidate Starts for Velveteen_84:
(Start: 15 @47835 has 126 MA's),

Gene: Veteran_82 Start: 50328, Stop: 50465, Start Num: 15
Candidate Starts for Veteran_82:
(10, 50289), (Start: 15 @50328 has 126 MA's),

Gene: Violac_92 Start: 52741, Stop: 52881, Start Num: 14
Candidate Starts for Violac_92:
(6, 52681), (Start: 14 @52741 has 72 MA's), (16, 52759),

Gene: Vivum_92 Start: 53135, Stop: 53275, Start Num: 14
Candidate Starts for Vivum_92:
(Start: 14 @53135 has 72 MA's), (16, 53153),

Gene: Wachhund_86 Start: 48006, Stop: 48143, Start Num: 15
Candidate Starts for Wachhund_86:
(3, 47838), (4, 47850), (Start: 15 @48006 has 126 MA's),

Gene: Wee_95 Start: 53153, Stop: 53290, Start Num: 15
Candidate Starts for Wee_95:
(Start: 15 @53153 has 126 MA's),

Gene: Whatsapiecost_81 Start: 45843, Stop: 45980, Start Num: 15
Candidate Starts for Whatsapiecost_81:
(Start: 11 @45825 has 11 MA's), (Start: 15 @45843 has 126 MA's),

Gene: Whouxphf_89 Start: 51343, Stop: 51480, Start Num: 15
Candidate Starts for Whouxphf_89:
(Start: 15 @51343 has 126 MA's),

Gene: WillSterrel_88 Start: 51766, Stop: 51903, Start Num: 15

Candidate Starts for WillSterrel_88:
(Start: 15 @51766 has 126 MA's), (17, 51859),

Gene: XFactor_81 Start: 49448, Stop: 49603, Start Num: 11
Candidate Starts for XFactor_81:
(Start: 11 @49448 has 11 MA's), (Start: 15 @49466 has 126 MA's),

Gene: Yorick_84 Start: 51666, Stop: 51845, Start Num: 9
Candidate Starts for Yorick_84:
(1, 51360), (2, 51492), (7, 51639), (Start: 9 @51666 has 1 MA's), (12, 51690), (17, 51798),

Gene: Yorick_81 Start: 50842, Stop: 50979, Start Num: 15
Candidate Starts for Yorick_81:
(Start: 15 @50842 has 126 MA's),

Gene: Zapner_95 Start: 49183, Stop: 49320, Start Num: 15
Candidate Starts for Zapner_95:
(Start: 15 @49183 has 126 MA's),

Gene: Zerg_89 Start: 50783, Stop: 50923, Start Num: 14
Candidate Starts for Zerg_89:
(Start: 14 @50783 has 72 MA's), (16, 50801),

Gene: Zizzle_91 Start: 52235, Stop: 52372, Start Num: 15
Candidate Starts for Zizzle_91:
(Start: 11 @52217 has 11 MA's), (Start: 15 @52235 has 126 MA's),