

Pham 204900



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 204900 Report

This analysis was run 02/22/25 on database version 588.

Pham number 204900 has 136 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Baine_17, Lola20_16, Anseraureola_16, Cayde6_17, Loca_16
- Track 2 : BurtonThePup_16, Miaurora_16, Snuffles_17, JaimeB_16, Lunatic_16, LionelHutz_16, Nobel_16, Gabbspett_16, Publix_16, MirimarMandM_16, Rhogar_16, Hernandez44_16, Namsahir_17, Stem_16, PuffyCat_16, Owens_16, Trackstar_16, Slentz_16, HeadMave_17, Ciel_16, JooneeDee_16, NeumannU_16, Danno_16, BinkBonk_16, TimoTea_16, Hulk_16, SantasSleigh_16, Bintii_16, ELee24_15, Ekko14_16, Bullzi2019_16, Godfather_16, TinyTruffula_16, Luxx_16, Goobery_16, Scrunchy_16, Jella_17, Eightball_16, HarperAnne_16, Clownery_16, Cazares_16, Aries55_16, IzzyPants24_16, Maneater_16, Scamander_16, Niffler_16, Majesty_16, Sage7_16, BarBear_16, Kojax4_16, Trireme_16, Astro16_16, Yami_16, VitulaEligans_16, TeddyBoy_16, Upsilon_16, Avvas_16, Elspeth_16, Zahlia_17, Burgy_16, Slizam_16, PoRanda_16
- Track 3 : MasterPitts_16, Octopus_16, Madebyisha_19, Alucard_16, EdElric_16, YertPhresh_16, Puddles3_17, Bradley2_16, Horacetta_16, SeaWolves_16, Erin_16, Jahseh_16, PaoPu_16, Aztec_16, Danimal_16, Chatham_16, Picnic_16, DirtPie_17, Gardevoir_16, GoldenBlanche_17, Dooby_16, Minima_16, LemonPepper_16, ManAs_16, Jerky_16, KyriosFaba_16, Gillker_16, Pondwater_16, JoBros_16, Yasuo_16, Myram_17, Dongwon_16, DaftyDuck_16, Sara_16, Witch_16, Yubaba_16
- Track 4 : McShie_16, Belthelas_16
- Track 5 : Otwor_16
- Track 6 : Quaker_16, Douggie_16, Livingwater_16
- Track 7 : Leafy_16
- Track 8 : Jannah_16, Rhysand_16, Vanisius_16, Josuke_16, Cheesecake_16, LaviMo_16
- Track 9 : Oaklynn_16, MelBee03_16, JRok_16, MrGreen_16, Azizam_16, BrokMonster_16, Kevanna_16
- Track 10 : KayPaulus_16, Wolfpack_16, Sippinontea_16, Bodhi17_16
- Track 11 : KillerTomato_16, Bri160_16, BoomRoasted_16
- Track 12 : Kaijohn_16
- Track 13 : Noelani_16
- Track 14 : Concrete_16
- Track 15 : TomBrady12_16, RoscoWindex_16
- Track 16 : Biscayne_16

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

The start number called the most often in the published annotations is 5, it was called in 120 of the 123 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alucard_16, Anseraureola_16, Aries55_16, Astro16_16, Avvas_16, Azizam_16, Aztec_16, Baine_17, BarBear_16, Belthelas_16, BinkBonk_16, Bintii_16, Biscayne_16, Bodhi17_16, BoomRoasted_16, Bradley2_16, Bri160_16, BrokMonster_16, Bullzi2019_16, Burgy_16, BurtonThePup_16, Cayde6_17, Cazares_16, Chatham_16, Cheesecake_16, Ciel_16, Clownery_16, DaftyDuck_16, Danimal_16, Danno_16, DirtPie_17, Dongwon_16, Dooby_16, Duggie_16, ELee24_15, EdElric_16, Eightball_16, Ekko14_16, Elspeth_16, Erin_16, Gabbspett_16, Gardevoir_16, Gillker_16, Godfather_16, GoldenBlanche_17, Goobery_16, HarperAnne_16, HeadMave_17, Hernandez44_16, Horacetta_16, Hulk_16, IzzyPants24_16, JRok_16, Jahseh_16, JaimeB_16, Jannah_16, Jella_17, Jerky_16, JoBros_16, JooneeDee_16, Josuke_16, KaiJohn_16, KayPaulus_16, Kevanna_16, KillerTomato_16, Kojax4_16, KyriosFaba_16, LaviMo_16, Leafy_16, LemonPepper_16, LionelHutz_16, Livingwater_16, Loca_16, Lola20_16, Lunatic_16, Luxx_16, Madebyisha_19, Majesty_16, ManAs_16, Maneater_16, MasterPitts_16, McShie_16, MelBee03_16, Miaurora_16, Minima_16, MirimarMandM_16, MrGreen_16, Myram_17, Namsahir_17, NeumannU_16, Niffler_16, Nobel_16, Noelani_16, Oaklynn_16, Octopus_16, Otwor_16, Owens_16, PaoPu_16, Picnic_16, PoRanda_16, Pondwater_16, Publix_16, Puddles3_17, PuffyCat_16, Quaker_16, Rhogar_16, Rhysand_16, Sage7_16, SantasSleigh_16, Sara_16, Scamander_16, Scrunchy_16, SeaWolves_16, Sippinontea_16, Slentz_16, Slizam_16, Snuffles_17, Stem_16, TeddyBoy_16, TimoTea_16, TinyTruffula_16, Trackstar_16, Trireme_16, Upsilon_16, Vanisius_16, VitulaEligans_16, Witch_16, Wolfpack_16, Yami_16, Yasuo_16, YertPhresh_16, Yubaba_16, Zahlia_17,

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

- RoscoWindex_16, TomBrady12_16,

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

- Concrete_16,

Summary by start number:

Start 4:

- Found in 102 of 136 (75.0%) of genes in pham
- Manual Annotations of this start: 2 of 123
- Called 2.0% of time when present
- Phage (with cluster) where this start called: RoscoWindex_16 (EE), TomBrady12_16 (EE),

Start 5:

- Found in 135 of 136 (99.3%) of genes in pham
- Manual Annotations of this start: 120 of 123
- Called 98.5% of time when present
- Phage (with cluster) where this start called: Alucard_16 (EE), Anseraureola_16 (EE), Aries55_16 (EE), Astro16_16 (EE), Avvas_16 (EE), Azizam_16 (EE), Aztec_16 (EE), Baine_17 (EE), BarBear_16 (EE), Belthelas_16 (EE), BinkBonk_16 (EE), Bintii_16 (EE), Biscayne_16 (EE), Bodhi17_16 (EE), BoomRoasted_16 (EE), Bradley2_16 (EE), Bri160_16 (EE), BrokMonster_16 (EE), Bullzi2019_16 (EE), Burgy_16 (EE),

BurtonThePup_16 (EE), Cayde6_17 (EE), Cazares_16 (EE), Chatham_16 (EE), Cheesecake_16 (EE), Ciel_16 (EE), Clownery_16 (EE), DaftyDuck_16 (EE), Danimal_16 (EE), Danno_16 (EE), DirtPie_17 (EE), Dongwon_16 (EE), Dooby_16 (EE), Douggie_16 (EE), ELee24_15 (EE), EdElric_16 (EE), Eightball_16 (EE), Ekko14_16 (EE), Elspeth_16 (EE), Erin_16 (EE), Gabbspett_16 (EE), Gardevoir_16 (EE), Gillker_16 (EE), Godfather_16 (EE), GoldenBlanche_17 (EE), Goobery_16 (EE), HarperAnne_16 (EE), HeadMave_17 (EE), Hernandez44_16 (EE), Horacetta_16 (EE), Hulk_16 (EE), IzzyPants24_16 (EE), JRok_16 (EE), Jahseh_16 (EE), JaimeB_16 (EE), Jannah_16 (EE), Jella_17 (EE), Jerky_16 (EE), JoBros_16 (EE), JooneeDee_16 (EE), Josuke_16 (EE), Kaijohn_16 (EE), KayPaulus_16 (EE), Kevanna_16 (EE), KillerTomato_16 (EE), Kojax4_16 (EE), KyriosFaba_16 (EE), LaviMo_16 (EE), Leafy_16 (EE), LemonPepper_16 (EE), LionelHutz_16 (EE), Livingwater_16 (EE), Loca_16 (EE), Lola20_16 (EE), Lunatic_16 (EE), Luxx_16 (EE), Madebyisha_19 (EE), Majesty_16 (EE), ManAs_16 (EE), Maneater_16 (EE), MasterPitts_16 (EE), McShie_16 (EE), MelBee03_16 (EE), Miaurora_16 (EE), Minima_16 (EE), MirimarMandM_16 (EE), MrGreen_16 (EE), Myram_17 (EE), Namsahir_17 (EE), NeumannU_16 (EE), Niffler_16 (EE), Nobel_16 (EE), Noelani_16 (EE), Oaklynn_16 (EE), Octopus_16 (EE), Otwor_16 (EE), Owens_16 (EE), PaoPu_16 (EE), Picnic_16 (EE), PoRanda_16 (EE), Pondwater_16 (EE), Publix_16 (EE), Puddles3_17 (EE), PuffyCat_16 (EE), Quaker_16 (EE), Rhogar_16 (EE), Rhysand_16 (EE), Sage7_16 (EE), SantasSleigh_16 (EE), Sara_16 (EE), Scamander_16 (EE), Scrunchy_16 (EE), SeaWolves_16 (EE), Sippinontea_16 (EE), Slentz_16 (EE), Slizam_16 (EE), Snuffles_17 (EE), Stem_16 (EE), TeddyBoy_16 (EE), TimoTea_16 (EE), TinyTruffula_16 (EE), Trackstar_16 (EE), Trireme_16 (EE), Upsilon_16 (EE), Vanisius_16 (EE), VitulaEligans_16 (EE), Witch_16 (EE), Wolfpack_16 (EE), Yami_16 (EE), Yasuo_16 (EE), YertPhresh_16 (EE), Yubaba_16 (EE), Zahlia_17 (EE),

Start 6:

- Found in 1 of 136 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 123
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Concrete_16 (EE),

Summary by clusters:

There is one cluster represented in this pham: EE

Info for manual annotations of cluster EE:

- Start number 4 was manually annotated 2 times for cluster EE.
- Start number 5 was manually annotated 120 times for cluster EE.
- Start number 6 was manually annotated 1 time for cluster EE.

Gene Information:

Gene: Alucard_16 Start: 13258, Stop: 13545, Start Num: 5

Candidate Starts for Alucard_16:

(Start: 4 @13234 has 2 MA's), (Start: 5 @13258 has 120 MA's), (7, 13276), (10, 13324), (11, 13369), (12, 13465),

Gene: Anseraureola_16 Start: 13311, Stop: 13595, Start Num: 5

Candidate Starts for Anseraureola_16:

(Start: 5 @13311 has 120 MA's), (7, 13329), (9, 13359),

Gene: Aries55_16 Start: 13335, Stop: 13622, Start Num: 5

Candidate Starts for Aries55_16:

(Start: 4 @13311 has 2 MA's), (Start: 5 @13335 has 120 MA's), (7, 13353), (10, 13401), (11, 13446),

Gene: Astro16_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for Astro16_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Avvas_16 Start: 13335, Stop: 13622, Start Num: 5

Candidate Starts for Avvas_16:

(Start: 4 @13311 has 2 MA's), (Start: 5 @13335 has 120 MA's), (7, 13353), (10, 13401), (11, 13446),

Gene: Azizam_16 Start: 13281, Stop: 13544, Start Num: 5

Candidate Starts for Azizam_16:

(Start: 5 @13281 has 120 MA's), (7, 13299), (9, 13329),

Gene: Aztec_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Aztec_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Baine_17 Start: 13286, Stop: 13558, Start Num: 5

Candidate Starts for Baine_17:

(Start: 5 @13286 has 120 MA's), (7, 13304), (9, 13334),

Gene: BarBear_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for BarBear_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Belthelas_16 Start: 13404, Stop: 13670, Start Num: 5

Candidate Starts for Belthelas_16:

(Start: 5 @13404 has 120 MA's), (7, 13422), (9, 13452),

Gene: BinkBonk_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for BinkBonk_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Bintii_16 Start: 13343, Stop: 13630, Start Num: 5

Candidate Starts for Bintii_16:

(Start: 4 @13319 has 2 MA's), (Start: 5 @13343 has 120 MA's), (7, 13361), (10, 13409), (11, 13454),

Gene: Biscayne_16 Start: 13423, Stop: 13665, Start Num: 5

Candidate Starts for Biscayne_16:

(Start: 4 @13399 has 2 MA's), (Start: 5 @13423 has 120 MA's), (7, 13441), (9, 13471),

Gene: Bodhi17_16 Start: 13345, Stop: 13641, Start Num: 5

Candidate Starts for Bodhi17_16:

(Start: 5 @13345 has 120 MA's), (7, 13363), (9, 13393),

Gene: BoomRoasted_16 Start: 13334, Stop: 13609, Start Num: 5

Candidate Starts for BoomRoasted_16:

(Start: 5 @13334 has 120 MA's), (7, 13352), (8, 13358), (9, 13382),

Gene: Bradley2_16 Start: 13256, Stop: 13543, Start Num: 5

Candidate Starts for Bradley2_16:

(Start: 4 @13232 has 2 MA's), (Start: 5 @13256 has 120 MA's), (7, 13274), (10, 13322), (11, 13367), (12, 13463),

Gene: Bri160_16 Start: 13333, Stop: 13596, Start Num: 5

Candidate Starts for Bri160_16:

(Start: 5 @13333 has 120 MA's), (7, 13351), (8, 13357), (9, 13381),

Gene: BrokMonster_16 Start: 13348, Stop: 13593, Start Num: 5

Candidate Starts for BrokMonster_16:

(Start: 5 @13348 has 120 MA's), (7, 13366), (9, 13396),

Gene: Bullzi2019_16 Start: 12816, Stop: 13115, Start Num: 5

Candidate Starts for Bullzi2019_16:

(Start: 4 @12792 has 2 MA's), (Start: 5 @12816 has 120 MA's), (7, 12834), (10, 12882), (11, 12927),

Gene: Burgy_16 Start: 13335, Stop: 13622, Start Num: 5

Candidate Starts for Burgy_16:

(Start: 4 @13311 has 2 MA's), (Start: 5 @13335 has 120 MA's), (7, 13353), (10, 13401), (11, 13446),

Gene: BurtonThePup_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for BurtonThePup_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Cayde6_17 Start: 13286, Stop: 13558, Start Num: 5

Candidate Starts for Cayde6_17:

(Start: 5 @13286 has 120 MA's), (7, 13304), (9, 13334),

Gene: Cazares_16 Start: 12786, Stop: 13085, Start Num: 5

Candidate Starts for Cazares_16:

(Start: 4 @12762 has 2 MA's), (Start: 5 @12786 has 120 MA's), (7, 12804), (10, 12852), (11, 12897),

Gene: Chatham_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Chatham_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Cheesecake_16 Start: 13336, Stop: 13623, Start Num: 5

Candidate Starts for Cheesecake_16:

(Start: 5 @13336 has 120 MA's), (7, 13354), (10, 13402), (11, 13447),

Gene: Ciel_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for Ciel_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Clownery_16 Start: 12903, Stop: 13202, Start Num: 5

Candidate Starts for Clownery_16:

(Start: 4 @12879 has 2 MA's), (Start: 5 @12903 has 120 MA's), (7, 12921), (10, 12969), (11, 13014),

Gene: Concrete_16 Start: 13335, Stop: 13586, Start Num: 6
Candidate Starts for Concrete_16:
(Start: 4 @13308 has 2 MA's), (Start: 6 @13335 has 1 MA's), (7, 13353), (9, 13383),

Gene: DaftyDuck_16 Start: 13266, Stop: 13553, Start Num: 5
Candidate Starts for DaftyDuck_16:
(Start: 4 @13242 has 2 MA's), (Start: 5 @13266 has 120 MA's), (7, 13284), (10, 13332), (11, 13377),
(12, 13473),

Gene: Danimal_16 Start: 13257, Stop: 13544, Start Num: 5
Candidate Starts for Danimal_16:
(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368),
(12, 13464),

Gene: Danno_16 Start: 13335, Stop: 13622, Start Num: 5
Candidate Starts for Danno_16:
(Start: 4 @13311 has 2 MA's), (Start: 5 @13335 has 120 MA's), (7, 13353), (10, 13401), (11, 13446),

Gene: DirtPie_17 Start: 13359, Stop: 13646, Start Num: 5
Candidate Starts for DirtPie_17:
(Start: 4 @13335 has 2 MA's), (Start: 5 @13359 has 120 MA's), (7, 13377), (10, 13425), (11, 13470),
(12, 13566),

Gene: Dongwon_16 Start: 13257, Stop: 13544, Start Num: 5
Candidate Starts for Dongwon_16:
(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368),
(12, 13464),

Gene: Dooby_16 Start: 13257, Stop: 13544, Start Num: 5
Candidate Starts for Dooby_16:
(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368),
(12, 13464),

Gene: Douggie_16 Start: 13344, Stop: 13601, Start Num: 5
Candidate Starts for Douggie_16:
(Start: 5 @13344 has 120 MA's), (9, 13392),

Gene: ELee24_15 Start: 13294, Stop: 13575, Start Num: 5
Candidate Starts for ELee24_15:
(Start: 4 @13270 has 2 MA's), (Start: 5 @13294 has 120 MA's), (7, 13312), (10, 13360), (11, 13405),

Gene: EdElric_16 Start: 13257, Stop: 13544, Start Num: 5
Candidate Starts for EdElric_16:
(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368),
(12, 13464),

Gene: Eightball_16 Start: 13329, Stop: 13616, Start Num: 5
Candidate Starts for Eightball_16:
(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Ekko14_16 Start: 12784, Stop: 13083, Start Num: 5
Candidate Starts for Ekko14_16:
(Start: 4 @12760 has 2 MA's), (Start: 5 @12784 has 120 MA's), (7, 12802), (10, 12850), (11, 12895),

Gene: Elspeth_16 Start: 12784, Stop: 13083, Start Num: 5

Candidate Starts for Elspeth_16:

(Start: 4 @12760 has 2 MA's), (Start: 5 @12784 has 120 MA's), (7, 12802), (10, 12850), (11, 12895),

Gene: Erin_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Erin_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Gabbspett_16 Start: 13361, Stop: 13648, Start Num: 5

Candidate Starts for Gabbspett_16:

(Start: 4 @13337 has 2 MA's), (Start: 5 @13361 has 120 MA's), (7, 13379), (10, 13427), (11, 13472),

Gene: Gardevoir_16 Start: 13291, Stop: 13578, Start Num: 5

Candidate Starts for Gardevoir_16:

(Start: 4 @13267 has 2 MA's), (Start: 5 @13291 has 120 MA's), (7, 13309), (10, 13357), (11, 13402), (12, 13498),

Gene: Gillker_16 Start: 13256, Stop: 13543, Start Num: 5

Candidate Starts for Gillker_16:

(Start: 4 @13232 has 2 MA's), (Start: 5 @13256 has 120 MA's), (7, 13274), (10, 13322), (11, 13367), (12, 13463),

Gene: Godfather_16 Start: 13335, Stop: 13622, Start Num: 5

Candidate Starts for Godfather_16:

(Start: 4 @13311 has 2 MA's), (Start: 5 @13335 has 120 MA's), (7, 13353), (10, 13401), (11, 13446),

Gene: GoldenBlanche_17 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for GoldenBlanche_17:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Goobery_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for Goobery_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: HarperAnne_16 Start: 12783, Stop: 13082, Start Num: 5

Candidate Starts for HarperAnne_16:

(Start: 4 @12759 has 2 MA's), (Start: 5 @12783 has 120 MA's), (7, 12801), (10, 12849), (11, 12894),

Gene: HeadMave_17 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for HeadMave_17:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Hernandez44_16 Start: 13361, Stop: 13648, Start Num: 5

Candidate Starts for Hernandez44_16:

(Start: 4 @13337 has 2 MA's), (Start: 5 @13361 has 120 MA's), (7, 13379), (10, 13427), (11, 13472),

Gene: Horacetta_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Horacetta_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Hulk_16 Start: 13273, Stop: 13560, Start Num: 5

Candidate Starts for Hulk_16:

(Start: 4 @13249 has 2 MA's), (Start: 5 @13273 has 120 MA's), (7, 13291), (10, 13339), (11, 13384),

Gene: IzzyPants24_16 Start: 12834, Stop: 13133, Start Num: 5

Candidate Starts for IzzyPants24_16:

(Start: 4 @12810 has 2 MA's), (Start: 5 @12834 has 120 MA's), (7, 12852), (10, 12900), (11, 12945),

Gene: JRok_16 Start: 13278, Stop: 13541, Start Num: 5

Candidate Starts for JRok_16:

(Start: 5 @13278 has 120 MA's), (7, 13296), (9, 13326),

Gene: Jahseh_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Jahseh_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: JaimeB_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for JaimeB_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Jannah_16 Start: 13324, Stop: 13611, Start Num: 5

Candidate Starts for Jannah_16:

(Start: 5 @13324 has 120 MA's), (7, 13342), (10, 13390), (11, 13435),

Gene: Jella_17 Start: 13347, Stop: 13634, Start Num: 5

Candidate Starts for Jella_17:

(Start: 4 @13323 has 2 MA's), (Start: 5 @13347 has 120 MA's), (7, 13365), (10, 13413), (11, 13458),

Gene: Jerky_16 Start: 13410, Stop: 13697, Start Num: 5

Candidate Starts for Jerky_16:

(Start: 4 @13386 has 2 MA's), (Start: 5 @13410 has 120 MA's), (7, 13428), (10, 13476), (11, 13521), (12, 13617),

Gene: JoBros_16 Start: 13258, Stop: 13545, Start Num: 5

Candidate Starts for JoBros_16:

(Start: 4 @13234 has 2 MA's), (Start: 5 @13258 has 120 MA's), (7, 13276), (10, 13324), (11, 13369), (12, 13465),

Gene: JooneeDee_16 Start: 13343, Stop: 13630, Start Num: 5

Candidate Starts for JooneeDee_16:

(Start: 4 @13319 has 2 MA's), (Start: 5 @13343 has 120 MA's), (7, 13361), (10, 13409), (11, 13454),

Gene: Josuke_16 Start: 13336, Stop: 13623, Start Num: 5

Candidate Starts for Josuke_16:

(Start: 5 @13336 has 120 MA's), (7, 13354), (10, 13402), (11, 13447),

Gene: Kaijohn_16 Start: 13293, Stop: 13571, Start Num: 5

Candidate Starts for Kaijohn_16:

(Start: 5 @13293 has 120 MA's), (7, 13311), (9, 13341), (13, 13515),

Gene: KayPaulus_16 Start: 13345, Stop: 13614, Start Num: 5

Candidate Starts for KayPaulus_16:

(Start: 5 @13345 has 120 MA's), (7, 13363), (9, 13393),

Gene: Kevanna_16 Start: 13346, Stop: 13603, Start Num: 5

Candidate Starts for Kevanna_16:

(Start: 5 @13346 has 120 MA's), (7, 13364), (9, 13394),

Gene: KillerTomato_16 Start: 13333, Stop: 13596, Start Num: 5

Candidate Starts for KillerTomato_16:

(Start: 5 @13333 has 120 MA's), (7, 13351), (8, 13357), (9, 13381),

Gene: Kojax4_16 Start: 13335, Stop: 13622, Start Num: 5

Candidate Starts for Kojax4_16:

(Start: 4 @13311 has 2 MA's), (Start: 5 @13335 has 120 MA's), (7, 13353), (10, 13401), (11, 13446),

Gene: KyriosFaba_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for KyriosFaba_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: LaviMo_16 Start: 13336, Stop: 13623, Start Num: 5

Candidate Starts for LaviMo_16:

(Start: 5 @13336 has 120 MA's), (7, 13354), (10, 13402), (11, 13447),

Gene: Leafy_16 Start: 13302, Stop: 13556, Start Num: 5

Candidate Starts for Leafy_16:

(1, 13068), (2, 13164), (Start: 5 @13302 has 120 MA's), (7, 13320), (9, 13350),

Gene: LemonPepper_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for LemonPepper_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: LionelHutz_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for LionelHutz_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Livingwater_16 Start: 13344, Stop: 13601, Start Num: 5

Candidate Starts for Livingwater_16:

(Start: 5 @13344 has 120 MA's), (9, 13392),

Gene: Loca_16 Start: 13376, Stop: 13624, Start Num: 5

Candidate Starts for Loca_16:

(Start: 5 @13376 has 120 MA's), (7, 13394), (9, 13424),

Gene: Lola20_16 Start: 13286, Stop: 13558, Start Num: 5

Candidate Starts for Lola20_16:

(Start: 5 @13286 has 120 MA's), (7, 13304), (9, 13334),

Gene: Lunatic_16 Start: 12786, Stop: 13085, Start Num: 5

Candidate Starts for Lunatic_16:

(Start: 4 @12762 has 2 MA's), (Start: 5 @12786 has 120 MA's), (7, 12804), (10, 12852), (11, 12897),

Gene: Luxx_16 Start: 13347, Stop: 13634, Start Num: 5
Candidate Starts for Luxx_16:
(Start: 4 @13323 has 2 MA's), (Start: 5 @13347 has 120 MA's), (7, 13365), (10, 13413), (11, 13458),

Gene: Madebyisha_19 Start: 13410, Stop: 13697, Start Num: 5
Candidate Starts for Madebyisha_19:
(Start: 4 @13386 has 2 MA's), (Start: 5 @13410 has 120 MA's), (7, 13428), (10, 13476), (11, 13521),
(12, 13617),

Gene: Majesty_16 Start: 13329, Stop: 13616, Start Num: 5
Candidate Starts for Majesty_16:
(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: ManAs_16 Start: 13257, Stop: 13544, Start Num: 5
Candidate Starts for ManAs_16:
(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368),
(12, 13464),

Gene: Maneater_16 Start: 13311, Stop: 13598, Start Num: 5
Candidate Starts for Maneater_16:
(Start: 4 @13287 has 2 MA's), (Start: 5 @13311 has 120 MA's), (7, 13329), (10, 13377), (11, 13422),

Gene: MasterPitts_16 Start: 13266, Stop: 13553, Start Num: 5
Candidate Starts for MasterPitts_16:
(Start: 4 @13242 has 2 MA's), (Start: 5 @13266 has 120 MA's), (7, 13284), (10, 13332), (11, 13377),
(12, 13473),

Gene: McShie_16 Start: 13349, Stop: 13594, Start Num: 5
Candidate Starts for McShie_16:
(Start: 5 @13349 has 120 MA's), (7, 13367), (9, 13397),

Gene: MelBee03_16 Start: 13346, Stop: 13603, Start Num: 5
Candidate Starts for MelBee03_16:
(Start: 5 @13346 has 120 MA's), (7, 13364), (9, 13394),

Gene: Miaurora_16 Start: 12903, Stop: 13202, Start Num: 5
Candidate Starts for Miaurora_16:
(Start: 4 @12879 has 2 MA's), (Start: 5 @12903 has 120 MA's), (7, 12921), (10, 12969), (11, 13014),

Gene: Minima_16 Start: 13257, Stop: 13544, Start Num: 5
Candidate Starts for Minima_16:
(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368),
(12, 13464),

Gene: MirimarMandM_16 Start: 13386, Stop: 13673, Start Num: 5
Candidate Starts for MirimarMandM_16:
(Start: 4 @13362 has 2 MA's), (Start: 5 @13386 has 120 MA's), (7, 13404), (10, 13452), (11, 13497),

Gene: MrGreen_16 Start: 13300, Stop: 13566, Start Num: 5
Candidate Starts for MrGreen_16:
(Start: 5 @13300 has 120 MA's), (7, 13318), (9, 13348),

Gene: Myram_17 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Myram_17:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Namsahir_17 Start: 12858, Stop: 13157, Start Num: 5

Candidate Starts for Namsahir_17:

(Start: 4 @12834 has 2 MA's), (Start: 5 @12858 has 120 MA's), (7, 12876), (10, 12924), (11, 12969),

Gene: NeumannU_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for NeumannU_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Niffler_16 Start: 12876, Stop: 13175, Start Num: 5

Candidate Starts for Niffler_16:

(Start: 4 @12852 has 2 MA's), (Start: 5 @12876 has 120 MA's), (7, 12894), (10, 12942), (11, 12987),

Gene: Nobel_16 Start: 12903, Stop: 13202, Start Num: 5

Candidate Starts for Nobel_16:

(Start: 4 @12879 has 2 MA's), (Start: 5 @12903 has 120 MA's), (7, 12921), (10, 12969), (11, 13014),

Gene: Noelani_16 Start: 13221, Stop: 13499, Start Num: 5

Candidate Starts for Noelani_16:

(3, 13179), (Start: 5 @13221 has 120 MA's), (7, 13239), (11, 13332),

Gene: Oaklynn_16 Start: 13281, Stop: 13544, Start Num: 5

Candidate Starts for Oaklynn_16:

(Start: 5 @13281 has 120 MA's), (7, 13299), (9, 13329),

Gene: Octopus_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Octopus_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Otwor_16 Start: 13337, Stop: 13624, Start Num: 5

Candidate Starts for Otwor_16:

(3, 13295), (Start: 5 @13337 has 120 MA's), (7, 13355), (10, 13403), (11, 13448),

Gene: Owens_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for Owens_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: PaoPu_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for PaoPu_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Picnic_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Picnic_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: PoRanda_16 Start: 13386, Stop: 13673, Start Num: 5

Candidate Starts for PoRanda_16:

(Start: 4 @13362 has 2 MA's), (Start: 5 @13386 has 120 MA's), (7, 13404), (10, 13452), (11, 13497),

Gene: Pondwater_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Pondwater_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Publix_16 Start: 12858, Stop: 13157, Start Num: 5

Candidate Starts for Publix_16:

(Start: 4 @12834 has 2 MA's), (Start: 5 @12858 has 120 MA's), (7, 12876), (10, 12924), (11, 12969),

Gene: Puddles3_17 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Puddles3_17:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: PuffyCat_16 Start: 12828, Stop: 13127, Start Num: 5

Candidate Starts for PuffyCat_16:

(Start: 4 @12804 has 2 MA's), (Start: 5 @12828 has 120 MA's), (7, 12846), (10, 12894), (11, 12939),

Gene: Quaker_16 Start: 13344, Stop: 13601, Start Num: 5

Candidate Starts for Quaker_16:

(Start: 5 @13344 has 120 MA's), (9, 13392),

Gene: Rhogar_16 Start: 13329, Stop: 13616, Start Num: 5

Candidate Starts for Rhogar_16:

(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Rhysand_16 Start: 13336, Stop: 13623, Start Num: 5

Candidate Starts for Rhysand_16:

(Start: 5 @13336 has 120 MA's), (7, 13354), (10, 13402), (11, 13447),

Gene: RoscoWindex_16 Start: 13312, Stop: 13623, Start Num: 4

Candidate Starts for RoscoWindex_16:

(Start: 4 @13312 has 2 MA's), (Start: 5 @13336 has 120 MA's), (7, 13354), (10, 13402), (11, 13447),

Gene: Sage7_16 Start: 13335, Stop: 13622, Start Num: 5

Candidate Starts for Sage7_16:

(Start: 4 @13311 has 2 MA's), (Start: 5 @13335 has 120 MA's), (7, 13353), (10, 13401), (11, 13446),

Gene: SantasSleigh_16 Start: 13359, Stop: 13646, Start Num: 5

Candidate Starts for SantasSleigh_16:

(Start: 4 @13335 has 2 MA's), (Start: 5 @13359 has 120 MA's), (7, 13377), (10, 13425), (11, 13470),

Gene: Sara_16 Start: 13257, Stop: 13544, Start Num: 5

Candidate Starts for Sara_16:

(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368), (12, 13464),

Gene: Scamander_16 Start: 13335, Stop: 13622, Start Num: 5

Candidate Starts for Scamander_16:

(Start: 4 @13311 has 2 MA's), (Start: 5 @13335 has 120 MA's), (7, 13353), (10, 13401), (11, 13446),

Gene: Scrunchy_16 Start: 13329, Stop: 13616, Start Num: 5
Candidate Starts for Scrunchy_16:
(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: SeaWolves_16 Start: 13257, Stop: 13544, Start Num: 5
Candidate Starts for SeaWolves_16:
(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368),
(12, 13464),

Gene: Sippinontea_16 Start: 13345, Stop: 13632, Start Num: 5
Candidate Starts for Sippinontea_16:
(Start: 5 @13345 has 120 MA's), (7, 13363), (9, 13393),

Gene: Slentz_16 Start: 13329, Stop: 13616, Start Num: 5
Candidate Starts for Slentz_16:
(Start: 4 @13305 has 2 MA's), (Start: 5 @13329 has 120 MA's), (7, 13347), (10, 13395), (11, 13440),

Gene: Slizam_16 Start: 12834, Stop: 13133, Start Num: 5
Candidate Starts for Slizam_16:
(Start: 4 @12810 has 2 MA's), (Start: 5 @12834 has 120 MA's), (7, 12852), (10, 12900), (11, 12945),

Gene: Snuffles_17 Start: 13006, Stop: 13305, Start Num: 5
Candidate Starts for Snuffles_17:
(Start: 4 @12982 has 2 MA's), (Start: 5 @13006 has 120 MA's), (7, 13024), (10, 13072), (11, 13117),

Gene: Stem_16 Start: 12834, Stop: 13133, Start Num: 5
Candidate Starts for Stem_16:
(Start: 4 @12810 has 2 MA's), (Start: 5 @12834 has 120 MA's), (7, 12852), (10, 12900), (11, 12945),

Gene: TeddyBoy_16 Start: 13330, Stop: 13617, Start Num: 5
Candidate Starts for TeddyBoy_16:
(Start: 4 @13306 has 2 MA's), (Start: 5 @13330 has 120 MA's), (7, 13348), (10, 13396), (11, 13441),

Gene: TimoTea_16 Start: 13311, Stop: 13598, Start Num: 5
Candidate Starts for TimoTea_16:
(Start: 4 @13287 has 2 MA's), (Start: 5 @13311 has 120 MA's), (7, 13329), (10, 13377), (11, 13422),

Gene: TinyTruffula_16 Start: 12903, Stop: 13202, Start Num: 5
Candidate Starts for TinyTruffula_16:
(Start: 4 @12879 has 2 MA's), (Start: 5 @12903 has 120 MA's), (7, 12921), (10, 12969), (11, 13014),

Gene: TomBrady12_16 Start: 12811, Stop: 13134, Start Num: 4
Candidate Starts for TomBrady12_16:
(Start: 4 @12811 has 2 MA's), (Start: 5 @12835 has 120 MA's), (7, 12853), (10, 12901), (11, 12946),

Gene: Trackstar_16 Start: 12903, Stop: 13202, Start Num: 5
Candidate Starts for Trackstar_16:
(Start: 4 @12879 has 2 MA's), (Start: 5 @12903 has 120 MA's), (7, 12921), (10, 12969), (11, 13014),

Gene: Trireme_16 Start: 12901, Stop: 13200, Start Num: 5
Candidate Starts for Trireme_16:
(Start: 4 @12877 has 2 MA's), (Start: 5 @12901 has 120 MA's), (7, 12919), (10, 12967), (11, 13012),

Gene: Upsilon_16 Start: 13386, Stop: 13673, Start Num: 5
Candidate Starts for Upsilon_16:
(Start: 4 @13362 has 2 MA's), (Start: 5 @13386 has 120 MA's), (7, 13404), (10, 13452), (11, 13497),

Gene: Vanisius_16 Start: 13336, Stop: 13623, Start Num: 5
Candidate Starts for Vanisius_16:
(Start: 5 @13336 has 120 MA's), (7, 13354), (10, 13402), (11, 13447),

Gene: VitulaEligans_16 Start: 13419, Stop: 13706, Start Num: 5
Candidate Starts for VitulaEligans_16:
(Start: 4 @13395 has 2 MA's), (Start: 5 @13419 has 120 MA's), (7, 13437), (10, 13485), (11, 13530),

Gene: Witch_16 Start: 13258, Stop: 13545, Start Num: 5
Candidate Starts for Witch_16:
(Start: 4 @13234 has 2 MA's), (Start: 5 @13258 has 120 MA's), (7, 13276), (10, 13324), (11, 13369),
(12, 13465),

Gene: Wolfpack_16 Start: 13345, Stop: 13614, Start Num: 5
Candidate Starts for Wolfpack_16:
(Start: 5 @13345 has 120 MA's), (7, 13363), (9, 13393),

Gene: Yami_16 Start: 12786, Stop: 13085, Start Num: 5
Candidate Starts for Yami_16:
(Start: 4 @12762 has 2 MA's), (Start: 5 @12786 has 120 MA's), (7, 12804), (10, 12852), (11, 12897),

Gene: Yasuo_16 Start: 13320, Stop: 13607, Start Num: 5
Candidate Starts for Yasuo_16:
(Start: 4 @13296 has 2 MA's), (Start: 5 @13320 has 120 MA's), (7, 13338), (10, 13386), (11, 13431),
(12, 13527),

Gene: YertPhresh_16 Start: 13257, Stop: 13544, Start Num: 5
Candidate Starts for YertPhresh_16:
(Start: 4 @13233 has 2 MA's), (Start: 5 @13257 has 120 MA's), (7, 13275), (10, 13323), (11, 13368),
(12, 13464),

Gene: Yubaba_16 Start: 13291, Stop: 13578, Start Num: 5
Candidate Starts for Yubaba_16:
(Start: 4 @13267 has 2 MA's), (Start: 5 @13291 has 120 MA's), (7, 13309), (10, 13357), (11, 13402),
(12, 13498),

Gene: Zahlia_17 Start: 13365, Stop: 13652, Start Num: 5
Candidate Starts for Zahlia_17:
(Start: 4 @13341 has 2 MA's), (Start: 5 @13365 has 120 MA's), (7, 13383), (10, 13431), (11, 13476),