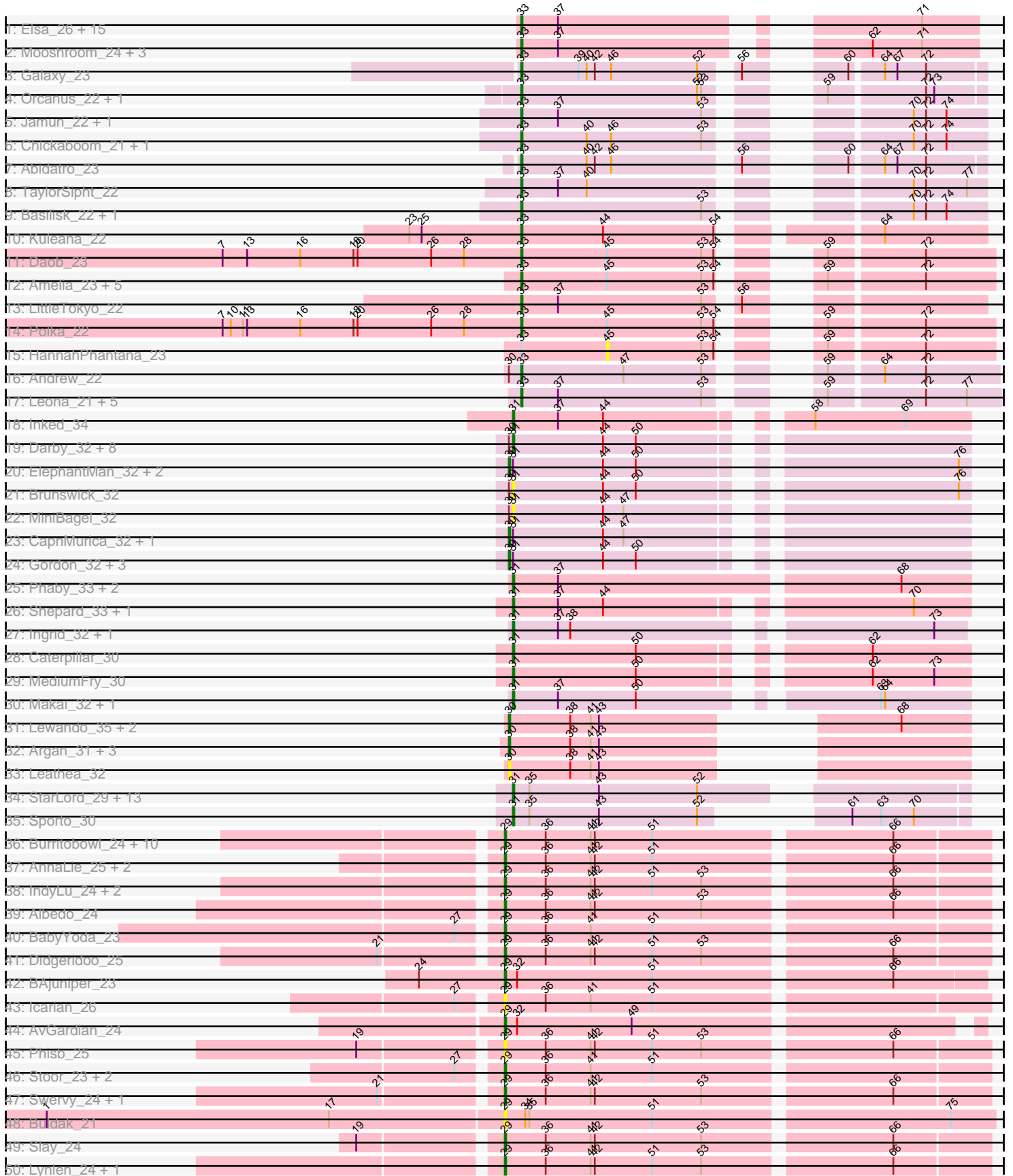
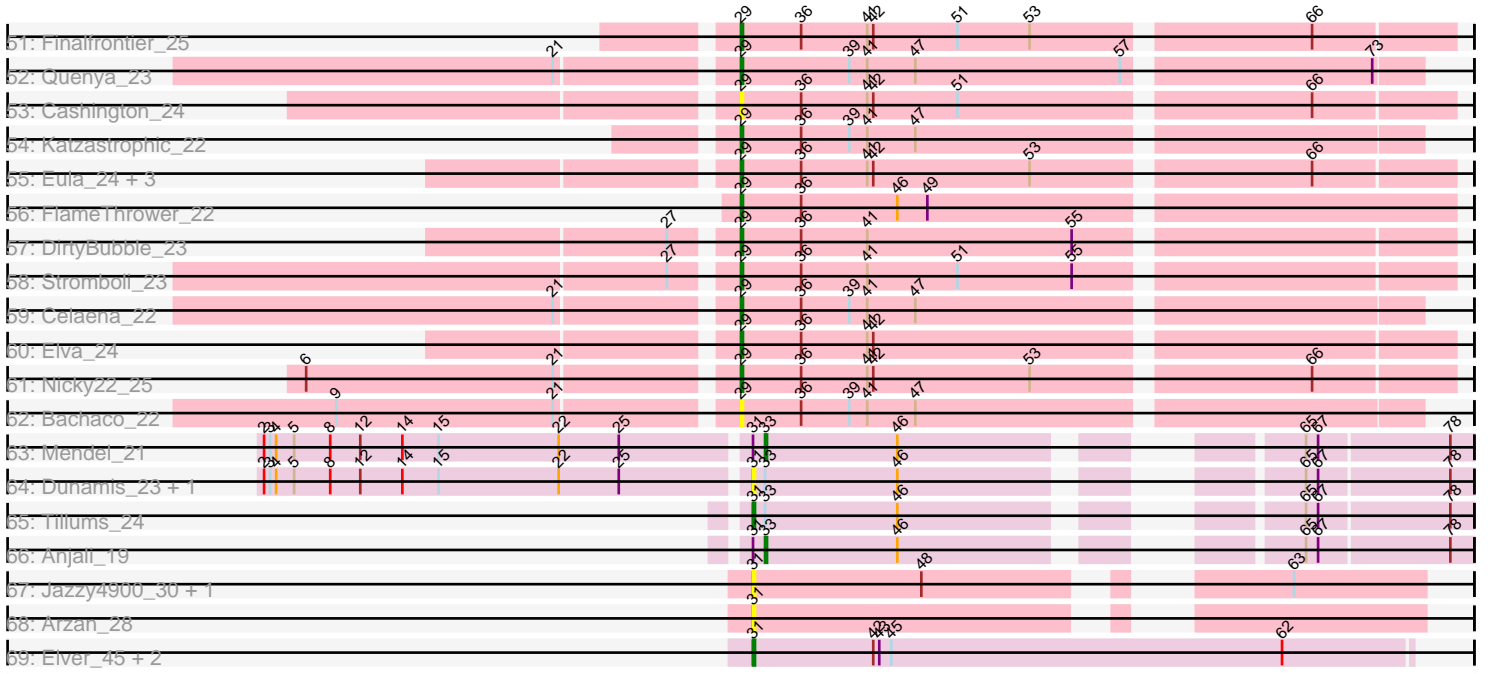


Pham 154520



Pham 154520



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 154520 Report

This analysis was run 04/12/24 on database version 558.

Pham number 154520 has 163 members, 31 are drafts.

Phages represented in each track:

- Track 1 : Elsa_26, BenitoAntonio_26, Circum_26, KeaneyLin_24, GoCrazy_24, Hankly_24, Arcadia_26, Xenomorph_24, Correa_25, Dynamite_25, Tribby_26, Nason_26, Cheesy_26, NapoleonB_25, Mudcat_25, Benllo_24
- Track 2 : Mooshroom_24, Kardesai_24, JEGGS_25, Heisenberger_25
- Track 3 : Galaxy_23
- Track 4 : Orcanus_22, Eesa_22
- Track 5 : Jamun_22, Vulpecula_22
- Track 6 : Chickaboom_21, Brynnie_22
- Track 7 : Abidatro_23
- Track 8 : TaylorSipht_22
- Track 9 : Basilisk_22, Ruchi_22
- Track 10 : Kuleana_22
- Track 11 : Daob_23
- Track 12 : Amelia_23, Melons_23, Cote_23, Coral_22, Lunar_23, Kepler_22
- Track 13 : LittleTokyo_22
- Track 14 : Polka_22
- Track 15 : HannahPhantana_23
- Track 16 : Andrew_22
- Track 17 : Leona_21, Renna12_22, Juno112_21, KHumphrey_21, PhluffyCoco_21, RedFox_21
- Track 18 : Inked_34
- Track 19 : Darby_32, AreFloNak_32, CastorTray_34, Synepsis_31, Nivinsha_32, ScienceWizSam_34, Issa_32, Trustiboi_33, DevitoJr_32
- Track 20 : ElephantMan_32, Niktson_32, Teacup_32
- Track 21 : Brunswick_32
- Track 22 : MiniBagel_32
- Track 23 : CapnMurica_32, Tenno_33
- Track 24 : Gordon_32, Breylor17_33, Nightmare_33, Tatanka_32
- Track 25 : Phaby_33, Giantsbane_33, Tokki_33
- Track 26 : Shepard_33, LilHuddy_33
- Track 27 : Ingrid_32, Loretta_32
- Track 28 : Caterpillar_30
- Track 29 : MediumFry_30
- Track 30 : Makai_32, Truckee_31
- Track 31 : Lewando_35, Renaldo_37, BarbieDoll_35
- Track 32 : Argan_31, Zeina_32, GantcherGoblin_31, Uzumaki_32
- Track 33 : Leathea_32

- Track 34 : StarLord_29, ProfFrink_29, Raunak_29, Stayer_29, Egad_29, DoctorPepper_29, Salk_29, Linda_29, BronxBay_29, Shiba_29, MrAaronian_29, Michelle_29, Djungelskog_29, Sloopyjoe_29
- Track 35 : Sporto_30
- Track 36 : Burritobowl_24, DickRichards_24, Johnathan_24, LimaBean_24, Avacadoman_24, CroZenni_24, Albright_24, Abigail_24, Arroyo_25, Doobus_24, BubbaBear_24
- Track 37 : AnnaLie_25, SansAfet_24, BelmontSKP_25
- Track 38 : IndyLu_24, Lahqtemish_24, BabyDaisy_25
- Track 39 : Albedo_24
- Track 40 : BabyYoda_23
- Track 41 : Didgeridoo_25
- Track 42 : BAjuniper_23
- Track 43 : Icarian_26
- Track 44 : AvGardian_24
- Track 45 : Phisb_25
- Track 46 : Stoor_23, Loviatar_40, SanaSana_24
- Track 47 : Swervy_24, SarBear_24
- Track 48 : Buldak_21
- Track 49 : Slay_24
- Track 50 : Lynlen_24, Kenzers_24
- Track 51 : Finalfrontier_25
- Track 52 : Quenya_23
- Track 53 : Cashington_24
- Track 54 : Katzastrophic_22
- Track 55 : Eula_24, TukTuk_24, Jovita_24, QMacho_25
- Track 56 : FlameThrower_22
- Track 57 : DirtyBubble_23
- Track 58 : Stromboli_23
- Track 59 : Celaena_22
- Track 60 : Elva_24
- Track 61 : Nicky22_25
- Track 62 : Bachaco_22
- Track 63 : Mendel_21
- Track 64 : Dunamis_23, Swim_24
- Track 65 : Tillums_24
- Track 66 : Anjali_19
- Track 67 : Jazzy4900_30, Sunny4976_29
- Track 68 : Arzan_28
- Track 69 : Elver_45, Paella_46, Qui_46

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

The start number called the most often in the published annotations is 33, it was called in 44 of the 132 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro_23, Amelia_23, Andrew_22, Anjali_19, Arcadia_26, Basilisk_22, BenitoAntonio_26, Benllo_24, Brynnie_22, Cheesy_26, Chickaboom_21, Circum_26, Coral_22, Correa_25, Cote_23, Daob_23, Dynamite_25, Eesa_22, Elsa_26,

Galaxy_23, GoCrazy_24, Hankly_24, Heisenberger_25, JEGGS_25, Jamun_22, Juno112_21, KHumphrey_21, Kardesai_24, KeaneyLin_24, Kepler_22, Kuleana_22, Leona_21, LittleTokyo_22, Lunar_23, Melons_23, Mendel_21, Mooshroom_24, Mudcat_25, NapoleonB_25, Nason_26, Orcanus_22, PhluffyCoco_21, Polka_22, RedFox_21, Renna12_22, Ruchi_22, TaylorSipht_22, Tribby_26, Vulpecula_22, Xenomorph_24,

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

- Dunamis_23, HannahPhantana_23, Swim_24, Tillums_24,

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

- Abigail_24, Albedo_24, Albright_24, AnnaLie_25, AreFloNak_32, Argan_31, Arroyo_25, Arzan_28, AvGardian_24, Avocadoman_24, BAjuniper_23, BabyDaisy_25, BabyYoda_23, Bachaco_22, BarbieDoll_35, BelmontSKP_25, Breylor17_33, BronxBay_29, Brunswick_32, BubbaBear_24, Buldak_21, Burritobowl_24, CapnMurica_32, Cashington_24, CastorTray_34, Caterpillar_30, Celaena_22, CroZenni_24, Darby_32, DevitoJr_32, DickRichards_24, Didgeridoo_25, DirtyBubble_23, Djungelskog_29, DoctorPepper_29, Doobus_24, Egad_29, ElephantMan_32, Elva_24, Elver_45, Eula_24, Finalfrontier_25, FlameThrower_22, GantcherGoblin_31, Giantsbane_33, Gordon_32, Icarian_26, IndyLu_24, Ingrid_32, Inked_34, Issa_32, Jazzy4900_30, Johnathan_24, Jovita_24, Katzastrophic_22, Kenzers_24, Lahqtemish_24, Leatheia_32, Lewando_35, LilHuddy_33, LimaBean_24, Linda_29, Loretta_32, Loviatar_40, Lynlen_24, Makai_32, MediumFry_30, Michelle_29, MiniBagel_32, MrAaronian_29, Nicky22_25, Nightmare_33, Niktson_32, Nivinsha_32, Paella_46, Phaby_33, Phisb_25, ProfFrink_29, QMacho_25, Quenya_23, Qui_46, Raunak_29, Renaldo_37, Salk_29, SanaSana_24, SansAfet_24, SarBear_24, ScienceWizSam_34, Shepard_33, Shiba_29, Slay_24, Sloopyjoe_29, Sporto_30, StarLord_29, Stayer_29, Stoor_23, Stromboli_23, Sunny4976_29, Swervy_24, Synepsis_31, Tatanka_32, Teacup_32, Tenno_33, Tokki_33, Truckee_31, Trustiboi_33, TukTuk_24, Uzumaki_32, Zeina_32,

Summary by start number:

Start 29:

- Found in 48 of 163 (29.4%) of genes in pham
- Manual Annotations of this start: 42 of 132
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abigail_24 (EB), Albedo_24 (EB), Albright_24 (EB), AnnaLie_25 (EB), Arroyo_25 (EB), AvGardian_24 (EB), Avocadoman_24 (EB), BAjuniper_23 (EB), BabyDaisy_25 (EB), BabyYoda_23 (EB), Bachaco_22 (EB), BelmontSKP_25 (EB), BubbaBear_24 (EB), Buldak_21 (EB), Burritobowl_24 (EB), Cashington_24 (EB), Celaena_22 (EB), CroZenni_24 (EB), DickRichards_24 (EB), Didgeridoo_25 (EB), DirtyBubble_23 (EB), Doobus_24 (EB), Elva_24 (EB), Eula_24 (EB), Finalfrontier_25 (EB), FlameThrower_22 (EB), Icarian_26 (EB), IndyLu_24 (EB), Johnathan_24 (EB), Jovita_24 (EB), Katzastrophic_22 (EB), Kenzers_24 (EB), Lahqtemish_24 (EB), LimaBean_24 (EB), Loviatar_40 (EB), Lynlen_24 (EB), Nicky22_25 (EB), Phisb_25 (EB), QMacho_25 (EB), Quenya_23 (EB), SanaSana_24 (EB), SansAfet_24 (EB), SarBear_24 (EB), Slay_24 (EB), Stoor_23 (EB), Stromboli_23 (EB), Swervy_24 (EB), TukTuk_24 (EB),

Start 30:

- Found in 29 of 163 (17.8%) of genes in pham
- Manual Annotations of this start: 14 of 132

- Called 58.6% of time when present
- Phage (with cluster) where this start called: Argan_31 (AU6), BarbieDoll_35 (AU6), Breylor17_33 (AU1), CapnMurica_32 (AU1), ElephantMan_32 (AU1), GantcherGoblin_31 (AU6), Gordon_32 (AU1), Leatheia_32 (AU6), Lewando_35 (AU6), Nightmare_33 (AU1), Niktson_32 (AU1), Renaldo_37 (AU6), Tatanka_32 (AU1), Teacup_32 (AU1), Tenno_33 (AU1), Uzumaki_32 (AU6), Zeina_32 (AU6),

Start 31:

- Found in 58 of 163 (35.6%) of genes in pham
- Manual Annotations of this start: 32 of 132
- Called 81.0% of time when present
- Phage (with cluster) where this start called: AreFloNak_32 (AU1), Arzan_28 (FI), BronxBay_29 (AW), Brunswick_32 (AU1), CastorTray_34 (AU1), Caterpillar_30 (AU4), Darby_32 (AU1), DevitoJr_32 (AU1), Djungelskog_29 (AW), DoctorPepper_29 (AW), Dunamis_23 (FD), Egad_29 (AW), Elver_45 (FK), Giantsbane_33 (AU2), Ingrid_32 (AU3), Inked_34 (AU), Issa_32 (AU1), Jazzy4900_30 (FI), LilHuddy_33 (AU2), Linda_29 (AW), Loretta_32 (AU3), Makai_32 (AU5), MediumFry_30 (AU4), Michelle_29 (AW), MiniBagel_32 (AU1), MrAaronian_29 (AW), Nivinsha_32 (AU1), Paella_46 (FK), Phaby_33 (AU2), ProfFrink_29 (AW), Qui_46 (FK), Raunak_29 (AW), Salk_29 (AW), ScienceWizSam_34 (AU1), Shepard_33 (AU2), Shiba_29 (AW), Sloopyjoe_29 (AW), Sporto_30 (AW), StarLord_29 (AW), Stayer_29 (AW), Sunny4976_29 (FI), Swim_24 (FD), Synopsis_31 (AU1), Tillums_24 (FD), Tokki_33 (AU2), Truckee_31 (AU5), Trustiboi_33 (AU1),

Start 33:

- Found in 54 of 163 (33.1%) of genes in pham
- Manual Annotations of this start: 44 of 132
- Called 92.6% of time when present
- Phage (with cluster) where this start called: Abidatro_23 (AS1), Amelia_23 (AS2), Andrew_22 (AS3), Anjali_19 (FD), Arcadia_26 (AM), Basilisk_22 (AS1), BenitoAntonio_26 (AM), Benllo_24 (AM), Brynnie_22 (AS1), Cheesy_26 (AM), Chickaboom_21 (AS1), Circum_26 (AM), Coral_22 (AS2), Correa_25 (AM), Cote_23 (AS2), Daob_23 (AS2), Dynamite_25 (AM), Eesa_22 (AS1), Elsa_26 (AM), Galaxy_23 (AS1), GoCrazy_24 (AM), Hankly_24 (AM), Heisenberger_25 (AM), JEGGS_25 (AM), Jamun_22 (AS1), Juno112_21 (AS3), KHumphrey_21 (AS3), Kardesai_24 (AM), KeaneyLin_24 (AM), Kepler_22 (AS2), Kuleana_22 (AS2), Leona_21 (AS3), LittleTokyo_22 (AS2), Lunar_23 (AS2), Melons_23 (AS2), Mendel_21 (FD), Mooshroom_24 (AM), Mudcat_25 (AM), NapoleonB_25 (AM), Nason_26 (AM), Orcanus_22 (AS1), PhluffyCoco_21 (AS3), Polka_22 (AS2), RedFox_21 (AS3), Renna12_22 (AS3), Ruchi_22 (AS1), TaylorSipht_22 (AS1), Tribby_26 (AM), Vulpecula_22 (AS1), Xenomorph_24 (AM),

Start 45:

- Found in 12 of 163 (7.4%) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: HannahPhantana_23 (AS2),

Summary by clusters:

There are 16 clusters represented in this pham: AS3, AS2, AS1, FD, AM, EB, AU1, AU3, AU2, AU5, AU4, AW, AU6, FI, FK, AU,

Info for manual annotations of cluster AM:

- Start number 33 was manually annotated 18 times for cluster AM.

Info for manual annotations of cluster AS1:

- Start number 33 was manually annotated 10 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 33 was manually annotated 10 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 33 was manually annotated 4 times for cluster AS3.

Info for manual annotations of cluster AU:

- Start number 31 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 30 was manually annotated 9 times for cluster AU1.
- Start number 31 was manually annotated 6 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 31 was manually annotated 4 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 31 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 31 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 31 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 30 was manually annotated 5 times for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 31 was manually annotated 12 times for cluster AW.

Info for manual annotations of cluster EB:

- Start number 29 was manually annotated 42 times for cluster EB.

Info for manual annotations of cluster FD:

- Start number 31 was manually annotated 1 time for cluster FD.
- Start number 33 was manually annotated 2 times for cluster FD.

Info for manual annotations of cluster FK:

- Start number 31 was manually annotated 2 times for cluster FK.

Gene Information:

Gene: Abidatro_23 Start: 17715, Stop: 17999, Start Num: 33

Candidate Starts for Abidatro_23:

(Start: 33 @17715 has 44 MA's), (40, 17763), (42, 17769), (46, 17781), (56, 17862), (60, 17907), (64, 17928), (67, 17937), (72, 17958),

Gene: Abigail_24 Start: 19414, Stop: 19755, Start Num: 29

Candidate Starts for Abigail_24:

(Start: 29 @19414 has 42 MA's), (36, 19444), (41, 19477), (42, 19480), (51, 19522), (66, 19687),

Gene: Albedo_24 Start: 19291, Stop: 19632, Start Num: 29

Candidate Starts for Albedo_24:

(Start: 29 @19291 has 42 MA's), (36, 19321), (41, 19354), (42, 19357), (53, 19435), (66, 19564),

Gene: Albright_24 Start: 19172, Stop: 19513, Start Num: 29

Candidate Starts for Albright_24:

(Start: 29 @19172 has 42 MA's), (36, 19202), (41, 19235), (42, 19238), (51, 19280), (66, 19445),

Gene: Amelia_23 Start: 16639, Stop: 16932, Start Num: 33

Candidate Starts for Amelia_23:

(Start: 33 @16639 has 44 MA's), (45, 16702), (53, 16771), (54, 16780), (59, 16816), (72, 16882),

Gene: Andrew_22 Start: 16648, Stop: 16944, Start Num: 33

Candidate Starts for Andrew_22:

(Start: 30 @16639 has 14 MA's), (Start: 33 @16648 has 44 MA's), (47, 16723), (53, 16780), (59, 16825), (64, 16861), (72, 16891),

Gene: Anjali_19 Start: 15340, Stop: 15636, Start Num: 33

Candidate Starts for Anjali_19:

(Start: 31 @15334 has 32 MA's), (Start: 33 @15340 has 44 MA's), (46, 15406), (65, 15556), (67, 15562), (78, 15625),

Gene: AnnaLie_25 Start: 19601, Stop: 19942, Start Num: 29

Candidate Starts for AnnaLie_25:

(Start: 29 @19601 has 42 MA's), (36, 19631), (41, 19664), (42, 19667), (51, 19709), (66, 19874),

Gene: Arcadia_26 Start: 24545, Stop: 24826, Start Num: 33

Candidate Starts for Arcadia_26:

(Start: 33 @24545 has 44 MA's), (37, 24572), (71, 24785),

Gene: AreFloNak_32 Start: 28123, Stop: 28425, Start Num: 31

Candidate Starts for AreFloNak_32:

(Start: 30 @28120 has 14 MA's), (Start: 31 @28123 has 32 MA's), (44, 28189), (50, 28213),

Gene: Argan_31 Start: 26704, Stop: 26967, Start Num: 30

Candidate Starts for Argan_31:

(Start: 30 @26704 has 14 MA's), (38, 26749), (41, 26764), (43, 26770),

Gene: Arroyo_25 Start: 19801, Stop: 20142, Start Num: 29

Candidate Starts for Arroyo_25:

(Start: 29 @19801 has 42 MA's), (36, 19831), (41, 19864), (42, 19867), (51, 19909), (66, 20074),

Gene: Arzan_28 Start: 25421, Stop: 25702, Start Num: 31

Candidate Starts for Arzan_28:

(Start: 31 @25421 has 32 MA's),

Gene: AvGardian_24 Start: 19525, Stop: 19851, Start Num: 29

Candidate Starts for AvGardian_24:

(Start: 29 @19525 has 42 MA's), (32, 19534), (49, 19618),

Gene: Avocadoman_24 Start: 19356, Stop: 19697, Start Num: 29

Candidate Starts for Avocadoman_24:

(Start: 29 @19356 has 42 MA's), (36, 19386), (41, 19419), (42, 19422), (51, 19464), (66, 19629),

Gene: BAjuniper_23 Start: 20001, Stop: 20339, Start Num: 29

Candidate Starts for BAjuniper_23:

(24, 19938), (Start: 29 @20001 has 42 MA's), (32, 20010), (51, 20109), (66, 20274),

Gene: BabyDaisy_25 Start: 19417, Stop: 19758, Start Num: 29

Candidate Starts for BabyDaisy_25:

(Start: 29 @19417 has 42 MA's), (36, 19447), (41, 19480), (42, 19483), (51, 19525), (53, 19561), (66, 19690),

Gene: BabyYoda_23 Start: 19985, Stop: 20326, Start Num: 29

Candidate Starts for BabyYoda_23:

(27, 19958), (Start: 29 @19985 has 42 MA's), (36, 20015), (41, 20048), (51, 20093),

Gene: Bachaco_22 Start: 20044, Stop: 20370, Start Num: 29

Candidate Starts for Bachaco_22:

(9, 19855), (21, 19963), (Start: 29 @20044 has 42 MA's), (36, 20074), (39, 20098), (41, 20107), (47, 20131),

Gene: BarbieDoll_35 Start: 28680, Stop: 28943, Start Num: 30

Candidate Starts for BarbieDoll_35:

(Start: 30 @28680 has 14 MA's), (38, 28725), (41, 28740), (43, 28746), (68, 28893),

Gene: Basilisk_22 Start: 17928, Stop: 18215, Start Num: 33

Candidate Starts for Basilisk_22:

(Start: 33 @17928 has 44 MA's), (53, 18060), (70, 18162), (72, 18171), (74, 18186),

Gene: BelmontSKP_25 Start: 19601, Stop: 19942, Start Num: 29

Candidate Starts for BelmontSKP_25:

(Start: 29 @19601 has 42 MA's), (36, 19631), (41, 19664), (42, 19667), (51, 19709), (66, 19874),

Gene: BenitoAntonio_26 Start: 24161, Stop: 24442, Start Num: 33

Candidate Starts for BenitoAntonio_26:

(Start: 33 @24161 has 44 MA's), (37, 24188), (71, 24401),

Gene: Benllo_24 Start: 24445, Stop: 24726, Start Num: 33

Candidate Starts for Benllo_24:

(Start: 33 @24445 has 44 MA's), (37, 24472), (71, 24685),

Gene: Breylor17_33 Start: 28726, Stop: 29031, Start Num: 30

Candidate Starts for Breylor17_33:

(Start: 30 @28726 has 14 MA's), (Start: 31 @28729 has 32 MA's), (44, 28795), (50, 28819),

Gene: BronxBay_29 Start: 25277, Stop: 25576, Start Num: 31

Candidate Starts for BronxBay_29:

(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: Brunswick_32 Start: 28195, Stop: 28497, Start Num: 31

Candidate Starts for Brunswick_32:

(Start: 30 @28192 has 14 MA's), (Start: 31 @28195 has 32 MA's), (44, 28261), (50, 28285), (76, 28489),

Gene: Brynnie_22 Start: 17740, Stop: 18027, Start Num: 33

Candidate Starts for Brynnie_22:

(Start: 33 @17740 has 44 MA's), (40, 17788), (46, 17806), (53, 17872), (70, 17974), (72, 17983), (74, 17998),

Gene: BubbaBear_24 Start: 19291, Stop: 19632, Start Num: 29

Candidate Starts for BubbaBear_24:

(Start: 29 @19291 has 42 MA's), (36, 19321), (41, 19354), (42, 19357), (51, 19399), (66, 19564),

Gene: Buldak_21 Start: 17968, Stop: 18315, Start Num: 29

Candidate Starts for Buldak_21:

(1, 17635), (17, 17842), (Start: 29 @17968 has 42 MA's), (34, 17983), (35, 17986), (51, 18076), (75, 18283),

Gene: Burritobowl_24 Start: 19357, Stop: 19698, Start Num: 29

Candidate Starts for Burritobowl_24:

(Start: 29 @19357 has 42 MA's), (36, 19387), (41, 19420), (42, 19423), (51, 19465), (66, 19630),

Gene: CapnMurica_32 Start: 29278, Stop: 29583, Start Num: 30

Candidate Starts for CapnMurica_32:

(Start: 30 @29278 has 14 MA's), (Start: 31 @29281 has 32 MA's), (44, 29347), (47, 29362),

Gene: Cashington_24 Start: 19206, Stop: 19547, Start Num: 29

Candidate Starts for Cashington_24:

(Start: 29 @19206 has 42 MA's), (36, 19236), (41, 19269), (42, 19272), (51, 19314), (66, 19479),

Gene: CastorTray_34 Start: 28587, Stop: 28889, Start Num: 31

Candidate Starts for CastorTray_34:

(Start: 30 @28584 has 14 MA's), (Start: 31 @28587 has 32 MA's), (44, 28653), (50, 28677),

Gene: Caterpillar_30 Start: 27361, Stop: 27663, Start Num: 31

Candidate Starts for Caterpillar_30:

(Start: 31 @27361 has 32 MA's), (50, 27451), (62, 27592),

Gene: Celaena_22 Start: 19992, Stop: 20318, Start Num: 29

Candidate Starts for Celaena_22:

(21, 19911), (Start: 29 @19992 has 42 MA's), (36, 20022), (39, 20046), (41, 20055), (47, 20079),

Gene: Cheesy_26 Start: 24260, Stop: 24541, Start Num: 33

Candidate Starts for Cheesy_26:

(Start: 33 @24260 has 44 MA's), (37, 24287), (71, 24500),

Gene: Chickaboom_21 Start: 16666, Stop: 16953, Start Num: 33

Candidate Starts for Chickaboom_21:

(Start: 33 @16666 has 44 MA's), (40, 16714), (46, 16732), (53, 16798), (70, 16900), (72, 16909), (74, 16924),

Gene: Circum_26 Start: 24267, Stop: 24548, Start Num: 33

Candidate Starts for Circum_26:

(Start: 33 @24267 has 44 MA's), (37, 24294), (71, 24507),

Gene: Coral_22 Start: 16478, Stop: 16771, Start Num: 33

Candidate Starts for Coral_22:

(Start: 33 @16478 has 44 MA's), (45, 16541), (53, 16610), (54, 16619), (59, 16655), (72, 16721),

Gene: Correa_25 Start: 23775, Stop: 24056, Start Num: 33

Candidate Starts for Correa_25:

(Start: 33 @23775 has 44 MA's), (37, 23802), (71, 24015),

Gene: Cote_23 Start: 16639, Stop: 16932, Start Num: 33

Candidate Starts for Cote_23:

(Start: 33 @16639 has 44 MA's), (45, 16702), (53, 16771), (54, 16780), (59, 16816), (72, 16882),

Gene: CroZenni_24 Start: 19195, Stop: 19536, Start Num: 29

Candidate Starts for CroZenni_24:

(Start: 29 @19195 has 42 MA's), (36, 19225), (41, 19258), (42, 19261), (51, 19303), (66, 19468),

Gene: Daob_23 Start: 16644, Stop: 16937, Start Num: 33

Candidate Starts for Daob_23:

(7, 16425), (13, 16443), (16, 16482), (18, 16521), (20, 16524), (26, 16578), (28, 16602), (Start: 33 @16644 has 44 MA's), (45, 16707), (53, 16776), (54, 16785), (59, 16821), (72, 16887),

Gene: Darby_32 Start: 28033, Stop: 28335, Start Num: 31

Candidate Starts for Darby_32:

(Start: 30 @28030 has 14 MA's), (Start: 31 @28033 has 32 MA's), (44, 28099), (50, 28123),

Gene: DevitoJr_32 Start: 28204, Stop: 28506, Start Num: 31

Candidate Starts for DevitoJr_32:

(Start: 30 @28201 has 14 MA's), (Start: 31 @28204 has 32 MA's), (44, 28270), (50, 28294),

Gene: DickRichards_24 Start: 19687, Stop: 20028, Start Num: 29

Candidate Starts for DickRichards_24:

(Start: 29 @19687 has 42 MA's), (36, 19717), (41, 19750), (42, 19753), (51, 19795), (66, 19960),

Gene: Didgeridoo_25 Start: 19419, Stop: 19760, Start Num: 29

Candidate Starts for Didgeridoo_25:

(21, 19338), (Start: 29 @19419 has 42 MA's), (36, 19449), (41, 19482), (42, 19485), (51, 19527), (53, 19563), (66, 19692),

Gene: DirtyBubble_23 Start: 19943, Stop: 20284, Start Num: 29

Candidate Starts for DirtyBubble_23:

(27, 19916), (Start: 29 @19943 has 42 MA's), (36, 19973), (41, 20006), (55, 20108),

Gene: Djungelskog_29 Start: 25277, Stop: 25576, Start Num: 31

Candidate Starts for Djungelskog_29:

(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: DoctorPepper_29 Start: 25277, Stop: 25576, Start Num: 31

Candidate Starts for DoctorPepper_29:

(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: Doobus_24 Start: 19523, Stop: 19864, Start Num: 29

Candidate Starts for Doobus_24:

(Start: 29 @19523 has 42 MA's), (36, 19553), (41, 19586), (42, 19589), (51, 19631), (66, 19796),

Gene: Dunamis_23 Start: 15491, Stop: 15793, Start Num: 31

Candidate Starts for Dunamis_23:

(2, 15254), (3, 15257), (4, 15260), (5, 15269), (8, 15287), (12, 15302), (14, 15323), (15, 15341), (22, 15401), (25, 15431), (Start: 31 @15491 has 32 MA's), (Start: 33 @15497 has 44 MA's), (46, 15563), (65, 15713), (67, 15719), (78, 15782),

Gene: Dynamite_25 Start: 24068, Stop: 24349, Start Num: 33

Candidate Starts for Dynamite_25:

(Start: 33 @24068 has 44 MA's), (37, 24095), (71, 24308),

Gene: Eesa_22 Start: 17891, Stop: 18175, Start Num: 33

Candidate Starts for Eesa_22:

(Start: 33 @17891 has 44 MA's), (52, 18020), (53, 18023), (59, 18068), (72, 18134), (73, 18140),

Gene: Egad_29 Start: 25278, Stop: 25577, Start Num: 31

Candidate Starts for Egad_29:

(Start: 31 @25278 has 32 MA's), (35, 25290), (43, 25341), (52, 25413),

Gene: ElephantMan_32 Start: 28732, Stop: 29037, Start Num: 30

Candidate Starts for ElephantMan_32:

(Start: 30 @28732 has 14 MA's), (Start: 31 @28735 has 32 MA's), (44, 28801), (50, 28825), (76, 29029),

Gene: Elsa_26 Start: 24545, Stop: 24826, Start Num: 33

Candidate Starts for Elsa_26:

(Start: 33 @24545 has 44 MA's), (37, 24572), (71, 24785),

Gene: Elva_24 Start: 19907, Stop: 20248, Start Num: 29

Candidate Starts for Elva_24:

(Start: 29 @19907 has 42 MA's), (36, 19937), (41, 19970), (42, 19973),

Gene: Elver_45 Start: 36891, Stop: 37217, Start Num: 31

Candidate Starts for Elver_45:

(Start: 31 @36891 has 32 MA's), (42, 36951), (43, 36954), (45, 36960), (62, 37155),

Gene: Eula_24 Start: 19276, Stop: 19617, Start Num: 29

Candidate Starts for Eula_24:

(Start: 29 @19276 has 42 MA's), (36, 19306), (41, 19339), (42, 19342), (53, 19420), (66, 19549),

Gene: Finalfrontier_25 Start: 19783, Stop: 20124, Start Num: 29

Candidate Starts for Finalfrontier_25:

(Start: 29 @19783 has 42 MA's), (36, 19813), (41, 19846), (42, 19849), (51, 19891), (53, 19927), (66, 20056),

Gene: FlameThrower_22 Start: 19518, Stop: 19862, Start Num: 29

Candidate Starts for FlameThrower_22:

(Start: 29 @19518 has 42 MA's), (36, 19548), (46, 19596), (49, 19611),

Gene: Galaxy_23 Start: 17720, Stop: 18004, Start Num: 33

Candidate Starts for Galaxy_23:

(Start: 33 @17720 has 44 MA's), (39, 17762), (40, 17768), (42, 17774), (46, 17786), (52, 17849), (56, 17867), (60, 17912), (64, 17933), (67, 17942), (72, 17963),

Gene: GantcherGoblin_31 Start: 26743, Stop: 27006, Start Num: 30

Candidate Starts for GantcherGoblin_31:

(Start: 30 @26743 has 14 MA's), (38, 26788), (41, 26803), (43, 26809),

Gene: Giantsbane_33 Start: 27202, Stop: 27525, Start Num: 31

Candidate Starts for Giantsbane_33:

(Start: 31 @27202 has 32 MA's), (37, 27235), (68, 27475),

Gene: GoCrazy_24 Start: 24068, Stop: 24349, Start Num: 33

Candidate Starts for GoCrazy_24:

(Start: 33 @24068 has 44 MA's), (37, 24095), (71, 24308),

Gene: Gordon_32 Start: 29306, Stop: 29611, Start Num: 30

Candidate Starts for Gordon_32:

(Start: 30 @29306 has 14 MA's), (Start: 31 @29309 has 32 MA's), (44, 29375), (50, 29399),

Gene: Hankly_24 Start: 23290, Stop: 23571, Start Num: 33

Candidate Starts for Hankly_24:

(Start: 33 @23290 has 44 MA's), (37, 23317), (71, 23530),

Gene: HannahPhantana_23 Start: 16705, Stop: 16935, Start Num: 45

Candidate Starts for HannahPhantana_23:

(Start: 33 @16642 has 44 MA's), (45, 16705), (53, 16774), (54, 16783), (59, 16819), (72, 16885),

Gene: Heisenberger_25 Start: 23938, Stop: 24219, Start Num: 33

Candidate Starts for Heisenberger_25:

(Start: 33 @23938 has 44 MA's), (37, 23965), (62, 24142), (71, 24178),

Gene: Icarian_26 Start: 19822, Stop: 20163, Start Num: 29

Candidate Starts for Icarian_26:

(27, 19795), (Start: 29 @19822 has 42 MA's), (36, 19852), (41, 19885), (51, 19930),

Gene: IndyLu_24 Start: 19238, Stop: 19579, Start Num: 29

Candidate Starts for IndyLu_24:

(Start: 29 @19238 has 42 MA's), (36, 19268), (41, 19301), (42, 19304), (51, 19346), (53, 19382), (66, 19511),

Gene: Ingrid_32 Start: 27921, Stop: 28220, Start Num: 31

Candidate Starts for Ingrid_32:

(Start: 31 @27921 has 32 MA's), (37, 27954), (38, 27963), (73, 28197),

Gene: Inked_34 Start: 28940, Stop: 29242, Start Num: 31

Candidate Starts for Inked_34:

(Start: 31 @28940 has 32 MA's), (37, 28973), (44, 29006), (58, 29129), (69, 29195),

Gene: Issa_32 Start: 28013, Stop: 28315, Start Num: 31

Candidate Starts for Issa_32:

(Start: 30 @28010 has 14 MA's), (Start: 31 @28013 has 32 MA's), (44, 28079), (50, 28103),

Gene: JEGGS_25 Start: 23992, Stop: 24273, Start Num: 33

Candidate Starts for JEGGS_25:

(Start: 33 @23992 has 44 MA's), (37, 24019), (62, 24196), (71, 24232),

Gene: Jamun_22 Start: 17334, Stop: 17621, Start Num: 33

Candidate Starts for Jamun_22:

(Start: 33 @17334 has 44 MA's), (37, 17361), (53, 17466), (70, 17568), (72, 17577), (74, 17592),

Gene: Jazzy4900_30 Start: 26675, Stop: 26956, Start Num: 31

Candidate Starts for Jazzy4900_30:

(Start: 31 @26675 has 32 MA's), (48, 26759), (63, 26891),

Gene: Johnathan_24 Start: 19296, Stop: 19637, Start Num: 29

Candidate Starts for Johnathan_24:

(Start: 29 @19296 has 42 MA's), (36, 19326), (41, 19359), (42, 19362), (51, 19404), (66, 19569),

Gene: Jovita_24 Start: 19380, Stop: 19721, Start Num: 29

Candidate Starts for Jovita_24:

(Start: 29 @19380 has 42 MA's), (36, 19410), (41, 19443), (42, 19446), (53, 19524), (66, 19653),

Gene: Juno112_21 Start: 16205, Stop: 16495, Start Num: 33

Candidate Starts for Juno112_21:

(Start: 33 @16205 has 44 MA's), (37, 16232), (53, 16337), (59, 16382), (72, 16448), (77, 16478),

Gene: KHumphrey_21 Start: 16202, Stop: 16492, Start Num: 33

Candidate Starts for KHumphrey_21:

(Start: 33 @16202 has 44 MA's), (37, 16229), (53, 16334), (59, 16379), (72, 16445), (77, 16475),

Gene: Kardesai_24 Start: 23671, Stop: 23952, Start Num: 33

Candidate Starts for Kardesai_24:

(Start: 33 @23671 has 44 MA's), (37, 23698), (62, 23875), (71, 23911),

Gene: Katzastrophic_22 Start: 19650, Stop: 19976, Start Num: 29

Candidate Starts for Katzastrophic_22:

(Start: 29 @19650 has 42 MA's), (36, 19680), (39, 19704), (41, 19713), (47, 19737),

Gene: KeaneyLin_24 Start: 24068, Stop: 24349, Start Num: 33

Candidate Starts for KeaneyLin_24:

(Start: 33 @24068 has 44 MA's), (37, 24095), (71, 24308),

Gene: Kenzers_24 Start: 19266, Stop: 19607, Start Num: 29

Candidate Starts for Kenzers_24:

(Start: 29 @19266 has 42 MA's), (36, 19296), (41, 19329), (42, 19332), (51, 19374), (53, 19410), (66, 19539),

Gene: Kepler_22 Start: 16477, Stop: 16770, Start Num: 33

Candidate Starts for Kepler_22:

(Start: 33 @16477 has 44 MA's), (45, 16540), (53, 16609), (54, 16618), (59, 16654), (72, 16720),

Gene: Kuleana_22 Start: 16584, Stop: 16892, Start Num: 33

Candidate Starts for Kuleana_22:

(23, 16503), (25, 16512), (Start: 33 @16584 has 44 MA's), (44, 16644), (54, 16725), (64, 16818),

Gene: Lahqtemish_24 Start: 19289, Stop: 19630, Start Num: 29

Candidate Starts for Lahqtemish_24:

(Start: 29 @19289 has 42 MA's), (36, 19319), (41, 19352), (42, 19355), (51, 19397), (53, 19433), (66, 19562),

Gene: Leathea_32 Start: 26639, Stop: 26902, Start Num: 30

Candidate Starts for Leathea_32:

(Start: 30 @26639 has 14 MA's), (38, 26684), (41, 26699), (43, 26705),

Gene: Leona_21 Start: 16264, Stop: 16560, Start Num: 33

Candidate Starts for Leona_21:

(Start: 33 @16264 has 44 MA's), (37, 16291), (53, 16396), (59, 16441), (72, 16507), (77, 16537),

Gene: Lewando_35 Start: 28662, Stop: 28925, Start Num: 30

Candidate Starts for Lewando_35:

(Start: 30 @28662 has 14 MA's), (38, 28707), (41, 28722), (43, 28728), (68, 28875),

Gene: LilHuddy_33 Start: 28384, Stop: 28686, Start Num: 31

Candidate Starts for LilHuddy_33:

(Start: 31 @28384 has 32 MA's), (37, 28417), (44, 28450), (70, 28645),

Gene: LimaBean_24 Start: 19292, Stop: 19633, Start Num: 29

Candidate Starts for LimaBean_24:

(Start: 29 @19292 has 42 MA's), (36, 19322), (41, 19355), (42, 19358), (51, 19400), (66, 19565),

Gene: Linda_29 Start: 25277, Stop: 25576, Start Num: 31

Candidate Starts for Linda_29:

(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: LittleTokyo_22 Start: 16542, Stop: 16829, Start Num: 33

Candidate Starts for LittleTokyo_22:

(Start: 33 @16542 has 44 MA's), (37, 16569), (53, 16674), (56, 16689),

Gene: Loretta_32 Start: 27921, Stop: 28220, Start Num: 31

Candidate Starts for Loretta_32:

(Start: 31 @27921 has 32 MA's), (37, 27954), (38, 27963), (73, 28197),

Gene: Loviatar_40 Start: 19917, Stop: 20258, Start Num: 29

Candidate Starts for Loviatar_40:

(27, 19890), (Start: 29 @19917 has 42 MA's), (36, 19947), (41, 19980), (51, 20025),

Gene: Lunar_23 Start: 16639, Stop: 16932, Start Num: 33

Candidate Starts for Lunar_23:

(Start: 33 @16639 has 44 MA's), (45, 16702), (53, 16771), (54, 16780), (59, 16816), (72, 16882),

Gene: Lynlen_24 Start: 19266, Stop: 19607, Start Num: 29

Candidate Starts for Lynlen_24:

(Start: 29 @19266 has 42 MA's), (36, 19296), (41, 19329), (42, 19332), (51, 19374), (53, 19410), (66, 19539),

Gene: Makai_32 Start: 28159, Stop: 28461, Start Num: 31

Candidate Starts for Makai_32:

(Start: 31 @28159 has 32 MA's), (37, 28192), (50, 28249), (63, 28396), (64, 28399),

Gene: MediumFry_30 Start: 27363, Stop: 27665, Start Num: 31

Candidate Starts for MediumFry_30:

(Start: 31 @27363 has 32 MA's), (50, 27453), (62, 27594), (73, 27639),

Gene: Melons_23 Start: 16639, Stop: 16932, Start Num: 33

Candidate Starts for Melons_23:

(Start: 33 @16639 has 44 MA's), (45, 16702), (53, 16771), (54, 16780), (59, 16816), (72, 16882),

Gene: Mendel_21 Start: 15255, Stop: 15551, Start Num: 33

Candidate Starts for Mendel_21:

(2, 15012), (3, 15015), (4, 15018), (5, 15027), (8, 15045), (12, 15060), (14, 15081), (15, 15099), (22, 15159), (25, 15189), (Start: 31 @15249 has 32 MA's), (Start: 33 @15255 has 44 MA's), (46, 15321), (65, 15471), (67, 15477), (78, 15540),

Gene: Michelle_29 Start: 25277, Stop: 25576, Start Num: 31

Candidate Starts for Michelle_29:

(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: MiniBagel_32 Start: 29260, Stop: 29562, Start Num: 31

Candidate Starts for MiniBagel_32:

(Start: 30 @29257 has 14 MA's), (Start: 31 @29260 has 32 MA's), (44, 29326), (47, 29341),

Gene: Mooshroom_24 Start: 23671, Stop: 23952, Start Num: 33

Candidate Starts for Mooshroom_24:

(Start: 33 @23671 has 44 MA's), (37, 23698), (62, 23875), (71, 23911),

Gene: MrAaronian_29 Start: 25277, Stop: 25576, Start Num: 31

Candidate Starts for MrAaronian_29:

(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: Mudcat_25 Start: 25969, Stop: 26250, Start Num: 33

Candidate Starts for Mudcat_25:

(Start: 33 @25969 has 44 MA's), (37, 25996), (71, 26209),

Gene: NapoleonB_25 Start: 24068, Stop: 24349, Start Num: 33

Candidate Starts for NapoleonB_25:

(Start: 33 @24068 has 44 MA's), (37, 24095), (71, 24308),

Gene: Nason_26 Start: 24545, Stop: 24826, Start Num: 33

Candidate Starts for Nason_26:

(Start: 33 @24545 has 44 MA's), (37, 24572), (71, 24785),

Gene: Nicky22_25 Start: 19726, Stop: 20067, Start Num: 29

Candidate Starts for Nicky22_25:

(6, 19522), (21, 19645), (Start: 29 @19726 has 42 MA's), (36, 19756), (41, 19789), (42, 19792), (53, 19870), (66, 19999),

Gene: Nightmare_33 Start: 28570, Stop: 28875, Start Num: 30

Candidate Starts for Nightmare_33:

(Start: 30 @28570 has 14 MA's), (Start: 31 @28573 has 32 MA's), (44, 28639), (50, 28663),

Gene: Niktson_32 Start: 28732, Stop: 29037, Start Num: 30

Candidate Starts for Niktson_32:

(Start: 30 @28732 has 14 MA's), (Start: 31 @28735 has 32 MA's), (44, 28801), (50, 28825), (76, 29029),

Gene: Nivinsha_32 Start: 28123, Stop: 28425, Start Num: 31

Candidate Starts for Nivinsha_32:

(Start: 30 @28120 has 14 MA's), (Start: 31 @28123 has 32 MA's), (44, 28189), (50, 28213),

Gene: Orcanus_22 Start: 17591, Stop: 17875, Start Num: 33

Candidate Starts for Orcanus_22:

(Start: 33 @17591 has 44 MA's), (52, 17720), (53, 17723), (59, 17768), (72, 17834), (73, 17840),

Gene: Paella_46 Start: 36893, Stop: 37219, Start Num: 31

Candidate Starts for Paella_46:

(Start: 31 @36893 has 32 MA's), (42, 36953), (43, 36956), (45, 36962), (62, 37157),

Gene: Phaby_33 Start: 28317, Stop: 28640, Start Num: 31

Candidate Starts for Phaby_33:

(Start: 31 @28317 has 32 MA's), (37, 28350), (68, 28590),

Gene: Phisb_25 Start: 19292, Stop: 19633, Start Num: 29

Candidate Starts for Phisb_25:

(19, 19196), (Start: 29 @19292 has 42 MA's), (36, 19322), (41, 19355), (42, 19358), (51, 19400), (53, 19436), (66, 19565),

Gene: PhluffyCoco_21 Start: 16204, Stop: 16494, Start Num: 33

Candidate Starts for PhluffyCoco_21:

(Start: 33 @16204 has 44 MA's), (37, 16231), (53, 16336), (59, 16381), (72, 16447), (77, 16477),

Gene: Polka_22 Start: 16483, Stop: 16776, Start Num: 33

Candidate Starts for Polka_22:

(7, 16264), (10, 16270), (11, 16279), (13, 16282), (16, 16321), (18, 16360), (20, 16363), (26, 16417), (28, 16441), (Start: 33 @16483 has 44 MA's), (45, 16546), (53, 16615), (54, 16624), (59, 16660), (72, 16726),

Gene: ProfFrink_29 Start: 25277, Stop: 25576, Start Num: 31

Candidate Starts for ProfFrink_29:

(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: QMacho_25 Start: 19759, Stop: 20100, Start Num: 29

Candidate Starts for QMacho_25:

(Start: 29 @19759 has 42 MA's), (36, 19789), (41, 19822), (42, 19825), (53, 19903), (66, 20032),

Gene: Quenya_23 Start: 19515, Stop: 19841, Start Num: 29

Candidate Starts for Quenya_23:

(21, 19434), (Start: 29 @19515 has 42 MA's), (39, 19569), (41, 19578), (47, 19602), (57, 19704), (73, 19818),

Gene: Qui_46 Start: 36893, Stop: 37219, Start Num: 31

Candidate Starts for Qui_46:

(Start: 31 @36893 has 32 MA's), (42, 36953), (43, 36956), (45, 36962), (62, 37157),

Gene: Raunak_29 Start: 25277, Stop: 25576, Start Num: 31
Candidate Starts for Raunak_29:
(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: RedFox_21 Start: 16204, Stop: 16494, Start Num: 33
Candidate Starts for RedFox_21:
(Start: 33 @16204 has 44 MA's), (37, 16231), (53, 16336), (59, 16381), (72, 16447), (77, 16477),

Gene: Renaldo_37 Start: 28671, Stop: 28934, Start Num: 30
Candidate Starts for Renaldo_37:
(Start: 30 @28671 has 14 MA's), (38, 28716), (41, 28731), (43, 28737), (68, 28884),

Gene: Renna12_22 Start: 16554, Stop: 16850, Start Num: 33
Candidate Starts for Renna12_22:
(Start: 33 @16554 has 44 MA's), (37, 16581), (53, 16686), (59, 16731), (72, 16797), (77, 16827),

Gene: Ruchi_22 Start: 17874, Stop: 18161, Start Num: 33
Candidate Starts for Ruchi_22:
(Start: 33 @17874 has 44 MA's), (53, 18006), (70, 18108), (72, 18117), (74, 18132),

Gene: Salk_29 Start: 25277, Stop: 25576, Start Num: 31
Candidate Starts for Salk_29:
(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: SanaSana_24 Start: 19856, Stop: 20197, Start Num: 29
Candidate Starts for SanaSana_24:
(27, 19829), (Start: 29 @19856 has 42 MA's), (36, 19886), (41, 19919), (51, 19964),

Gene: SansAfet_24 Start: 19203, Stop: 19544, Start Num: 29
Candidate Starts for SansAfet_24:
(Start: 29 @19203 has 42 MA's), (36, 19233), (41, 19266), (42, 19269), (51, 19311), (66, 19476),

Gene: SarBear_24 Start: 19257, Stop: 19598, Start Num: 29
Candidate Starts for SarBear_24:
(21, 19176), (Start: 29 @19257 has 42 MA's), (36, 19287), (41, 19320), (42, 19323), (53, 19401), (66, 19530),

Gene: ScienceWizSam_34 Start: 28524, Stop: 28826, Start Num: 31
Candidate Starts for ScienceWizSam_34:
(Start: 30 @28521 has 14 MA's), (Start: 31 @28524 has 32 MA's), (44, 28590), (50, 28614),

Gene: Shepard_33 Start: 28381, Stop: 28683, Start Num: 31
Candidate Starts for Shepard_33:
(Start: 31 @28381 has 32 MA's), (37, 28414), (44, 28447), (70, 28642),

Gene: Shiba_29 Start: 25277, Stop: 25576, Start Num: 31
Candidate Starts for Shiba_29:
(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: Slay_24 Start: 19799, Stop: 20140, Start Num: 29
Candidate Starts for Slay_24:

(19, 19703), (Start: 29 @19799 has 42 MA's), (36, 19829), (41, 19862), (42, 19865), (53, 19943), (66, 20072),

Gene: Sloopyjoe_29 Start: 25278, Stop: 25577, Start Num: 31

Candidate Starts for Sloopyjoe_29:

(Start: 31 @25278 has 32 MA's), (35, 25290), (43, 25341), (52, 25413),

Gene: Sporto_30 Start: 26489, Stop: 26746, Start Num: 31

Candidate Starts for Sporto_30:

(Start: 31 @26489 has 32 MA's), (35, 26501), (43, 26552), (52, 26624), (61, 26663), (63, 26684), (70, 26708),

Gene: StarLord_29 Start: 25278, Stop: 25577, Start Num: 31

Candidate Starts for StarLord_29:

(Start: 31 @25278 has 32 MA's), (35, 25290), (43, 25341), (52, 25413),

Gene: Stayer_29 Start: 25277, Stop: 25576, Start Num: 31

Candidate Starts for Stayer_29:

(Start: 31 @25277 has 32 MA's), (35, 25289), (43, 25340), (52, 25412),

Gene: Stoor_23 Start: 19853, Stop: 20194, Start Num: 29

Candidate Starts for Stoor_23:

(27, 19826), (Start: 29 @19853 has 42 MA's), (36, 19883), (41, 19916), (51, 19961),

Gene: Stromboli_23 Start: 19983, Stop: 20324, Start Num: 29

Candidate Starts for Stromboli_23:

(27, 19956), (Start: 29 @19983 has 42 MA's), (36, 20013), (41, 20046), (51, 20091), (55, 20148),

Gene: Sunny4976_29 Start: 26675, Stop: 26956, Start Num: 31

Candidate Starts for Sunny4976_29:

(Start: 31 @26675 has 32 MA's), (48, 26759), (63, 26891),

Gene: Swervy_24 Start: 19257, Stop: 19598, Start Num: 29

Candidate Starts for Swervy_24:

(21, 19176), (Start: 29 @19257 has 42 MA's), (36, 19287), (41, 19320), (42, 19323), (53, 19401), (66, 19530),

Gene: Swim_24 Start: 15748, Stop: 16050, Start Num: 31

Candidate Starts for Swim_24:

(2, 15511), (3, 15514), (4, 15517), (5, 15526), (8, 15544), (12, 15559), (14, 15580), (15, 15598), (22, 15658), (25, 15688), (Start: 31 @15748 has 32 MA's), (Start: 33 @15754 has 44 MA's), (46, 15820), (65, 15970), (67, 15976), (78, 16039),

Gene: Synopsis_31 Start: 28187, Stop: 28489, Start Num: 31

Candidate Starts for Synopsis_31:

(Start: 30 @28184 has 14 MA's), (Start: 31 @28187 has 32 MA's), (44, 28253), (50, 28277),

Gene: Tatanka_32 Start: 28668, Stop: 28973, Start Num: 30

Candidate Starts for Tatanka_32:

(Start: 30 @28668 has 14 MA's), (Start: 31 @28671 has 32 MA's), (44, 28737), (50, 28761),

Gene: TaylorSipht_22 Start: 16608, Stop: 16895, Start Num: 33

Candidate Starts for TaylorSipht_22:

(Start: 33 @16608 has 44 MA's), (37, 16635), (40, 16656), (70, 16842), (72, 16851), (77, 16881),

Gene: Teacup_32 Start: 28040, Stop: 28345, Start Num: 30

Candidate Starts for Teacup_32:

(Start: 30 @28040 has 14 MA's), (Start: 31 @28043 has 32 MA's), (44, 28109), (50, 28133), (76, 28337),

Gene: Tenno_33 Start: 29266, Stop: 29571, Start Num: 30

Candidate Starts for Tenno_33:

(Start: 30 @29266 has 14 MA's), (Start: 31 @29269 has 32 MA's), (44, 29335), (47, 29350),

Gene: Tillums_24 Start: 15881, Stop: 16183, Start Num: 31

Candidate Starts for Tillums_24:

(Start: 31 @15881 has 32 MA's), (Start: 33 @15887 has 44 MA's), (46, 15953), (65, 16103), (67, 16109), (78, 16172),

Gene: Tokki_33 Start: 28333, Stop: 28656, Start Num: 31

Candidate Starts for Tokki_33:

(Start: 31 @28333 has 32 MA's), (37, 28366), (68, 28606),

Gene: Tribby_26 Start: 24260, Stop: 24541, Start Num: 33

Candidate Starts for Tribby_26:

(Start: 33 @24260 has 44 MA's), (37, 24287), (71, 24500),

Gene: Truckee_31 Start: 28204, Stop: 28506, Start Num: 31

Candidate Starts for Truckee_31:

(Start: 31 @28204 has 32 MA's), (37, 28237), (50, 28294), (63, 28441), (64, 28444),

Gene: Trustiboi_33 Start: 28740, Stop: 29042, Start Num: 31

Candidate Starts for Trustiboi_33:

(Start: 30 @28737 has 14 MA's), (Start: 31 @28740 has 32 MA's), (44, 28806), (50, 28830),

Gene: TukTuk_24 Start: 19315, Stop: 19656, Start Num: 29

Candidate Starts for TukTuk_24:

(Start: 29 @19315 has 42 MA's), (36, 19345), (41, 19378), (42, 19381), (53, 19459), (66, 19588),

Gene: Uzumaki_32 Start: 27562, Stop: 27825, Start Num: 30

Candidate Starts for Uzumaki_32:

(Start: 30 @27562 has 14 MA's), (38, 27607), (41, 27622), (43, 27628),

Gene: Vulpecula_22 Start: 17332, Stop: 17619, Start Num: 33

Candidate Starts for Vulpecula_22:

(Start: 33 @17332 has 44 MA's), (37, 17359), (53, 17464), (70, 17566), (72, 17575), (74, 17590),

Gene: Xenomorph_24 Start: 24278, Stop: 24559, Start Num: 33

Candidate Starts for Xenomorph_24:

(Start: 33 @24278 has 44 MA's), (37, 24305), (71, 24518),

Gene: Zeina_32 Start: 26943, Stop: 27206, Start Num: 30

Candidate Starts for Zeina_32:

(Start: 30 @26943 has 14 MA's), (38, 26988), (41, 27003), (43, 27009),