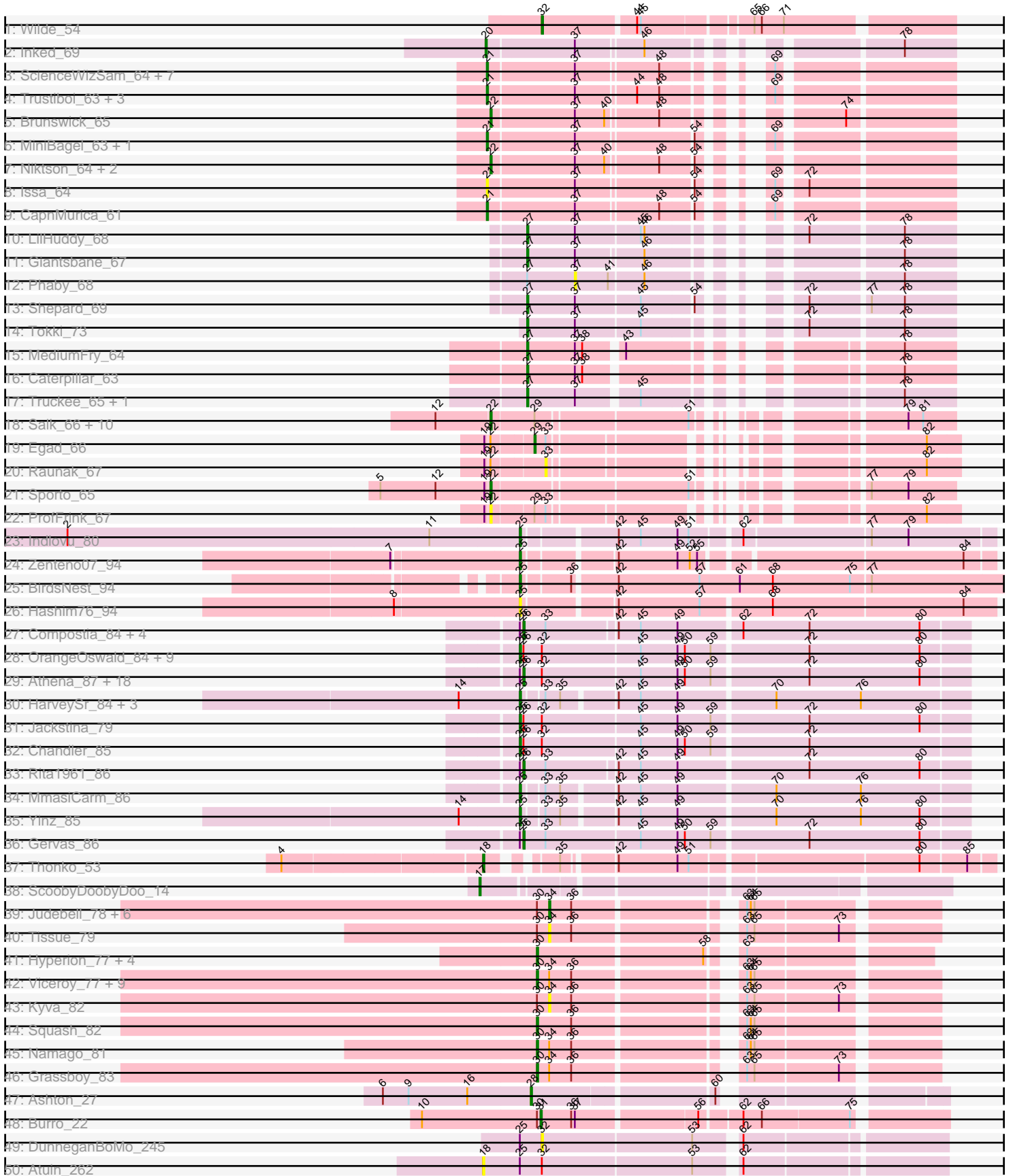
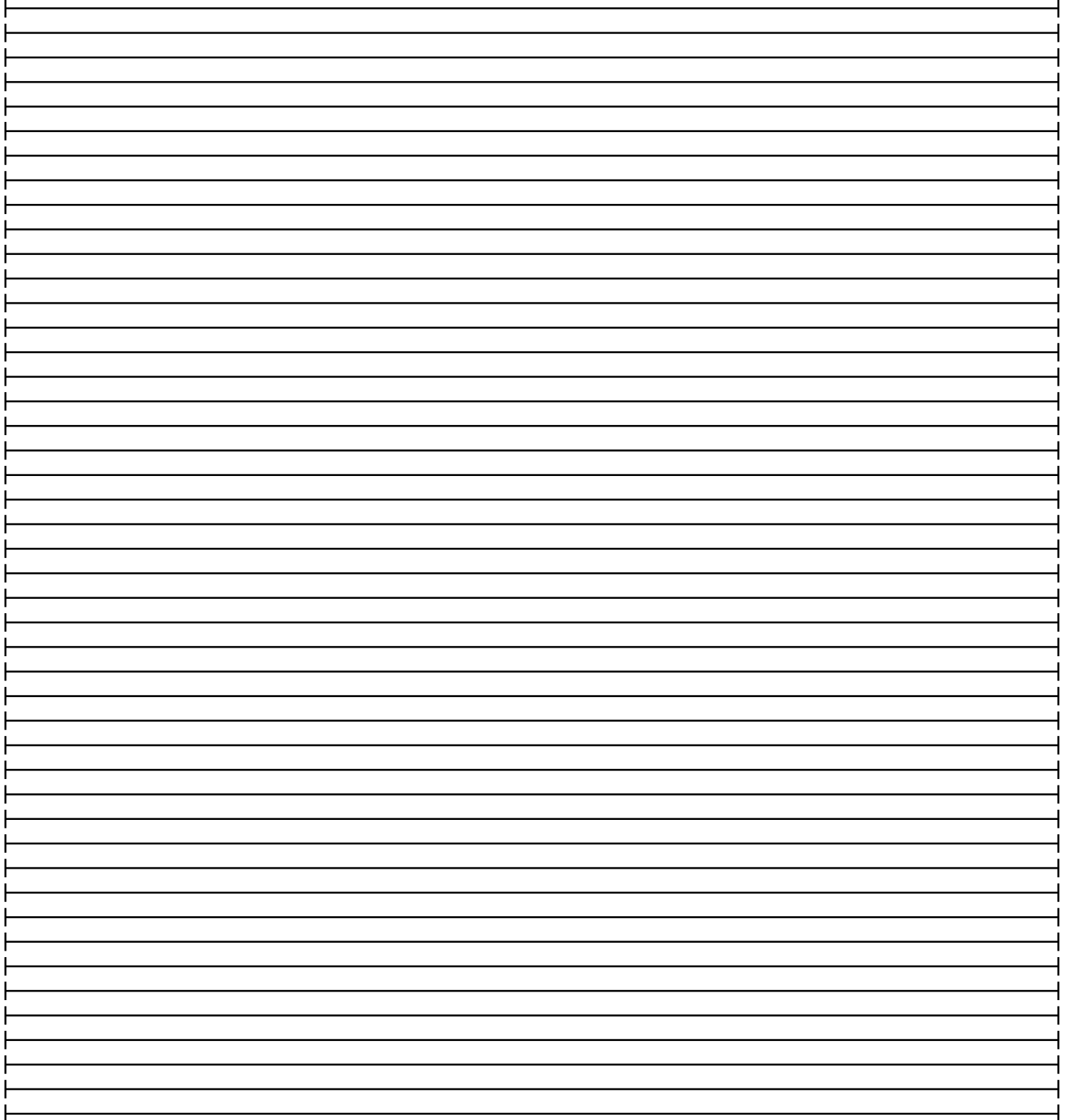
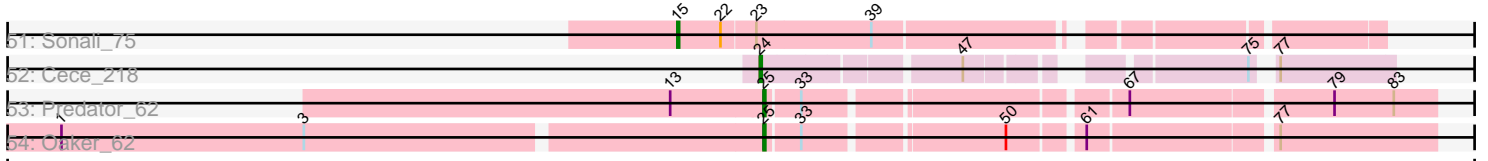


Pham 171284



Pham 171284



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 171284 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171284 has 131 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Wilde_54
- Track 2 : Inked_69
- Track 3 : ScienceWizSam_64, Gordon_61, Darby_62, Nivinsha_66, DevitoJr_63, Tatanka_59, Synopsis_62, AreFloNak_66
- Track 4 : Trustiboi_63, Breylor17_63, Nightmare_65, CastorTray_67
- Track 5 : Brunswick_65
- Track 6 : MiniBagel_63, Tenno_64
- Track 7 : Niktson_64, ElephantMan_64, Teacup_65
- Track 8 : Issa_64
- Track 9 : CapnMurica_61
- Track 10 : LilHuddy_68
- Track 11 : Giantsbane_67
- Track 12 : Phaby_68
- Track 13 : Shepard_69
- Track 14 : Tokki_73
- Track 15 : MediumFry_64
- Track 16 : Caterpillar_63
- Track 17 : Truckee_65, Makai_67
- Track 18 : Salk_66, BronxBay_66, Shiba_65, MrAaronian_66, DoctorPepper_66, Sloopyjoe_66, Linda_66, Michelle_66, Djungelskog_65, Stayer_66, StarLord_66
- Track 19 : Egad_66
- Track 20 : Raunak_67
- Track 21 : Sporto_65
- Track 22 : ProfFrink_67
- Track 23 : Indlovu_80
- Track 24 : Zenteno07_94
- Track 25 : BirdsNest_94
- Track 26 : Hashim76_94
- Track 27 : Compostia_84, ChaChing_85, Philly_84, GlenHope_86, Halfpint_85
- Track 28 : OrangeOswald_84, Ben11_85, Phayeta_88, Kronus_85, Audrey_85, LestyG_83, Mortcellus_85, Baloo_84, Corofin_85, RomaT_85
- Track 29 : Athena_87, Phaedrus_80, Tydolla_81, RagingRooster_84, Phlyer_85, Heathcliff_85, SynergyX_85, Akoma_85, Abinghost_85, SlippinJimmy_88, Nozo_85, Briakila_85, Devonte_83, Deenasa_85, Daisy_84, Kamiyu_85, Casbah_85, Yahalom_83, Obutu_87
- Track 30 : HarveySr_84, Marley1013_86, Morty007_84, Neos5_85
- Track 31 : Jackstina_79

- Track 32 : Chandler_85
- Track 33 : Rita1961_86
- Track 34 : MmasiCarm_86
- Track 35 : Yinz_85
- Track 36 : Gervas_86
- Track 37 : Thonko_53
- Track 38 : ScoobyDoobyDoo_14
- Track 39 : Judebell_78, DonaldDuck_80, Wayne3_80, Rudy_76, BabyDotz_77, Zagie_80, Sillytadpoles_81
- Track 40 : Tissue_79
- Track 41 : Hyperion_77, Blab_75, Mashley_79, AluminumJesus_75, Gazebo_79
- Track 42 : Viceroy_77, Teehee_79, Jehoshaphat_80, Casend_79, Phabia_78, StrawberryJamm_84, Lonelysoil_76, Llemily_80, Quammi_77, Wheelie_78
- Track 43 : Kyva_82
- Track 44 : Squash_82
- Track 45 : Namago_81
- Track 46 : Grassboy_83
- Track 47 : Ashton_27
- Track 48 : Burro_22
- Track 49 : DunneganBoMo_245
- Track 50 : Atuin_262
- Track 51 : Sonali_75
- Track 52 : Cece_218
- Track 53 : Predator_62
- Track 54 : Oaker_62

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

The start number called the most often in the published annotations is 26, it was called in 24 of the 113 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abinghost_85, Akoma_85, Athena_87, Briakila_85, Casbah_85, ChaChing_85, Compostia_84, Daisy_84, Deenasa_85, Devonte_83, Gervas_86, GlenHope_86, Halfpint_85, Heathcliff_85, Kamiyu_85, Nozo_85, Obutu_87, Phaedruss_80, Philly_84, Phlyer_85, RagingRooster_84, Rita1961_86, SlippinJimmy_88, SynergyX_85, Tydolla_81, Yahalom_83,

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

- Audrey_85, Baloo_84, Ben11_85, Chandler_85, Corofin_85, Jackstina_79, Kronus_85, LestyG_83, Mortcellus_85, OrangeOswald_84, Phayeta_88, RomaT_85,

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

- AluminumJesus_75, AreFloNak_66, Ashton_27, Atuin_262, BabyDotz_77, BirdsNest_94, Blab_75, Breylor17_63, BronxBay_66, Brunswick_65, Burro_22, CapnMurica_61, Casend_79, CastorTray_67, Caterpillar_63, Cece_218, Darby_62, DevitoJr_63, Djungelskog_65, DoctorPepper_66, DonaldDuck_80, DunneganBoMo_245, Egad_66, ElephantMan_64, Gazebo_79, Giantsbane_67, Gordon_61, Grassboy_83, HarveySr_84, Hashim76_94, Hyperion_77, Indlovu_80, Inked_69, Issa_64, Jehoshaphat_80, Judebell_78, Kyva_82, LilHuddy_68, Linda_66,

Llemily_80, Lonelysoil_76, Makai_67, Marley1013_86, Mashley_79, MediumFry_64, Michelle_66, MiniBagel_63, MmasiCarm_86, Morty007_84, MrAaronian_66, Namago_81, Neos5_85, Nightmare_65, Niktson_64, Nivinsha_66, Oaker_62, Phabia_78, Phaby_68, Predator_62, ProfFrink_67, Quammi_77, Raunak_67, Rudy_76, Salk_66, ScienceWizSam_64, ScoobyDoobyDoo_14, Shepard_69, Shiba_65, Sillytadpoles_81, Sloopyjoe_66, Sonali_75, Sporto_65, Squash_82, StarLord_66, Stayer_66, StrawberryJamm_84, Synepsis_62, Tatanka_59, Teacup_65, Teehee_79, Tenno_64, Thonko_53, Tissue_79, Tokki_73, Truckee_65, Trustiboi_63, Viceroy_77, Wayne3_80, Wheelie_78, Wilde_54, Yinz_85, Zagie_80, Zenteno07_94,

Summary by start number:

Start 15:

- Found in 1 of 131 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 113
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sonali_75 (FG),

Start 17:

- Found in 1 of 131 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 113
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ScoobyDoobyDoo_14 (C2),

Start 18:

- Found in 2 of 131 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 113
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin_262 (FC), Thonko_53 (B8),

Start 20:

- Found in 1 of 131 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 113
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Inked_69 (AU),

Start 21:

- Found in 16 of 131 (12.2%) of genes in pham
- Manual Annotations of this start: 13 of 113
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AreFloNak_66 (AU1), Breylor17_63 (AU1), CapnMurica_61 (AU1), CastorTray_67 (AU1), Darby_62 (AU1), DevitoJr_63 (AU1), Gordon_61 (AU1), Issa_64 (AU1), MiniBagel_63 (AU1), Nightmare_65 (AU1), Nivinsha_66 (AU1), ScienceWizSam_64 (AU1), Synepsis_62 (AU1), Tatanka_59 (AU1), Tenno_64 (AU1), Trustiboi_63 (AU1),

Start 22:

- Found in 20 of 131 (15.3%) of genes in pham
- Manual Annotations of this start: 15 of 113
- Called 85.0% of time when present
- Phage (with cluster) where this start called: BronxBay_66 (AW), Brunswick_65 (AU1), Djungelskog_65 (AW), DoctorPepper_66 (AW), ElephantMan_64 (AU1),

Linda_66 (AW), Michelle_66 (AW), MrAaronian_66 (AW), Niktson_64 (AU1), ProfFrink_67 (AW), Salk_66 (AW), Shiba_65 (AW), Sloopyjoe_66 (AW), Sporto_65 (AW), StarLord_66 (AW), Stayer_66 (AW), Teacup_65 (AU1),

Start 24:

- Found in 1 of 131 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 113
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cece_218 (GD3),

Start 25:

- Found in 52 of 131 (39.7%) of genes in pham
- Manual Annotations of this start: 22 of 113
- Called 46.2% of time when present
- Phage (with cluster) where this start called: Audrey_85 (B3), Baloo_84 (B3), Ben11_85 (B3), BirdsNest_94 (B13), Chandler_85 (B3), Corofin_85 (B3), HarveySr_84 (B3), Hashim76_94 (B13), Indlovu_80 (B11), Jackstina_79 (B3), Kronus_85 (B3), LestyG_83 (B3), Marley1013_86 (B3), MmasiCarm_86 (B3), Mortcellus_85 (B3), Morty007_84 (B3), Neos5_85 (B3), Oaker_62 (H1), OrangeOswald_84 (B3), Phayeta_88 (B3), Predator_62 (H1), RomaT_85 (B3), Yinz_85 (B3), Zenteno07_94 (B13),

Start 26:

- Found in 38 of 131 (29.0%) of genes in pham
- Manual Annotations of this start: 24 of 113
- Called 68.4% of time when present
- Phage (with cluster) where this start called: Abingghost_85 (B3), Akoma_85 (B3), Athena_87 (B3), Briakila_85 (B3), Casbah_85 (B3), ChaChing_85 (B3), Compostia_84 (B3), Daisy_84 (B3), Deenasa_85 (B3), Devonte_83 (B3), Gervas_86 (B3), GlenHope_86 (B3), Halfpint_85 (B3), Heathcliff_85 (B3), Kamiyu_85 (B3), Nozo_85 (B3), Obutu_87 (B3), Phaedrus_80 (B3), Philly_84 (B3), Phlyer_85 (B3), RagingRooster_84 (B3), Rita1961_86 (B3), SlippinJimmy_88 (B3), SynergyX_85 (B3), Tydolla_81 (B3), Yahalom_83 (B3),

Start 27:

- Found in 9 of 131 (6.9%) of genes in pham
- Manual Annotations of this start: 8 of 113
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Caterpillar_63 (AU4), Giantsbane_67 (AU2), LilHuddy_68 (AU2), Makai_67 (AU5), MediumFry_64 (AU4), Shepard_69 (AU2), Tokki_73 (AU2), Truckee_65 (AU5),

Start 28:

- Found in 1 of 131 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 113
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ashton_27 (EK2),

Start 29:

- Found in 13 of 131 (9.9%) of genes in pham
- Manual Annotations of this start: 1 of 113
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Egad_66 (AW),

Start 30:

- Found in 28 of 131 (21.4%) of genes in pham
- Manual Annotations of this start: 17 of 113
- Called 64.3% of time when present
- Phage (with cluster) where this start called: AluminumJesus_75 (EG), Blab_75 (EG), Casend_79 (EG), Gazebo_79 (EG), Grassboy_83 (EG), Hyperion_77 (EG), Jehoshaphat_80 (EG), Llemily_80 (EG), Lonelysoil_76 (EG), Mashley_79 (EG), Namago_81 (EG), Phabia_78 (EG), Quammi_77 (EG), Squash_82 (EG), StrawberryJamm_84 (EG), Teehee_79 (EG), Viceroy_77 (EG), Wheelie_78 (EG),

Start 31:

- Found in 1 of 131 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 113
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Burro_22 (EM1),

Start 32:

- Found in 34 of 131 (26.0%) of genes in pham
- Manual Annotations of this start: 1 of 113
- Called 5.9% of time when present
- Phage (with cluster) where this start called: DunneganBoMo_245 (FC), Wilde_54 (AP1),

Start 33:

- Found in 18 of 131 (13.7%) of genes in pham
- No Manual Annotations of this start.
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Raunak_67 (AW),

Start 34:

- Found in 21 of 131 (16.0%) of genes in pham
- Manual Annotations of this start: 5 of 113
- Called 42.9% of time when present
- Phage (with cluster) where this start called: BabyDotz_77 (EG), DonaldDuck_80 (EG), Judebell_78 (EG), Kyva_82 (EG), Rudy_76 (EG), Sillytadpoles_81 (EG), Tissue_79 (EG), Wayne3_80 (EG), Zagie_80 (EG),

Start 37:

- Found in 31 of 131 (23.7%) of genes in pham
- No Manual Annotations of this start.
- Called 3.2% of time when present
- Phage (with cluster) where this start called: Phaby_68 (AU2),

Summary by clusters:

There are 19 clusters represented in this pham: FG, GD3, H1, FC, EG, AP1, C2, AU1, B11, AU2, EM1, B13, AW, B3, AU5, AU, B8, EK2, AU4,

Info for manual annotations of cluster AP1:

- Start number 32 was manually annotated 1 time for cluster AP1.

Info for manual annotations of cluster AU:

- Start number 20 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 21 was manually annotated 13 times for cluster AU1.
- Start number 22 was manually annotated 4 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 27 was manually annotated 4 times for cluster AU2.

Info for manual annotations of cluster AU4:

- Start number 27 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 27 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AW:

- Start number 22 was manually annotated 11 times for cluster AW.
- Start number 29 was manually annotated 1 time for cluster AW.

Info for manual annotations of cluster B11:

- Start number 25 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B13:

- Start number 25 was manually annotated 2 times for cluster B13.

Info for manual annotations of cluster B3:

- Start number 25 was manually annotated 17 times for cluster B3.
- Start number 26 was manually annotated 24 times for cluster B3.

Info for manual annotations of cluster B8:

- Start number 18 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster C2:

- Start number 17 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster EG:

- Start number 30 was manually annotated 17 times for cluster EG.
- Start number 34 was manually annotated 5 times for cluster EG.

Info for manual annotations of cluster EK2:

- Start number 28 was manually annotated 1 time for cluster EK2.

Info for manual annotations of cluster EM1:

- Start number 31 was manually annotated 1 time for cluster EM1.

Info for manual annotations of cluster FG:

- Start number 15 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster GD3:

- Start number 24 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster H1:

- Start number 25 was manually annotated 2 times for cluster H1.

Gene Information:

Gene: Abinghost_85 Start: 62155, Stop: 61802, Start Num: 26

Candidate Starts for Abinghost_85:

(Start: 25 @62158 has 22 MA's), (Start: 26 @62155 has 24 MA's), (Start: 32 @62140 has 1 MA's), (45, 62062), (49, 62032), (50, 62026), (59, 62005), (72, 61930), (80, 61840),

Gene: Akoma_85 Start: 62195, Stop: 61842, Start Num: 26

Candidate Starts for Akoma_85:

(Start: 25 @62198 has 22 MA's), (Start: 26 @62195 has 24 MA's), (Start: 32 @62180 has 1 MA's), (45, 62102), (49, 62072), (50, 62066), (59, 62045), (72, 61970), (80, 61880),

Gene: AluminumJesus_75 Start: 51316, Stop: 51035, Start Num: 30

Candidate Starts for AluminumJesus_75:

(Start: 30 @51316 has 17 MA's), (58, 51187), (63, 51172),

Gene: AreFloNak_66 Start: 44576, Stop: 44890, Start Num: 21

Candidate Starts for AreFloNak_66:

(Start: 21 @44576 has 13 MA's), (37, 44645), (48, 44708), (69, 44759),

Gene: Ashton_27 Start: 15701, Stop: 15408, Start Num: 28

Candidate Starts for Ashton_27:

(6, 15821), (9, 15800), (16, 15752), (Start: 28 @15701 has 1 MA's), (60, 15563),

Gene: Athena_87 Start: 62930, Stop: 62577, Start Num: 26

Candidate Starts for Athena_87:

(Start: 25 @62933 has 22 MA's), (Start: 26 @62930 has 24 MA's), (Start: 32 @62915 has 1 MA's), (45, 62837), (49, 62807), (50, 62801), (59, 62780), (72, 62705), (80, 62615),

Gene: Atuin_262 Start: 161281, Stop: 161634, Start Num: 18

Candidate Starts for Atuin_262:

(Start: 18 @161281 has 1 MA's), (Start: 25 @161311 has 22 MA's), (Start: 32 @161329 has 1 MA's), (53, 161449), (62, 161479),

Gene: Audrey_85 Start: 62187, Stop: 61831, Start Num: 25

Candidate Starts for Audrey_85:

(Start: 25 @62187 has 22 MA's), (Start: 26 @62184 has 24 MA's), (Start: 32 @62169 has 1 MA's), (45, 62091), (49, 62061), (50, 62055), (59, 62034), (72, 61959), (80, 61869),

Gene: BabyDotz_77 Start: 52957, Stop: 52679, Start Num: 34

Candidate Starts for BabyDotz_77:

(Start: 30 @52966 has 17 MA's), (Start: 34 @52957 has 5 MA's), (36, 52939), (63, 52822), (64, 52819), (65, 52816),

Gene: Baloo_84 Start: 62039, Stop: 61683, Start Num: 25

Candidate Starts for Baloo_84:

(Start: 25 @62039 has 22 MA's), (Start: 26 @62036 has 24 MA's), (Start: 32 @62021 has 1 MA's), (45, 61943), (49, 61913), (50, 61907), (59, 61886), (72, 61811), (80, 61721),

Gene: Ben11_85 Start: 62414, Stop: 62058, Start Num: 25

Candidate Starts for Ben11_85:

(Start: 25 @62414 has 22 MA's), (Start: 26 @62411 has 24 MA's), (Start: 32 @62396 has 1 MA's), (45, 62318), (49, 62288), (50, 62282), (59, 62261), (72, 62186), (80, 62096),

Gene: BirdsNest_94 Start: 66955, Stop: 66563, Start Num: 25

Candidate Starts for BirdsNest_94:

(Start: 25 @66955 has 22 MA's), (36, 66919), (42, 66886), (57, 66820), (61, 66787), (68, 66760), (75, 66697), (77, 66682),

Gene: Blab_75 Start: 51607, Stop: 51326, Start Num: 30

Candidate Starts for Blab_75:

(Start: 30 @51607 has 17 MA's), (58, 51478), (63, 51463),

Gene: Breylor17_63 Start: 45151, Stop: 45465, Start Num: 21

Candidate Starts for Breylor17_63:

(Start: 21 @45151 has 13 MA's), (37, 45220), (44, 45265), (48, 45283), (69, 45334),

Gene: Briakila_85 Start: 62382, Stop: 62029, Start Num: 26

Candidate Starts for Briakila_85:

(Start: 25 @62385 has 22 MA's), (Start: 26 @62382 has 24 MA's), (Start: 32 @62367 has 1 MA's), (45, 62289), (49, 62259), (50, 62253), (59, 62232), (72, 62157), (80, 62067),

Gene: BronxBay_66 Start: 42743, Stop: 43054, Start Num: 22

Candidate Starts for BronxBay_66:

(12, 42701), (Start: 22 @42743 has 15 MA's), (Start: 29 @42776 has 1 MA's), (51, 42893), (79, 43016), (81, 43028),

Gene: Brunswick_65 Start: 44599, Stop: 44910, Start Num: 22

Candidate Starts for Brunswick_65:

(Start: 22 @44599 has 15 MA's), (37, 44665), (40, 44689), (48, 44728), (74, 44827),

Gene: Burro_22 Start: 15917, Stop: 15615, Start Num: 31

Candidate Starts for Burro_22:

(10, 16013), (Start: 30 @15920 has 17 MA's), (Start: 31 @15917 has 1 MA's), (36, 15893), (37, 15890), (56, 15797), (62, 15767), (66, 15752), (75, 15683),

Gene: CapnMurica_61 Start: 45337, Stop: 45651, Start Num: 21

Candidate Starts for CapnMurica_61:

(Start: 21 @45337 has 13 MA's), (37, 45406), (48, 45469), (54, 45493), (69, 45520),

Gene: Casbah_85 Start: 62495, Stop: 62142, Start Num: 26

Candidate Starts for Casbah_85:

(Start: 25 @62498 has 22 MA's), (Start: 26 @62495 has 24 MA's), (Start: 32 @62480 has 1 MA's), (45, 62402), (49, 62372), (50, 62366), (59, 62345), (72, 62270), (80, 62180),

Gene: Casend_79 Start: 52248, Stop: 51961, Start Num: 30

Candidate Starts for Casend_79:

(Start: 30 @52248 has 17 MA's), (Start: 34 @52239 has 5 MA's), (36, 52221), (63, 52104), (64, 52101), (65, 52098),

Gene: CastorTray_67 Start: 45340, Stop: 45654, Start Num: 21

Candidate Starts for CastorTray_67:

(Start: 21 @45340 has 13 MA's), (37, 45409), (44, 45454), (48, 45472), (69, 45523),

Gene: Caterpillar_63 Start: 44268, Stop: 44546, Start Num: 27

Candidate Starts for Caterpillar_63:

(Start: 27 @44268 has 8 MA's), (37, 44307), (38, 44313), (78, 44505),

Gene: Cece_218 Start: 133451, Stop: 133741, Start Num: 24

Candidate Starts for Cece_218:

(Start: 24 @133451 has 1 MA's), (47, 133550), (75, 133673), (77, 133679),

Gene: ChaChing_85 Start: 62197, Stop: 61847, Start Num: 26

Candidate Starts for ChaChing_85:

(Start: 25 @62200 has 22 MA's), (Start: 26 @62197 has 24 MA's), (33, 62179), (42, 62125), (45, 62107), (49, 62077), (62, 62029), (72, 61975), (80, 61885),

Gene: Chandler_85 Start: 62974, Stop: 62618, Start Num: 25

Candidate Starts for Chandler_85:

(Start: 25 @62974 has 22 MA's), (Start: 26 @62971 has 24 MA's), (Start: 32 @62956 has 1 MA's), (45, 62878), (49, 62848), (50, 62842), (59, 62821), (72, 62746),

Gene: Compostia_84 Start: 62637, Stop: 62287, Start Num: 26

Candidate Starts for Compostia_84:

(Start: 25 @62640 has 22 MA's), (Start: 26 @62637 has 24 MA's), (33, 62619), (42, 62565), (45, 62547), (49, 62517), (62, 62469), (72, 62415), (80, 62325),

Gene: Corofin_85 Start: 62209, Stop: 61853, Start Num: 25

Candidate Starts for Corofin_85:

(Start: 25 @62209 has 22 MA's), (Start: 26 @62206 has 24 MA's), (Start: 32 @62191 has 1 MA's), (45, 62113), (49, 62083), (50, 62077), (59, 62056), (72, 61981), (80, 61891),

Gene: Daisy_84 Start: 61757, Stop: 61404, Start Num: 26

Candidate Starts for Daisy_84:

(Start: 25 @61760 has 22 MA's), (Start: 26 @61757 has 24 MA's), (Start: 32 @61742 has 1 MA's), (45, 61664), (49, 61634), (50, 61628), (59, 61607), (72, 61532), (80, 61442),

Gene: Darby_62 Start: 44386, Stop: 44700, Start Num: 21

Candidate Starts for Darby_62:

(Start: 21 @44386 has 13 MA's), (37, 44455), (48, 44518), (69, 44569),

Gene: Deenasa_85 Start: 63106, Stop: 62753, Start Num: 26

Candidate Starts for Deenasa_85:

(Start: 25 @63109 has 22 MA's), (Start: 26 @63106 has 24 MA's), (Start: 32 @63091 has 1 MA's), (45, 63013), (49, 62983), (50, 62977), (59, 62956), (72, 62881), (80, 62791),

Gene: DevitoJr_63 Start: 44772, Stop: 45086, Start Num: 21

Candidate Starts for DevitoJr_63:

(Start: 21 @44772 has 13 MA's), (37, 44841), (48, 44904), (69, 44955),

Gene: Devonte_83 Start: 61823, Stop: 61470, Start Num: 26

Candidate Starts for Devonte_83:

(Start: 25 @61826 has 22 MA's), (Start: 26 @61823 has 24 MA's), (Start: 32 @61808 has 1 MA's), (45, 61730), (49, 61700), (50, 61694), (59, 61673), (72, 61598), (80, 61508),

Gene: Djungelskog_65 Start: 42742, Stop: 43056, Start Num: 22
Candidate Starts for Djungelskog_65:
(12, 42700), (Start: 22 @42742 has 15 MA's), (Start: 29 @42775 has 1 MA's), (51, 42895), (79, 43018), (81, 43030),

Gene: DoctorPepper_66 Start: 42447, Stop: 42758, Start Num: 22
Candidate Starts for DoctorPepper_66:
(12, 42405), (Start: 22 @42447 has 15 MA's), (Start: 29 @42480 has 1 MA's), (51, 42597), (79, 42720), (81, 42732),

Gene: DonaldDuck_80 Start: 51591, Stop: 51313, Start Num: 34
Candidate Starts for DonaldDuck_80:
(Start: 30 @51600 has 17 MA's), (Start: 34 @51591 has 5 MA's), (36, 51573), (63, 51456), (64, 51453), (65, 51450),

Gene: DunneganBoMo_245 Start: 159407, Stop: 159712, Start Num: 32
Candidate Starts for DunneganBoMo_245:
(Start: 25 @159389 has 22 MA's), (Start: 32 @159407 has 1 MA's), (53, 159527), (62, 159557),

Gene: Egad_66 Start: 42768, Stop: 43037, Start Num: 29
Candidate Starts for Egad_66:
(19, 42735), (Start: 22 @42738 has 15 MA's), (Start: 29 @42768 has 1 MA's), (33, 42777), (82, 43011),

Gene: ElephantMan_64 Start: 45229, Stop: 45540, Start Num: 22
Candidate Starts for ElephantMan_64:
(Start: 22 @45229 has 15 MA's), (37, 45295), (40, 45319), (48, 45358), (54, 45382),

Gene: Gazebo_79 Start: 52534, Stop: 52253, Start Num: 30
Candidate Starts for Gazebo_79:
(Start: 30 @52534 has 17 MA's), (58, 52405), (63, 52390),

Gene: Gervas_86 Start: 62651, Stop: 62298, Start Num: 26
Candidate Starts for Gervas_86:
(Start: 25 @62654 has 22 MA's), (Start: 26 @62651 has 24 MA's), (33, 62633), (45, 62558), (49, 62528), (50, 62522), (59, 62501), (72, 62426), (80, 62336),

Gene: Giantsbane_67 Start: 43961, Stop: 44245, Start Num: 27
Candidate Starts for Giantsbane_67:
(Start: 27 @43961 has 8 MA's), (37, 44000), (46, 44051), (78, 44204),

Gene: GlenHope_86 Start: 62227, Stop: 61877, Start Num: 26
Candidate Starts for GlenHope_86:
(Start: 25 @62230 has 22 MA's), (Start: 26 @62227 has 24 MA's), (33, 62209), (42, 62155), (45, 62137), (49, 62107), (62, 62059), (72, 62005), (80, 61915),

Gene: Gordon_61 Start: 45264, Stop: 45578, Start Num: 21
Candidate Starts for Gordon_61:
(Start: 21 @45264 has 13 MA's), (37, 45333), (48, 45396), (69, 45447),

Gene: Grassboy_83 Start: 52649, Stop: 52362, Start Num: 30
Candidate Starts for Grassboy_83:

(Start: 30 @52649 has 17 MA's), (Start: 34 @52640 has 5 MA's), (36, 52622), (63, 52505), (65, 52499), (73, 52433),

Gene: Halfpint_85 Start: 61969, Stop: 61619, Start Num: 26

Candidate Starts for Halfpint_85:

(Start: 25 @61972 has 22 MA's), (Start: 26 @61969 has 24 MA's), (33, 61951), (42, 61897), (45, 61879), (49, 61849), (62, 61801), (72, 61747), (80, 61657),

Gene: HarveySr_84 Start: 61732, Stop: 61388, Start Num: 25

Candidate Starts for HarveySr_84:

(14, 61780), (Start: 25 @61732 has 22 MA's), (33, 61717), (35, 61705), (42, 61666), (45, 61648), (49, 61618), (70, 61543), (76, 61474),

Gene: Hashim76_94 Start: 66420, Stop: 66052, Start Num: 25

Candidate Starts for Hashim76_94:

(8, 66519), (Start: 25 @66420 has 22 MA's), (42, 66351), (57, 66285), (68, 66231), (84, 66078),

Gene: Heathcliff_85 Start: 62151, Stop: 61798, Start Num: 26

Candidate Starts for Heathcliff_85:

(Start: 25 @62154 has 22 MA's), (Start: 26 @62151 has 24 MA's), (Start: 32 @62136 has 1 MA's), (45, 62058), (49, 62028), (50, 62022), (59, 62001), (72, 61926), (80, 61836),

Gene: Hyperion_77 Start: 51797, Stop: 51516, Start Num: 30

Candidate Starts for Hyperion_77:

(Start: 30 @51797 has 17 MA's), (58, 51668), (63, 51653),

Gene: Indlovu_80 Start: 64701, Stop: 64342, Start Num: 25

Candidate Starts for Indlovu_80:

(2, 65067), (11, 64773), (Start: 25 @64701 has 22 MA's), (42, 64632), (45, 64614), (49, 64584), (51, 64575), (62, 64539), (77, 64440), (79, 64410),

Gene: Inked_69 Start: 45815, Stop: 46129, Start Num: 20

Candidate Starts for Inked_69:

(Start: 20 @45815 has 1 MA's), (37, 45884), (46, 45935), (78, 46088),

Gene: Issa_64 Start: 44432, Stop: 44746, Start Num: 21

Candidate Starts for Issa_64:

(Start: 21 @44432 has 13 MA's), (37, 44501), (54, 44588), (69, 44615), (72, 44633),

Gene: Jackstina_79 Start: 62068, Stop: 61712, Start Num: 25

Candidate Starts for Jackstina_79:

(Start: 25 @62068 has 22 MA's), (Start: 26 @62065 has 24 MA's), (Start: 32 @62050 has 1 MA's), (45, 61972), (49, 61942), (59, 61915), (72, 61840), (80, 61750),

Gene: Jehoshaphat_80 Start: 52516, Stop: 52229, Start Num: 30

Candidate Starts for Jehoshaphat_80:

(Start: 30 @52516 has 17 MA's), (Start: 34 @52507 has 5 MA's), (36, 52489), (63, 52372), (64, 52369), (65, 52366),

Gene: Judebell_78 Start: 51731, Stop: 51453, Start Num: 34

Candidate Starts for Judebell_78:

(Start: 30 @51740 has 17 MA's), (Start: 34 @51731 has 5 MA's), (36, 51713), (63, 51596), (64, 51593), (65, 51590),

Gene: Kamiyu_85 Start: 62154, Stop: 61801, Start Num: 26

Candidate Starts for Kamiyu_85:

(Start: 25 @62157 has 22 MA's), (Start: 26 @62154 has 24 MA's), (Start: 32 @62139 has 1 MA's), (45, 62061), (49, 62031), (50, 62025), (59, 62004), (72, 61929), (80, 61839),

Gene: Kronus_85 Start: 63241, Stop: 62885, Start Num: 25

Candidate Starts for Kronus_85:

(Start: 25 @63241 has 22 MA's), (Start: 26 @63238 has 24 MA's), (Start: 32 @63223 has 1 MA's), (45, 63145), (49, 63115), (50, 63109), (59, 63088), (72, 63013), (80, 62923),

Gene: Kyva_82 Start: 52664, Stop: 52386, Start Num: 34

Candidate Starts for Kyva_82:

(Start: 30 @52673 has 17 MA's), (Start: 34 @52664 has 5 MA's), (36, 52646), (63, 52529), (65, 52523), (73, 52457),

Gene: LestyG_83 Start: 61727, Stop: 61371, Start Num: 25

Candidate Starts for LestyG_83:

(Start: 25 @61727 has 22 MA's), (Start: 26 @61724 has 24 MA's), (Start: 32 @61709 has 1 MA's), (45, 61631), (49, 61601), (50, 61595), (59, 61574), (72, 61499), (80, 61409),

Gene: LilHuddy_68 Start: 45074, Stop: 45361, Start Num: 27

Candidate Starts for LilHuddy_68:

(Start: 27 @45074 has 8 MA's), (37, 45113), (45, 45164), (46, 45167), (72, 45248), (78, 45320),

Gene: Linda_66 Start: 42740, Stop: 43051, Start Num: 22

Candidate Starts for Linda_66:

(12, 42698), (Start: 22 @42740 has 15 MA's), (Start: 29 @42773 has 1 MA's), (51, 42890), (79, 43013), (81, 43025),

Gene: Llemily_80 Start: 51295, Stop: 51008, Start Num: 30

Candidate Starts for Llemily_80:

(Start: 30 @51295 has 17 MA's), (Start: 34 @51286 has 5 MA's), (36, 51268), (63, 51151), (64, 51148), (65, 51145),

Gene: Lonelysoil_76 Start: 51052, Stop: 50765, Start Num: 30

Candidate Starts for Lonelysoil_76:

(Start: 30 @51052 has 17 MA's), (Start: 34 @51043 has 5 MA's), (36, 51025), (63, 50908), (64, 50905), (65, 50902),

Gene: Makai_67 Start: 45228, Stop: 45506, Start Num: 27

Candidate Starts for Makai_67:

(Start: 27 @45228 has 8 MA's), (37, 45267), (45, 45312), (78, 45465),

Gene: Marley1013_86 Start: 63081, Stop: 62737, Start Num: 25

Candidate Starts for Marley1013_86:

(14, 63129), (Start: 25 @63081 has 22 MA's), (33, 63066), (35, 63054), (42, 63015), (45, 62997), (49, 62967), (70, 62892), (76, 62823),

Gene: Mashley_79 Start: 52319, Stop: 52038, Start Num: 30

Candidate Starts for Mashley_79:

(Start: 30 @52319 has 17 MA's), (58, 52190), (63, 52175),

Gene: MediumFry_64 Start: 44564, Stop: 44842, Start Num: 27
Candidate Starts for MediumFry_64:
(Start: 27 @44564 has 8 MA's), (37, 44603), (38, 44609), (43, 44636), (78, 44801),

Gene: Michelle_66 Start: 42742, Stop: 43053, Start Num: 22
Candidate Starts for Michelle_66:
(12, 42700), (Start: 22 @42742 has 15 MA's), (Start: 29 @42775 has 1 MA's), (51, 42892), (79, 43015), (81, 43027),

Gene: MiniBagel_63 Start: 45328, Stop: 45642, Start Num: 21
Candidate Starts for MiniBagel_63:
(Start: 21 @45328 has 13 MA's), (37, 45397), (54, 45484), (69, 45511),

Gene: MmasiCarm_86 Start: 62584, Stop: 62240, Start Num: 25
Candidate Starts for MmasiCarm_86:
(Start: 25 @62584 has 22 MA's), (33, 62569), (35, 62557), (42, 62518), (45, 62500), (49, 62470), (70, 62395), (76, 62326),

Gene: Mortcellus_85 Start: 63322, Stop: 62966, Start Num: 25
Candidate Starts for Mortcellus_85:
(Start: 25 @63322 has 22 MA's), (Start: 26 @63319 has 24 MA's), (Start: 32 @63304 has 1 MA's), (45, 63226), (49, 63196), (50, 63190), (59, 63169), (72, 63094), (80, 63004),

Gene: Morty007_84 Start: 63081, Stop: 62737, Start Num: 25
Candidate Starts for Morty007_84:
(14, 63129), (Start: 25 @63081 has 22 MA's), (33, 63066), (35, 63054), (42, 63015), (45, 62997), (49, 62967), (70, 62892), (76, 62823),

Gene: MrAaronian_66 Start: 42742, Stop: 43053, Start Num: 22
Candidate Starts for MrAaronian_66:
(12, 42700), (Start: 22 @42742 has 15 MA's), (Start: 29 @42775 has 1 MA's), (51, 42892), (79, 43015), (81, 43027),

Gene: Namago_81 Start: 52020, Stop: 51733, Start Num: 30
Candidate Starts for Namago_81:
(Start: 30 @52020 has 17 MA's), (Start: 34 @52011 has 5 MA's), (36, 51993), (63, 51876), (64, 51873), (65, 51870),

Gene: Neos5_85 Start: 62543, Stop: 62199, Start Num: 25
Candidate Starts for Neos5_85:
(14, 62591), (Start: 25 @62543 has 22 MA's), (33, 62528), (35, 62516), (42, 62477), (45, 62459), (49, 62429), (70, 62354), (76, 62285),

Gene: Nightmare_65 Start: 45626, Stop: 45940, Start Num: 21
Candidate Starts for Nightmare_65:
(Start: 21 @45626 has 13 MA's), (37, 45695), (44, 45740), (48, 45758), (69, 45809),

Gene: Niktson_64 Start: 45229, Stop: 45540, Start Num: 22
Candidate Starts for Niktson_64:
(Start: 22 @45229 has 15 MA's), (37, 45295), (40, 45319), (48, 45358), (54, 45382),

Gene: Nivinsha_66 Start: 44576, Stop: 44890, Start Num: 21
Candidate Starts for Nivinsha_66:

(Start: 21 @44576 has 13 MA's), (37, 44645), (48, 44708), (69, 44759),

Gene: Nozo_85 Start: 62961, Stop: 62608, Start Num: 26

Candidate Starts for Nozo_85:

(Start: 25 @62964 has 22 MA's), (Start: 26 @62961 has 24 MA's), (Start: 32 @62946 has 1 MA's), (45, 62868), (49, 62838), (50, 62832), (59, 62811), (72, 62736), (80, 62646),

Gene: Oaker_62 Start: 48655, Stop: 48993, Start Num: 25

Candidate Starts for Oaker_62:

(1, 48274), (3, 48409), (Start: 25 @48655 has 22 MA's), (33, 48673), (50, 48775), (61, 48811), (77, 48907),

Gene: Obutu_87 Start: 62764, Stop: 62411, Start Num: 26

Candidate Starts for Obutu_87:

(Start: 25 @62767 has 22 MA's), (Start: 26 @62764 has 24 MA's), (Start: 32 @62749 has 1 MA's), (45, 62671), (49, 62641), (50, 62635), (59, 62614), (72, 62539), (80, 62449),

Gene: OrangeOswald_84 Start: 62199, Stop: 61843, Start Num: 25

Candidate Starts for OrangeOswald_84:

(Start: 25 @62199 has 22 MA's), (Start: 26 @62196 has 24 MA's), (Start: 32 @62181 has 1 MA's), (45, 62103), (49, 62073), (50, 62067), (59, 62046), (72, 61971), (80, 61881),

Gene: Phabia_78 Start: 51707, Stop: 51420, Start Num: 30

Candidate Starts for Phabia_78:

(Start: 30 @51707 has 17 MA's), (Start: 34 @51698 has 5 MA's), (36, 51680), (63, 51563), (64, 51560), (65, 51557),

Gene: Phaby_68 Start: 45674, Stop: 45922, Start Num: 37

Candidate Starts for Phaby_68:

(Start: 27 @45635 has 8 MA's), (37, 45674), (41, 45701), (46, 45728), (78, 45881),

Gene: Phaedrus_80 Start: 61612, Stop: 61259, Start Num: 26

Candidate Starts for Phaedrus_80:

(Start: 25 @61615 has 22 MA's), (Start: 26 @61612 has 24 MA's), (Start: 32 @61597 has 1 MA's), (45, 61519), (49, 61489), (50, 61483), (59, 61462), (72, 61387), (80, 61297),

Gene: Phayeta_88 Start: 62684, Stop: 62328, Start Num: 25

Candidate Starts for Phayeta_88:

(Start: 25 @62684 has 22 MA's), (Start: 26 @62681 has 24 MA's), (Start: 32 @62666 has 1 MA's), (45, 62588), (49, 62558), (50, 62552), (59, 62531), (72, 62456), (80, 62366),

Gene: Philly_84 Start: 62041, Stop: 61691, Start Num: 26

Candidate Starts for Philly_84:

(Start: 25 @62044 has 22 MA's), (Start: 26 @62041 has 24 MA's), (33, 62023), (42, 61969), (45, 61951), (49, 61921), (62, 61873), (72, 61819), (80, 61729),

Gene: Phlyer_85 Start: 62907, Stop: 62554, Start Num: 26

Candidate Starts for Phlyer_85:

(Start: 25 @62910 has 22 MA's), (Start: 26 @62907 has 24 MA's), (Start: 32 @62892 has 1 MA's), (45, 62814), (49, 62784), (50, 62778), (59, 62757), (72, 62682), (80, 62592),

Gene: Predator_62 Start: 46573, Stop: 46911, Start Num: 25

Candidate Starts for Predator_62:

(13, 46528), (Start: 25 @46573 has 22 MA's), (33, 46591), (67, 46750), (79, 46855), (83, 46888),

Gene: ProfFrink_67 Start: 42737, Stop: 43036, Start Num: 22

Candidate Starts for ProfFrink_67:

(19, 42734), (Start: 22 @42737 has 15 MA's), (Start: 29 @42767 has 1 MA's), (33, 42776), (82, 43010),

Gene: Quammi_77 Start: 51407, Stop: 51120, Start Num: 30

Candidate Starts for Quammi_77:

(Start: 30 @51407 has 17 MA's), (Start: 34 @51398 has 5 MA's), (36, 51380), (63, 51263), (64, 51260), (65, 51257),

Gene: RagingRooster_84 Start: 61887, Stop: 61534, Start Num: 26

Candidate Starts for RagingRooster_84:

(Start: 25 @61890 has 22 MA's), (Start: 26 @61887 has 24 MA's), (Start: 32 @61872 has 1 MA's), (45, 61794), (49, 61764), (50, 61758), (59, 61737), (72, 61662), (80, 61572),

Gene: Raunak_67 Start: 42437, Stop: 42697, Start Num: 33

Candidate Starts for Raunak_67:

(19, 42395), (Start: 22 @42398 has 15 MA's), (33, 42437), (82, 42671),

Gene: Rita1961_86 Start: 62538, Stop: 62188, Start Num: 26

Candidate Starts for Rita1961_86:

(Start: 25 @62541 has 22 MA's), (Start: 26 @62538 has 24 MA's), (33, 62520), (42, 62466), (45, 62448), (49, 62418), (72, 62316), (80, 62226),

Gene: RomaT_85 Start: 62764, Stop: 62408, Start Num: 25

Candidate Starts for RomaT_85:

(Start: 25 @62764 has 22 MA's), (Start: 26 @62761 has 24 MA's), (Start: 32 @62746 has 1 MA's), (45, 62668), (49, 62638), (50, 62632), (59, 62611), (72, 62536), (80, 62446),

Gene: Rudy_76 Start: 51434, Stop: 51156, Start Num: 34

Candidate Starts for Rudy_76:

(Start: 30 @51443 has 17 MA's), (Start: 34 @51434 has 5 MA's), (36, 51416), (63, 51299), (64, 51296), (65, 51293),

Gene: Salk_66 Start: 42740, Stop: 43051, Start Num: 22

Candidate Starts for Salk_66:

(12, 42698), (Start: 22 @42740 has 15 MA's), (Start: 29 @42773 has 1 MA's), (51, 42890), (79, 43013), (81, 43025),

Gene: ScienceWizSam_64 Start: 44738, Stop: 45052, Start Num: 21

Candidate Starts for ScienceWizSam_64:

(Start: 21 @44738 has 13 MA's), (37, 44807), (48, 44870), (69, 44921),

Gene: ScoobyDoobyDoo_14 Start: 4522, Stop: 4866, Start Num: 17

Candidate Starts for ScoobyDoobyDoo_14:

(Start: 17 @4522 has 1 MA's),

Gene: Shepard_69 Start: 44933, Stop: 45220, Start Num: 27

Candidate Starts for Shepard_69:

(Start: 27 @44933 has 8 MA's), (37, 44972), (45, 45023), (54, 45062), (72, 45107), (77, 45152), (78, 45179),

Gene: Shiba_65 Start: 42398, Stop: 42709, Start Num: 22

Candidate Starts for Shiba_65:

(12, 42356), (Start: 22 @42398 has 15 MA's), (Start: 29 @42431 has 1 MA's), (51, 42548), (79, 42671), (81, 42683),

Gene: Sillytadpoles_81 Start: 51274, Stop: 50996, Start Num: 34

Candidate Starts for Sillytadpoles_81:

(Start: 30 @51283 has 17 MA's), (Start: 34 @51274 has 5 MA's), (36, 51256), (63, 51139), (64, 51136), (65, 51133),

Gene: SlippinJimmy_88 Start: 63571, Stop: 63218, Start Num: 26

Candidate Starts for SlippinJimmy_88:

(Start: 25 @63574 has 22 MA's), (Start: 26 @63571 has 24 MA's), (Start: 32 @63556 has 1 MA's), (45, 63478), (49, 63448), (50, 63442), (59, 63421), (72, 63346), (80, 63256),

Gene: Sloopyjoe_66 Start: 42744, Stop: 43055, Start Num: 22

Candidate Starts for Sloopyjoe_66:

(12, 42702), (Start: 22 @42744 has 15 MA's), (Start: 29 @42777 has 1 MA's), (51, 42894), (79, 43017), (81, 43029),

Gene: Sonali_75 Start: 48306, Stop: 48659, Start Num: 15

Candidate Starts for Sonali_75:

(Start: 15 @48306 has 1 MA's), (Start: 22 @48330 has 15 MA's), (23, 48348), (39, 48411),

Gene: Sporto_65 Start: 43859, Stop: 44170, Start Num: 22

Candidate Starts for Sporto_65:

(5, 43772), (12, 43817), (19, 43856), (Start: 22 @43859 has 15 MA's), (51, 44009), (77, 44102), (79, 44132),

Gene: Squash_82 Start: 52656, Stop: 52369, Start Num: 30

Candidate Starts for Squash_82:

(Start: 30 @52656 has 17 MA's), (36, 52629), (63, 52512), (64, 52509), (65, 52506),

Gene: StarLord_66 Start: 42737, Stop: 43048, Start Num: 22

Candidate Starts for StarLord_66:

(12, 42695), (Start: 22 @42737 has 15 MA's), (Start: 29 @42770 has 1 MA's), (51, 42887), (79, 43010), (81, 43022),

Gene: Stayer_66 Start: 42740, Stop: 43051, Start Num: 22

Candidate Starts for Stayer_66:

(12, 42698), (Start: 22 @42740 has 15 MA's), (Start: 29 @42773 has 1 MA's), (51, 42890), (79, 43013), (81, 43025),

Gene: StrawberryJamm_84 Start: 51823, Stop: 51536, Start Num: 30

Candidate Starts for StrawberryJamm_84:

(Start: 30 @51823 has 17 MA's), (Start: 34 @51814 has 5 MA's), (36, 51796), (63, 51679), (64, 51676), (65, 51673),

Gene: Synopsis_62 Start: 44739, Stop: 45053, Start Num: 21

Candidate Starts for Synopsis_62:

(Start: 21 @44739 has 13 MA's), (37, 44808), (48, 44871), (69, 44922),

Gene: SynergyX_85 Start: 62198, Stop: 61845, Start Num: 26

Candidate Starts for SynergyX_85:

(Start: 25 @62201 has 22 MA's), (Start: 26 @62198 has 24 MA's), (Start: 32 @62183 has 1 MA's), (45, 62105), (49, 62075), (50, 62069), (59, 62048), (72, 61973), (80, 61883),

Gene: Tatanka_59 Start: 44875, Stop: 45189, Start Num: 21

Candidate Starts for Tatanka_59:

(Start: 21 @44875 has 13 MA's), (37, 44944), (48, 45007), (69, 45058),

Gene: Teacup_65 Start: 45308, Stop: 45619, Start Num: 22

Candidate Starts for Teacup_65:

(Start: 22 @45308 has 15 MA's), (37, 45374), (40, 45398), (48, 45437), (54, 45461),

Gene: Teehee_79 Start: 52513, Stop: 52226, Start Num: 30

Candidate Starts for Teehee_79:

(Start: 30 @52513 has 17 MA's), (Start: 34 @52504 has 5 MA's), (36, 52486), (63, 52369), (64, 52366), (65, 52363),

Gene: Tenno_64 Start: 45392, Stop: 45706, Start Num: 21

Candidate Starts for Tenno_64:

(Start: 21 @45392 has 13 MA's), (37, 45461), (54, 45548), (69, 45575),

Gene: Thonko_53 Start: 44732, Stop: 44370, Start Num: 18

Candidate Starts for Thonko_53:

(4, 44885), (Start: 18 @44732 has 1 MA's), (35, 44693), (42, 44657), (49, 44609), (51, 44600), (80, 44426), (85, 44390),

Gene: Tissue_79 Start: 52271, Stop: 51993, Start Num: 34

Candidate Starts for Tissue_79:

(Start: 30 @52280 has 17 MA's), (Start: 34 @52271 has 5 MA's), (36, 52253), (63, 52136), (65, 52130), (73, 52064),

Gene: Tokki_73 Start: 45503, Stop: 45790, Start Num: 27

Candidate Starts for Tokki_73:

(Start: 27 @45503 has 8 MA's), (37, 45542), (45, 45593), (72, 45677), (78, 45749),

Gene: Truckee_65 Start: 45012, Stop: 45290, Start Num: 27

Candidate Starts for Truckee_65:

(Start: 27 @45012 has 8 MA's), (37, 45051), (45, 45096), (78, 45249),

Gene: Trustiboi_63 Start: 44994, Stop: 45308, Start Num: 21

Candidate Starts for Trustiboi_63:

(Start: 21 @44994 has 13 MA's), (37, 45063), (44, 45108), (48, 45126), (69, 45177),

Gene: Tydolla_81 Start: 62177, Stop: 61824, Start Num: 26

Candidate Starts for Tydolla_81:

(Start: 25 @62180 has 22 MA's), (Start: 26 @62177 has 24 MA's), (Start: 32 @62162 has 1 MA's), (45, 62084), (49, 62054), (50, 62048), (59, 62027), (72, 61952), (80, 61862),

Gene: Viceroy_77 Start: 51416, Stop: 51129, Start Num: 30

Candidate Starts for Viceroy_77:

(Start: 30 @51416 has 17 MA's), (Start: 34 @51407 has 5 MA's), (36, 51389), (63, 51272), (64, 51269), (65, 51266),

Gene: Wayne3_80 Start: 52267, Stop: 51989, Start Num: 34

Candidate Starts for Wayne3_80:

(Start: 30 @52276 has 17 MA's), (Start: 34 @52267 has 5 MA's), (36, 52249), (63, 52132), (64, 52129), (65, 52126),

Gene: Wheelie_78 Start: 51597, Stop: 51310, Start Num: 30

Candidate Starts for Wheelie_78:

(Start: 30 @51597 has 17 MA's), (Start: 34 @51588 has 5 MA's), (36, 51570), (63, 51453), (64, 51450), (65, 51447),

Gene: Wilde_54 Start: 41249, Stop: 40941, Start Num: 32

Candidate Starts for Wilde_54:

(Start: 32 @41249 has 1 MA's), (44, 41177), (45, 41174), (65, 41093), (66, 41087), (71, 41069),

Gene: Yahalom_83 Start: 62004, Stop: 61651, Start Num: 26

Candidate Starts for Yahalom_83:

(Start: 25 @62007 has 22 MA's), (Start: 26 @62004 has 24 MA's), (Start: 32 @61989 has 1 MA's), (45, 61911), (49, 61881), (50, 61875), (59, 61854), (72, 61779), (80, 61689),

Gene: Yinz_85 Start: 62060, Stop: 61716, Start Num: 25

Candidate Starts for Yinz_85:

(14, 62108), (Start: 25 @62060 has 22 MA's), (33, 62045), (35, 62033), (42, 61994), (45, 61976), (49, 61946), (70, 61871), (76, 61802), (80, 61754),

Gene: Zagie_80 Start: 52091, Stop: 51813, Start Num: 34

Candidate Starts for Zagie_80:

(Start: 30 @52100 has 17 MA's), (Start: 34 @52091 has 5 MA's), (36, 52073), (63, 51956), (64, 51953), (65, 51950),

Gene: Zenteno07_94 Start: 66543, Stop: 66193, Start Num: 25

Candidate Starts for Zenteno07_94:

(7, 66642), (Start: 25 @66543 has 22 MA's), (42, 66477), (49, 66429), (52, 66420), (55, 66414), (84, 66216),