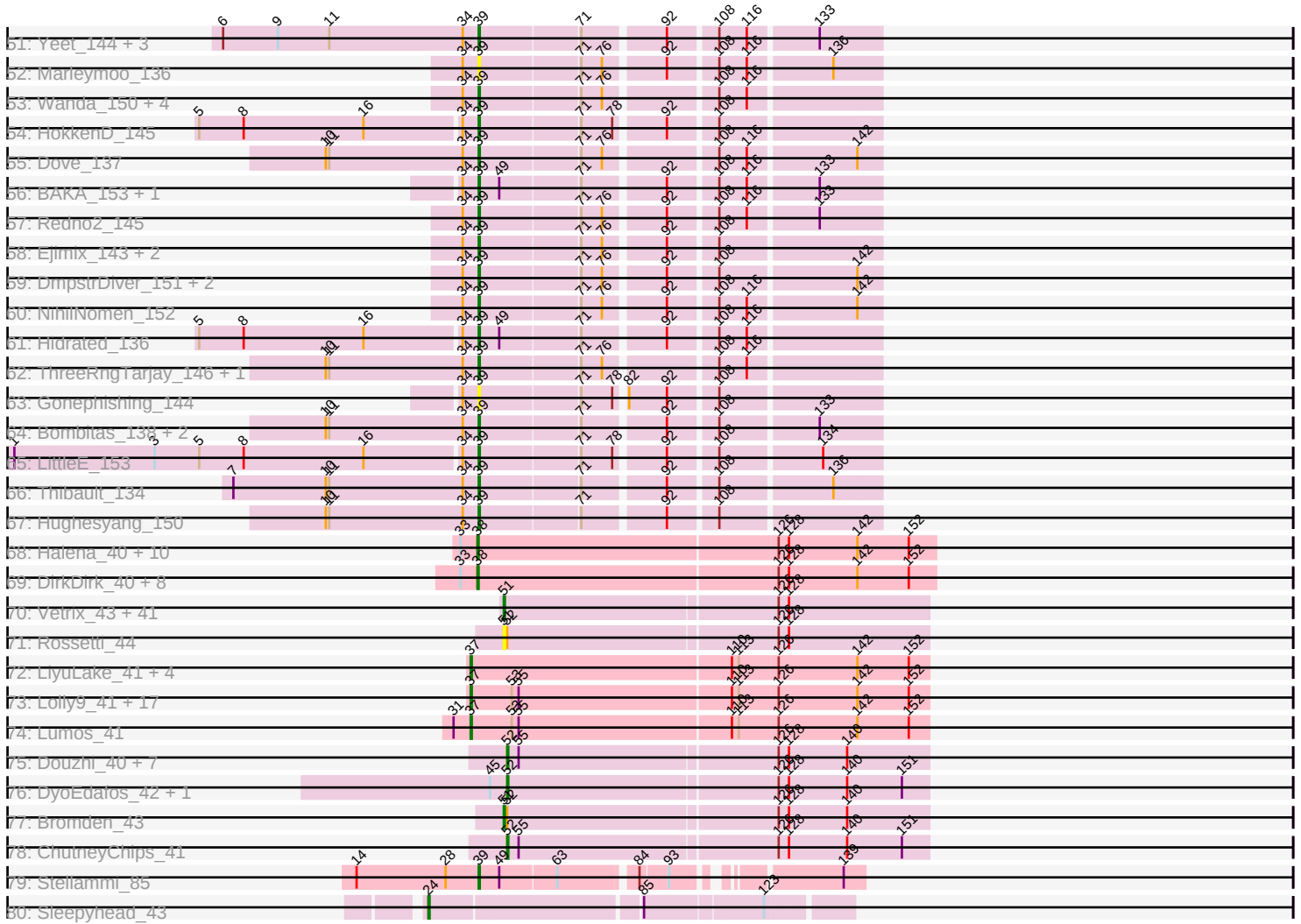


Pham 330469



Pham 330469



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 330469 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330469 has 227 members, 41 are drafts.

Phages represented in each track:

- Track 1 : Roary_44, Smeadley_44, Astro_43, Danforth_43, Groundhog_42, Caitlin_43, Expelliarmus_43
- Track 2 : Stephig9_44
- Track 3 : Phillis_45
- Track 4 : Shagrat_49
- Track 5 : SFuller_57
- Track 6 : RegnumDei_48
- Track 7 : Jflix2_89
- Track 8 : Madraxi_61
- Track 9 : CurlyFries_50
- Track 10 : CurlyFries_66
- Track 11 : CurlyFries_65
- Track 12 : SFuller_76
- Track 13 : Jflix2_77
- Track 14 : Madraxi_80
- Track 15 : Madraxi_81
- Track 16 : RegnumDei_62
- Track 17 : RegnumDei_63
- Track 18 : Madraxi_91
- Track 19 : REQ1_28
- Track 20 : Jflix2_58
- Track 21 : Shagrat_66
- Track 22 : Shagrat_65
- Track 23 : Jflix2_76
- Track 24 : REQ1_45
- Track 25 : SFuller_75
- Track 26 : Nova53_268
- Track 27 : Nova53_257
- Track 28 : Francesca_262, Dorin_262
- Track 29 : Francesca_263, Dorin_263
- Track 30 : Dorin_268, Francesca_268
- Track 31 : Nova53_264
- Track 32 : Pons_59
- Track 33 : BigChungus_57, SummitAcademy_57, Yucky_60, CocoaPuff_57, Feastonyeet_57, Vine_60, PotPie_57, Balloona_56
- Track 34 : CherryonLim_58
- Track 35 : ElJefes_59, McDazzle_59, SheckWes_61

- Track 36 : Elinal_62, KayGee_60
- Track 37 : MAnor_59
- Track 38 : Keelan_107
- Track 39 : Fryberger_106, Ronaldo_108, Guey18_111, Volt_110, Ziko_109
- Track 40 : Keelan_26
- Track 41 : Guey18_34
- Track 42 : Ziko_32, Ronaldo_32, Volt_31
- Track 43 : Fryberger_29
- Track 44 : Guey18_33
- Track 45 : Hannaconda_124, Odette_135, HokkenD_123, Yeet_125, Gonephishing_125, Courthouse_126, Superphikiman_128, Rearden_129
- Track 46 : Porcelain_146, MiaZeal_149, Lucky2013_142
- Track 47 : Optimus_144, Omega_157, BronnyJames_145, Nibley_144, Shaboozey_148, Odette_156
- Track 48 : Bagrid_154, Constella_144
- Track 49 : Squint_142, Nekros_148, Hannaconda_144, KashFlow_150
- Track 50 : Duke13_149, EricMillard_145
- Track 51 : Yeet_144, Superphikiman_147, Courthouse_145, Ariel_149
- Track 52 : Marleymoo_136
- Track 53 : Wanda_150, Kalah2_142, Zelink_145, Bobby_141, Minerva_150
- Track 54 : HokkenD_145
- Track 55 : Dove_137
- Track 56 : BAKA_153, Klein_150
- Track 57 : Redno2_145
- Track 58 : Ejimix_143, Halley_152, Dallas_151
- Track 59 : DmpstrDiver_151, Pound_142, Schatzie_146
- Track 60 : NihilNomen_152
- Track 61 : Hidrated_136
- Track 62 : ThreeRngTarjay_146, Phoebus_151
- Track 63 : Gonephishing_144
- Track 64 : Bombitas_138, JuicyJay_146, Beem_153
- Track 65 : LittleE_153
- Track 66 : Thibault_134
- Track 67 : Hughesyang_150
- Track 68 : Halena_40, MAckerman_41, CicholasNage_41, Calm_41, Wyatt2_41, Rose5_40, Silverleaf_40, Zaria_41, AvadaKedavra_41, Acquire49_41, Tyson_40
- Track 69 : DirkDirk_40, Wamburggrxpress_41, JoeDirt_40, Appletree2_40, Enceladus_40, LeBron_41, Poochiewood_40, OhShagHennessy_40, UPIE_41
- Track 70 : Vetrrix_43, Lewan_43, Hiraya_43, GuuelaD_43, Sarshaun_43, Kahlid_43, Hafay_43, Winky_43, Crossroads_43, Loadrie_43, Breezona_43, Soap141_43, Claus_43, SoJulia_44, Bazzle_43, Nicholasp3_43, Gabriela_43, Itos_42, Lynnae_43, Molivier_43, Finemlucis_43, DHan_44, BobsGarage_43, ZhongYanYuan_41, Gardann_43, Netyap_43, Wilder_43, ChengKai98_43, MkaliMitinis3_43, Rumpelstiltskin_43, OverPar_43, Archie_43, Underpass_43, BigCheese_43, Zakai_43, DrSeegs_43, Faith1_43, Wigglewiggle_43, Miley16_43, LilDestine_43, DanBing_42, Baoshan_42
- Track 71 : Rossetti_44
- Track 72 : LiyuLake_41, Krypton555_41, Whirlwind_42, BourbonZero_40, Ellson_41
- Track 73 : Lolly9_41, MsGreen_41, Jobypre_41, MiniLon_41, Samty_41, Clautastrophe_41, Kingsolomon_41, Bellis_41, Red305_41, Snenia_41, Finnry_41, TriFive_41, DuncansLeg_41, KirDoubleO7_39, Jubie_41, Nicholas_41, MiniMac_41, Moostard_41
- Track 74 : Lumos_41

- Track 75 : Douzhi_40, Chaser_40, PYPDinur_40, BrainDrainer_41, Sheng711_41, FarmResident_41, Douge_40, Quby_41
- Track 76 : DyoEdafos_42, Kropertea_41
- Track 77 : Bromden_43
- Track 78 : ChutneyChips_41
- Track 79 : Stellammi_85
- Track 80 : Sleepyhead_43

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

The start number called the most often in the published annotations is 39, it was called in 46 of the 186 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel_149, BAKA_153, Bagrid_154, Beem_153, Bobby_141, Bombitas_138, BronnyJames_145, Constella_144, Courthouse_145, CurlyFries_50, Dallas_151, DmpstrDiver_151, Dove_137, Duke13_149, Ejimix_143, EricMillard_145, Gonephishing_144, Halley_152, Hannaconda_144, Hidrated_136, HokkenD_145, Hughesyang_150, JuicyJay_146, Kalah2_142, KashFlow_150, Klein_150, LittleE_153, Lucky2013_142, Marleymoo_136, MiaZeal_149, Minerva_150, Nekros_148, Nibley_144, NihilNomen_152, Nova53_264, Odette_156, Omega_157, Optimus_144, Phoebus_151, Porcelain_146, Pound_142, Redno2_145, RegnumDei_48, Schatzie_146, Shaboozey_148, Shagrat_49, Squint_142, Stellammi_85, Superphikiman_147, Thibault_134, ThreeRngTarjay_146, Wanda_150, Yeet_144, Zelink_145,

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

- Balloona_56, BigChungus_57, CocoaPuff_57, Dorin_263, Elinal_62, Featonyeet_57, Francesca_263, KayGee_60, PotPie_57, SFuller_75, SummitAcademy_57, Vine_60, Yucky_60,

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

- Acquire49_41, Appletree2_40, Archie_43, Astro_43, AvadaKedavra_41, Baoshan_42, Bazzle_43, Bellis_41, BigCheese_43, BobsGarage_43, BourbonZero_40, BrainDrainer_41, Breezona_43, Bromden_43, Caitlin_43, Calm_41, Chaser_40, ChengKai98_43, CherryonLim_58, ChutneyChips_41, CicholasNage_41, Claus_43, Clautastrophe_41, Courthouse_126, Crossroads_43, CurlyFries_65, CurlyFries_66, DHan_44, DanBing_42, Danforth_43, DirkDirk_40, Dorin_262, Dorin_268, Douge_40, Douzhi_40, DrSeegs_43, DuncansLeg_41, DyoEdafos_42, ElJefes_59, Ellson_41, Enceladus_40, Expelliarmus_43, Faith1_43, FarmResident_41, Finemlucis_43, Finnry_41, Francesca_262, Francesca_268, Fryberger_106, Fryberger_29, Gabriela_43, Gardann_43, Gonephishing_125, Groundhog_42, Guey18_111, Guey18_33, Guey18_34, GuuelaD_43, Hafay_43, Halena_40, Hannaconda_124, Hiraya_43, HokkenD_123, Itos_42, Jflix2_58, Jflix2_76, Jflix2_77, Jflix2_89, Jobypre_41, JoeDirt_40, Jubie_41, Kahlid_43, Keelan_107, Keelan_26, Kingsolomon_41, KirDoubleO7_39, Kropertea_41, Krypton555_41, LeBron_41, Lewan_43, LilDestine_43, LiyuLake_41, Loadrie_43, Lolly9_41, Lumos_41, Lynnae_43, MAckerman_41, MAnor_59, Madraxi_61, Madraxi_80, Madraxi_81, Madraxi_91, McDazzle_59, Miley16_43, MiniLon_41, MiniMac_41, MkaliMitinis3_43, Molivier_43, Moostard_41, MsGreen_41, Netyap_43,

Nicholas_41, Nicholasp3_43, Nova53_257, Nova53_268, Odette_135, OhShagHennessy_40, OverPar_43, PYPDinur_40, Phillis_45, Pons_59, Poochiewood_40, Quby_41, REQ1_28, REQ1_45, Rearden_129, Red305_41, RegnumDei_62, RegnumDei_63, Roary_44, Ronaldo_108, Ronaldo_32, Rose5_40, Rossetti_44, Rumpelstiltskin_43, SFuller_57, SFuller_76, Samty_41, Sarshaun_43, Shagrat_65, Shagrat_66, SheckWes_61, Sheng711_41, Silverleaf_40, Sleepyhead_43, Smeadley_44, Snenia_41, SoJulia_44, Soap141_43, Stephig9_44, Superphikiman_128, TriFive_41, Tyson_40, UPIE_41, Underpass_43, Vetrix_43, Volt_110, Volt_31, Wamburggrxpress_41, Whirlwind_42, Wigglewiggle_43, Wilder_43, Winky_43, Wyatt2_41, Yeet_125, Zakai_43, Zaria_41, ZhongYanYuan_41, Ziko_109, Ziko_32,

Summary by start number:

Start 15:

- Found in 16 of 227 (7.0%) of genes in pham
- Manual Annotations of this start: 12 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Balloona_56 (CT), BigChungus_57 (CT), CherryonLim_58 (CT), CocoaPuff_57 (CT), ElJefes_59 (CT), Elinal_62 (CT), Feastonyeet_57 (CT), KayGee_60 (CT), MAnor_59 (CT), McDazzle_59 (CT), Pons_59 (CT), PotPie_57 (CT), SheckWes_61 (CT), SummitAcademy_57 (CT), Vine_60 (CT), Yucky_60 (CT),

Start 24:

- Found in 5 of 227 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 186
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Sleepyhead_43 (singleton),

Start 25:

- Found in 2 of 227 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 186
- Called 50.0% of time when present
- Phage (with cluster) where this start called: CurlyFries_66 (CF),

Start 26:

- Found in 4 of 227 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jflix2_58 (CF), Madraxi_61 (CF), REQ1_28 (CF), SFuller_57 (CF),

Start 28:

- Found in 3 of 227 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 186
- Called 33.3% of time when present
- Phage (with cluster) where this start called: CurlyFries_65 (CF),

Start 29:

- Found in 1 of 227 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 186
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Nova53_257 (CG),

Start 30:

- Found in 5 of 227 (2.2%) of genes in pham
- Manual Annotations of this start: 3 of 186
- Called 60.0% of time when present
- Phage (with cluster) where this start called: RegnumDei_62 (CF), RegnumDei_63 (CF), Shagrat_65 (CF),

Start 32:

- Found in 4 of 227 (1.8%) of genes in pham
- Manual Annotations of this start: 4 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jflix2_76 (CF), Keelan_26 (DP), Madraxi_80 (CF), SFuller_75 (CF),

Start 35:

- Found in 2 of 227 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jflix2_89 (CF), Madraxi_91 (CF),

Start 36:

- Found in 2 of 227 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Keelan_107 (DP), REQ1_45 (CF),

Start 37:

- Found in 30 of 227 (13.2%) of genes in pham
- Manual Annotations of this start: 24 of 186
- Called 96.7% of time when present
- Phage (with cluster) where this start called: Bellis_41 (L3), BourbonZero_40 (L3), Clautastrophe_41 (L3), DuncansLeg_41 (L3), Ellson_41 (L3), Finnry_41 (L3), Fryberger_106 (DP), Guey18_111 (DP), Jobypre_41 (L3), Jubie_41 (L3), Kingsolomon_41 (L3), KirDoubleO7_39 (L3), Krypton555_41 (L3), LiyuLake_41 (L3), Lolly9_41 (L3), Lumos_41 (L3), MiniLon_41 (L3), MiniMac_41 (L3), Moostard_41 (L3), MsGreen_41 (L3), Nicholas_41 (L3), Red305_41 (L3), Ronaldo_108 (DP), Samty_41 (L3), Snenia_41 (L3), TriFive_41 (L3), Volt_110 (DP), Whirlwind_42 (L3), Ziko_109 (DP),

Start 38:

- Found in 20 of 227 (8.8%) of genes in pham
- Manual Annotations of this start: 19 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49_41 (L1), Appletree2_40 (L1), AvadaKedavra_41 (L1), Calm_41 (L1), CicholasNage_41 (L1), DirkDirk_40 (L1), Enceladus_40 (L1), Halena_40 (L1), JoeDirt_40 (L1), LeBron_41 (L1), MAckerman_41 (L1), OhShagHennessy_40 (L1), Poochiewood_40 (L1), Rose5_40 (L1), Silverleaf_40 (L1), Tyson_40 (L1), UPIE_41 (L1), Wamburggrxpress_41 (L1), Wyatt2_41 (L1), Zaria_41 (L1),

Start 39:

- Found in 67 of 227 (29.5%) of genes in pham
- Manual Annotations of this start: 46 of 186
- Called 80.6% of time when present
- Phage (with cluster) where this start called: Ariel_149 (J), BAKA_153 (J), Bagrid_154 (J), Beem_153 (J), Bobby_141 (J), Bombitas_138 (J), BronnyJames_145 (J), Constella_144 (J), Courthouse_145 (J), CurlyFries_50 (CF), Dallas_151 (J), DmpstrDiver_151 (J), Dove_137 (J), Duke13_149 (J), Ejimix_143 (J), EricMillard_145 (J), Gonephishing_144 (J), Halley_152 (J), Hannaconda_144 (J), Hidrated_136 (J), HokkenD_145 (J), Hughesyang_150 (J), JuicyJay_146 (J), Kalah2_142 (J), KashFlow_150 (J), Klein_150 (J), LittleE_153 (J), Lucky2013_142 (J), Marleymo_136 (J), MiaZeal_149 (J), Minerva_150 (J), Nekros_148 (J), Nibley_144 (J), NihilNomen_152 (J), Nova53_264 (CG), Odette_156 (J), Omega_157 (J), Optimus_144 (J), Phoebus_151 (J), Porcelain_146 (J), Pound_142 (J), Redno2_145 (J), RegnumDei_48 (CF), Schatzie_146 (J), Shaboozey_148 (J), Shagrat_49 (CF), Squint_142 (J), Stellammi_85 (UNK), Superphikiman_147 (J), Thibault_134 (J), ThreeRngTarjay_146 (J), Wanda_150 (J), Yeet_144 (J), Zelink_145 (J),

Start 41:

- Found in 8 of 227 (3.5%) of genes in pham
- Manual Annotations of this start: 5 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Courthouse_126 (J), Gonephishing_125 (J), Hannaconda_124 (J), HokkenD_123 (J), Odette_135 (J), Rearden_129 (J), Superphikiman_128 (J), Yeet_125 (J),

Start 42:

- Found in 5 of 227 (2.2%) of genes in pham
- Manual Annotations of this start: 4 of 186
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Dorin_262 (CG), Dorin_263 (CG), Francesca_262 (CG), Francesca_263 (CG),

Start 46:

- Found in 6 of 227 (2.6%) of genes in pham
- Manual Annotations of this start: 6 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fryberger_29 (DP), Guey18_34 (DP), Nova53_268 (CG), Ronaldo_32 (DP), Volt_31 (DP), Ziko_32 (DP),

Start 48:

- Found in 2 of 227 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dorin_268 (CG), Francesca_268 (CG),

Start 50:

- Found in 1 of 227 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Guey18_33 (DP),

Start 51:

- Found in 44 of 227 (19.4%) of genes in pham

- Manual Annotations of this start: 32 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archie_43 (L2), Baoshan_42 (L2), Bazzle_43 (L2), BigCheese_43 (L2), BobsGarage_43 (L2), Breezona_43 (L2), Bromden_43 (L4), ChengKai98_43 (L2), Claus_43 (L2), Crossroads_43 (L2), DHan_44 (L2), DanBing_42 (L2), DrSeegs_43 (L2), Faith1_43 (L2), Finemlucis_43 (L2), Gabriela_43 (L2), Gardann_43 (L2), GuuelaD_43 (L2), Hafay_43 (L2), Hiraya_43 (L2), Itos_42 (L2), Kahlid_43 (L2), Lewan_43 (L2), LilDestine_43 (L2), Loadrie_43 (L2), Lynnae_43 (L2), Miley16_43 (L2), MkaliMitinis3_43 (L2), Molivier_43 (L2), Netyap_43 (L2), Nicholasp3_43 (L2), OverPar_43 (L2), Rossetti_44 (L2), Rumpelstiltskin_43 (L2), Sarshaun_43 (L2), SoJulia_44 (L2), Soap141_43 (L2), Underpass_43 (L2), Vetrix_43 (L2), Wigglewiggle_43 (L2), Wilder_43 (L2), Winky_43 (L2), Zakai_43 (L2), ZhongYanYuan_41 (L2),

Start 52:

- Found in 14 of 227 (6.2%) of genes in pham
- Manual Annotations of this start: 5 of 186
- Called 78.6% of time when present
- Phage (with cluster) where this start called: BrainDrainer_41 (L4), Chaser_40 (L4), ChutneyChips_41 (L4), Douge_40 (L4), Douzhi_40 (L4), DyoEdafos_42 (L4), FarmResident_41 (L4), Kropertea_41 (L4), PYPDinur_40 (L4), Quby_41 (L4), Sheng711_41 (L4),

Start 61:

- Found in 9 of 227 (4.0%) of genes in pham
- Manual Annotations of this start: 9 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Astro_43 (A8), Caitlin_43 (A8), Danforth_43 (A8), Expelliarmus_43 (A8), Groundhog_42 (A8), Phillis_45 (A8), Roary_44 (A8), Smeadley_44 (A8), Stephig9_44 (A8),

Start 149:

- Found in 3 of 227 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jflix2_77 (CF), Madraxi_81 (CF), SFuller_76 (CF),

Start 153:

- Found in 1 of 227 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 186
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shagrat_66 (CF),

Summary by clusters:

There are 12 clusters represented in this pham: singleton, J, CG, CF, L4, L2, L3, L1, A8, UNK, DP, CT,

Info for manual annotations of cluster A8:

- Start number 61 was manually annotated 9 times for cluster A8.

Info for manual annotations of cluster CF:

- Start number 25 was manually annotated 1 time for cluster CF.
- Start number 26 was manually annotated 3 times for cluster CF.
- Start number 28 was manually annotated 1 time for cluster CF.
- Start number 30 was manually annotated 3 times for cluster CF.
- Start number 32 was manually annotated 3 times for cluster CF.
- Start number 35 was manually annotated 2 times for cluster CF.
- Start number 39 was manually annotated 3 times for cluster CF.
- Start number 149 was manually annotated 3 times for cluster CF.
- Start number 153 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster CG:

- Start number 29 was manually annotated 1 time for cluster CG.
- Start number 39 was manually annotated 1 time for cluster CG.
- Start number 42 was manually annotated 4 times for cluster CG.
- Start number 46 was manually annotated 1 time for cluster CG.
- Start number 48 was manually annotated 2 times for cluster CG.

Info for manual annotations of cluster CT:

- Start number 15 was manually annotated 12 times for cluster CT.

Info for manual annotations of cluster DP:

- Start number 32 was manually annotated 1 time for cluster DP.
- Start number 36 was manually annotated 1 time for cluster DP.
- Start number 37 was manually annotated 5 times for cluster DP.
- Start number 46 was manually annotated 5 times for cluster DP.
- Start number 50 was manually annotated 1 time for cluster DP.

Info for manual annotations of cluster J:

- Start number 39 was manually annotated 41 times for cluster J.
- Start number 41 was manually annotated 5 times for cluster J.

Info for manual annotations of cluster L1:

- Start number 38 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 51 was manually annotated 31 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 37 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 51 was manually annotated 1 time for cluster L4.
- Start number 52 was manually annotated 5 times for cluster L4.

Info for manual annotations of cluster UNK:

- Start number 39 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: Acquire49_41 Start: 33548, Stop: 33943, Start Num: 38

Candidate Starts for Acquire49_41:

(33, 33533), (Start: 38 @33548 has 19 MA's), (126, 33806), (128, 33815), (142, 33875), (152, 33920),

Gene: Appletree2_40 Start: 33475, Stop: 33870, Start Num: 38

Candidate Starts for Appletree2_40:

(33, 33460), (Start: 38 @33475 has 19 MA's), (126, 33733), (128, 33742), (142, 33802), (152, 33847),

Gene: Archie_43 Start: 35110, Stop: 35472, Start Num: 51

Candidate Starts for Archie_43:

(Start: 51 @35110 has 32 MA's), (126, 35341), (128, 35350),

Gene: Ariel_149 Start: 76661, Stop: 76984, Start Num: 39

Candidate Starts for Ariel_149:

(6, 76439), (9, 76487), (11, 76532), (34, 76649), (Start: 39 @76661 has 46 MA's), (71, 76745), (92, 76811), (108, 76850), (116, 76874), (133, 76931),

Gene: Astro_43 Start: 30852, Stop: 30550, Start Num: 61

Candidate Starts for Astro_43:

(Start: 61 @30852 has 9 MA's), (94, 30741), (99, 30732), (129, 30639), (142, 30588), (146, 30567),

Gene: AvadaKedavra_41 Start: 33557, Stop: 33952, Start Num: 38

Candidate Starts for AvadaKedavra_41:

(33, 33542), (Start: 38 @33557 has 19 MA's), (126, 33815), (128, 33824), (142, 33884), (152, 33929),

Gene: BAKA_153 Start: 81330, Stop: 81653, Start Num: 39

Candidate Starts for BAKA_153:

(34, 81318), (Start: 39 @81330 has 46 MA's), (49, 81348), (71, 81414), (92, 81480), (108, 81519), (116, 81543), (133, 81600),

Gene: Bagrid_154 Start: 82037, Stop: 82360, Start Num: 39

Candidate Starts for Bagrid_154:

(34, 82025), (Start: 39 @82037 has 46 MA's), (71, 82121), (76, 82139), (92, 82187), (108, 82226), (116, 82250),

Gene: Balloona_56 Start: 41140, Stop: 40739, Start Num: 15

Candidate Starts for Balloona_56:

(Start: 15 @41140 has 12 MA's), (Start: 39 @41062 has 46 MA's), (72, 40990), (73, 40987), (78, 40969), (80, 40963), (89, 40933), (106, 40900), (129, 40828), (140, 40786),

Gene: Baoshan_42 Start: 34767, Stop: 35129, Start Num: 51

Candidate Starts for Baoshan_42:

(Start: 51 @34767 has 32 MA's), (126, 34998), (128, 35007),

Gene: Bazzle_43 Start: 35142, Stop: 35504, Start Num: 51

Candidate Starts for Bazzle_43:

(Start: 51 @35142 has 32 MA's), (126, 35373), (128, 35382),

Gene: Beem_153 Start: 81458, Stop: 81781, Start Num: 39

Candidate Starts for Beem_153:

(10, 81326), (11, 81329), (34, 81446), (Start: 39 @81458 has 46 MA's), (71, 81542), (92, 81608), (108, 81647), (133, 81728),

Gene: Bellis_41 Start: 35165, Stop: 35560, Start Num: 37

Candidate Starts for Bellis_41:

(Start: 37 @35165 has 24 MA's), (53, 35201), (55, 35207), (110, 35390), (113, 35396), (126, 35429), (142, 35498), (152, 35543),

Gene: BigCheese_43 Start: 34906, Stop: 35268, Start Num: 51

Candidate Starts for BigCheese_43:

(Start: 51 @34906 has 32 MA's), (126, 35137), (128, 35146),

Gene: BigChungus_57 Start: 40681, Stop: 40280, Start Num: 15

Candidate Starts for BigChungus_57:

(Start: 15 @40681 has 12 MA's), (Start: 39 @40603 has 46 MA's), (72, 40531), (73, 40528), (78, 40510), (80, 40504), (89, 40474), (106, 40441), (129, 40369), (140, 40327),

Gene: Bobby_141 Start: 81455, Stop: 81778, Start Num: 39

Candidate Starts for Bobby_141:

(34, 81443), (Start: 39 @81455 has 46 MA's), (71, 81539), (76, 81557), (108, 81644), (116, 81668),

Gene: BobsGarage_43 Start: 34906, Stop: 35268, Start Num: 51

Candidate Starts for BobsGarage_43:

(Start: 51 @34906 has 32 MA's), (126, 35137), (128, 35146),

Gene: Bombitas_138 Start: 78311, Stop: 78634, Start Num: 39

Candidate Starts for Bombitas_138:

(10, 78179), (11, 78182), (34, 78299), (Start: 39 @78311 has 46 MA's), (71, 78395), (92, 78461), (108, 78500), (133, 78581),

Gene: BourbonZero_40 Start: 35147, Stop: 35542, Start Num: 37

Candidate Starts for BourbonZero_40:

(Start: 37 @35147 has 24 MA's), (110, 35372), (113, 35378), (126, 35411), (142, 35480), (152, 35525),

Gene: BrainDrainer_41 Start: 33839, Stop: 34198, Start Num: 52

Candidate Starts for BrainDrainer_41:

(Start: 52 @33839 has 5 MA's), (55, 33848), (126, 34067), (128, 34076), (140, 34127),

Gene: Breezona_43 Start: 34906, Stop: 35268, Start Num: 51

Candidate Starts for Breezona_43:

(Start: 51 @34906 has 32 MA's), (126, 35137), (128, 35146),

Gene: Bromden_43 Start: 34662, Stop: 35024, Start Num: 51

Candidate Starts for Bromden_43:

(Start: 51 @34662 has 32 MA's), (Start: 52 @34665 has 5 MA's), (126, 34893), (128, 34902), (140, 34953),

Gene: BronnyJames_145 Start: 77611, Stop: 77934, Start Num: 39

Candidate Starts for BronnyJames_145:

(Start: 39 @77611 has 46 MA's), (71, 77695), (78, 77722), (92, 77761), (108, 77800), (134, 77884),

Gene: Caitlin_43 Start: 30845, Stop: 30543, Start Num: 61

Candidate Starts for Caitlin_43:

(Start: 61 @30845 has 9 MA's), (94, 30734), (99, 30725), (129, 30632), (142, 30581), (146, 30560),

Gene: Calm_41 Start: 33563, Stop: 33958, Start Num: 38

Candidate Starts for Calm_41:

(33, 33548), (Start: 38 @33563 has 19 MA's), (126, 33821), (128, 33830), (142, 33890), (152, 33935),

Gene: Chaser_40 Start: 33656, Stop: 34015, Start Num: 52

Candidate Starts for Chaser_40:

(Start: 52 @33656 has 5 MA's), (55, 33665), (126, 33884), (128, 33893), (140, 33944),

Gene: ChengKai98_43 Start: 34907, Stop: 35269, Start Num: 51

Candidate Starts for ChengKai98_43:

(Start: 51 @34907 has 32 MA's), (126, 35138), (128, 35147),

Gene: CherryonLim_58 Start: 42157, Stop: 41738, Start Num: 15

Candidate Starts for CherryonLim_58:

(Start: 15 @42157 has 12 MA's), (20, 42124), (73, 41986), (75, 41983), (86, 41941), (98, 41914), (102, 41905), (106, 41896), (127, 41839),

Gene: ChutneyChips_41 Start: 33836, Stop: 34195, Start Num: 52

Candidate Starts for ChutneyChips_41:

(Start: 52 @33836 has 5 MA's), (55, 33845), (126, 34064), (128, 34073), (140, 34124), (151, 34172),

Gene: CicholasNage_41 Start: 33584, Stop: 33979, Start Num: 38

Candidate Starts for CicholasNage_41:

(33, 33569), (Start: 38 @33584 has 19 MA's), (126, 33842), (128, 33851), (142, 33911), (152, 33956),

Gene: Claus_43 Start: 34925, Stop: 35287, Start Num: 51

Candidate Starts for Claus_43:

(Start: 51 @34925 has 32 MA's), (126, 35156), (128, 35165),

Gene: Clautastrophe_41 Start: 35163, Stop: 35558, Start Num: 37

Candidate Starts for Clautastrophe_41:

(Start: 37 @35163 has 24 MA's), (53, 35199), (55, 35205), (110, 35388), (113, 35394), (126, 35427), (142, 35496), (152, 35541),

Gene: CocoaPuff_57 Start: 40686, Stop: 40285, Start Num: 15

Candidate Starts for CocoaPuff_57:

(Start: 15 @40686 has 12 MA's), (Start: 39 @40608 has 46 MA's), (72, 40536), (73, 40533), (78, 40515), (80, 40509), (89, 40479), (106, 40446), (129, 40374), (140, 40332),

Gene: Constella_144 Start: 79520, Stop: 79843, Start Num: 39

Candidate Starts for Constella_144:

(34, 79508), (Start: 39 @79520 has 46 MA's), (71, 79604), (76, 79622), (92, 79670), (108, 79709), (116, 79733),

Gene: Courthouse_145 Start: 76519, Stop: 76842, Start Num: 39

Candidate Starts for Courthouse_145:

(6, 76297), (9, 76345), (11, 76390), (34, 76507), (Start: 39 @76519 has 46 MA's), (71, 76603), (92, 76669), (108, 76708), (116, 76732), (133, 76789),

Gene: Courthouse_126 Start: 68736, Stop: 69029, Start Num: 41

Candidate Starts for Courthouse_126:

(Start: 41 @68736 has 5 MA's), (82, 68853), (105, 68913), (132, 68985), (133, 68988),

Gene: Crossroads_43 Start: 34908, Stop: 35270, Start Num: 51

Candidate Starts for Crossroads_43:

(Start: 51 @34908 has 32 MA's), (126, 35139), (128, 35148),

Gene: CurlyFries_50 Start: 35699, Stop: 35998, Start Num: 39

Candidate Starts for CurlyFries_50:

(21, 35636), (22, 35639), (Start: 39 @35699 has 46 MA's), (96, 35846), (138, 35963), (142, 35978), (144, 35987),

Gene: CurlyFries_66 Start: 39792, Stop: 40115, Start Num: 25

Candidate Starts for CurlyFries_66:

(Start: 25 @39792 has 1 MA's), (Start: 30 @39801 has 3 MA's), (135, 40065), (140, 40080), (143, 40092),

Gene: CurlyFries_65 Start: 39422, Stop: 39799, Start Num: 28

Candidate Starts for CurlyFries_65:

(Start: 28 @39422 has 1 MA's), (60, 39494), (77, 39551), (91, 39596), (140, 39746),

Gene: DHan_44 Start: 34866, Stop: 35228, Start Num: 51

Candidate Starts for DHan_44:

(Start: 51 @34866 has 32 MA's), (126, 35097), (128, 35106),

Gene: Dallas_151 Start: 80367, Stop: 80690, Start Num: 39

Candidate Starts for Dallas_151:

(34, 80355), (Start: 39 @80367 has 46 MA's), (71, 80451), (76, 80469), (92, 80517), (108, 80556),

Gene: DanBing_42 Start: 34758, Stop: 35120, Start Num: 51

Candidate Starts for DanBing_42:

(Start: 51 @34758 has 32 MA's), (126, 34989), (128, 34998),

Gene: Danforth_43 Start: 30881, Stop: 30579, Start Num: 61

Candidate Starts for Danforth_43:

(Start: 61 @30881 has 9 MA's), (94, 30770), (99, 30761), (129, 30668), (142, 30617), (146, 30596),

Gene: DirkDirk_40 Start: 33535, Stop: 33930, Start Num: 38

Candidate Starts for DirkDirk_40:

(33, 33520), (Start: 38 @33535 has 19 MA's), (126, 33793), (128, 33802), (142, 33862), (152, 33907),

Gene: DmpstrDiver_151 Start: 80286, Stop: 80609, Start Num: 39

Candidate Starts for DmpstrDiver_151:

(34, 80274), (Start: 39 @80286 has 46 MA's), (71, 80370), (76, 80388), (92, 80436), (108, 80475), (142, 80589),

Gene: Dorin_262 Start: 128550, Stop: 128915, Start Num: 42

Candidate Starts for Dorin_262:

(Start: 42 @128550 has 4 MA's), (82, 128673), (84, 128682), (86, 128688), (114, 128766), (118, 128772), (130, 128817), (142, 128865),

Gene: Dorin_268 Start: 130231, Stop: 130557, Start Num: 48

Candidate Starts for Dorin_268:

(Start: 48 @130231 has 2 MA's), (56, 130246), (124, 130429), (126, 130438), (142, 130507),

Gene: Dorin_263 Start: 128893, Stop: 129231, Start Num: 42

Candidate Starts for Dorin_263:

(Start: 39 @128890 has 46 MA's), (Start: 42 @128893 has 4 MA's), (100, 129061),

Gene: Douge_40 Start: 33594, Stop: 33953, Start Num: 52

Candidate Starts for Douge_40:

(Start: 52 @33594 has 5 MA's), (55, 33603), (126, 33822), (128, 33831), (140, 33882),

Gene: Douzhi_40 Start: 33700, Stop: 34059, Start Num: 52

Candidate Starts for Douzhi_40:

(Start: 52 @33700 has 5 MA's), (55, 33709), (126, 33928), (128, 33937), (140, 33988),

Gene: Dove_137 Start: 76474, Stop: 76797, Start Num: 39

Candidate Starts for Dove_137:

(10, 76342), (11, 76345), (34, 76462), (Start: 39 @76474 has 46 MA's), (71, 76558), (76, 76576), (108, 76663), (116, 76687), (142, 76777),

Gene: DrSeegs_43 Start: 34906, Stop: 35268, Start Num: 51

Candidate Starts for DrSeegs_43:

(Start: 51 @34906 has 32 MA's), (126, 35137), (128, 35146),

Gene: Duke13_149 Start: 79615, Stop: 79938, Start Num: 39

Candidate Starts for Duke13_149:

(34, 79603), (Start: 39 @79615 has 46 MA's), (49, 79633), (71, 79699), (92, 79765), (108, 79804), (136, 79897),

Gene: DuncansLeg_41 Start: 35184, Stop: 35579, Start Num: 37

Candidate Starts for DuncansLeg_41:

(Start: 37 @35184 has 24 MA's), (53, 35220), (55, 35226), (110, 35409), (113, 35415), (126, 35448), (142, 35517), (152, 35562),

Gene: DyoEdafos_42 Start: 33916, Stop: 34275, Start Num: 52

Candidate Starts for DyoEdafos_42:

(45, 33901), (Start: 52 @33916 has 5 MA's), (126, 34144), (128, 34153), (140, 34204), (151, 34252),

Gene: Ejimix_143 Start: 80435, Stop: 80758, Start Num: 39

Candidate Starts for Ejimix_143:

(34, 80423), (Start: 39 @80435 has 46 MA's), (71, 80519), (76, 80537), (92, 80585), (108, 80624),

Gene: ElJefes_59 Start: 41219, Stop: 40824, Start Num: 15

Candidate Starts for ElJefes_59:

(Start: 15 @41219 has 12 MA's), (20, 41186), (73, 41069), (78, 41051), (86, 41027), (102, 40991), (106, 40982), (127, 40925),

Gene: Elinal_62 Start: 41462, Stop: 41016, Start Num: 15

Candidate Starts for Elinal_62:

(Start: 15 @41462 has 12 MA's), (Start: 39 @41357 has 46 MA's), (58, 41315), (73, 41261), (78, 41243), (80, 41237), (89, 41207), (106, 41174), (129, 41102), (140, 41060),

Gene: Ellson_41 Start: 35160, Stop: 35555, Start Num: 37

Candidate Starts for Ellson_41:

(Start: 37 @35160 has 24 MA's), (110, 35385), (113, 35391), (126, 35424), (142, 35493), (152, 35538),

Gene: Enceladus_40 Start: 33518, Stop: 33913, Start Num: 38

Candidate Starts for Enceladus_40:

(33, 33503), (Start: 38 @33518 has 19 MA's), (126, 33776), (128, 33785), (142, 33845), (152, 33890),

Gene: EricMillard_145 Start: 80967, Stop: 81290, Start Num: 39
Candidate Starts for EricMillard_145:
(34, 80955), (Start: 39 @80967 has 46 MA's), (49, 80985), (71, 81051), (92, 81117), (108, 81156),
(136, 81249),

Gene: Expelliarmus_43 Start: 30910, Stop: 30608, Start Num: 61
Candidate Starts for Expelliarmus_43:
(Start: 61 @30910 has 9 MA's), (94, 30799), (99, 30790), (129, 30697), (142, 30646), (146, 30625),

Gene: Faith1_43 Start: 34906, Stop: 35268, Start Num: 51
Candidate Starts for Faith1_43:
(Start: 51 @34906 has 32 MA's), (126, 35137), (128, 35146),

Gene: FarmResident_41 Start: 33638, Stop: 33997, Start Num: 52
Candidate Starts for FarmResident_41:
(Start: 52 @33638 has 5 MA's), (55, 33647), (126, 33866), (128, 33875), (140, 33926),

Gene: Feastonyeet_57 Start: 40681, Stop: 40280, Start Num: 15
Candidate Starts for Feastonyeet_57:
(Start: 15 @40681 has 12 MA's), (Start: 39 @40603 has 46 MA's), (72, 40531), (73, 40528), (78, 40510), (80, 40504), (89, 40474), (106, 40441), (129, 40369), (140, 40327),

Gene: Finemlucis_43 Start: 35182, Stop: 35544, Start Num: 51
Candidate Starts for Finemlucis_43:
(Start: 51 @35182 has 32 MA's), (126, 35413), (128, 35422),

Gene: Finnry_41 Start: 35166, Stop: 35561, Start Num: 37
Candidate Starts for Finnry_41:
(Start: 37 @35166 has 24 MA's), (53, 35202), (55, 35208), (110, 35391), (113, 35397), (126, 35430),
(142, 35499), (152, 35544),

Gene: Francesca_262 Start: 129192, Stop: 129557, Start Num: 42
Candidate Starts for Francesca_262:
(Start: 42 @129192 has 4 MA's), (82, 129315), (84, 129324), (86, 129330), (114, 129408), (118, 129414), (130, 129459), (142, 129507),

Gene: Francesca_263 Start: 129535, Stop: 129873, Start Num: 42
Candidate Starts for Francesca_263:
(Start: 39 @129532 has 46 MA's), (Start: 42 @129535 has 4 MA's), (100, 129703),

Gene: Francesca_268 Start: 130873, Stop: 131199, Start Num: 48
Candidate Starts for Francesca_268:
(Start: 48 @130873 has 2 MA's), (56, 130888), (124, 131071), (126, 131080), (142, 131149),

Gene: Fryberger_106 Start: 52384, Stop: 52698, Start Num: 37
Candidate Starts for Fryberger_106:
(17, 52294), (31, 52369), (Start: 37 @52384 has 24 MA's), (99, 52540), (129, 52609), (145, 52672),

Gene: Fryberger_29 Start: 8784, Stop: 8455, Start Num: 46
Candidate Starts for Fryberger_29:
(Start: 46 @8784 has 6 MA's), (54, 8769), (65, 8739), (90, 8658), (101, 8637),

Gene: Gabriela_43 Start: 35168, Stop: 35530, Start Num: 51

Candidate Starts for Gabriela_43:

(Start: 51 @35168 has 32 MA's), (126, 35399), (128, 35408),

Gene: Gardann_43 Start: 34907, Stop: 35269, Start Num: 51

Candidate Starts for Gardann_43:

(Start: 51 @34907 has 32 MA's), (126, 35138), (128, 35147),

Gene: Gonephishing_125 Start: 68379, Stop: 68672, Start Num: 41

Candidate Starts for Gonephishing_125:

(Start: 41 @68379 has 5 MA's), (82, 68496), (105, 68556), (132, 68628), (133, 68631),

Gene: Gonephishing_144 Start: 78607, Stop: 78930, Start Num: 39

Candidate Starts for Gonephishing_144:

(34, 78595), (Start: 39 @78607 has 46 MA's), (71, 78691), (78, 78718), (82, 78724), (92, 78757), (108, 78796),

Gene: Groundhog_42 Start: 30817, Stop: 30515, Start Num: 61

Candidate Starts for Groundhog_42:

(Start: 61 @30817 has 9 MA's), (94, 30706), (99, 30697), (129, 30604), (142, 30553), (146, 30532),

Gene: Guey18_34 Start: 9973, Stop: 9644, Start Num: 46

Candidate Starts for Guey18_34:

(Start: 46 @9973 has 6 MA's), (79, 9898), (108, 9814),

Gene: Guey18_33 Start: 9651, Stop: 9316, Start Num: 50

Candidate Starts for Guey18_33:

(47, 9657), (Start: 50 @9651 has 1 MA's), (54, 9639), (65, 9609), (90, 9531),

Gene: Guey18_111 Start: 53707, Stop: 54021, Start Num: 37

Candidate Starts for Guey18_111:

(17, 53617), (31, 53692), (Start: 37 @53707 has 24 MA's), (99, 53863), (129, 53932), (145, 53995),

Gene: GuuelaD_43 Start: 34945, Stop: 35307, Start Num: 51

Candidate Starts for GuuelaD_43:

(Start: 51 @34945 has 32 MA's), (126, 35176), (128, 35185),

Gene: Hafay_43 Start: 34940, Stop: 35302, Start Num: 51

Candidate Starts for Hafay_43:

(Start: 51 @34940 has 32 MA's), (126, 35171), (128, 35180),

Gene: Halena_40 Start: 33559, Stop: 33954, Start Num: 38

Candidate Starts for Halena_40:

(33, 33544), (Start: 38 @33559 has 19 MA's), (126, 33817), (128, 33826), (142, 33886), (152, 33931),

Gene: Halley_152 Start: 80751, Stop: 81074, Start Num: 39

Candidate Starts for Halley_152:

(34, 80739), (Start: 39 @80751 has 46 MA's), (71, 80835), (76, 80853), (92, 80901), (108, 80940),

Gene: Hannaconda_124 Start: 69032, Stop: 69325, Start Num: 41

Candidate Starts for Hannaconda_124:

(Start: 41 @69032 has 5 MA's), (82, 69149), (105, 69209), (132, 69281), (133, 69284),

Gene: Hannaconda_144 Start: 79540, Stop: 79863, Start Num: 39

Candidate Starts for Hannaconda_144:

(Start: 39 @79540 has 46 MA's), (71, 79624), (78, 79651), (82, 79657), (92, 79690), (108, 79729),

Gene: Hidrated_136 Start: 79925, Stop: 80248, Start Num: 39

Candidate Starts for Hidrated_136:

(5, 79688), (8, 79727), (16, 79832), (34, 79913), (Start: 39 @79925 has 46 MA's), (49, 79943), (71, 80009), (92, 80075), (108, 80114), (116, 80138),

Gene: Hiraya_43 Start: 34907, Stop: 35269, Start Num: 51

Candidate Starts for Hiraya_43:

(Start: 51 @34907 has 32 MA's), (126, 35138), (128, 35147),

Gene: HokkenD_123 Start: 71913, Stop: 72206, Start Num: 41

Candidate Starts for HokkenD_123:

(Start: 41 @71913 has 5 MA's), (82, 72030), (105, 72090), (132, 72162), (133, 72165),

Gene: HokkenD_145 Start: 81876, Stop: 82199, Start Num: 39

Candidate Starts for HokkenD_145:

(5, 81639), (8, 81678), (16, 81783), (34, 81864), (Start: 39 @81876 has 46 MA's), (71, 81960), (78, 81987), (92, 82026), (108, 82065),

Gene: Hughesyang_150 Start: 81110, Stop: 81433, Start Num: 39

Candidate Starts for Hughesyang_150:

(10, 80978), (11, 80981), (34, 81098), (Start: 39 @81110 has 46 MA's), (71, 81194), (92, 81260), (108, 81299),

Gene: Itos_42 Start: 33812, Stop: 34174, Start Num: 51

Candidate Starts for Itos_42:

(Start: 51 @33812 has 32 MA's), (126, 34043), (128, 34052),

Gene: Jflix2_89 Start: 50660, Stop: 51001, Start Num: 35

Candidate Starts for Jflix2_89:

(13, 50558), (18, 50594), (27, 50642), (Start: 35 @50660 has 2 MA's), (69, 50741), (140, 50939),

Gene: Jflix2_77 Start: 46906, Stop: 47172, Start Num: 149

Candidate Starts for Jflix2_77:

(Start: 149 @46906 has 3 MA's), (156, 47026), (158, 47071), (161, 47149),

Gene: Jflix2_58 Start: 39721, Stop: 40101, Start Num: 26

Candidate Starts for Jflix2_58:

(2, 39397), (Start: 24 @39709 has 1 MA's), (Start: 26 @39721 has 3 MA's), (62, 39814), (115, 39979), (129, 40024), (141, 40069),

Gene: Jflix2_76 Start: 46571, Stop: 46909, Start Num: 32

Candidate Starts for Jflix2_76:

(Start: 32 @46571 has 4 MA's), (64, 46643), (109, 46766), (117, 46784), (130, 46826), (142, 46874),

Gene: Jobypre_41 Start: 35163, Stop: 35558, Start Num: 37

Candidate Starts for Jobypre_41:

(Start: 37 @35163 has 24 MA's), (53, 35199), (55, 35205), (110, 35388), (113, 35394), (126, 35427), (142, 35496), (152, 35541),

Gene: JoeDirt_40 Start: 33516, Stop: 33911, Start Num: 38

Candidate Starts for JoeDirt_40:

(33, 33501), (Start: 38 @33516 has 19 MA's), (126, 33774), (128, 33783), (142, 33843), (152, 33888),

Gene: Jubie_41 Start: 35164, Stop: 35559, Start Num: 37

Candidate Starts for Jubie_41:

(Start: 37 @35164 has 24 MA's), (53, 35200), (55, 35206), (110, 35389), (113, 35395), (126, 35428), (142, 35497), (152, 35542),

Gene: JuicyJay_146 Start: 82036, Stop: 82359, Start Num: 39

Candidate Starts for JuicyJay_146:

(10, 81904), (11, 81907), (34, 82024), (Start: 39 @82036 has 46 MA's), (71, 82120), (92, 82186), (108, 82225), (133, 82306),

Gene: Kahlid_43 Start: 34912, Stop: 35274, Start Num: 51

Candidate Starts for Kahlid_43:

(Start: 51 @34912 has 32 MA's), (126, 35143), (128, 35152),

Gene: Kalah2_142 Start: 80240, Stop: 80563, Start Num: 39

Candidate Starts for Kalah2_142:

(34, 80228), (Start: 39 @80240 has 46 MA's), (71, 80324), (76, 80342), (108, 80429), (116, 80453),

Gene: KashFlow_150 Start: 79539, Stop: 79862, Start Num: 39

Candidate Starts for KashFlow_150:

(Start: 39 @79539 has 46 MA's), (71, 79623), (78, 79650), (82, 79656), (92, 79689), (108, 79728),

Gene: KayGee_60 Start: 41462, Stop: 41016, Start Num: 15

Candidate Starts for KayGee_60:

(Start: 15 @41462 has 12 MA's), (Start: 39 @41357 has 46 MA's), (58, 41315), (73, 41261), (78, 41243), (80, 41237), (89, 41207), (106, 41174), (129, 41102), (140, 41060),

Gene: Keelan_107 Start: 53290, Stop: 53652, Start Num: 36

Candidate Starts for Keelan_107:

(Start: 36 @53290 has 1 MA's), (73, 53383), (93, 53449), (99, 53461), (119, 53524), (121, 53527), (134, 53581), (145, 53623),

Gene: Keelan_26 Start: 8252, Stop: 7875, Start Num: 32

Candidate Starts for Keelan_26:

(Start: 32 @8252 has 4 MA's), (78, 8120), (80, 8114), (87, 8090), (93, 8075), (103, 8051), (125, 7988), (148, 7892),

Gene: Kingsolomon_41 Start: 35163, Stop: 35558, Start Num: 37

Candidate Starts for Kingsolomon_41:

(Start: 37 @35163 has 24 MA's), (53, 35199), (55, 35205), (110, 35388), (113, 35394), (126, 35427), (142, 35496), (152, 35541),

Gene: KirDoubleO7_39 Start: 35188, Stop: 35583, Start Num: 37

Candidate Starts for KirDoubleO7_39:

(Start: 37 @35188 has 24 MA's), (53, 35224), (55, 35230), (110, 35413), (113, 35419), (126, 35452), (142, 35521), (152, 35566),

Gene: Klein_150 Start: 80105, Stop: 80428, Start Num: 39

Candidate Starts for Klein_150:

(34, 80093), (Start: 39 @80105 has 46 MA's), (49, 80123), (71, 80189), (92, 80255), (108, 80294), (116, 80318), (133, 80375),

Gene: Kropertea_41 Start: 33739, Stop: 34098, Start Num: 52

Candidate Starts for Kropertea_41:

(45, 33724), (Start: 52 @33739 has 5 MA's), (126, 33967), (128, 33976), (140, 34027), (151, 34075),

Gene: Krypton555_41 Start: 35080, Stop: 35475, Start Num: 37

Candidate Starts for Krypton555_41:

(Start: 37 @35080 has 24 MA's), (110, 35305), (113, 35311), (126, 35344), (142, 35413), (152, 35458),

Gene: LeBron_41 Start: 33560, Stop: 33955, Start Num: 38

Candidate Starts for LeBron_41:

(33, 33545), (Start: 38 @33560 has 19 MA's), (126, 33818), (128, 33827), (142, 33887), (152, 33932),

Gene: Lewan_43 Start: 34899, Stop: 35261, Start Num: 51

Candidate Starts for Lewan_43:

(Start: 51 @34899 has 32 MA's), (126, 35130), (128, 35139),

Gene: LilDestine_43 Start: 34904, Stop: 35266, Start Num: 51

Candidate Starts for LilDestine_43:

(Start: 51 @34904 has 32 MA's), (126, 35135), (128, 35144),

Gene: LittleE_153 Start: 80985, Stop: 81308, Start Num: 39

Candidate Starts for LittleE_153:

(1, 80586), (3, 80709), (5, 80748), (8, 80787), (16, 80892), (34, 80973), (Start: 39 @80985 has 46 MA's), (71, 81069), (78, 81096), (92, 81135), (108, 81174), (134, 81258),

Gene: LiyuLake_41 Start: 35150, Stop: 35545, Start Num: 37

Candidate Starts for LiyuLake_41:

(Start: 37 @35150 has 24 MA's), (110, 35375), (113, 35381), (126, 35414), (142, 35483), (152, 35528),

Gene: Loadrie_43 Start: 34938, Stop: 35300, Start Num: 51

Candidate Starts for Loadrie_43:

(Start: 51 @34938 has 32 MA's), (126, 35169), (128, 35178),

Gene: Lolly9_41 Start: 34974, Stop: 35369, Start Num: 37

Candidate Starts for Lolly9_41:

(Start: 37 @34974 has 24 MA's), (53, 35010), (55, 35016), (110, 35199), (113, 35205), (126, 35238), (142, 35307), (152, 35352),

Gene: Lucky2013_142 Start: 75897, Stop: 76220, Start Num: 39

Candidate Starts for Lucky2013_142:

(34, 75885), (Start: 39 @75897 has 46 MA's), (49, 75915), (71, 75981), (78, 76008), (92, 76047), (108, 76086), (134, 76170),

Gene: Lumos_41 Start: 35160, Stop: 35555, Start Num: 37

Candidate Starts for Lumos_41:

(31, 35145), (Start: 37 @35160 has 24 MA's), (53, 35196), (55, 35202), (110, 35385), (113, 35391), (126, 35424), (142, 35493), (152, 35538),

Gene: Lynnae_43 Start: 34895, Stop: 35257, Start Num: 51

Candidate Starts for Lynnae_43:

(Start: 51 @34895 has 32 MA's), (126, 35126), (128, 35135),

Gene: MAckerman_41 Start: 33553, Stop: 33948, Start Num: 38

Candidate Starts for MAckerman_41:

(33, 33538), (Start: 38 @33553 has 19 MA's), (126, 33811), (128, 33820), (142, 33880), (152, 33925),

Gene: MAnor_59 Start: 41593, Stop: 41144, Start Num: 15

Candidate Starts for MAnor_59:

(Start: 15 @41593 has 12 MA's), (Start: 37 @41497 has 24 MA's), (58, 41449), (59, 41443), (73, 41395), (80, 41371), (89, 41341), (106, 41308), (129, 41236), (140, 41194),

Gene: Madraxi_61 Start: 42224, Stop: 42604, Start Num: 26

Candidate Starts for Madraxi_61:

(9, 42083), (Start: 24 @42212 has 1 MA's), (Start: 26 @42224 has 3 MA's), (88, 42407), (145, 42590),

Gene: Madraxi_80 Start: 49350, Stop: 49697, Start Num: 32

Candidate Starts for Madraxi_80:

(19, 49296), (Start: 32 @49350 has 4 MA's), (64, 49431), (97, 49518), (109, 49554), (117, 49572), (130, 49614), (142, 49662),

Gene: Madraxi_81 Start: 49694, Stop: 49978, Start Num: 149

Candidate Starts for Madraxi_81:

(Start: 149 @49694 has 3 MA's), (154, 49712), (155, 49793), (158, 49856),

Gene: Madraxi_91 Start: 52811, Stop: 53170, Start Num: 35

Candidate Starts for Madraxi_91:

(Start: 35 @52811 has 2 MA's), (44, 52826), (111, 52988), (129, 53033), (140, 53075),

Gene: Marleymoo_136 Start: 77201, Stop: 77524, Start Num: 39

Candidate Starts for Marleymoo_136:

(34, 77189), (Start: 39 @77201 has 46 MA's), (71, 77285), (76, 77303), (92, 77351), (108, 77390), (116, 77414), (136, 77483),

Gene: McDazzle_59 Start: 41213, Stop: 40818, Start Num: 15

Candidate Starts for McDazzle_59:

(Start: 15 @41213 has 12 MA's), (20, 41180), (73, 41063), (78, 41045), (86, 41021), (102, 40985), (106, 40976), (127, 40919),

Gene: MiaZeal_149 Start: 77044, Stop: 77367, Start Num: 39

Candidate Starts for MiaZeal_149:

(34, 77032), (Start: 39 @77044 has 46 MA's), (49, 77062), (71, 77128), (78, 77155), (92, 77194), (108, 77233), (134, 77317),

Gene: Miley16_43 Start: 34906, Stop: 35268, Start Num: 51

Candidate Starts for Miley16_43:

(Start: 51 @34906 has 32 MA's), (126, 35137), (128, 35146),

Gene: Minerva_150 Start: 80059, Stop: 80382, Start Num: 39

Candidate Starts for Minerva_150:

(34, 80047), (Start: 39 @80059 has 46 MA's), (71, 80143), (76, 80161), (108, 80248), (116, 80272),

Gene: MiniLon_41 Start: 34975, Stop: 35370, Start Num: 37

Candidate Starts for MiniLon_41:

(Start: 37 @34975 has 24 MA's), (53, 35011), (55, 35017), (110, 35200), (113, 35206), (126, 35239), (142, 35308), (152, 35353),

Gene: MiniMac_41 Start: 34972, Stop: 35367, Start Num: 37

Candidate Starts for MiniMac_41:

(Start: 37 @34972 has 24 MA's), (53, 35008), (55, 35014), (110, 35197), (113, 35203), (126, 35236), (142, 35305), (152, 35350),

Gene: MkaliMitinis3_43 Start: 34908, Stop: 35270, Start Num: 51

Candidate Starts for MkaliMitinis3_43:

(Start: 51 @34908 has 32 MA's), (126, 35139), (128, 35148),

Gene: Molivier_43 Start: 34903, Stop: 35265, Start Num: 51

Candidate Starts for Molivier_43:

(Start: 51 @34903 has 32 MA's), (126, 35134), (128, 35143),

Gene: Moostard_41 Start: 35165, Stop: 35560, Start Num: 37

Candidate Starts for Moostard_41:

(Start: 37 @35165 has 24 MA's), (53, 35201), (55, 35207), (110, 35390), (113, 35396), (126, 35429), (142, 35498), (152, 35543),

Gene: MsGreen_41 Start: 35163, Stop: 35558, Start Num: 37

Candidate Starts for MsGreen_41:

(Start: 37 @35163 has 24 MA's), (53, 35199), (55, 35205), (110, 35388), (113, 35394), (126, 35427), (142, 35496), (152, 35541),

Gene: Nekros_148 Start: 79933, Stop: 80256, Start Num: 39

Candidate Starts for Nekros_148:

(Start: 39 @79933 has 46 MA's), (71, 80017), (78, 80044), (82, 80050), (92, 80083), (108, 80122),

Gene: Netyap_43 Start: 34906, Stop: 35268, Start Num: 51

Candidate Starts for Netyap_43:

(Start: 51 @34906 has 32 MA's), (126, 35137), (128, 35146),

Gene: Nibley_144 Start: 77188, Stop: 77511, Start Num: 39

Candidate Starts for Nibley_144:

(Start: 39 @77188 has 46 MA's), (71, 77272), (78, 77299), (92, 77338), (108, 77377), (134, 77461),

Gene: Nicholas_41 Start: 35163, Stop: 35558, Start Num: 37

Candidate Starts for Nicholas_41:

(Start: 37 @35163 has 24 MA's), (53, 35199), (55, 35205), (110, 35388), (113, 35394), (126, 35427), (142, 35496), (152, 35541),

Gene: Nicholasp3_43 Start: 34907, Stop: 35269, Start Num: 51

Candidate Starts for Nicholasp3_43:

(Start: 51 @34907 has 32 MA's), (126, 35138), (128, 35147),

Gene: NihilNomen_152 Start: 79960, Stop: 80283, Start Num: 39

Candidate Starts for NihilNomen_152:

(34, 79948), (Start: 39 @79960 has 46 MA's), (71, 80044), (76, 80062), (92, 80110), (108, 80149), (116, 80173), (142, 80263),

Gene: Nova53_268 Start: 131044, Stop: 131379, Start Num: 46

Candidate Starts for Nova53_268:

(40, 131032), (Start: 46 @131044 has 6 MA's), (68, 131089), (70, 131092), (141, 131320), (143, 131329), (150, 131359),

Gene: Nova53_257 Start: 128188, Stop: 128547, Start Num: 29

Candidate Starts for Nova53_257:

(23, 128170), (Start: 29 @128188 has 1 MA's), (56, 128254), (64, 128284), (122, 128434), (147, 128533),

Gene: Nova53_264 Start: 130197, Stop: 130535, Start Num: 39

Candidate Starts for Nova53_264:

(Start: 39 @130197 has 46 MA's), (Start: 42 @130200 has 4 MA's), (57, 130236), (67, 130275), (80, 130311), (100, 130368), (116, 130416),

Gene: Odette_135 Start: 73830, Stop: 74123, Start Num: 41

Candidate Starts for Odette_135:

(Start: 41 @73830 has 5 MA's), (82, 73947), (105, 74007), (132, 74079), (133, 74082),

Gene: Odette_156 Start: 82653, Stop: 82976, Start Num: 39

Candidate Starts for Odette_156:

(Start: 39 @82653 has 46 MA's), (71, 82737), (78, 82764), (92, 82803), (108, 82842), (134, 82926),

Gene: OhShagHennessy_40 Start: 33506, Stop: 33901, Start Num: 38

Candidate Starts for OhShagHennessy_40:

(33, 33491), (Start: 38 @33506 has 19 MA's), (126, 33764), (128, 33773), (142, 33833), (152, 33878),

Gene: Omega_157 Start: 82149, Stop: 82472, Start Num: 39

Candidate Starts for Omega_157:

(Start: 39 @82149 has 46 MA's), (71, 82233), (78, 82260), (92, 82299), (108, 82338), (134, 82422),

Gene: Optimus_144 Start: 79658, Stop: 79981, Start Num: 39

Candidate Starts for Optimus_144:

(Start: 39 @79658 has 46 MA's), (71, 79742), (78, 79769), (92, 79808), (108, 79847), (134, 79931),

Gene: OverPar_43 Start: 34938, Stop: 35300, Start Num: 51

Candidate Starts for OverPar_43:

(Start: 51 @34938 has 32 MA's), (126, 35169), (128, 35178),

Gene: PYPDinur_40 Start: 33700, Stop: 34059, Start Num: 52

Candidate Starts for PYPDinur_40:

(Start: 52 @33700 has 5 MA's), (55, 33709), (126, 33928), (128, 33937), (140, 33988),

Gene: Phillis_45 Start: 31235, Stop: 30933, Start Num: 61

Candidate Starts for Phillis_45:

(Start: 61 @31235 has 9 MA's), (94, 31124), (99, 31115), (120, 31055), (129, 31022), (142, 30971), (146, 30950),

Gene: Phoebus_151 Start: 82464, Stop: 82787, Start Num: 39

Candidate Starts for Phoebus_151:

(10, 82332), (11, 82335), (34, 82452), (Start: 39 @82464 has 46 MA's), (71, 82548), (76, 82566), (108, 82653), (116, 82677),

Gene: Pons_59 Start: 41198, Stop: 40776, Start Num: 15

Candidate Starts for Pons_59:

(Start: 15 @41198 has 12 MA's), (72, 41030), (73, 41027), (80, 41003), (89, 40973), (106, 40940), (129, 40868), (140, 40826),

Gene: Poochiewood_40 Start: 33534, Stop: 33929, Start Num: 38

Candidate Starts for Poochiewood_40:

(33, 33519), (Start: 38 @33534 has 19 MA's), (126, 33792), (128, 33801), (142, 33861), (152, 33906),

Gene: Porcelain_146 Start: 76843, Stop: 77166, Start Num: 39

Candidate Starts for Porcelain_146:

(34, 76831), (Start: 39 @76843 has 46 MA's), (49, 76861), (71, 76927), (78, 76954), (92, 76993), (108, 77032), (134, 77116),

Gene: PotPie_57 Start: 41716, Stop: 41315, Start Num: 15

Candidate Starts for PotPie_57:

(Start: 15 @41716 has 12 MA's), (Start: 39 @41638 has 46 MA's), (72, 41566), (73, 41563), (78, 41545), (80, 41539), (89, 41509), (106, 41476), (129, 41404), (140, 41362),

Gene: Pound_142 Start: 79694, Stop: 80017, Start Num: 39

Candidate Starts for Pound_142:

(34, 79682), (Start: 39 @79694 has 46 MA's), (71, 79778), (76, 79796), (92, 79844), (108, 79883), (142, 79997),

Gene: Quby_41 Start: 33594, Stop: 33953, Start Num: 52

Candidate Starts for Quby_41:

(Start: 52 @33594 has 5 MA's), (55, 33603), (126, 33822), (128, 33831), (140, 33882),

Gene: REQ1_28 Start: 11269, Stop: 11631, Start Num: 26

Candidate Starts for REQ1_28:

(Start: 24 @11257 has 1 MA's), (Start: 26 @11269 has 3 MA's), (129, 11554), (140, 11596),

Gene: REQ1_45 Start: 18020, Stop: 18358, Start Num: 36

Candidate Starts for REQ1_45:

(27, 17999), (Start: 36 @18020 has 1 MA's), (64, 18092), (121, 18242), (136, 18302), (137, 18305), (140, 18314),

Gene: Rearden_129 Start: 69937, Stop: 70230, Start Num: 41

Candidate Starts for Rearden_129:

(Start: 41 @69937 has 5 MA's), (82, 70054), (105, 70114), (132, 70186), (133, 70189),

Gene: Red305_41 Start: 35163, Stop: 35558, Start Num: 37

Candidate Starts for Red305_41:

(Start: 37 @35163 has 24 MA's), (53, 35199), (55, 35205), (110, 35388), (113, 35394), (126, 35427), (142, 35496), (152, 35541),

Gene: Redno2_145 Start: 77962, Stop: 78285, Start Num: 39

Candidate Starts for Redno2_145:

(34, 77950), (Start: 39 @77962 has 46 MA's), (71, 78046), (76, 78064), (92, 78112), (108, 78151), (116, 78175), (133, 78232),

Gene: RegnumDei_48 Start: 35958, Stop: 36257, Start Num: 39

Candidate Starts for RegnumDei_48:

(21, 35895), (22, 35898), (Start: 39 @35958 has 46 MA's), (96, 36105), (138, 36222), (144, 36246),

Gene: RegnumDei_62 Start: 40266, Stop: 40643, Start Num: 30

Candidate Starts for RegnumDei_62:

(4, 40029), (12, 40176), (Start: 30 @40266 has 3 MA's), (Start: 52 @40311 has 5 MA's), (60, 40338), (91, 40440), (140, 40590),

Gene: RegnumDei_63 Start: 40645, Stop: 40995, Start Num: 30

Candidate Starts for RegnumDei_63:

(Start: 25 @40636 has 1 MA's), (Start: 30 @40645 has 3 MA's), (81, 40783), (140, 40960), (143, 40972),

Gene: Roary_44 Start: 30866, Stop: 30564, Start Num: 61

Candidate Starts for Roary_44:

(Start: 61 @30866 has 9 MA's), (94, 30755), (99, 30746), (129, 30653), (142, 30602), (146, 30581),

Gene: Ronaldo_32 Start: 9713, Stop: 9384, Start Num: 46

Candidate Starts for Ronaldo_32:

(Start: 46 @9713 has 6 MA's), (54, 9698), (90, 9587), (101, 9566),

Gene: Ronaldo_108 Start: 53289, Stop: 53603, Start Num: 37

Candidate Starts for Ronaldo_108:

(17, 53199), (31, 53274), (Start: 37 @53289 has 24 MA's), (99, 53445), (129, 53514), (145, 53577),

Gene: Rose5_40 Start: 33548, Stop: 33943, Start Num: 38

Candidate Starts for Rose5_40:

(33, 33533), (Start: 38 @33548 has 19 MA's), (126, 33806), (128, 33815), (142, 33875), (152, 33920),

Gene: Rossetti_44 Start: 35454, Stop: 35816, Start Num: 51

Candidate Starts for Rossetti_44:

(Start: 51 @35454 has 32 MA's), (Start: 52 @35457 has 5 MA's), (126, 35685), (128, 35694),

Gene: Rumpelstiltskin_43 Start: 35173, Stop: 35535, Start Num: 51

Candidate Starts for Rumpelstiltskin_43:

(Start: 51 @35173 has 32 MA's), (126, 35404), (128, 35413),

Gene: SFuller_57 Start: 39913, Stop: 40293, Start Num: 26

Candidate Starts for SFuller_57:

(Start: 24 @39901 has 1 MA's), (Start: 26 @39913 has 3 MA's), (115, 40171), (141, 40261), (145, 40279),

Gene: SFuller_76 Start: 47105, Stop: 47371, Start Num: 149

Candidate Starts for SFuller_76:

(Start: 30 @46754 has 3 MA's), (Start: 149 @47105 has 3 MA's), (156, 47225), (158, 47270), (161, 47348),

Gene: SFuller_75 Start: 46761, Stop: 47108, Start Num: 32

Candidate Starts for SFuller_75:

(Start: 32 @46761 has 4 MA's), (Start: 39 @46776 has 46 MA's), (64, 46839), (109, 46965), (117, 46983), (130, 47025), (142, 47073),

Gene: Samty_41 Start: 35164, Stop: 35559, Start Num: 37

Candidate Starts for Samty_41:

(Start: 37 @35164 has 24 MA's), (53, 35200), (55, 35206), (110, 35389), (113, 35395), (126, 35428), (142, 35497), (152, 35542),

Gene: Sarshaun_43 Start: 34940, Stop: 35302, Start Num: 51
Candidate Starts for Sarshaun_43:
(Start: 51 @34940 has 32 MA's), (126, 35171), (128, 35180),

Gene: Schatzie_146 Start: 80543, Stop: 80866, Start Num: 39
Candidate Starts for Schatzie_146:
(34, 80531), (Start: 39 @80543 has 46 MA's), (71, 80627), (76, 80645), (92, 80693), (108, 80732), (142, 80846),

Gene: Shaboozey_148 Start: 77632, Stop: 77955, Start Num: 39
Candidate Starts for Shaboozey_148:
(Start: 39 @77632 has 46 MA's), (71, 77716), (78, 77743), (92, 77782), (108, 77821), (134, 77905),

Gene: Shagrat_49 Start: 36435, Stop: 36740, Start Num: 39
Candidate Starts for Shagrat_49:
(21, 36375), (22, 36378), (Start: 39 @36435 has 46 MA's), (131, 36675), (136, 36696), (145, 36729),

Gene: Shagrat_66 Start: 40915, Stop: 41250, Start Num: 153
Candidate Starts for Shagrat_66:
(33, 40549), (43, 40564), (66, 40630), (74, 40654), (83, 40693), (95, 40720), (107, 40756), (Start: 153 @40915 has 1 MA's), (157, 41023), (159, 41101), (160, 41104), (162, 41197), (163, 41212), (164, 41224),

Gene: Shagrat_65 Start: 40539, Stop: 40913, Start Num: 30
Candidate Starts for Shagrat_65:
(Start: 28 @40536 has 1 MA's), (Start: 30 @40539 has 3 MA's), (60, 40611), (76, 40662), (77, 40668), (91, 40713), (104, 40740), (112, 40770), (140, 40860),

Gene: SheckWes_61 Start: 40759, Stop: 40364, Start Num: 15
Candidate Starts for SheckWes_61:
(Start: 15 @40759 has 12 MA's), (20, 40726), (73, 40609), (78, 40591), (86, 40567), (102, 40531), (106, 40522), (127, 40465),

Gene: Sheng711_41 Start: 33700, Stop: 34059, Start Num: 52
Candidate Starts for Sheng711_41:
(Start: 52 @33700 has 5 MA's), (55, 33709), (126, 33928), (128, 33937), (140, 33988),

Gene: Silverleaf_40 Start: 33548, Stop: 33943, Start Num: 38
Candidate Starts for Silverleaf_40:
(33, 33533), (Start: 38 @33548 has 19 MA's), (126, 33806), (128, 33815), (142, 33875), (152, 33920),

Gene: Sleepyhead_43 Start: 31028, Stop: 31363, Start Num: 24
Candidate Starts for Sleepyhead_43:
(Start: 24 @31028 has 1 MA's), (85, 31199), (123, 31295),

Gene: Smeadley_44 Start: 31032, Stop: 30730, Start Num: 61
Candidate Starts for Smeadley_44:
(Start: 61 @31032 has 9 MA's), (94, 30921), (99, 30912), (129, 30819), (142, 30768), (146, 30747),

Gene: Snenia_41 Start: 35164, Stop: 35559, Start Num: 37

Candidate Starts for Snenia_41:

(Start: 37 @35164 has 24 MA's), (53, 35200), (55, 35206), (110, 35389), (113, 35395), (126, 35428), (142, 35497), (152, 35542),

Gene: SoJulia_44 Start: 35166, Stop: 35528, Start Num: 51

Candidate Starts for SoJulia_44:

(Start: 51 @35166 has 32 MA's), (126, 35397), (128, 35406),

Gene: Soap141_43 Start: 34940, Stop: 35302, Start Num: 51

Candidate Starts for Soap141_43:

(Start: 51 @34940 has 32 MA's), (126, 35171), (128, 35180),

Gene: Squint_142 Start: 76328, Stop: 76651, Start Num: 39

Candidate Starts for Squint_142:

(Start: 39 @76328 has 46 MA's), (71, 76412), (78, 76439), (82, 76445), (92, 76478), (108, 76517),

Gene: Stellammi_85 Start: 44564, Stop: 44845, Start Num: 39

Candidate Starts for Stellammi_85:

(14, 44459), (Start: 28 @44537 has 1 MA's), (Start: 39 @44564 has 46 MA's), (49, 44582), (63, 44630), (84, 44690), (93, 44711), (139, 44828),

Gene: Stephig9_44 Start: 30891, Stop: 30589, Start Num: 61

Candidate Starts for Stephig9_44:

(Start: 61 @30891 has 9 MA's), (94, 30780), (99, 30771), (129, 30678), (142, 30627), (146, 30606),

Gene: SummitAcademy_57 Start: 40859, Stop: 40458, Start Num: 15

Candidate Starts for SummitAcademy_57:

(Start: 15 @40859 has 12 MA's), (Start: 39 @40781 has 46 MA's), (72, 40709), (73, 40706), (78, 40688), (80, 40682), (89, 40652), (106, 40619), (129, 40547), (140, 40505),

Gene: Superphikiman_147 Start: 76801, Stop: 77124, Start Num: 39

Candidate Starts for Superphikiman_147:

(6, 76579), (9, 76627), (11, 76672), (34, 76789), (Start: 39 @76801 has 46 MA's), (71, 76885), (92, 76951), (108, 76990), (116, 77014), (133, 77071),

Gene: Superphikiman_128 Start: 69018, Stop: 69311, Start Num: 41

Candidate Starts for Superphikiman_128:

(Start: 41 @69018 has 5 MA's), (82, 69135), (105, 69195), (132, 69267), (133, 69270),

Gene: Thibault_134 Start: 77417, Stop: 77740, Start Num: 39

Candidate Starts for Thibault_134:

(7, 77204), (10, 77285), (11, 77288), (34, 77405), (Start: 39 @77417 has 46 MA's), (71, 77501), (92, 77567), (108, 77606), (136, 77699),

Gene: ThreeRngTarjay_146 Start: 81055, Stop: 81378, Start Num: 39

Candidate Starts for ThreeRngTarjay_146:

(10, 80923), (11, 80926), (34, 81043), (Start: 39 @81055 has 46 MA's), (71, 81139), (76, 81157), (108, 81244), (116, 81268),

Gene: TriFive_41 Start: 35163, Stop: 35558, Start Num: 37

Candidate Starts for TriFive_41:

(Start: 37 @35163 has 24 MA's), (53, 35199), (55, 35205), (110, 35388), (113, 35394), (126, 35427), (142, 35496), (152, 35541),

Gene: Tyson_40 Start: 33549, Stop: 33944, Start Num: 38

Candidate Starts for Tyson_40:

(33, 33534), (Start: 38 @33549 has 19 MA's), (126, 33807), (128, 33816), (142, 33876), (152, 33921),

Gene: UPIE_41 Start: 33532, Stop: 33927, Start Num: 38

Candidate Starts for UPIE_41:

(33, 33517), (Start: 38 @33532 has 19 MA's), (126, 33790), (128, 33799), (142, 33859), (152, 33904),

Gene: Underpass_43 Start: 34907, Stop: 35269, Start Num: 51

Candidate Starts for Underpass_43:

(Start: 51 @34907 has 32 MA's), (126, 35138), (128, 35147),

Gene: Vetrix_43 Start: 34913, Stop: 35275, Start Num: 51

Candidate Starts for Vetrix_43:

(Start: 51 @34913 has 32 MA's), (126, 35144), (128, 35153),

Gene: Vine_60 Start: 41482, Stop: 41081, Start Num: 15

Candidate Starts for Vine_60:

(Start: 15 @41482 has 12 MA's), (Start: 39 @41404 has 46 MA's), (72, 41332), (73, 41329), (78, 41311), (80, 41305), (89, 41275), (106, 41242), (129, 41170), (140, 41128),

Gene: Volt_31 Start: 9713, Stop: 9384, Start Num: 46

Candidate Starts for Volt_31:

(Start: 46 @9713 has 6 MA's), (54, 9698), (90, 9587), (101, 9566),

Gene: Volt_110 Start: 53453, Stop: 53767, Start Num: 37

Candidate Starts for Volt_110:

(17, 53363), (31, 53438), (Start: 37 @53453 has 24 MA's), (99, 53609), (129, 53678), (145, 53741),

Gene: Wamburgrexpress_41 Start: 33547, Stop: 33942, Start Num: 38

Candidate Starts for Wamburgrexpress_41:

(33, 33532), (Start: 38 @33547 has 19 MA's), (126, 33805), (128, 33814), (142, 33874), (152, 33919),

Gene: Wanda_150 Start: 78530, Stop: 78853, Start Num: 39

Candidate Starts for Wanda_150:

(34, 78518), (Start: 39 @78530 has 46 MA's), (71, 78614), (76, 78632), (108, 78719), (116, 78743),

Gene: Whirlwind_42 Start: 34922, Stop: 35317, Start Num: 37

Candidate Starts for Whirlwind_42:

(Start: 37 @34922 has 24 MA's), (110, 35147), (113, 35153), (126, 35186), (142, 35255), (152, 35300),

Gene: Wigglewobble_43 Start: 34939, Stop: 35301, Start Num: 51

Candidate Starts for Wigglewobble_43:

(Start: 51 @34939 has 32 MA's), (126, 35170), (128, 35179),

Gene: Wilder_43 Start: 34912, Stop: 35274, Start Num: 51

Candidate Starts for Wilder_43:

(Start: 51 @34912 has 32 MA's), (126, 35143), (128, 35152),

Gene: Winky_43 Start: 34906, Stop: 35268, Start Num: 51

Candidate Starts for Winky_43:

(Start: 51 @34906 has 32 MA's), (126, 35137), (128, 35146),

Gene: Wyatt2_41 Start: 33548, Stop: 33943, Start Num: 38

Candidate Starts for Wyatt2_41:

(33, 33533), (Start: 38 @33548 has 19 MA's), (126, 33806), (128, 33815), (142, 33875), (152, 33920),

Gene: Yeet_144 Start: 79906, Stop: 80229, Start Num: 39

Candidate Starts for Yeet_144:

(6, 79684), (9, 79732), (11, 79777), (34, 79894), (Start: 39 @79906 has 46 MA's), (71, 79990), (92, 80056), (108, 80095), (116, 80119), (133, 80176),

Gene: Yeet_125 Start: 71942, Stop: 72235, Start Num: 41

Candidate Starts for Yeet_125:

(Start: 41 @71942 has 5 MA's), (82, 72059), (105, 72119), (132, 72191), (133, 72194),

Gene: Yucky_60 Start: 41274, Stop: 40873, Start Num: 15

Candidate Starts for Yucky_60:

(Start: 15 @41274 has 12 MA's), (Start: 39 @41196 has 46 MA's), (72, 41124), (73, 41121), (78, 41103), (80, 41097), (89, 41067), (106, 41034), (129, 40962), (140, 40920),

Gene: Zakai_43 Start: 35164, Stop: 35526, Start Num: 51

Candidate Starts for Zakai_43:

(Start: 51 @35164 has 32 MA's), (126, 35395), (128, 35404),

Gene: Zaria_41 Start: 33563, Stop: 33958, Start Num: 38

Candidate Starts for Zaria_41:

(33, 33548), (Start: 38 @33563 has 19 MA's), (126, 33821), (128, 33830), (142, 33890), (152, 33935),

Gene: Zelink_145 Start: 81372, Stop: 81695, Start Num: 39

Candidate Starts for Zelink_145:

(34, 81360), (Start: 39 @81372 has 46 MA's), (71, 81456), (76, 81474), (108, 81561), (116, 81585),

Gene: ZhongYanYuan_41 Start: 34767, Stop: 35129, Start Num: 51

Candidate Starts for ZhongYanYuan_41:

(Start: 51 @34767 has 32 MA's), (126, 34998), (128, 35007),

Gene: Ziko_32 Start: 9653, Stop: 9324, Start Num: 46

Candidate Starts for Ziko_32:

(Start: 46 @9653 has 6 MA's), (54, 9638), (90, 9527), (101, 9506),

Gene: Ziko_109 Start: 53295, Stop: 53609, Start Num: 37

Candidate Starts for Ziko_109:

(17, 53205), (31, 53280), (Start: 37 @53295 has 24 MA's), (99, 53451), (129, 53520), (145, 53583),