



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 157776 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157776 has 92 members, 25 are drafts.

Phages represented in each track:

- Track 1 : Sigman_16, Maskar_15, Puhltonio_16, Pops_16, MelsMeow_15, TallGrassMM_16, Longacauda_15, CampRoach_15, BatteryCK_15, Olive_16, Swish_16, Cornobble_15, Oosterbaan_16, Quisquilliae_16, Swiphy_16, Anderson_16, Phipps_16, Harvey_16, Andre_16, DuchessDung_15, Doddsville_16, Nyala_15, Matalotodo_15, Orwigg_16, Gwilliam_16, Chah_16, Yoshand_16, Virgeve_15, Inverness_16, Etaye_16, Pinkman_15, Orfeu_15, Chute_15, Banjo_15, JDog_15, KLucky39_16, Newman_16, Badfish_16, Kikipoo_16, MrPhizzler_15, Scoot17C_16, Hartsy_15, Thora_16, Lasso_16, LasagnaCat_16, Fang_16, Ashraf_15, Lopsy_15, UncleHowie_16, Daffy_16, Eremos_16, Apizium_15, DelRivs_15, Katniss_16, Dice_16, ABU_16, Ricotta_16, Pacifista_17, Hamish_16, OSmaximus_16, Suffolk_16, Orion_16, Colbert_16, Rimu_15, Gophee_16, Schueller_15, ThreeOh3D2_16, Selr12_16, IsaacEli_16, Vortex_16, PG1_16, Megatron_16, Coletti_15, Mana_15, ImtiyazSitla_15, PhatLouie_16, Morgushi_16, LeiMonet_16, FluffyNinja_16, Olak_15, Eugenia_16, Murdoc_16, Megamind20_16, Vaishali24_15, Numberten_16, Iridoclysis_16, Serendipity_16, Potter_15
- Track 2 : OliverWalter_16, Manad_15, Basato_17, Prickles_16

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

The start number called the most often in the published annotations is 2, it was called in 67 of the 67 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_16, Anderson_16, Andre_16, Apizium_15, Ashraf_15, Badfish_16, Banjo_15, Basato_17, BatteryCK_15, CampRoach_15, Chah_16, Chute_15, Colbert_16, Coletti_15, Cornobble_15, Daffy_16, DelRivs_15, Dice_16, Doddsville_16, DuchessDung_15, Eremos_16, Etaye_16, Eugenia_16, Fang_16, FluffyNinja_16, Gophee_16, Gwilliam_16, Hamish_16, Hartsy_15, Harvey_16, ImtiyazSitla_15, Inverness_16, Iridoclysis_16, IsaacEli_16, JDog_15, KLucky39_16, Katniss_16, Kikipoo_16, LasagnaCat_16, Lasso_16, LeiMonet_16, Longacauda_15, Lopsy_15, Mana_15, Manad_15, Maskar_15, Matalotodo_15, Megamind20_16, Megatron_16, MelsMeow_15, Morgushi_16, MrPhizzler_15, Murdoc_16, Newman_16, Numberten_16, Nyala_15, OSmaximus_16, Olak_15, Olive_16, OliverWalter_16, Oosterbaan_16, Orfeu_15, Orion_16, Orwigg_16, PG1_16, Pacifista_17,

PhatLouie_16, Phipps_16, Pinkman_15, Pops_16, Potter_15, Prickles_16, Puhltonio_16, Quisquilliae_16, Ricotta_16, Rimu_15, Schueller_15, Scoot17C_16, Selr12_16, Serendipity_16, Sigman_16, Suffolk_16, Swiphy_16, Swish_16, TallGrassMM_16, Thora_16, ThreeOh3D2_16, UncleHowie_16, Vaishali24_15, Virgeve_15, Vortex_16, Yoshand_16,

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

-

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

-

Summary by start number:

Start 2:

- Found in 92 of 92 (100.0%) of genes in pham
- Manual Annotations of this start: 67 of 67
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ABU_16 (B1), Anderson_16 (B1), Andre_16 (B1), Apizium_15 (B1), Ashraf_15 (B1), Badfish_16 (B1), Banjo_15 (B1), Basato_17 (B1), BatteryCK_15 (B1), CampRoach_15 (B1), Chah_16 (B1), Chute_15 (B1), Colbert_16 (B1), Coletti_15 (B1), Cornobble_15 (B1), Daffy_16 (B1), DelRivs_15 (B1), Dice_16 (B1), Doddsville_16 (B1), DuchessDung_15 (B1), Eremos_16 (B1), Etaye_16 (B1), Eugenia_16 (B1), Fang_16 (B1), FluffyNinja_16 (B1), Gophee_16 (B1), Gwilliam_16 (B1), Hamish_16 (B1), Hartsy_15 (B1), Harvey_16 (B1), ImtiyazSitla_15 (B1), Inverness_16 (B1), Iridoclysis_16 (B1), IsaacEli_16 (B1), JDog_15 (B1), KLucky39_16 (B1), Katniss_16 (B1), Kikipoo_16 (B1), LasagnaCat_16 (B1), Lasso_16 (B1), LeiMonet_16 (B1), Longacauda_15 (B1), Lopsy_15 (B1), Mana_15 (B1), Manad_15 (B1), Maskar_15 (B1), Matalotodo_15 (B1), Megamind20_16 (B1), Megatron_16 (B1), MelsMeow_15 (B1), Morgushi_16 (B1), MrPhizzler_15 (B1), Murdoc_16 (B1), Newman_16 (B1), Numberten_16 (B1), Nyala_15 (B1), OSmaximus_16 (B1), Olak_15 (B1), Olive_16 (B1), OliverWalter_16 (B1), Oosterbaan_16 (B1), Orfeu_15 (B1), Orion_16 (B1), Orwigg_16 (B1), PG1_16 (B1), Pacifista_17 (B1), PhatLouie_16 (B1), Phipps_16 (B1), Pinkman_15 (B1), Pops_16 (B1), Potter_15 (B1), Prickles_16 (B1), Puhltonio_16 (B1), Quisquilliae_16 (B1), Ricotta_16 (B1), Rimu_15 (B1), Schueller_15 (B1), Scoot17C_16 (B1), Selr12_16 (B1), Serendipity_16 (B1), Sigman_16 (B1), Suffolk_16 (B1), Swiphy_16 (B1), Swish_16 (B1), TallGrassMM_16 (B1), Thora_16 (B1), ThreeOh3D2_16 (B1), UncleHowie_16 (B1), Vaishali24_15 (B1), Virgeve_15 (B1), Vortex_16 (B1), Yoshand_16 (B1),

Summary by clusters:

There is one cluster represented in this pham: B1

Info for manual annotations of cluster B1:

- Start number 2 was manually annotated 67 times for cluster B1.

Gene Information:

Gene: ABU_16 Start: 13693, Stop: 13992, Start Num: 2

Candidate Starts for ABU_16:

(1, 13642), (Start: 2 @13693 has 67 MA's), (3, 13705), (4, 13708), (5, 13717), (6, 13738), (7, 13933),

Gene: Anderson_16 Start: 13686, Stop: 13985, Start Num: 2

Candidate Starts for Anderson_16:

(1, 13635), (Start: 2 @13686 has 67 MA's), (3, 13698), (4, 13701), (5, 13710), (6, 13731), (7, 13926),

Gene: Andre_16 Start: 13684, Stop: 13983, Start Num: 2

Candidate Starts for Andre_16:

(1, 13633), (Start: 2 @13684 has 67 MA's), (3, 13696), (4, 13699), (5, 13708), (6, 13729), (7, 13924),

Gene: Apizium_15 Start: 13430, Stop: 13729, Start Num: 2

Candidate Starts for Apizium_15:

(1, 13379), (Start: 2 @13430 has 67 MA's), (3, 13442), (4, 13445), (5, 13454), (6, 13475), (7, 13670),

Gene: Ashraf_15 Start: 13248, Stop: 13547, Start Num: 2

Candidate Starts for Ashraf_15:

(1, 13197), (Start: 2 @13248 has 67 MA's), (3, 13260), (4, 13263), (5, 13272), (6, 13293), (7, 13488),

Gene: Badfish_16 Start: 13719, Stop: 14018, Start Num: 2

Candidate Starts for Badfish_16:

(1, 13668), (Start: 2 @13719 has 67 MA's), (3, 13731), (4, 13734), (5, 13743), (6, 13764), (7, 13959),

Gene: Banjo_15 Start: 13397, Stop: 13696, Start Num: 2

Candidate Starts for Banjo_15:

(1, 13346), (Start: 2 @13397 has 67 MA's), (3, 13409), (4, 13412), (5, 13421), (6, 13442), (7, 13637),

Gene: Basato_17 Start: 13923, Stop: 14222, Start Num: 2

Candidate Starts for Basato_17:

(1, 13872), (Start: 2 @13923 has 67 MA's), (4, 13938), (5, 13947), (6, 13968), (7, 14163),

Gene: BatteryCK_15 Start: 13254, Stop: 13553, Start Num: 2

Candidate Starts for BatteryCK_15:

(1, 13203), (Start: 2 @13254 has 67 MA's), (3, 13266), (4, 13269), (5, 13278), (6, 13299), (7, 13494),

Gene: CampRoach_15 Start: 13692, Stop: 13991, Start Num: 2

Candidate Starts for CampRoach_15:

(1, 13641), (Start: 2 @13692 has 67 MA's), (3, 13704), (4, 13707), (5, 13716), (6, 13737), (7, 13932),

Gene: Chah_16 Start: 13720, Stop: 14019, Start Num: 2

Candidate Starts for Chah_16:

(1, 13669), (Start: 2 @13720 has 67 MA's), (3, 13732), (4, 13735), (5, 13744), (6, 13765), (7, 13960),

Gene: Chute_15 Start: 13716, Stop: 14015, Start Num: 2

Candidate Starts for Chute_15:

(1, 13665), (Start: 2 @13716 has 67 MA's), (3, 13728), (4, 13731), (5, 13740), (6, 13761), (7, 13956),

Gene: Colbert_16 Start: 13704, Stop: 14003, Start Num: 2

Candidate Starts for Colbert_16:

(1, 13653), (Start: 2 @13704 has 67 MA's), (3, 13716), (4, 13719), (5, 13728), (6, 13749), (7, 13944),

Gene: Coletti_15 Start: 13716, Stop: 14015, Start Num: 2

Candidate Starts for Coletti_15:

(1, 13665), (Start: 2 @13716 has 67 MA's), (3, 13728), (4, 13731), (5, 13740), (6, 13761), (7, 13956),

Gene: Cornobble_15 Start: 13261, Stop: 13560, Start Num: 2

Candidate Starts for Cornobble_15:

(1, 13210), (Start: 2 @13261 has 67 MA's), (3, 13273), (4, 13276), (5, 13285), (6, 13306), (7, 13501),

Gene: Daffy_16 Start: 13426, Stop: 13725, Start Num: 2

Candidate Starts for Daffy_16:

(1, 13375), (Start: 2 @13426 has 67 MA's), (3, 13438), (4, 13441), (5, 13450), (6, 13471), (7, 13666),

Gene: DelRivs_15 Start: 13413, Stop: 13712, Start Num: 2

Candidate Starts for DelRivs_15:

(1, 13362), (Start: 2 @13413 has 67 MA's), (3, 13425), (4, 13428), (5, 13437), (6, 13458), (7, 13653),

Gene: Dice_16 Start: 13401, Stop: 13700, Start Num: 2

Candidate Starts for Dice_16:

(1, 13350), (Start: 2 @13401 has 67 MA's), (3, 13413), (4, 13416), (5, 13425), (6, 13446), (7, 13641),

Gene: Doddsville_16 Start: 13414, Stop: 13713, Start Num: 2

Candidate Starts for Doddsville_16:

(1, 13363), (Start: 2 @13414 has 67 MA's), (3, 13426), (4, 13429), (5, 13438), (6, 13459), (7, 13654),

Gene: DuchessDung_15 Start: 13254, Stop: 13553, Start Num: 2

Candidate Starts for DuchessDung_15:

(1, 13203), (Start: 2 @13254 has 67 MA's), (3, 13266), (4, 13269), (5, 13278), (6, 13299), (7, 13494),

Gene: Eremos_16 Start: 13701, Stop: 14000, Start Num: 2

Candidate Starts for Eremos_16:

(1, 13650), (Start: 2 @13701 has 67 MA's), (3, 13713), (4, 13716), (5, 13725), (6, 13746), (7, 13941),

Gene: Etaye_16 Start: 13686, Stop: 13985, Start Num: 2

Candidate Starts for Etaye_16:

(1, 13635), (Start: 2 @13686 has 67 MA's), (3, 13698), (4, 13701), (5, 13710), (6, 13731), (7, 13926),

Gene: Eugenia_16 Start: 13714, Stop: 14013, Start Num: 2

Candidate Starts for Eugenia_16:

(1, 13663), (Start: 2 @13714 has 67 MA's), (3, 13726), (4, 13729), (5, 13738), (6, 13759), (7, 13954),

Gene: Fang_16 Start: 13717, Stop: 14016, Start Num: 2

Candidate Starts for Fang_16:

(1, 13666), (Start: 2 @13717 has 67 MA's), (3, 13729), (4, 13732), (5, 13741), (6, 13762), (7, 13957),

Gene: FluffyNinja_16 Start: 13705, Stop: 14004, Start Num: 2

Candidate Starts for FluffyNinja_16:

(1, 13654), (Start: 2 @13705 has 67 MA's), (3, 13717), (4, 13720), (5, 13729), (6, 13750), (7, 13945),

Gene: Gophee_16 Start: 13686, Stop: 13985, Start Num: 2

Candidate Starts for Gophee_16:

(1, 13635), (Start: 2 @13686 has 67 MA's), (3, 13698), (4, 13701), (5, 13710), (6, 13731), (7, 13926),

Gene: Gwilliam_16 Start: 13698, Stop: 13997, Start Num: 2

Candidate Starts for Gwilliam_16:

(1, 13647), (Start: 2 @13698 has 67 MA's), (3, 13710), (4, 13713), (5, 13722), (6, 13743), (7, 13938),

Gene: Hamish_16 Start: 13695, Stop: 13994, Start Num: 2

Candidate Starts for Hamish_16:

(1, 13644), (Start: 2 @13695 has 67 MA's), (3, 13707), (4, 13710), (5, 13719), (6, 13740), (7, 13935),

Gene: Hartsy_15 Start: 13698, Stop: 13997, Start Num: 2

Candidate Starts for Hartsy_15:

(1, 13647), (Start: 2 @13698 has 67 MA's), (3, 13710), (4, 13713), (5, 13722), (6, 13743), (7, 13938),

Gene: Harvey_16 Start: 13723, Stop: 14022, Start Num: 2

Candidate Starts for Harvey_16:

(1, 13672), (Start: 2 @13723 has 67 MA's), (3, 13735), (4, 13738), (5, 13747), (6, 13768), (7, 13963),

Gene: ImtiyazSitla_15 Start: 13248, Stop: 13547, Start Num: 2

Candidate Starts for ImtiyazSitla_15:

(1, 13197), (Start: 2 @13248 has 67 MA's), (3, 13260), (4, 13263), (5, 13272), (6, 13293), (7, 13488),

Gene: Inverness_16 Start: 13709, Stop: 14008, Start Num: 2

Candidate Starts for Inverness_16:

(1, 13658), (Start: 2 @13709 has 67 MA's), (3, 13721), (4, 13724), (5, 13733), (6, 13754), (7, 13949),

Gene: Iridoclysis_16 Start: 13681, Stop: 13980, Start Num: 2

Candidate Starts for Iridoclysis_16:

(1, 13630), (Start: 2 @13681 has 67 MA's), (3, 13693), (4, 13696), (5, 13705), (6, 13726), (7, 13921),

Gene: IsaacEli_16 Start: 13713, Stop: 14012, Start Num: 2

Candidate Starts for IsaacEli_16:

(1, 13662), (Start: 2 @13713 has 67 MA's), (3, 13725), (4, 13728), (5, 13737), (6, 13758), (7, 13953),

Gene: JDog_15 Start: 13416, Stop: 13715, Start Num: 2

Candidate Starts for JDog_15:

(1, 13365), (Start: 2 @13416 has 67 MA's), (3, 13428), (4, 13431), (5, 13440), (6, 13461), (7, 13656),

Gene: KLucky39_16 Start: 13701, Stop: 14000, Start Num: 2

Candidate Starts for KLucky39_16:

(1, 13650), (Start: 2 @13701 has 67 MA's), (3, 13713), (4, 13716), (5, 13725), (6, 13746), (7, 13941),

Gene: Katniss_16 Start: 13720, Stop: 14019, Start Num: 2

Candidate Starts for Katniss_16:

(1, 13669), (Start: 2 @13720 has 67 MA's), (3, 13732), (4, 13735), (5, 13744), (6, 13765), (7, 13960),

Gene: Kikipoo_16 Start: 13713, Stop: 14012, Start Num: 2

Candidate Starts for Kikipoo_16:

(1, 13662), (Start: 2 @13713 has 67 MA's), (3, 13725), (4, 13728), (5, 13737), (6, 13758), (7, 13953),

Gene: LasagnaCat_16 Start: 13704, Stop: 14003, Start Num: 2

Candidate Starts for LasagnaCat_16:

(1, 13653), (Start: 2 @13704 has 67 MA's), (3, 13716), (4, 13719), (5, 13728), (6, 13749), (7, 13944),

Gene: Lasso_16 Start: 13680, Stop: 13979, Start Num: 2

Candidate Starts for Lasso_16:

(1, 13629), (Start: 2 @13680 has 67 MA's), (3, 13692), (4, 13695), (5, 13704), (6, 13725), (7, 13920),

Gene: LeiMonet_16 Start: 13410, Stop: 13709, Start Num: 2
Candidate Starts for LeiMonet_16:
(1, 13359), (Start: 2 @13410 has 67 MA's), (3, 13422), (4, 13425), (5, 13434), (6, 13455), (7, 13650),

Gene: Longacauda_15 Start: 13404, Stop: 13703, Start Num: 2
Candidate Starts for Longacauda_15:
(1, 13353), (Start: 2 @13404 has 67 MA's), (3, 13416), (4, 13419), (5, 13428), (6, 13449), (7, 13644),

Gene: Lopsy_15 Start: 13260, Stop: 13559, Start Num: 2
Candidate Starts for Lopsy_15:
(1, 13209), (Start: 2 @13260 has 67 MA's), (3, 13272), (4, 13275), (5, 13284), (6, 13305), (7, 13500),

Gene: Mana_15 Start: 13408, Stop: 13707, Start Num: 2
Candidate Starts for Mana_15:
(1, 13357), (Start: 2 @13408 has 67 MA's), (3, 13420), (4, 13423), (5, 13432), (6, 13453), (7, 13648),

Gene: Manad_15 Start: 13258, Stop: 13557, Start Num: 2
Candidate Starts for Manad_15:
(1, 13207), (Start: 2 @13258 has 67 MA's), (4, 13273), (5, 13282), (6, 13303), (7, 13498),

Gene: Maskar_15 Start: 13248, Stop: 13547, Start Num: 2
Candidate Starts for Maskar_15:
(1, 13197), (Start: 2 @13248 has 67 MA's), (3, 13260), (4, 13263), (5, 13272), (6, 13293), (7, 13488),

Gene: Matalotodo_15 Start: 13696, Stop: 13995, Start Num: 2
Candidate Starts for Matalotodo_15:
(1, 13645), (Start: 2 @13696 has 67 MA's), (3, 13708), (4, 13711), (5, 13720), (6, 13741), (7, 13936),

Gene: Megamind20_16 Start: 13421, Stop: 13720, Start Num: 2
Candidate Starts for Megamind20_16:
(1, 13370), (Start: 2 @13421 has 67 MA's), (3, 13433), (4, 13436), (5, 13445), (6, 13466), (7, 13661),

Gene: Megatron_16 Start: 13701, Stop: 14000, Start Num: 2
Candidate Starts for Megatron_16:
(1, 13650), (Start: 2 @13701 has 67 MA's), (3, 13713), (4, 13716), (5, 13725), (6, 13746), (7, 13941),

Gene: MelsMeow_15 Start: 13260, Stop: 13559, Start Num: 2
Candidate Starts for MelsMeow_15:
(1, 13209), (Start: 2 @13260 has 67 MA's), (3, 13272), (4, 13275), (5, 13284), (6, 13305), (7, 13500),

Gene: Morgushi_16 Start: 13412, Stop: 13711, Start Num: 2
Candidate Starts for Morgushi_16:
(1, 13361), (Start: 2 @13412 has 67 MA's), (3, 13424), (4, 13427), (5, 13436), (6, 13457), (7, 13652),

Gene: MrPhizzler_15 Start: 13413, Stop: 13712, Start Num: 2
Candidate Starts for MrPhizzler_15:
(1, 13362), (Start: 2 @13413 has 67 MA's), (3, 13425), (4, 13428), (5, 13437), (6, 13458), (7, 13653),

Gene: Murdoc_16 Start: 13701, Stop: 14000, Start Num: 2
Candidate Starts for Murdoc_16:
(1, 13650), (Start: 2 @13701 has 67 MA's), (3, 13713), (4, 13716), (5, 13725), (6, 13746), (7, 13941),

Gene: Newman_16 Start: 13701, Stop: 14000, Start Num: 2

Candidate Starts for Newman_16:

(1, 13650), (Start: 2 @13701 has 67 MA's), (3, 13713), (4, 13716), (5, 13725), (6, 13746), (7, 13941),

Gene: Numberten_16 Start: 13704, Stop: 14003, Start Num: 2

Candidate Starts for Numberten_16:

(1, 13653), (Start: 2 @13704 has 67 MA's), (3, 13716), (4, 13719), (5, 13728), (6, 13749), (7, 13944),

Gene: Nyala_15 Start: 13403, Stop: 13702, Start Num: 2

Candidate Starts for Nyala_15:

(1, 13352), (Start: 2 @13403 has 67 MA's), (3, 13415), (4, 13418), (5, 13427), (6, 13448), (7, 13643),

Gene: OSmaximus_16 Start: 13711, Stop: 14010, Start Num: 2

Candidate Starts for OSmaximus_16:

(1, 13660), (Start: 2 @13711 has 67 MA's), (3, 13723), (4, 13726), (5, 13735), (6, 13756), (7, 13951),

Gene: Olak_15 Start: 13400, Stop: 13699, Start Num: 2

Candidate Starts for Olak_15:

(1, 13349), (Start: 2 @13400 has 67 MA's), (3, 13412), (4, 13415), (5, 13424), (6, 13445), (7, 13640),

Gene: Olive_16 Start: 13692, Stop: 13991, Start Num: 2

Candidate Starts for Olive_16:

(1, 13641), (Start: 2 @13692 has 67 MA's), (3, 13704), (4, 13707), (5, 13716), (6, 13737), (7, 13932),

Gene: OliverWalter_16 Start: 13709, Stop: 14008, Start Num: 2

Candidate Starts for OliverWalter_16:

(1, 13658), (Start: 2 @13709 has 67 MA's), (4, 13724), (5, 13733), (6, 13754), (7, 13949),

Gene: Oosterbaan_16 Start: 13702, Stop: 14001, Start Num: 2

Candidate Starts for Oosterbaan_16:

(1, 13651), (Start: 2 @13702 has 67 MA's), (3, 13714), (4, 13717), (5, 13726), (6, 13747), (7, 13942),

Gene: Orfeu_15 Start: 13401, Stop: 13700, Start Num: 2

Candidate Starts for Orfeu_15:

(1, 13350), (Start: 2 @13401 has 67 MA's), (3, 13413), (4, 13416), (5, 13425), (6, 13446), (7, 13641),

Gene: Orion_16 Start: 13702, Stop: 14001, Start Num: 2

Candidate Starts for Orion_16:

(1, 13651), (Start: 2 @13702 has 67 MA's), (3, 13714), (4, 13717), (5, 13726), (6, 13747), (7, 13942),

Gene: Orwigg_16 Start: 13394, Stop: 13693, Start Num: 2

Candidate Starts for Orwigg_16:

(1, 13343), (Start: 2 @13394 has 67 MA's), (3, 13406), (4, 13409), (5, 13418), (6, 13439), (7, 13634),

Gene: PG1_16 Start: 13714, Stop: 14013, Start Num: 2

Candidate Starts for PG1_16:

(1, 13663), (Start: 2 @13714 has 67 MA's), (3, 13726), (4, 13729), (5, 13738), (6, 13759), (7, 13954),

Gene: Pacifista_17 Start: 13405, Stop: 13704, Start Num: 2

Candidate Starts for Pacifista_17:

(1, 13354), (Start: 2 @13405 has 67 MA's), (3, 13417), (4, 13420), (5, 13429), (6, 13450), (7, 13645),

Gene: PhatLouie_16 Start: 13701, Stop: 14000, Start Num: 2

Candidate Starts for PhatLouie_16:

(1, 13650), (Start: 2 @13701 has 67 MA's), (3, 13713), (4, 13716), (5, 13725), (6, 13746), (7, 13941),

Gene: Phipps_16 Start: 13680, Stop: 13979, Start Num: 2

Candidate Starts for Phipps_16:

(1, 13629), (Start: 2 @13680 has 67 MA's), (3, 13692), (4, 13695), (5, 13704), (6, 13725), (7, 13920),

Gene: Pinkman_15 Start: 13260, Stop: 13559, Start Num: 2

Candidate Starts for Pinkman_15:

(1, 13209), (Start: 2 @13260 has 67 MA's), (3, 13272), (4, 13275), (5, 13284), (6, 13305), (7, 13500),

Gene: Pops_16 Start: 13704, Stop: 14003, Start Num: 2

Candidate Starts for Pops_16:

(1, 13653), (Start: 2 @13704 has 67 MA's), (3, 13716), (4, 13719), (5, 13728), (6, 13749), (7, 13944),

Gene: Potter_15 Start: 13415, Stop: 13714, Start Num: 2

Candidate Starts for Potter_15:

(1, 13364), (Start: 2 @13415 has 67 MA's), (3, 13427), (4, 13430), (5, 13439), (6, 13460), (7, 13655),

Gene: Prickles_16 Start: 13695, Stop: 13994, Start Num: 2

Candidate Starts for Prickles_16:

(1, 13644), (Start: 2 @13695 has 67 MA's), (4, 13710), (5, 13719), (6, 13740), (7, 13935),

Gene: Puhltonio_16 Start: 13710, Stop: 14009, Start Num: 2

Candidate Starts for Puhltonio_16:

(1, 13659), (Start: 2 @13710 has 67 MA's), (3, 13722), (4, 13725), (5, 13734), (6, 13755), (7, 13950),

Gene: Quisquilliae_16 Start: 13716, Stop: 14015, Start Num: 2

Candidate Starts for Quisquilliae_16:

(1, 13665), (Start: 2 @13716 has 67 MA's), (3, 13728), (4, 13731), (5, 13740), (6, 13761), (7, 13956),

Gene: Ricotta_16 Start: 13425, Stop: 13724, Start Num: 2

Candidate Starts for Ricotta_16:

(1, 13374), (Start: 2 @13425 has 67 MA's), (3, 13437), (4, 13440), (5, 13449), (6, 13470), (7, 13665),

Gene: Rimu_15 Start: 13413, Stop: 13712, Start Num: 2

Candidate Starts for Rimu_15:

(1, 13362), (Start: 2 @13413 has 67 MA's), (3, 13425), (4, 13428), (5, 13437), (6, 13458), (7, 13653),

Gene: Schueller_15 Start: 13399, Stop: 13698, Start Num: 2

Candidate Starts for Schueller_15:

(1, 13348), (Start: 2 @13399 has 67 MA's), (3, 13411), (4, 13414), (5, 13423), (6, 13444), (7, 13639),

Gene: Scoot17C_16 Start: 13702, Stop: 14001, Start Num: 2

Candidate Starts for Scoot17C_16:

(1, 13651), (Start: 2 @13702 has 67 MA's), (3, 13714), (4, 13717), (5, 13726), (6, 13747), (7, 13942),

Gene: Selr12_16 Start: 13426, Stop: 13725, Start Num: 2

Candidate Starts for Selr12_16:

(1, 13375), (Start: 2 @13426 has 67 MA's), (3, 13438), (4, 13441), (5, 13450), (6, 13471), (7, 13666),

Gene: Serendipity_16 Start: 13722, Stop: 14021, Start Num: 2

Candidate Starts for Serendipity_16:

(1, 13671), (Start: 2 @13722 has 67 MA's), (3, 13734), (4, 13737), (5, 13746), (6, 13767), (7, 13962),

Gene: Sigman_16 Start: 13692, Stop: 13991, Start Num: 2

Candidate Starts for Sigman_16:

(1, 13641), (Start: 2 @13692 has 67 MA's), (3, 13704), (4, 13707), (5, 13716), (6, 13737), (7, 13932),

Gene: Suffolk_16 Start: 13700, Stop: 13999, Start Num: 2

Candidate Starts for Suffolk_16:

(1, 13649), (Start: 2 @13700 has 67 MA's), (3, 13712), (4, 13715), (5, 13724), (6, 13745), (7, 13940),

Gene: Swiphy_16 Start: 13701, Stop: 14000, Start Num: 2

Candidate Starts for Swiphy_16:

(1, 13650), (Start: 2 @13701 has 67 MA's), (3, 13713), (4, 13716), (5, 13725), (6, 13746), (7, 13941),

Gene: Swish_16 Start: 13696, Stop: 13995, Start Num: 2

Candidate Starts for Swish_16:

(1, 13645), (Start: 2 @13696 has 67 MA's), (3, 13708), (4, 13711), (5, 13720), (6, 13741), (7, 13936),

Gene: TallGrassMM_16 Start: 13426, Stop: 13725, Start Num: 2

Candidate Starts for TallGrassMM_16:

(1, 13375), (Start: 2 @13426 has 67 MA's), (3, 13438), (4, 13441), (5, 13450), (6, 13471), (7, 13666),

Gene: Thora_16 Start: 13710, Stop: 14009, Start Num: 2

Candidate Starts for Thora_16:

(1, 13659), (Start: 2 @13710 has 67 MA's), (3, 13722), (4, 13725), (5, 13734), (6, 13755), (7, 13950),

Gene: ThreeOh3D2_16 Start: 13711, Stop: 14010, Start Num: 2

Candidate Starts for ThreeOh3D2_16:

(1, 13660), (Start: 2 @13711 has 67 MA's), (3, 13723), (4, 13726), (5, 13735), (6, 13756), (7, 13951),

Gene: UncleHowie_16 Start: 13408, Stop: 13707, Start Num: 2

Candidate Starts for UncleHowie_16:

(1, 13357), (Start: 2 @13408 has 67 MA's), (3, 13420), (4, 13423), (5, 13432), (6, 13453), (7, 13648),

Gene: Vaishali24_15 Start: 13361, Stop: 13660, Start Num: 2

Candidate Starts for Vaishali24_15:

(1, 13310), (Start: 2 @13361 has 67 MA's), (3, 13373), (4, 13376), (5, 13385), (6, 13406), (7, 13601),

Gene: Virgeve_15 Start: 13414, Stop: 13713, Start Num: 2

Candidate Starts for Virgeve_15:

(1, 13363), (Start: 2 @13414 has 67 MA's), (3, 13426), (4, 13429), (5, 13438), (6, 13459), (7, 13654),

Gene: Vortex_16 Start: 13415, Stop: 13714, Start Num: 2

Candidate Starts for Vortex_16:

(1, 13364), (Start: 2 @13415 has 67 MA's), (3, 13427), (4, 13430), (5, 13439), (6, 13460), (7, 13655),

Gene: Yoshand_16 Start: 13705, Stop: 14004, Start Num: 2

Candidate Starts for Yoshand_16:

(1, 13654), (Start: 2 @13705 has 67 MA's), (3, 13717), (4, 13720), (5, 13729), (6, 13750), (7, 13945),