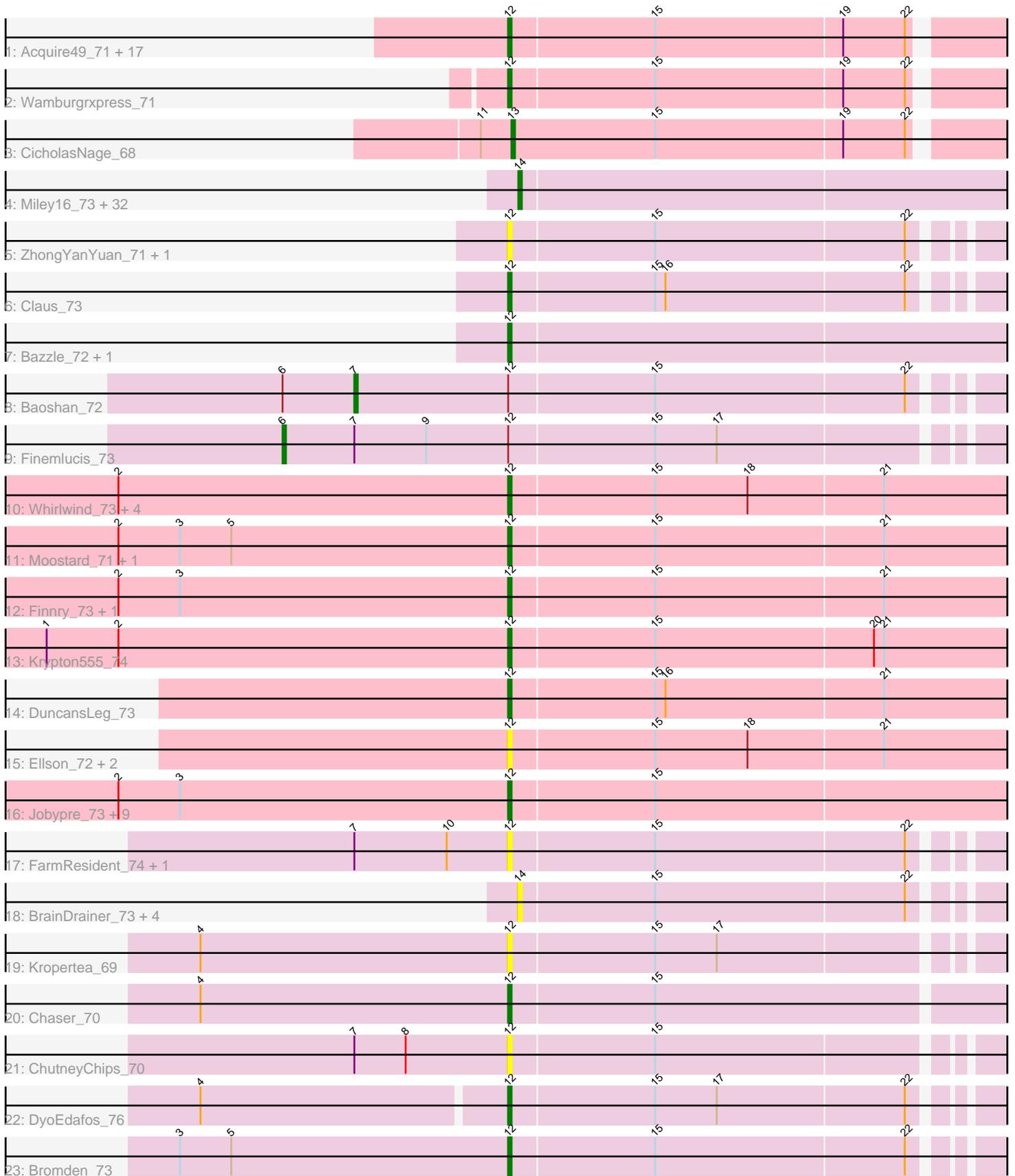


Pham 287779



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 287779 Report

This analysis was run 03/28/26 on database version 641.

Pham number 287779 has 96 members, 24 are drafts.

Phages represented in each track:

- Track 1 : Acquire49_71, UPIE_70, Enceladus_68, JoeDirt_71, Silverleaf_71, Appletree2_70, DirkDirk_68, AvadaKedavra_71, Rose5_71, Tyson_72, Calm_73, OhShagHennessy_69, LeBron_70, Poochiewood_70, Halena_69, MAckerman_69, Zaria_72, Wyatt2_72
- Track 2 : Wamburgxpress_71
- Track 3 : CicholasNage_68
- Track 4 : Miley16_73, Gabriela_71, Underpass_64, DrSeegs_73, Winky_73, Lynnae_75, Lewan_74, BobsGarage_73, GuuelaD_71, Gardann_74, OverPar_75, Crossroads_73, LilDestine_73, Nicholasp3_73, MkaliMitinis3_74, Sarshaun_74, SoJulia_74, Itos_72, Breezona_73, Netyap_74, Wigglewiggle_73, Wilder_74, Faith1_73, Kahlid_73, Rumpelstiltskin_72, Tourach_73, Hafay_75, Zakai_74, Rossetti_75, Vetrix_73, BigCheese_73, Soap141_73, Loadrie_72
- Track 5 : ZhongYanYuan_71, DanBing_74
- Track 6 : Claus_73
- Track 7 : Bazzle_72, Archie_71
- Track 8 : Baoshan_72
- Track 9 : Finemlucis_73
- Track 10 : Whirlwind_73, Lolly9_72, MiniMac_77, MiniLon_77, LiyuLake_72
- Track 11 : Moostard_71, Bellis_73
- Track 12 : Finnry_73, Samty_72
- Track 13 : Krypton555_74
- Track 14 : DuncansLeg_73
- Track 15 : Ellson_72, BourbonZero_74, KirDoubleO7_71
- Track 16 : Jobypre_73, Kingsolomon_71, TriFive_74, MsGreen_73, Nicholas_71, Red305_74, Clautastrophe_71, Lumos_74, Snenia_72, Jubie_72
- Track 17 : FarmResident_74, Quby_72
- Track 18 : BrainDrainer_73, Sheng711_73, Douzhi_73, PYPDinur_71, DHan_77
- Track 19 : Kropertea_69
- Track 20 : Chaser_70
- Track 21 : ChutneyChips_70
- Track 22 : DyoEdafos_76
- Track 23 : Bromden_73

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

The start number called the most often in the published annotations is 12, it was called in 43 of the 72 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_71, Appletree2_70, Archie_71, AvadaKedavra_71, Bazzle_72, Bellis_73, BourbonZero_74, Bromden_73, Calm_73, Chaser_70, ChutneyChips_70, Claus_73, Clautastrophe_71, DanBing_74, DirkDirk_68, DuncansLeg_73, DyoEdafos_76, Ellson_72, Enceladus_68, FarmResident_74, Finnry_73, Halena_69, Jobypre_73, JoeDirt_71, Jubie_72, Kingsolomon_71, KirDoubleO7_71, Kropertea_69, Krypton555_74, LeBron_70, LiyuLake_72, Lolly9_72, Lumos_74, MAckerman_69, MiniLon_77, MiniMac_77, Moostard_71, MsGreen_73, Nicholas_71, OhShagHennessy_69, Poochiewood_70, Quby_72, Red305_74, Rose5_71, Samty_72, Silverleaf_71, Snenia_72, TriFive_74, Tyson_72, UPIE_70, Wamburgxpress_71, Whirlwind_73, Wyatt2_72, Zaria_72, ZhongYanYuan_71,

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

- Baoshan_72, Finemlucis_73,

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

- BigCheese_73, BobsGarage_73, BrainDrainer_73, Breezona_73, CicholasNage_68, Crossroads_73, DHan_77, Douzhi_73, DrSeegs_73, Faith1_73, Gabriela_71, Gardann_74, GuuelaD_71, Hafay_75, Itos_72, Kahlid_73, Lewan_74, LilDestine_73, Loadrie_72, Lynnae_75, Miley16_73, MkaliMitinis3_74, Netyap_74, Nicholasp3_73, OverPar_75, PYPDinur_71, Rossetti_75, Rumpelstiltskin_72, Sarshaun_74, Sheng711_73, SoJulia_74, Soap141_73, Tourach_73, Underpass_64, Vetrix_73, Wigglewiggles_73, Wilder_74, Winky_73, Zakai_74,

Summary by start number:

Start 6:

- Found in 2 of 96 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 72
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Finemlucis_73 (L2),

Start 7:

- Found in 5 of 96 (5.2%) of genes in pham
- Manual Annotations of this start: 1 of 72
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Baoshan_72 (L2),

Start 12:

- Found in 57 of 96 (59.4%) of genes in pham
- Manual Annotations of this start: 43 of 72
- Called 96.5% of time when present
- Phage (with cluster) where this start called: Acquire49_71 (L1), Appletree2_70 (L1), Archie_71 (L2), AvadaKedavra_71 (L1), Bazzle_72 (L2), Bellis_73 (L3), BourbonZero_74 (L3), Bromden_73 (L4), Calm_73 (L1), Chaser_70 (L4), ChutneyChips_70 (L4), Claus_73 (L2), Clautastrophe_71 (L3), DanBing_74 (L2), DirkDirk_68 (L1), DuncansLeg_73 (L3), DyoEdafos_76 (L4), Ellson_72 (L3), Enceladus_68 (L1), FarmResident_74 (L4), Finnry_73 (L3), Halena_69 (L1), Jobypre_73 (L3), JoeDirt_71 (L1), Jubie_72 (L3), Kingsolomon_71 (L3),

KirDoubleO7_71 (L3), Kropertea_69 (L4), Krypton555_74 (L3), LeBron_70 (L1), LiyuLake_72 (L3), Lolly9_72 (L3), Lumos_74 (L3), MAckerman_69 (L1), MiniLon_77 (L3), MiniMac_77 (L3), Moostard_71 (L3), MsGreen_73 (L3), Nicholas_71 (L3), OhShagHennessy_69 (L1), Poochiewood_70 (L1), Quby_72 (L4), Red305_74 (L3), Rose5_71 (L1), Samty_72 (L3), Silverleaf_71 (L1), Snenia_72 (L3), TriFive_74 (L3), Tyson_72 (L1), UPIE_70 (L1), Wamburgxpress_71 (L1), Whirlwind_73 (L3), Wyatt2_72 (L1), Zaria_72 (L1), ZhongYanYuan_71 (L2),

Start 13:

- Found in 1 of 96 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 72
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CicholasNage_68 (L1),

Start 14:

- Found in 38 of 96 (39.6%) of genes in pham
- Manual Annotations of this start: 26 of 72
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigCheese_73 (L2), BobsGarage_73 (L2), BrainDrainer_73 (L4), Breezona_73 (L2), Crossroads_73 (L2), DHan_77 (L2), Douzhi_73 (L4), DrSeegs_73 (L2), Faith1_73 (L2), Gabriela_71 (L2), Gardann_74 (L2), GuuelaD_71 (L2), Hafay_75 (L2), Itos_72 (L2), Kahlid_73 (L2), Lewan_74 (L2), LilDestine_73 (L2), Loadrie_72 (L2), Lynnae_75 (L2), Miley16_73 (L2), MkaliMitinis3_74 (L2), Netyap_74 (L2), Nicholasp3_73 (L2), OverPar_75 (L2), PYPDinur_71 (L4), Rossetti_75 (L2), Rumpelstiltskin_72 (L2), Sarshaun_74 (L2), Sheng711_73 (L4), SoJulia_74 (L2), Soap141_73 (L2), Tourach_73 (L2), Underpass_64 (L2), Vetrix_73 (L2), Wigglewiggle_73 (L2), Wilder_74 (L2), Winky_73 (L2), Zakai_74 (L2),

Summary by clusters:

There are 4 clusters represented in this pham: L4, L2, L3, L1,

Info for manual annotations of cluster L1:

- Start number 12 was manually annotated 18 times for cluster L1.
- Start number 13 was manually annotated 1 time for cluster L1.

Info for manual annotations of cluster L2:

- Start number 6 was manually annotated 1 time for cluster L2.
- Start number 7 was manually annotated 1 time for cluster L2.
- Start number 12 was manually annotated 3 times for cluster L2.
- Start number 14 was manually annotated 26 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 12 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 12 was manually annotated 3 times for cluster L4.

Gene Information:

Gene: Acquire49_71 Start: 47715, Stop: 47858, Start Num: 12
Candidate Starts for Acquire49_71:
(Start: 12 @47715 has 43 MA's), (15, 47757), (19, 47811), (22, 47829),

Gene: Appletree2_70 Start: 47330, Stop: 47473, Start Num: 12
Candidate Starts for Appletree2_70:
(Start: 12 @47330 has 43 MA's), (15, 47372), (19, 47426), (22, 47444),

Gene: Archie_71 Start: 49099, Stop: 49248, Start Num: 12
Candidate Starts for Archie_71:
(Start: 12 @49099 has 43 MA's),

Gene: AvadaKedavra_71 Start: 47788, Stop: 47931, Start Num: 12
Candidate Starts for AvadaKedavra_71:
(Start: 12 @47788 has 43 MA's), (15, 47830), (19, 47884), (22, 47902),

Gene: Baoshan_72 Start: 49383, Stop: 49568, Start Num: 7
Candidate Starts for Baoshan_72:
(Start: 6 @49362 has 1 MA's), (Start: 7 @49383 has 1 MA's), (Start: 12 @49428 has 43 MA's), (15, 49470), (22, 49542),

Gene: Bazzle_72 Start: 49479, Stop: 49628, Start Num: 12
Candidate Starts for Bazzle_72:
(Start: 12 @49479 has 43 MA's),

Gene: Bellis_73 Start: 49762, Stop: 49911, Start Num: 12
Candidate Starts for Bellis_73:
(2, 49648), (3, 49666), (5, 49681), (Start: 12 @49762 has 43 MA's), (15, 49804), (21, 49870),

Gene: BigCheese_73 Start: 49373, Stop: 49519, Start Num: 14
Candidate Starts for BigCheese_73:
(Start: 14 @49373 has 26 MA's),

Gene: BobsGarage_73 Start: 49373, Stop: 49519, Start Num: 14
Candidate Starts for BobsGarage_73:
(Start: 14 @49373 has 26 MA's),

Gene: BourbonZero_74 Start: 49756, Stop: 49905, Start Num: 12
Candidate Starts for BourbonZero_74:
(Start: 12 @49756 has 43 MA's), (15, 49798), (18, 49825), (21, 49864),

Gene: BrainDrainer_73 Start: 48601, Stop: 48738, Start Num: 14
Candidate Starts for BrainDrainer_73:
(Start: 14 @48601 has 26 MA's), (15, 48640), (22, 48712),

Gene: Breezona_73 Start: 49373, Stop: 49519, Start Num: 14
Candidate Starts for Breezona_73:
(Start: 14 @49373 has 26 MA's),

Gene: Bromden_73 Start: 49169, Stop: 49309, Start Num: 12
Candidate Starts for Bromden_73:
(3, 49073), (5, 49088), (Start: 12 @49169 has 43 MA's), (15, 49211), (22, 49283),

Gene: Calm_73 Start: 48041, Stop: 48184, Start Num: 12
Candidate Starts for Calm_73:
(Start: 12 @48041 has 43 MA's), (15, 48083), (19, 48137), (22, 48155),

Gene: Chaser_70 Start: 48189, Stop: 48335, Start Num: 12
Candidate Starts for Chaser_70:
(4, 48099), (Start: 12 @48189 has 43 MA's), (15, 48231),

Gene: ChutneyChips_70 Start: 48454, Stop: 48594, Start Num: 12
Candidate Starts for ChutneyChips_70:
(Start: 7 @48409 has 1 MA's), (8, 48424), (Start: 12 @48454 has 43 MA's), (15, 48496),

Gene: CicholasNage_68 Start: 47378, Stop: 47521, Start Num: 13
Candidate Starts for CicholasNage_68:
(11, 47369), (Start: 13 @47378 has 1 MA's), (15, 47420), (19, 47474), (22, 47492),

Gene: Claus_73 Start: 49494, Stop: 49634, Start Num: 12
Candidate Starts for Claus_73:
(Start: 12 @49494 has 43 MA's), (15, 49536), (16, 49539), (22, 49608),

Gene: Clautastrophe_71 Start: 49759, Stop: 49908, Start Num: 12
Candidate Starts for Clautastrophe_71:
(2, 49645), (3, 49663), (Start: 12 @49759 has 43 MA's), (15, 49801),

Gene: Crossroads_73 Start: 49448, Stop: 49594, Start Num: 14
Candidate Starts for Crossroads_73:
(Start: 14 @49448 has 26 MA's),

Gene: DHan_77 Start: 49662, Stop: 49799, Start Num: 14
Candidate Starts for DHan_77:
(Start: 14 @49662 has 26 MA's), (15, 49701), (22, 49773),

Gene: DanBing_74 Start: 49363, Stop: 49503, Start Num: 12
Candidate Starts for DanBing_74:
(Start: 12 @49363 has 43 MA's), (15, 49405), (22, 49477),

Gene: DirkDirk_68 Start: 46916, Stop: 47059, Start Num: 12
Candidate Starts for DirkDirk_68:
(Start: 12 @46916 has 43 MA's), (15, 46958), (19, 47012), (22, 47030),

Gene: Douzhi_73 Start: 48417, Stop: 48554, Start Num: 14
Candidate Starts for Douzhi_73:
(Start: 14 @48417 has 26 MA's), (15, 48456), (22, 48528),

Gene: DrSeegs_73 Start: 49373, Stop: 49519, Start Num: 14
Candidate Starts for DrSeegs_73:
(Start: 14 @49373 has 26 MA's),

Gene: DuncansLeg_73 Start: 49744, Stop: 49893, Start Num: 12
Candidate Starts for DuncansLeg_73:
(Start: 12 @49744 has 43 MA's), (15, 49786), (16, 49789), (21, 49852),

Gene: DyoEdafos_76 Start: 48681, Stop: 48821, Start Num: 12

Candidate Starts for DyoEdafos_76:
(4, 48594), (Start: 12 @48681 has 43 MA's), (15, 48723), (17, 48741), (22, 48795),

Gene: Ellson_72 Start: 50059, Stop: 50208, Start Num: 12
Candidate Starts for Ellson_72:
(Start: 12 @50059 has 43 MA's), (15, 50101), (18, 50128), (21, 50167),

Gene: Enceladus_68 Start: 47673, Stop: 47816, Start Num: 12
Candidate Starts for Enceladus_68:
(Start: 12 @47673 has 43 MA's), (15, 47715), (19, 47769), (22, 47787),

Gene: Faith1_73 Start: 49373, Stop: 49519, Start Num: 14
Candidate Starts for Faith1_73:
(Start: 14 @49373 has 26 MA's),

Gene: FarmResident_74 Start: 48184, Stop: 48324, Start Num: 12
Candidate Starts for FarmResident_74:
(Start: 7 @48139 has 1 MA's), (10, 48166), (Start: 12 @48184 has 43 MA's), (15, 48226), (22, 48298),

Gene: Finemlucis_73 Start: 49850, Stop: 50056, Start Num: 6
Candidate Starts for Finemlucis_73:
(Start: 6 @49850 has 1 MA's), (Start: 7 @49871 has 1 MA's), (9, 49892), (Start: 12 @49916 has 43 MA's), (15, 49958), (17, 49976),

Gene: Finnry_73 Start: 50023, Stop: 50172, Start Num: 12
Candidate Starts for Finnry_73:
(2, 49909), (3, 49927), (Start: 12 @50023 has 43 MA's), (15, 50065), (21, 50131),

Gene: Gabriela_71 Start: 48220, Stop: 48366, Start Num: 14
Candidate Starts for Gabriela_71:
(Start: 14 @48220 has 26 MA's),

Gene: Gardann_74 Start: 49406, Stop: 49552, Start Num: 14
Candidate Starts for Gardann_74:
(Start: 14 @49406 has 26 MA's),

Gene: GuuelaD_71 Start: 49488, Stop: 49634, Start Num: 14
Candidate Starts for GuuelaD_71:
(Start: 14 @49488 has 26 MA's),

Gene: Hafay_75 Start: 49477, Stop: 49623, Start Num: 14
Candidate Starts for Hafay_75:
(Start: 14 @49477 has 26 MA's),

Gene: Halena_69 Start: 46953, Stop: 47096, Start Num: 12
Candidate Starts for Halena_69:
(Start: 12 @46953 has 43 MA's), (15, 46995), (19, 47049), (22, 47067),

Gene: Itos_72 Start: 48279, Stop: 48425, Start Num: 14
Candidate Starts for Itos_72:
(Start: 14 @48279 has 26 MA's),

Gene: Jobypre_73 Start: 49759, Stop: 49908, Start Num: 12

Candidate Starts for Jobypre_73:
(2, 49645), (3, 49663), (Start: 12 @49759 has 43 MA's), (15, 49801),

Gene: JoeDirt_71 Start: 48106, Stop: 48249, Start Num: 12
Candidate Starts for JoeDirt_71:
(Start: 12 @48106 has 43 MA's), (15, 48148), (19, 48202), (22, 48220),

Gene: Jubie_72 Start: 49894, Stop: 50043, Start Num: 12
Candidate Starts for Jubie_72:
(2, 49780), (3, 49798), (Start: 12 @49894 has 43 MA's), (15, 49936),

Gene: Kahlid_73 Start: 49379, Stop: 49525, Start Num: 14
Candidate Starts for Kahlid_73:
(Start: 14 @49379 has 26 MA's),

Gene: Kingsolomon_71 Start: 49766, Stop: 49915, Start Num: 12
Candidate Starts for Kingsolomon_71:
(2, 49652), (3, 49670), (Start: 12 @49766 has 43 MA's), (15, 49808),

Gene: KirDoubleO7_71 Start: 49746, Stop: 49895, Start Num: 12
Candidate Starts for KirDoubleO7_71:
(Start: 12 @49746 has 43 MA's), (15, 49788), (18, 49815), (21, 49854),

Gene: Kropertea_69 Start: 48370, Stop: 48510, Start Num: 12
Candidate Starts for Kropertea_69:
(4, 48280), (Start: 12 @48370 has 43 MA's), (15, 48412), (17, 48430),

Gene: Krypton555_74 Start: 49973, Stop: 50122, Start Num: 12
Candidate Starts for Krypton555_74:
(1, 49838), (2, 49859), (Start: 12 @49973 has 43 MA's), (15, 50015), (20, 50078), (21, 50081),

Gene: LeBron_70 Start: 46957, Stop: 47100, Start Num: 12
Candidate Starts for LeBron_70:
(Start: 12 @46957 has 43 MA's), (15, 46999), (19, 47053), (22, 47071),

Gene: Lewan_74 Start: 49430, Stop: 49576, Start Num: 14
Candidate Starts for Lewan_74:
(Start: 14 @49430 has 26 MA's),

Gene: LilDestine_73 Start: 49406, Stop: 49552, Start Num: 14
Candidate Starts for LilDestine_73:
(Start: 14 @49406 has 26 MA's),

Gene: LiyuLake_72 Start: 49807, Stop: 49956, Start Num: 12
Candidate Starts for LiyuLake_72:
(2, 49693), (Start: 12 @49807 has 43 MA's), (15, 49849), (18, 49876), (21, 49915),

Gene: Loadrie_72 Start: 49458, Stop: 49604, Start Num: 14
Candidate Starts for Loadrie_72:
(Start: 14 @49458 has 26 MA's),

Gene: Lolly9_72 Start: 49879, Stop: 50028, Start Num: 12
Candidate Starts for Lolly9_72:

(2, 49765), (Start: 12 @49879 has 43 MA's), (15, 49921), (18, 49948), (21, 49987),

Gene: Lumos_74 Start: 49756, Stop: 49905, Start Num: 12

Candidate Starts for Lumos_74:

(2, 49642), (3, 49660), (Start: 12 @49756 has 43 MA's), (15, 49798),

Gene: Lynnae_75 Start: 49391, Stop: 49537, Start Num: 14

Candidate Starts for Lynnae_75:

(Start: 14 @49391 has 26 MA's),

Gene: MAckerman_69 Start: 46946, Stop: 47089, Start Num: 12

Candidate Starts for MAckerman_69:

(Start: 12 @46946 has 43 MA's), (15, 46988), (19, 47042), (22, 47060),

Gene: Miley16_73 Start: 49373, Stop: 49519, Start Num: 14

Candidate Starts for Miley16_73:

(Start: 14 @49373 has 26 MA's),

Gene: MiniLon_77 Start: 49880, Stop: 50029, Start Num: 12

Candidate Starts for MiniLon_77:

(2, 49766), (Start: 12 @49880 has 43 MA's), (15, 49922), (18, 49949), (21, 49988),

Gene: MiniMac_77 Start: 49878, Stop: 50027, Start Num: 12

Candidate Starts for MiniMac_77:

(2, 49764), (Start: 12 @49878 has 43 MA's), (15, 49920), (18, 49947), (21, 49986),

Gene: MkaliMitinis3_74 Start: 49442, Stop: 49588, Start Num: 14

Candidate Starts for MkaliMitinis3_74:

(Start: 14 @49442 has 26 MA's),

Gene: Moostard_71 Start: 49762, Stop: 49911, Start Num: 12

Candidate Starts for Moostard_71:

(2, 49648), (3, 49666), (5, 49681), (Start: 12 @49762 has 43 MA's), (15, 49804), (21, 49870),

Gene: MsGreen_73 Start: 49759, Stop: 49908, Start Num: 12

Candidate Starts for MsGreen_73:

(2, 49645), (3, 49663), (Start: 12 @49759 has 43 MA's), (15, 49801),

Gene: Netyap_74 Start: 49374, Stop: 49520, Start Num: 14

Candidate Starts for Netyap_74:

(Start: 14 @49374 has 26 MA's),

Gene: Nicholas_71 Start: 49766, Stop: 49915, Start Num: 12

Candidate Starts for Nicholas_71:

(2, 49652), (3, 49670), (Start: 12 @49766 has 43 MA's), (15, 49808),

Gene: Nicholasp3_73 Start: 49406, Stop: 49552, Start Num: 14

Candidate Starts for Nicholasp3_73:

(Start: 14 @49406 has 26 MA's),

Gene: OhShagHennessy_69 Start: 46822, Stop: 46965, Start Num: 12

Candidate Starts for OhShagHennessy_69:

(Start: 12 @46822 has 43 MA's), (15, 46864), (19, 46918), (22, 46936),

Gene: OverPar_75 Start: 49458, Stop: 49604, Start Num: 14
Candidate Starts for OverPar_75:
(Start: 14 @49458 has 26 MA's),

Gene: PYPDinur_71 Start: 48447, Stop: 48584, Start Num: 14
Candidate Starts for PYPDinur_71:
(Start: 14 @48447 has 26 MA's), (15, 48486), (22, 48558),

Gene: Poochiewood_70 Start: 48114, Stop: 48257, Start Num: 12
Candidate Starts for Poochiewood_70:
(Start: 12 @48114 has 43 MA's), (15, 48156), (19, 48210), (22, 48228),

Gene: Quby_72 Start: 48149, Stop: 48289, Start Num: 12
Candidate Starts for Quby_72:
(Start: 7 @48104 has 1 MA's), (10, 48131), (Start: 12 @48149 has 43 MA's), (15, 48191), (22, 48263),

Gene: Red305_74 Start: 49759, Stop: 49908, Start Num: 12
Candidate Starts for Red305_74:
(2, 49645), (3, 49663), (Start: 12 @49759 has 43 MA's), (15, 49801),

Gene: Rose5_71 Start: 48126, Stop: 48269, Start Num: 12
Candidate Starts for Rose5_71:
(Start: 12 @48126 has 43 MA's), (15, 48168), (19, 48222), (22, 48240),

Gene: Rossetti_75 Start: 49952, Stop: 50086, Start Num: 14
Candidate Starts for Rossetti_75:
(Start: 14 @49952 has 26 MA's),

Gene: Rumpelstiltskin_72 Start: 49199, Stop: 49345, Start Num: 14
Candidate Starts for Rumpelstiltskin_72:
(Start: 14 @49199 has 26 MA's),

Gene: Samty_72 Start: 49767, Stop: 49916, Start Num: 12
Candidate Starts for Samty_72:
(2, 49653), (3, 49671), (Start: 12 @49767 has 43 MA's), (15, 49809), (21, 49875),

Gene: Sarshaun_74 Start: 49466, Stop: 49612, Start Num: 14
Candidate Starts for Sarshaun_74:
(Start: 14 @49466 has 26 MA's),

Gene: Sheng711_73 Start: 48455, Stop: 48592, Start Num: 14
Candidate Starts for Sheng711_73:
(Start: 14 @48455 has 26 MA's), (15, 48494), (22, 48566),

Gene: Silverleaf_71 Start: 47576, Stop: 47719, Start Num: 12
Candidate Starts for Silverleaf_71:
(Start: 12 @47576 has 43 MA's), (15, 47618), (19, 47672), (22, 47690),

Gene: Snenia_72 Start: 49760, Stop: 49909, Start Num: 12
Candidate Starts for Snenia_72:
(2, 49646), (3, 49664), (Start: 12 @49760 has 43 MA's), (15, 49802),

Gene: SoJulia_74 Start: 50035, Stop: 50181, Start Num: 14
Candidate Starts for SoJulia_74:
(Start: 14 @50035 has 26 MA's),

Gene: Soap141_73 Start: 49466, Stop: 49612, Start Num: 14
Candidate Starts for Soap141_73:
(Start: 14 @49466 has 26 MA's),

Gene: Tourach_73 Start: 49673, Stop: 49807, Start Num: 14
Candidate Starts for Tourach_73:
(Start: 14 @49673 has 26 MA's),

Gene: TriFive_74 Start: 49759, Stop: 49908, Start Num: 12
Candidate Starts for TriFive_74:
(2, 49645), (3, 49663), (Start: 12 @49759 has 43 MA's), (15, 49801),

Gene: Tyson_72 Start: 48052, Stop: 48195, Start Num: 12
Candidate Starts for Tyson_72:
(Start: 12 @48052 has 43 MA's), (15, 48094), (19, 48148), (22, 48166),

Gene: UPIE_70 Start: 47652, Stop: 47795, Start Num: 12
Candidate Starts for UPIE_70:
(Start: 12 @47652 has 43 MA's), (15, 47694), (19, 47748), (22, 47766),

Gene: Underpass_64 Start: 44442, Stop: 44588, Start Num: 14
Candidate Starts for Underpass_64:
(Start: 14 @44442 has 26 MA's),

Gene: Vetrix_73 Start: 49413, Stop: 49559, Start Num: 14
Candidate Starts for Vetrix_73:
(Start: 14 @49413 has 26 MA's),

Gene: Wamburgexpress_71 Start: 48087, Stop: 48230, Start Num: 12
Candidate Starts for Wamburgexpress_71:
(Start: 12 @48087 has 43 MA's), (15, 48129), (19, 48183), (22, 48201),

Gene: Whirlwind_73 Start: 49853, Stop: 50002, Start Num: 12
Candidate Starts for Whirlwind_73:
(2, 49739), (Start: 12 @49853 has 43 MA's), (15, 49895), (18, 49922), (21, 49961),

Gene: Wigglewobble_73 Start: 49430, Stop: 49576, Start Num: 14
Candidate Starts for Wigglewobble_73:
(Start: 14 @49430 has 26 MA's),

Gene: Wilder_74 Start: 49379, Stop: 49525, Start Num: 14
Candidate Starts for Wilder_74:
(Start: 14 @49379 has 26 MA's),

Gene: Winky_73 Start: 49373, Stop: 49519, Start Num: 14
Candidate Starts for Winky_73:
(Start: 14 @49373 has 26 MA's),

Gene: Wyatt2_72 Start: 48050, Stop: 48193, Start Num: 12

Candidate Starts for Wyatt2_72:

(Start: 12 @48050 has 43 MA's), (15, 48092), (19, 48146), (22, 48164),

Gene: Zakai_74 Start: 49699, Stop: 49845, Start Num: 14

Candidate Starts for Zakai_74:

(Start: 14 @49699 has 26 MA's),

Gene: Zaria_72 Start: 47506, Stop: 47649, Start Num: 12

Candidate Starts for Zaria_72:

(Start: 12 @47506 has 43 MA's), (15, 47548), (19, 47602), (22, 47620),

Gene: ZhongYanYuan_71 Start: 49018, Stop: 49158, Start Num: 12

Candidate Starts for ZhongYanYuan_71:

(Start: 12 @49018 has 43 MA's), (15, 49060), (22, 49132),