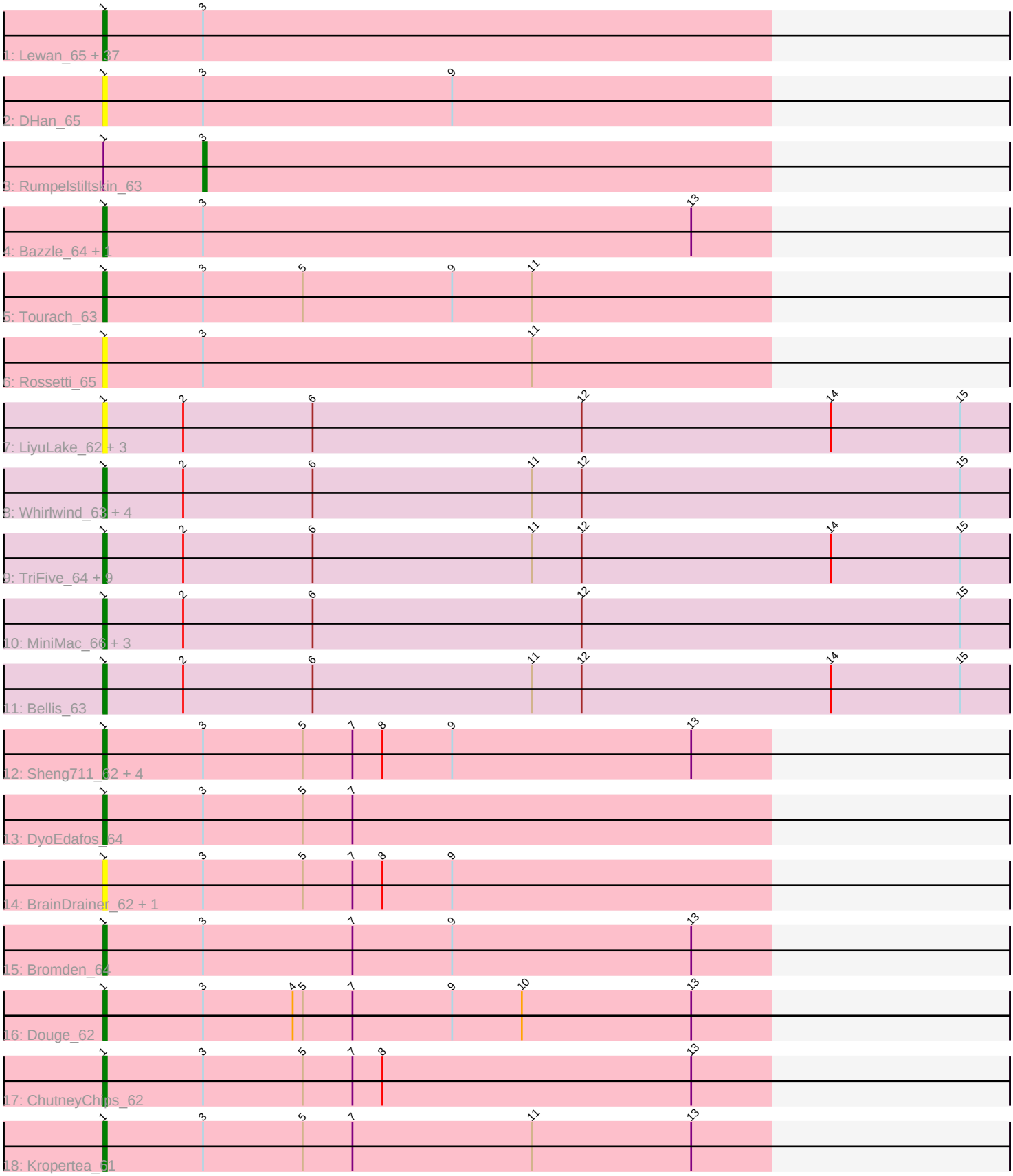
Pham 347529


1: Lewan_65 + 37
2: DHan_65
3: Rumpelstiltskin_63
4: Bazzle_64 + 1
5: Tourach_63
6: Rossetti_65
7: LiyuLake_62 + 3
8: Whirlwind_63 + 4
9: TriFive_64 + 9
10: MiniMac_66 + 3
11: Bellis_63
12: Sheng711_62 + 4
13: DyoEdafos_64
14: BrainDrainer_62 + 1
15: Bromden_64
16: Douge_62
17: ChutneyChips_62
18: Kropertea_61

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 347529 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347529 has 80 members, 23 are drafts.

Phages represented in each track:
• Track 1 : Lewan_65, Crossroads_64, Finemlucis_64, Breezona_64, Lynnae_65, LilDestine_64, BobsGarage_64, Underpass_55, Hiraya_64, GuuelaD_63, Soap141_64, Nicholasp3_64, Claus_64, Netyap_65, Faith1_64, BigCheese_64, MkaliMitinis3_65, Sarshaun_64, Loadrie_63, SoJulia_66, Miley16_64, DanBing_64, Wigglewiggle_64, Gabriela_61, Vetrix_64, ChengKai98_64, Molivier_55, ZhongYanYuan_62, OverPar_65, Kahlid_64, Itos_63, Zakai_65, DrSeegs_64, Wilder_65, Hafay_65, Gardann_65, Winky_64, Baoshan_63
• Track 2 : DHan_65
• Track 3 : Rumpelstiltskin_63
• Track 4 : Bazzle_64, Archie_64
• Track 5 : Tourach_63
• Track 6 : Rossetti_65
• Track 7 : LiyuLake_62, BourbonZero_63, Ellson_62, KirDoubleO7_61
• Track 8 : Whirlwind_63, Samty_63, Finnry_63, Moostard_62, Krypton555_64
• Track 9 : TriFive_64, Lumos_64, Jubie_62, MsGreen_63, Snenia_62, Nicholas_62, Jobypre_63, Red305_63, Clautastrophe_62, Kingsolomon_62
• Track 10 : MiniMac_66, DuncansLeg_63, Lolly9_62, MiniLon_66
• Track 11 : Bellis_63
• Track 12 : Sheng711_62, Quby_62, Chaser_60, Douzhi_62, PYPDinur_60
• Track 13 : DyoEdafos_64
• Track 14 : BrainDrainer_62, FarmResident_64
• Track 15 : Bromden_64
• Track 16 : Douge_62
• Track 17 : ChutneyChips_62
• Track 18 : Kropertea_61

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

The start number called the most often in the published annotations is 1, it was called in 56 of the 57 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Archie_64, Baoshan_63, Bazzle_64, Bellis_63, BigCheese_64, BobsGarage_64, BourbonZero_63, BrainDrainer_62, Breezona_64, Bromden_64, Chaser_60,

ChengKai98_64, ChutneyChips_62, Claus_64, Clautastrophe_62, Crossroads_64, DHan_65, DanBing_64, Douge_62, Douzhi_62, DrSeegs_64, DuncansLeg_63, DyoEdafos_64, Ellson_62, Faith1_64, FarmResident_64, Finemlucis_64, Finnry_63, Gabriela_61, Gardann_65, GuuelaD_63, Hafay_65, Hiraya_64, Itos_63, Jobypre_63, Jubie_62, Kahlid_64, Kingsolomon_62, KirDoubleO7_61, Kropertea_61, Krypton555_64, Lewan_65, LilDestine_64, LiyuLake_62, Loadrie_63, Lolly9_62, Lumos_64, Lynnae_65, Miley16_64, MiniLon_66, MiniMac_66, MkaliMitinis3_65, Molivier_55, Moostard_62, MsGreen_63, Netyap_65, Nicholas_62, Nicholasp3_64, OverPar_65, PYPDinur_60, Quby_62, Red305_63, Rossetti_65, Samty_63, Sarshaun_64, Sheng711_62, Snenia_62, SoJulia_66, Soap141_64, Tourach_63, TriFive_64, Underpass_55, Vetrix_64, Whirlwind_63, Wigglewiggle_64, Wilder_65, Winky_64, Zakai_65, ZhongYanYuan_62,

Genes that have the "Most Annotated" start but do not call it:
• Rumpelstiltskin_63,

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

Summary by start number:

Start 1:
• Found in 80 of 80 (100.0%) of genes in pham
• Manual Annotations of this start: 56 of 57
• Called 98.8% of time when present
• Phage (with cluster) where this start called: Archie_64 (L2), Baoshan_63 (L2), Bazzle_64 (L2), Bellis_63 (L3), BigCheese_64 (L2), BobsGarage_64 (L2), BourbonZero_63 (L3), BrainDrainer_62 (L4), Breezona_64 (L2), Bromden_64 (L4), Chaser_60 (L4), ChengKai98_64 (L2), ChutneyChips_62 (L4), Claus_64 (L2), Clautastrophe_62 (L3), Crossroads_64 (L2), DHan_65 (L2), DanBing_64 (L2), Douge_62 (L4), Douzhi_62 (L4), DrSeegs_64 (L2), DuncansLeg_63 (L3), DyoEdafos_64 (L4), Ellson_62 (L3), Faith1_64 (L2), FarmResident_64 (L4), Finemlucis_64 (L2), Finnry_63 (L3), Gabriela_61 (L2), Gardann_65 (L2), GuuelaD_63 (L2), Hafay_65 (L2), Hiraya_64 (L2), Itos_63 (L2), Jobypre_63 (L3), Jubie_62 (L3), Kahlid_64 (L2), Kingsolomon_62 (L3), KirDoubleO7_61 (L3), Kropertea_61 (L4), Krypton555_64 (L3), Lewan_65 (L2), LilDestine_64 (L2), LiyuLake_62 (L3), Loadrie_63 (L2), Lolly9_62 (L3), Lumos_64 (L3), Lynnae_65 (L2), Miley16_64 (L2), MiniLon_66 (L3), MiniMac_66 (L3), MkaliMitinis3_65 (L2), Molivier_55 (L2), Moostard_62 (L3), MsGreen_63 (L3), Netyap_65 (L2), Nicholas_62 (L3), Nicholasp3_64 (L2), OverPar_65 (L2), PYPDinur_60 (L4), Quby_62 (L4), Red305_63 (L3), Rossetti_65 (L2), Samty_63 (L3), Sarshaun_64 (L2), Sheng711_62 (L4), Snenia_62 (L3), SoJulia_66 (L2), Soap141_64 (L2), Tourach_63 (L2), TriFive_64 (L3), Underpass_55 (L2), Vetrix_64 (L2), Whirlwind_63 (L3), Wigglewiggle_64 (L2), Wilder_65 (L2), Winky_64 (L2), Zakai_65 (L2), ZhongYanYuan_62 (L2),

Start 3:
• Found in 56 of 80 (70.0%) of genes in pham
• Manual Annotations of this start: 1 of 57
• Called 1.8% of time when present
• Phage (with cluster) where this start called: Rumpelstiltskin_63 (L2),

Summary by clusters:

There are 3 clusters represented in this pham: L4, L2, L3,

Info for manual annotations of cluster L2:
•Start number 1 was manually annotated 31 times for cluster L2.
•Start number 3 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:
•Start number 1 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:
•Start number 1 was manually annotated 6 times for cluster L4.

Gene Information:

Gene: Archie_64 Start: 45720, Stop: 45920, Start Num: 1
Candidate Starts for Archie_64:
(Start: 1 @45720 has 56 MA's), (Start: 3 @45750 has 1 MA's), (13, 45897),

Gene: Baoshan_63 Start: 45422, Stop: 45622, Start Num: 1
Candidate Starts for Baoshan_63:
(Start: 1 @45422 has 56 MA's), (Start: 3 @45452 has 1 MA's),

Gene: Bazzle_64 Start: 45790, Stop: 45990, Start Num: 1
Candidate Starts for Bazzle_64:
(Start: 1 @45790 has 56 MA's), (Start: 3 @45820 has 1 MA's), (13, 45967),

Gene: Bellis_63 Start: 45533, Stop: 45805, Start Num: 1
Candidate Starts for Bellis_63:
(Start: 1 @45533 has 56 MA's), (2, 45557), (6, 45596), (11, 45662), (12, 45677), (14, 45752), (15, 45791),

Gene: BigCheese_64 Start: 45479, Stop: 45679, Start Num: 1
Candidate Starts for BigCheese_64:
(Start: 1 @45479 has 56 MA's), (Start: 3 @45509 has 1 MA's),

Gene: BobsGarage_64 Start: 45479, Stop: 45679, Start Num: 1
Candidate Starts for BobsGarage_64:
(Start: 1 @45479 has 56 MA's), (Start: 3 @45509 has 1 MA's),

Gene: BourbonZero_63 Start: 45578, Stop: 45850, Start Num: 1
Candidate Starts for BourbonZero_63:
(Start: 1 @45578 has 56 MA's), (2, 45602), (6, 45641), (12, 45722), (14, 45797), (15, 45836),

Gene: BrainDrainer_62 Start: 44348, Stop: 44548, Start Num: 1
Candidate Starts for BrainDrainer_62:
(Start: 1 @44348 has 56 MA's), (Start: 3 @44378 has 1 MA's), (5, 44408), (7, 44423), (8, 44432), (9, 44453),

Gene: Breezona_64 Start: 45479, Stop: 45679, Start Num: 1
Candidate Starts for Breezona_64:
(Start: 1 @45479 has 56 MA's), (Start: 3 @45509 has 1 MA's),

Gene: Bromden_64 Start: 45458, Stop: 45658, Start Num: 1
Candidate Starts for Bromden_64:
(Start: 1 @45458 has 56 MA's), (Start: 3 @45488 has 1 MA's), (7, 45533), (9, 45563), (13, 45635),

Gene: Chaser_60 Start: 44120, Stop: 44320, Start Num: 1
Candidate Starts for Chaser_60:
(Start: 1 @44120 has 56 MA's), (Start: 3 @44150 has 1 MA's), (5, 44180), (7, 44195), (8, 44204), (9, 44225), (13, 44297),

Gene: ChengKai98_64 Start: 45514, Stop: 45714, Start Num: 1
Candidate Starts for ChengKai98_64:
(Start: 1 @45514 has 56 MA's), (Start: 3 @45544 has 1 MA's),

Gene: ChutneyChips_62 Start: 44384, Stop: 44584, Start Num: 1
Candidate Starts for ChutneyChips_62:
(Start: 1 @44384 has 56 MA's), (Start: 3 @44414 has 1 MA's), (5, 44444), (7, 44459), (8, 44468), (13, 44561),

Gene: Claus_64 Start: 45560, Stop: 45760, Start Num: 1
Candidate Starts for Claus_64:
(Start: 1 @45560 has 56 MA's), (Start: 3 @45590 has 1 MA's),

Gene: Clautastrophe_62 Start: 45530, Stop: 45802, Start Num: 1
Candidate Starts for Clautastrophe_62:
(Start: 1 @45530 has 56 MA's), (2, 45554), (6, 45593), (11, 45659), (12, 45674), (14, 45749), (15, 45788),

Gene: Crossroads_64 Start: 45557, Stop: 45757, Start Num: 1
Candidate Starts for Crossroads_64:
(Start: 1 @45557 has 56 MA's), (Start: 3 @45587 has 1 MA's),

Gene: DHan_65 Start: 45460, Stop: 45660, Start Num: 1
Candidate Starts for DHan_65:
(Start: 1 @45460 has 56 MA's), (Start: 3 @45490 has 1 MA's), (9, 45565),

Gene: DanBing_64 Start: 45429, Stop: 45629, Start Num: 1
Candidate Starts for DanBing_64:
(Start: 1 @45429 has 56 MA's), (Start: 3 @45459 has 1 MA's),

Gene: Douge_62 Start: 44126, Stop: 44326, Start Num: 1
Candidate Starts for Douge_62:
(Start: 1 @44126 has 56 MA's), (Start: 3 @44156 has 1 MA's), (4, 44183), (5, 44186), (7, 44201), (9, 44231), (10, 44252), (13, 44303),

Gene: Douzhi_62 Start: 44179, Stop: 44379, Start Num: 1
Candidate Starts for Douzhi_62:
(Start: 1 @44179 has 56 MA's), (Start: 3 @44209 has 1 MA's), (5, 44239), (7, 44254), (8, 44263), (9, 44284), (13, 44356),

Gene: DrSeegs_64 Start: 45479, Stop: 45679, Start Num: 1
Candidate Starts for DrSeegs_64:
(Start: 1 @45479 has 56 MA's), (Start: 3 @45509 has 1 MA's),

Gene: DuncansLeg_63 Start: 45566, Stop: 45838, Start Num: 1
Candidate Starts for DuncansLeg_63:
(Start: 1 @45566 has 56 MA's), (2, 45590), (6, 45629), (12, 45710), (15, 45824),

Gene: DyoEdafos_64 Start: 44399, Stop: 44599, Start Num: 1
Candidate Starts for DyoEdafos_64:
(Start: 1 @44399 has 56 MA's), (Start: 3 @44429 has 1 MA's), (5, 44459), (7, 44474),

Gene: Ellson_62 Start: 45594, Stop: 45866, Start Num: 1
Candidate Starts for Ellson_62:
(Start: 1 @45594 has 56 MA's), (2, 45618), (6, 45657), (12, 45738), (14, 45813), (15, 45852),

Gene: Faith1_64 Start: 45479, Stop: 45679, Start Num: 1
Candidate Starts for Faith1_64:
(Start: 1 @45479 has 56 MA's), (Start: 3 @45509 has 1 MA's),

Gene: FarmResident_64 Start: 44142, Stop: 44342, Start Num: 1
Candidate Starts for FarmResident_64:
(Start: 1 @44142 has 56 MA's), (Start: 3 @44172 has 1 MA's), (5, 44202), (7, 44217), (8, 44226), (9, 44247),

Gene: Finemlucis_64 Start: 45800, Stop: 46000, Start Num: 1
Candidate Starts for Finemlucis_64:
(Start: 1 @45800 has 56 MA's), (Start: 3 @45830 has 1 MA's),

Gene: Finnry_63 Start: 45794, Stop: 46066, Start Num: 1
Candidate Starts for Finnry_63:
(Start: 1 @45794 has 56 MA's), (2, 45818), (6, 45857), (11, 45923), (12, 45938), (15, 46052),

Gene: Gabriela_61 Start: 43929, Stop: 44129, Start Num: 1
Candidate Starts for Gabriela_61:
(Start: 1 @43929 has 56 MA's), (Start: 3 @43959 has 1 MA's),

Gene: Gardann_65 Start: 45515, Stop: 45715, Start Num: 1
Candidate Starts for Gardann_65:
(Start: 1 @45515 has 56 MA's), (Start: 3 @45545 has 1 MA's),

Gene: GuuelaD_63 Start: 45594, Stop: 45794, Start Num: 1
Candidate Starts for GuuelaD_63:
(Start: 1 @45594 has 56 MA's), (Start: 3 @45624 has 1 MA's),

Gene: Hafay_65 Start: 45583, Stop: 45783, Start Num: 1
Candidate Starts for Hafay_65:
(Start: 1 @45583 has 56 MA's), (Start: 3 @45613 has 1 MA's),

Gene: Hiraya_64 Start: 45549, Stop: 45749, Start Num: 1
Candidate Starts for Hiraya_64:
(Start: 1 @45549 has 56 MA's), (Start: 3 @45579 has 1 MA's),

Gene: Itos_63 Start: 44385, Stop: 44585, Start Num: 1
Candidate Starts for Itos_63:
(Start: 1 @44385 has 56 MA's), (Start: 3 @44415 has 1 MA's),

Gene: Jobypre_63 Start: 45530, Stop: 45802, Start Num: 1
Candidate Starts for Jobypre_63:
(Start: 1 @45530 has 56 MA's), (2, 45554), (6, 45593), (11, 45659), (12, 45674), (14, 45749), (15, 45788),

Gene: Jubie_62 Start: 45665, Stop: 45937, Start Num: 1
Candidate Starts for Jubie_62:
(Start: 1 @45665 has 56 MA's), (2, 45689), (6, 45728), (11, 45794), (12, 45809), (14, 45884), (15, 45923),

Gene: Kahlid_64 Start: 45485, Stop: 45685, Start Num: 1
Candidate Starts for Kahlid_64:
(Start: 1 @45485 has 56 MA's), (Start: 3 @45515 has 1 MA's),

Gene: Kingsolomon_62 Start: 45537, Stop: 45809, Start Num: 1
Candidate Starts for Kingsolomon_62:
(Start: 1 @45537 has 56 MA's), (2, 45561), (6, 45600), (11, 45666), (12, 45681), (14, 45756), (15, 45795),

Gene: KirDoubleO7_61 Start: 45568, Stop: 45840, Start Num: 1
Candidate Starts for KirDoubleO7_61:
(Start: 1 @45568 has 56 MA's), (2, 45592), (6, 45631), (12, 45712), (14, 45787), (15, 45826),

Gene: Kropertea_61 Start: 44286, Stop: 44486, Start Num: 1
Candidate Starts for Kropertea_61:
(Start: 1 @44286 has 56 MA's), (Start: 3 @44316 has 1 MA's), (5, 44346), (7, 44361), (11, 44415), (13, 44463),

Gene: Krypton555_64 Start: 45762, Stop: 46034, Start Num: 1
Candidate Starts for Krypton555_64:
(Start: 1 @45762 has 56 MA's), (2, 45786), (6, 45825), (11, 45891), (12, 45906), (15, 46020),

Gene: Lewan_65 Start: 45539, Stop: 45739, Start Num: 1
Candidate Starts for Lewan_65:
(Start: 1 @45539 has 56 MA's), (Start: 3 @45569 has 1 MA's),

Gene: LilDestine_64 Start: 45512, Stop: 45712, Start Num: 1
Candidate Starts for LilDestine_64:
(Start: 1 @45512 has 56 MA's), (Start: 3 @45542 has 1 MA's),

Gene: LiyuLake_62 Start: 45584, Stop: 45856, Start Num: 1
Candidate Starts for LiyuLake_62:
(Start: 1 @45584 has 56 MA's), (2, 45608), (6, 45647), (12, 45728), (14, 45803), (15, 45842),

Gene: Loadrie_63 Start: 45567, Stop: 45767, Start Num: 1
Candidate Starts for Loadrie_63:
(Start: 1 @45567 has 56 MA's), (Start: 3 @45597 has 1 MA's),

Gene: Lolly9_62 Start: 45358, Stop: 45630, Start Num: 1
Candidate Starts for Lolly9_62:
(Start: 1 @45358 has 56 MA's), (2, 45382), (6, 45421), (12, 45502), (15, 45616),

Gene: Lumos_64 Start: 45527, Stop: 45799, Start Num: 1
Candidate Starts for Lumos_64:
(Start: 1 @45527 has 56 MA's), (2, 45551), (6, 45590), (11, 45656), (12, 45671), (14, 45746), (15, 45785),

Gene: Lynnae_65 Start: 45510, Stop: 45710, Start Num: 1
Candidate Starts for Lynnae_65:
(Start: 1 @45510 has 56 MA's), (Start: 3 @45540 has 1 MA's),

Gene: Miley16_64 Start: 45479, Stop: 45679, Start Num: 1
Candidate Starts for Miley16_64:
(Start: 1 @45479 has 56 MA's), (Start: 3 @45509 has 1 MA's),

Gene: MiniLon_66 Start: 45359, Stop: 45631, Start Num: 1
Candidate Starts for MiniLon_66:
(Start: 1 @45359 has 56 MA's), (2, 45383), (6, 45422), (12, 45503), (15, 45617),

Gene: MiniMac_66 Start: 45357, Stop: 45629, Start Num: 1
Candidate Starts for MiniMac_66:
(Start: 1 @45357 has 56 MA's), (2, 45381), (6, 45420), (12, 45501), (15, 45615),

Gene: MkaliMitinis3_65 Start: 45551, Stop: 45751, Start Num: 1
Candidate Starts for MkaliMitinis3_65:
(Start: 1 @45551 has 56 MA's), (Start: 3 @45581 has 1 MA's),

Gene: Molivier_55 Start: 40541, Stop: 40741, Start Num: 1
Candidate Starts for Molivier_55:
(Start: 1 @40541 has 56 MA's), (Start: 3 @40571 has 1 MA's),

Gene: Moostard_62 Start: 45533, Stop: 45805, Start Num: 1
Candidate Starts for Moostard_62:
(Start: 1 @45533 has 56 MA's), (2, 45557), (6, 45596), (11, 45662), (12, 45677), (15, 45791),

Gene: MsGreen_63 Start: 45530, Stop: 45802, Start Num: 1
Candidate Starts for MsGreen_63:
(Start: 1 @45530 has 56 MA's), (2, 45554), (6, 45593), (11, 45659), (12, 45674), (14, 45749), (15, 45788),

Gene: Netyap_65 Start: 45480, Stop: 45680, Start Num: 1
Candidate Starts for Netyap_65:
(Start: 1 @45480 has 56 MA's), (Start: 3 @45510 has 1 MA's),

Gene: Nicholas_62 Start: 45537, Stop: 45809, Start Num: 1
Candidate Starts for Nicholas_62:
(Start: 1 @45537 has 56 MA's), (2, 45561), (6, 45600), (11, 45666), (12, 45681), (14, 45756), (15, 45795),

Gene: Nicholasp3_64 Start: 45515, Stop: 45715, Start Num: 1
Candidate Starts for Nicholasp3_64:
(Start: 1 @45515 has 56 MA's), (Start: 3 @45545 has 1 MA's),

Gene: OverPar_65 Start: 45567, Stop: 45767, Start Num: 1
Candidate Starts for OverPar_65:

(Start: 1 @45567 has 56 MA's), (Start: 3 @45597 has 1 MA's),

Gene: PYPDinur_60 Start: 44209, Stop: 44409, Start Num: 1
Candidate Starts for PYPDinur_60:
(Start: 1 @44209 has 56 MA's), (Start: 3 @44239 has 1 MA's), (5, 44269), (7, 44284), (8, 44293), (9, 44314), (13, 44386),

Gene: Quby_62 Start: 44107, Stop: 44307, Start Num: 1
Candidate Starts for Quby_62:
(Start: 1 @44107 has 56 MA's), (Start: 3 @44137 has 1 MA's), (5, 44167), (7, 44182), (8, 44191), (9, 44212), (13, 44284),

Gene: Red305_63 Start: 45530, Stop: 45802, Start Num: 1
Candidate Starts for Red305_63:
(Start: 1 @45530 has 56 MA's), (2, 45554), (6, 45593), (11, 45659), (12, 45674), (14, 45749), (15, 45788),

Gene: Rossetti_65 Start: 46061, Stop: 46261, Start Num: 1
Candidate Starts for Rossetti_65:
(Start: 1 @46061 has 56 MA's), (Start: 3 @46091 has 1 MA's), (11, 46190),

Gene: Rumpelstiltskin_63 Start: 44938, Stop: 45108, Start Num: 3
Candidate Starts for Rumpelstiltskin_63:
(Start: 1 @44908 has 56 MA's), (Start: 3 @44938 has 1 MA's),

Gene: Samty_63 Start: 45538, Stop: 45810, Start Num: 1
Candidate Starts for Samty_63:
(Start: 1 @45538 has 56 MA's), (2, 45562), (6, 45601), (11, 45667), (12, 45682), (15, 45796),

Gene: Sarshaun_64 Start: 45575, Stop: 45775, Start Num: 1
Candidate Starts for Sarshaun_64:
(Start: 1 @45575 has 56 MA's), (Start: 3 @45605 has 1 MA's),

Gene: Sheng711_62 Start: 44186, Stop: 44386, Start Num: 1
Candidate Starts for Sheng711_62:
(Start: 1 @44186 has 56 MA's), (Start: 3 @44216 has 1 MA's), (5, 44246), (7, 44261), (8, 44270), (9, 44291), (13, 44363),

Gene: Snenia_62 Start: 45531, Stop: 45803, Start Num: 1
Candidate Starts for Snenia_62:
(Start: 1 @45531 has 56 MA's), (2, 45555), (6, 45594), (11, 45660), (12, 45675), (14, 45750), (15, 45789),

Gene: SoJulia_66 Start: 45744, Stop: 45944, Start Num: 1
Candidate Starts for SoJulia_66:
(Start: 1 @45744 has 56 MA's), (Start: 3 @45774 has 1 MA's),

Gene: Soap141_64 Start: 45575, Stop: 45775, Start Num: 1
Candidate Starts for Soap141_64:
(Start: 1 @45575 has 56 MA's), (Start: 3 @45605 has 1 MA's),

Gene: Tourach_63 Start: 45564, Stop: 45764, Start Num: 1
Candidate Starts for Tourach_63:

(Start: 1 @45564 has 56 MA's), (Start: 3 @45594 has 1 MA's), (5, 45624), (9, 45669), (11, 45693),

Gene: TriFive_64 Start: 45530, Stop: 45802, Start Num: 1
Candidate Starts for TriFive_64:
(Start: 1 @45530 has 56 MA's), (2, 45554), (6, 45593), (11, 45659), (12, 45674), (14, 45749), (15, 45788),

Gene: Underpass_55 Start: 40551, Stop: 40751, Start Num: 1
Candidate Starts for Underpass_55:
(Start: 1 @40551 has 56 MA's), (Start: 3 @40581 has 1 MA's),

Gene: Vetrix_64 Start: 45519, Stop: 45719, Start Num: 1
Candidate Starts for Vetrix_64:
(Start: 1 @45519 has 56 MA's), (Start: 3 @45549 has 1 MA's),

Gene: Whirlwind_63 Start: 45352, Stop: 45624, Start Num: 1
Candidate Starts for Whirlwind_63:
(Start: 1 @45352 has 56 MA's), (2, 45376), (6, 45415), (11, 45481), (12, 45496), (15, 45610),

Gene: Wigglewiggle_64 Start: 45539, Stop: 45739, Start Num: 1
Candidate Starts for Wigglewiggle_64:
(Start: 1 @45539 has 56 MA's), (Start: 3 @45569 has 1 MA's),

Gene: Wilder_65 Start: 45485, Stop: 45685, Start Num: 1
Candidate Starts for Wilder_65:
(Start: 1 @45485 has 56 MA's), (Start: 3 @45515 has 1 MA's),

Gene: Winky_64 Start: 45479, Stop: 45679, Start Num: 1
Candidate Starts for Winky_64:
(Start: 1 @45479 has 56 MA's), (Start: 3 @45509 has 1 MA's),

Gene: Zakai_65 Start: 45805, Stop: 46005, Start Num: 1
Candidate Starts for Zakai_65:
(Start: 1 @45805 has 56 MA's), (Start: 3 @45835 has 1 MA's),

Gene: ZhongYanYuan_62 Start: 45374, Stop: 45574, Start Num: 1
Candidate Starts for ZhongYanYuan_62:
(Start: 1 @45374 has 56 MA's), (Start: 3 @45404 has 1 MA's),