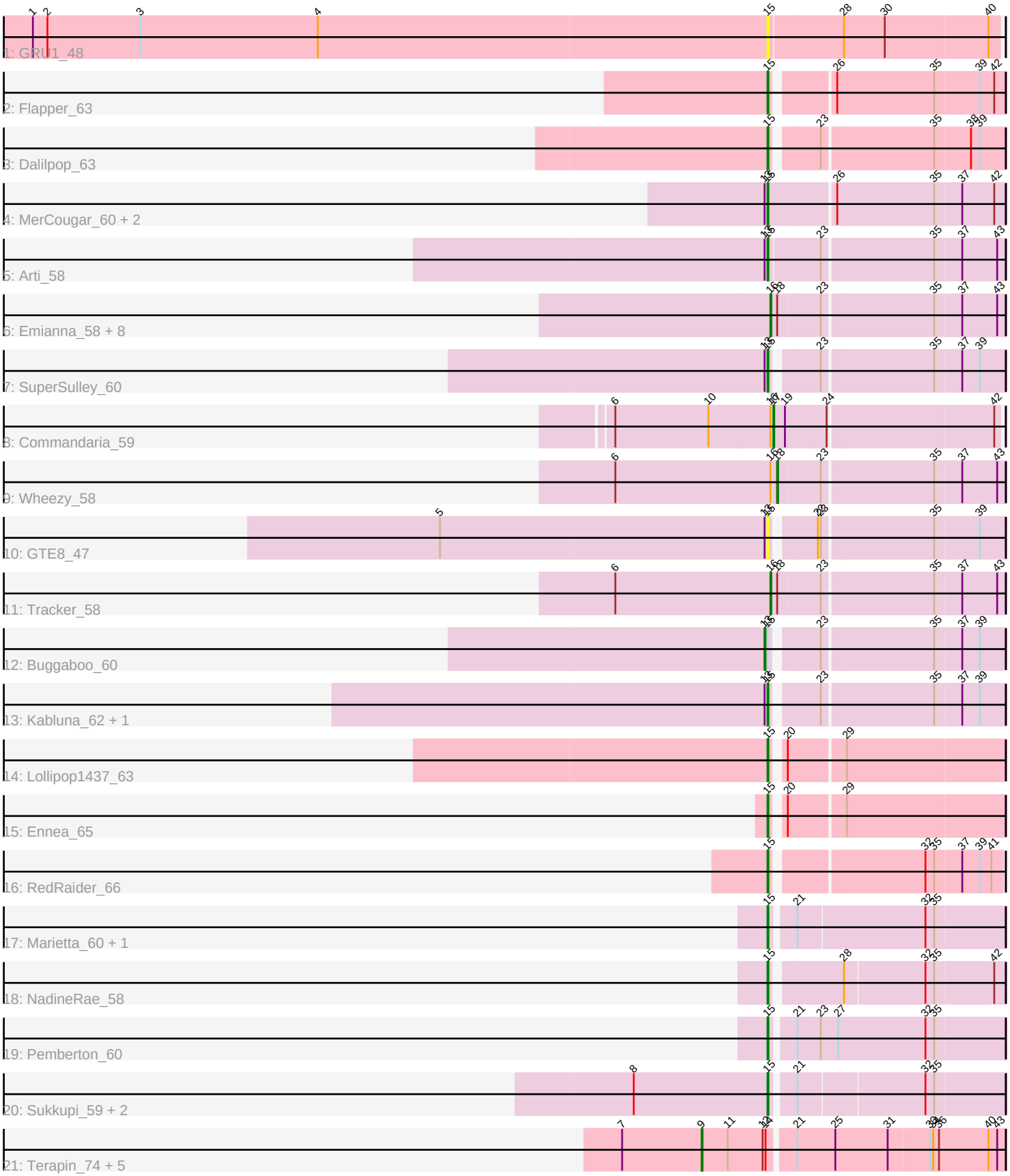
Pham 347798


1: GRU1_48
2: Flapper_63
3: Dalilpop_63
4: MerCougar_60 + 2
5: Arti_58
6: Emianna_58 + 8
7: SuperSulley_60
8: Commandaria_59
9: Wheezy_58
10: GTE8_47
11: Tracker_58
12: Buggaboo_60
13: Kabluna_62 + 1
14: Lollipop1437_63
15: Ennea_65
16: RedRaider_66
17: Marietta_60 + 1
18: NadineRae_58
19: Pemberton_60
20: Sukkupi_59 + 2
21: Terapin_74 + 5

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 347798 Report

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

Pham number 347798 has 40 members, 2 are drafts.

Phages represented in each track:
• Track 1 : GRU1_48
• Track 2 : Flapper_63
• Track 3 : Dalilpop_63
• Track 4 : MerCougar_60, StarStruck_60, Outis_60
• Track 5 : Arti_58
• Track 6 : Emianna_58, NatB6_58, NovumRegina_58, Kurt_58, KidneyBean_58, GrootJr_60, Jifall16_57, Foxboro_59, Phomeo_57
• Track 7 : SuperSulley_60
• Track 8 : Commandaria_59
• Track 9 : Wheezy_58
• Track 10 : GTE8_47
• Track 11 : Tracker_58
• Track 12 : Buggaboo_60
• Track 13 : Kabluna_62, Bonum_62
• Track 14 : Lollipop1437_63
• Track 15 : Ennea_65
• Track 16 : RedRaider_66
• Track 17 : Marietta_60, WhoseManz_59
• Track 18 : NadineRae_58
• Track 19 : Pemberton_60
• Track 20 : Sukkupi_59, Yndexa_59, BiPauneto_60
• Track 21 : Terapin_74, Beyoncage_73, Sienna_73, Djokovic_73, BiteSize_73, Madi_72

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

The start number called the most often in the published annotations is 15, it was called in 19 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_58, BiPauneto_60, Bonum_62, Dalilpop_63, Ennea_65, Flapper_63, GRU1_48, GTE8_47, Kabluna_62, Lollipop1437_63, Marietta_60, MerCougar_60, NadineRae_58, Outis_60, Pemberton_60, RedRaider_66, StarStruck_60, Sukkupi_59, SuperSulley_60, WhoseManz_59, Yndexa_59,

Genes that have the "Most Annotated" start but do not call it:
• Buggaboo_60,

Genes that do not have the "Most Annotated" start:
• Beyoncage_73, BiteSize_73, Commandaria_59, Djokovic_73, Emianna_58, Foxboro_59, GrootJr_60, Jifall16_57, KidneyBean_58, Kurt_58, Madi_72, NatB6_58, NovumRegina_58, Phomeo_57, Sienna_73, Terapin_74, Tracker_58, Wheezy_58,

Summary by start number:

Start 9:
• Found in 6 of 40 (15.0%) of genes in pham
• Manual Annotations of this start: 6 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beyoncage_73 (DG1), BiteSize_73 (DG1), Djokovic_73 (DG1), Madi_72 (DG1), Sienna_73 (DG1), Terapin_74 (DG1),

Start 13:
• Found in 9 of 40 (22.5%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Buggaboo_60 (CR2),

Start 15:
• Found in 22 of 40 (55.0%) of genes in pham
• Manual Annotations of this start: 19 of 38
• Called 95.5% of time when present
• Phage (with cluster) where this start called: Arti_58 (CR2), BiPauneto_60 (CR4), Bonum_62 (CR2), Dalilpop_63 (CR1), Ennea_65 (CR3), Flapper_63 (CR1), GRU1_48 (CR1), GTE8_47 (CR2), Kabluna_62 (CR2), Lollipop1437_63 (CR3), Marietta_60 (CR4), MerCougar_60 (CR2), NadineRae_58 (CR4), Outis_60 (CR2), Pemberton_60 (CR4), RedRaider_66 (CR3), StarStruck_60 (CR2), Sukkupi_59 (CR4), SuperSulley_60 (CR2), WhoseManz_59 (CR4), Yndexa_59 (CR4),

Start 16:
• Found in 12 of 40 (30.0%) of genes in pham
• Manual Annotations of this start: 10 of 38
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Emianna_58 (CR2), Foxboro_59 (CR2), GrootJr_60 (CR2), Jifall16_57 (CR2), KidneyBean_58 (CR2), Kurt_58 (CR2), NatB6_58 (CR2), NovumRegina_58 (CR2), Phomeo_57 (CR2), Tracker_58 (CR2),

Start 17:
• Found in 1 of 40 (2.5%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Commandaria_59 (CR2),

Start 18:
• Found in 11 of 40 (27.5%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 9.1% of time when present

• Phage (with cluster) where this start called: Wheezy_58 (CR2),

Summary by clusters:

There are 5 clusters represented in this pham: CR2, CR3, DG1, CR1, CR4,

Info for manual annotations of cluster CR1:
•Start number 15 was manually annotated 2 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 13 was manually annotated 1 time for cluster CR2.
•Start number 15 was manually annotated 7 times for cluster CR2.
•Start number 16 was manually annotated 10 times for cluster CR2.
•Start number 17 was manually annotated 1 time for cluster CR2.
•Start number 18 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 15 was manually annotated 3 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 15 was manually annotated 7 times for cluster CR4.

Info for manual annotations of cluster DG1:
•Start number 9 was manually annotated 6 times for cluster DG1.

Gene Information:

Gene: Arti_58 Start: 44583, Stop: 44350, Start Num: 15
Candidate Starts for Arti_58:
(Start: 13 @44586 has 1 MA's), (Start: 15 @44583 has 19 MA's), (23, 44532), (35, 44421), (37, 44394), (43, 44358),

Gene: Beyoncage_73 Start: 53385, Stop: 53687, Start Num: 9
Candidate Starts for Beyoncage_73:
(7, 53304), (Start: 9 @53385 has 6 MA's), (11, 53412), (12, 53448), (14, 53451), (21, 53475), (25, 53514), (31, 53568), (33, 53610), (34, 53613), (36, 53619), (40, 53670), (43, 53679),

Gene: BiPauneto_60 Start: 44090, Stop: 43863, Start Num: 15
Candidate Starts for BiPauneto_60:
(8, 44228), (Start: 15 @44090 has 19 MA's), (21, 44069), (32, 43943), (35, 43934),

Gene: BiteSize_73 Start: 53471, Stop: 53773, Start Num: 9
Candidate Starts for BiteSize_73:
(7, 53390), (Start: 9 @53471 has 6 MA's), (11, 53498), (12, 53534), (14, 53537), (21, 53561), (25, 53600), (31, 53654), (33, 53696), (34, 53699), (36, 53705), (40, 53756), (43, 53765),

Gene: Bonum_62 Start: 45238, Stop: 45014, Start Num: 15
Candidate Starts for Bonum_62:
(Start: 13 @45241 has 1 MA's), (Start: 15 @45238 has 19 MA's), (23, 45196), (35, 45085), (37, 45058), (39, 45040),

Gene: Buggaboo_60 Start: 45720, Stop: 45493, Start Num: 13
Candidate Starts for Buggaboo_60:
(Start: 13 @45720 has 1 MA's), (Start: 15 @45717 has 19 MA's), (23, 45675), (35, 45564), (37, 45537), (39, 45519),

Gene: Commandaria_59 Start: 45695, Stop: 45471, Start Num: 17
Candidate Starts for Commandaria_59:
(6, 45857), (10, 45761), (Start: 16 @45698 has 10 MA's), (Start: 17 @45695 has 1 MA's), (19, 45683), (24, 45641), (42, 45476),

Gene: Dalilpop_63 Start: 46869, Stop: 46645, Start Num: 15
Candidate Starts for Dalilpop_63:
(Start: 15 @46869 has 19 MA's), (23, 46827), (35, 46716), (38, 46680), (39, 46671),

Gene: Djokovic_73 Start: 53384, Stop: 53686, Start Num: 9
Candidate Starts for Djokovic_73:
(7, 53303), (Start: 9 @53384 has 6 MA's), (11, 53411), (12, 53447), (14, 53450), (21, 53474), (25, 53513), (31, 53567), (33, 53609), (34, 53612), (36, 53618), (40, 53669), (43, 53678),

Gene: Emianna_58 Start: 45572, Stop: 45342, Start Num: 16
Candidate Starts for Emianna_58:
(Start: 16 @45572 has 10 MA's), (Start: 18 @45566 has 1 MA's), (23, 45524), (35, 45413), (37, 45386), (43, 45350),

Gene: Ennea_65 Start: 46567, Stop: 46343, Start Num: 15
Candidate Starts for Ennea_65:
(Start: 15 @46567 has 19 MA's), (20, 46558), (29, 46504),

Gene: Flapper_63 Start: 46301, Stop: 46077, Start Num: 15
Candidate Starts for Flapper_63:
(Start: 15 @46301 has 19 MA's), (26, 46247), (35, 46148), (39, 46103), (42, 46088),

Gene: Foxboro_59 Start: 46078, Stop: 45848, Start Num: 16
Candidate Starts for Foxboro_59:
(Start: 16 @46078 has 10 MA's), (Start: 18 @46072 has 1 MA's), (23, 46030), (35, 45919), (37, 45892), (43, 45856),

Gene: GRU1_48 Start: 37859, Stop: 37626, Start Num: 15
Candidate Starts for GRU1_48:
(1, 38615), (2, 38600), (3, 38504), (4, 38321), (Start: 15 @37859 has 19 MA's), (28, 37784), (30, 37742), (40, 37637),

Gene: GTE8_47 Start: 38830, Stop: 38606, Start Num: 15
Candidate Starts for GTE8_47:
(5, 39166), (Start: 13 @38833 has 1 MA's), (Start: 15 @38830 has 19 MA's), (22, 38791), (23, 38788), (35, 38677), (39, 38632),

Gene: GrootJr_60 Start: 44954, Stop: 44724, Start Num: 16
Candidate Starts for GrootJr_60:
(Start: 16 @44954 has 10 MA's), (Start: 18 @44948 has 1 MA's), (23, 44906), (35, 44795), (37, 44768), (43, 44732),

Gene: Jifall16_57 Start: 45226, Stop: 44996, Start Num: 16

Candidate Starts for Jifall16_57:
(Start: 16 @45226 has 10 MA's), (Start: 18 @45220 has 1 MA's), (23, 45178), (35, 45067), (37, 45040), (43, 45004),

Gene: Kabluna_62 Start: 44653, Stop: 44429, Start Num: 15
Candidate Starts for Kabluna_62:
(Start: 13 @44656 has 1 MA's), (Start: 15 @44653 has 19 MA's), (23, 44611), (35, 44500), (37, 44473), (39, 44455),

Gene: KidneyBean_58 Start: 45350, Stop: 45120, Start Num: 16
Candidate Starts for KidneyBean_58:
(Start: 16 @45350 has 10 MA's), (Start: 18 @45344 has 1 MA's), (23, 45302), (35, 45191), (37, 45164), (43, 45128),

Gene: Kurt_58 Start: 45587, Stop: 45357, Start Num: 16
Candidate Starts for Kurt_58:
(Start: 16 @45587 has 10 MA's), (Start: 18 @45581 has 1 MA's), (23, 45539), (35, 45428), (37, 45401), (43, 45365),

Gene: Lollipop1437_63 Start: 46555, Stop: 46331, Start Num: 15
Candidate Starts for Lollipop1437_63:
(Start: 15 @46555 has 19 MA's), (20, 46546), (29, 46492),

Gene: Madi_72 Start: 53221, Stop: 53523, Start Num: 9
Candidate Starts for Madi_72:
(7, 53140), (Start: 9 @53221 has 6 MA's), (11, 53248), (12, 53284), (14, 53287), (21, 53311), (25, 53350), (31, 53404), (33, 53446), (34, 53449), (36, 53455), (40, 53506), (43, 53515),

Gene: Marietta_60 Start: 42428, Stop: 42198, Start Num: 15
Candidate Starts for Marietta_60:
(Start: 15 @42428 has 19 MA's), (21, 42407), (32, 42278), (35, 42269),

Gene: MerCougar_60 Start: 45856, Stop: 45620, Start Num: 15
Candidate Starts for MerCougar_60:
(Start: 13 @45859 has 1 MA's), (Start: 15 @45856 has 19 MA's), (26, 45790), (35, 45691), (37, 45664), (42, 45631),

Gene: NadineRae_58 Start: 41669, Stop: 41442, Start Num: 15
Candidate Starts for NadineRae_58:
(Start: 15 @41669 has 19 MA's), (28, 41603), (32, 41522), (35, 41513), (42, 41453),

Gene: NatB6_58 Start: 44644, Stop: 44414, Start Num: 16
Candidate Starts for NatB6_58:
(Start: 16 @44644 has 10 MA's), (Start: 18 @44638 has 1 MA's), (23, 44596), (35, 44485), (37, 44458), (43, 44422),

Gene: NovumRegina_58 Start: 44953, Stop: 44723, Start Num: 16
Candidate Starts for NovumRegina_58:
(Start: 16 @44953 has 10 MA's), (Start: 18 @44947 has 1 MA's), (23, 44905), (35, 44794), (37, 44767), (43, 44731),

Gene: Outis_60 Start: 45550, Stop: 45314, Start Num: 15
Candidate Starts for Outis_60:

(Start: 13 @45553 has 1 MA's), (Start: 15 @45550 has 19 MA's), (26, 45484), (35, 45385), (37, 45358), (42, 45325),

Gene: Pemberton_60 Start: 42413, Stop: 42180, Start Num: 15
Candidate Starts for Pemberton_60:
(Start: 15 @42413 has 19 MA's), (21, 42392), (23, 42368), (27, 42350), (32, 42260), (35, 42251),

Gene: Phomeo_57 Start: 45222, Stop: 44992, Start Num: 16
Candidate Starts for Phomeo_57:
(Start: 16 @45222 has 10 MA's), (Start: 18 @45216 has 1 MA's), (23, 45174), (35, 45063), (37, 45036), (43, 45000),

Gene: RedRaider_66 Start: 47810, Stop: 47589, Start Num: 15
Candidate Starts for RedRaider_66:
(Start: 15 @47810 has 19 MA's), (32, 47666), (35, 47657), (37, 47630), (39, 47612), (41, 47600),

Gene: Sienna_73 Start: 53462, Stop: 53764, Start Num: 9
Candidate Starts for Sienna_73:
(7, 53381), (Start: 9 @53462 has 6 MA's), (11, 53489), (12, 53525), (14, 53528), (21, 53552), (25, 53591), (31, 53645), (33, 53687), (34, 53690), (36, 53696), (40, 53747), (43, 53756),

Gene: StarStruck_60 Start: 45550, Stop: 45314, Start Num: 15
Candidate Starts for StarStruck_60:
(Start: 13 @45553 has 1 MA's), (Start: 15 @45550 has 19 MA's), (26, 45484), (35, 45385), (37, 45358), (42, 45325),

Gene: Sukkupi_59 Start: 43981, Stop: 43754, Start Num: 15
Candidate Starts for Sukkupi_59:
(8, 44119), (Start: 15 @43981 has 19 MA's), (21, 43960), (32, 43834), (35, 43825),

Gene: SuperSulley_60 Start: 45717, Stop: 45493, Start Num: 15
Candidate Starts for SuperSulley_60:
(Start: 13 @45720 has 1 MA's), (Start: 15 @45717 has 19 MA's), (23, 45675), (35, 45564), (37, 45537), (39, 45519),

Gene: Terapin_74 Start: 53386, Stop: 53688, Start Num: 9
Candidate Starts for Terapin_74:
(7, 53305), (Start: 9 @53386 has 6 MA's), (11, 53413), (12, 53449), (14, 53452), (21, 53476), (25, 53515), (31, 53569), (33, 53611), (34, 53614), (36, 53620), (40, 53671), (43, 53680),

Gene: Tracker_58 Start: 44368, Stop: 44138, Start Num: 16
Candidate Starts for Tracker_58:
(6, 44527), (Start: 16 @44368 has 10 MA's), (Start: 18 @44362 has 1 MA's), (23, 44320), (35, 44209), (37, 44182), (43, 44146),

Gene: Wheezy_58 Start: 44570, Stop: 44346, Start Num: 18
Candidate Starts for Wheezy_58:
(6, 44735), (Start: 16 @44576 has 10 MA's), (Start: 18 @44570 has 1 MA's), (23, 44528), (35, 44417), (37, 44390), (43, 44354),

Gene: WhoseManz_59 Start: 42041, Stop: 41811, Start Num: 15
Candidate Starts for WhoseManz_59:
(Start: 15 @42041 has 19 MA's), (21, 42020), (32, 41891), (35, 41882),

Gene: Yndexa_59 Start: 43981, Stop: 43754, Start Num: 15
Candidate Starts for Yndexa_59:
(8, 44119), (Start: 15 @43981 has 19 MA's), (21, 43960), (32, 43834), (35, 43825),