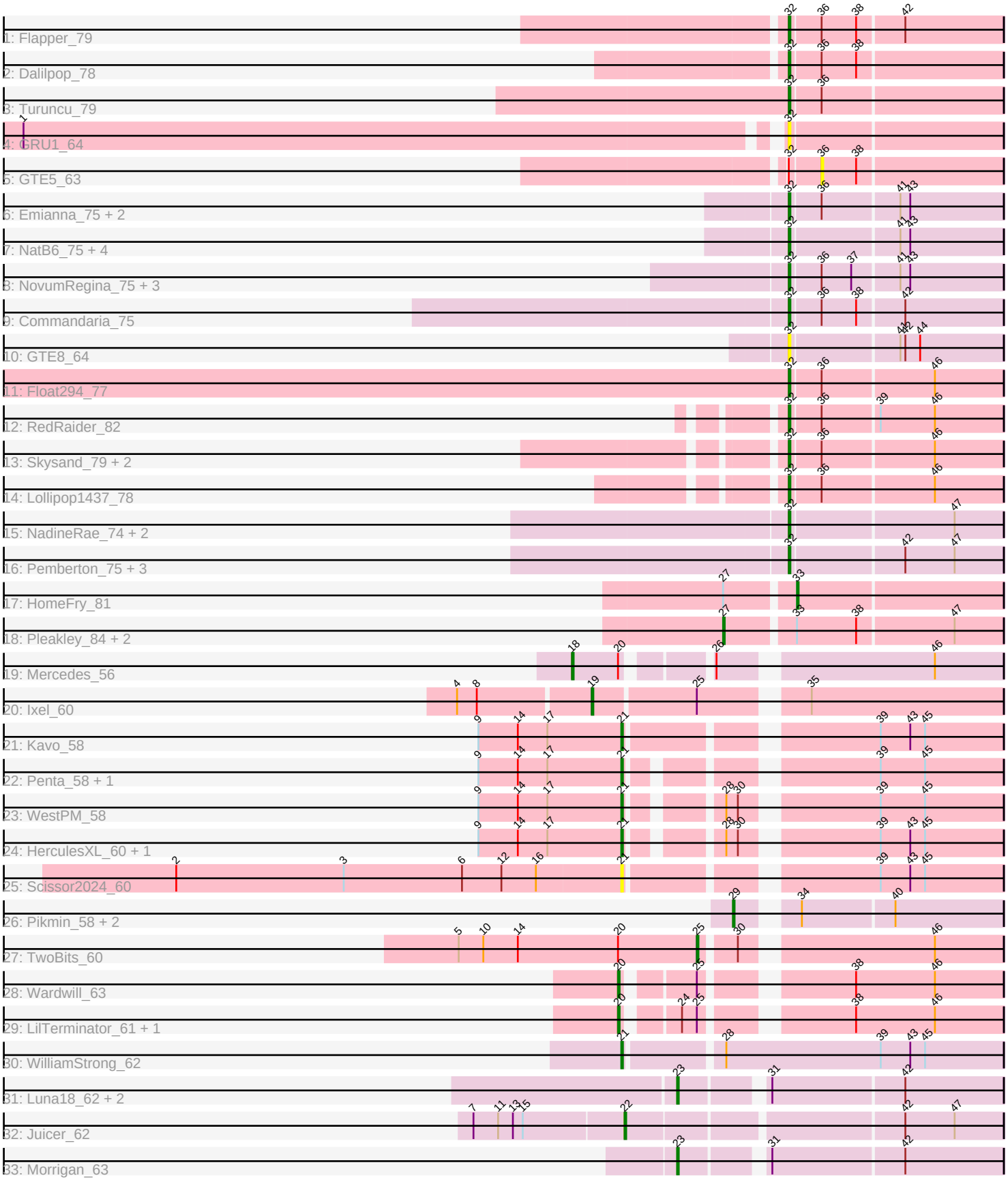
Pham 347659


1: Flapper_79
2: Dalilpop_78
3: Turuncu_79
4: GRU1_64
5: GTE5_63
6: Emianna_75 + 2
7: NatB6_75 + 4
8: NovumRegina_75 + 3
9: Commandaria_75
10: GTE8_64
11: Float294_77
12: RedRaider_82
13: Skysand_79 + 2
14: Lollipop1437_78
15: NadineRae_74 + 2
16: Pemberton_75 + 3
17: HomeFry_81
18: Pleakley_84 + 2
19: Mercedes_56
20: Ixel_60
21: Kavo_58
22: Penta_58 + 1
23: WestPM_58
24: HerculesXL_60 + 1
25: Scissor2024_60
26: Pikmin_58 + 2
27: TwoBits_60
28: Wardwill_63
29: LilTerminator_61 + 1
30: WilliamStrong_62
31: Luna18_62 + 2
32: Juicer_62
33: Morrigan_63

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 347659 Report

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

Pham number 347659 has 58 members, 5 are drafts.

Phages represented in each track:
- Track 1 : Flapper_79
- Track 2 : Dalilpop_78
- Track 3 : Turuncu_79
- Track 4 : GRU1_64
- Track 5 : GTE5_63
- Track 6 : Emianna_75, Arti_74, Kurt_75
- Track 7 : NatB6_75, KidneyBean_75, Jifall16_74, Phomeo_74, Foxboro_75
- Track 8 : NovumRegina_75, GrootJr_77, Tracker_75, Wheezy_75
- Track 9 : Commandaria_75
- Track 10 : GTE8_64
- Track 11 : Float294_77
- Track 12 : RedRaider_82
- Track 13 : Skysand_79, Patio_77, Ennea_82
- Track 14 : Lollipop1437_78
- Track 15 : NadineRae_74, WhoseManz_74, Marietta_75
- Track 16 : Pemberton_75, BiPauneto_77, Sukkupi_74, Yndexa_74
- Track 17 : HomeFry_81
- Track 18 : Pleakley_84, Fury_84, Scuba_84
- Track 19 : Mercedes_56
- Track 20 : Ixel_60
- Track 21 : Kavo_58
- Track 22 : Penta_58, Schimmels22_59
- Track 23 : WestPM_58
- Track 24 : HerculesXL_60, Tinyman4_58
- Track 25 : Scissor2024_60
- Track 26 : Pikmin_58, Casey_58, Pajaza_58
- Track 27 : TwoBits_60
- Track 28 : Wardwill_63
- Track 29 : LilTerminator_61, BaronJohn_61
- Track 30 : WilliamStrong_62
- Track 31 : Luna18_62, Chepli_62, KatChan_61
- Track 32 : Juicer_62
- Track 33 : Morrigan_63

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

The start number called the most often in the published annotations is 32, it was called in 29 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_74, BiPauneto_77, Commandaria_75, Dalilpop_78, Emianna_75, Ennea_82, Flapper_79, Float294_77, Foxboro_75, GRU1_64, GTE8_64, GrootJr_77, Jifall16_74, KidneyBean_75, Kurt_75, Lollipop1437_78, Marietta_75, NadineRae_74, NatB6_75, NovumRegina_75, Patio_77, Pemberton_75, Phomeo_74, RedRaider_82, Skysand_79, Sukkupi_74, Tracker_75, Turuncu_79, Wheezy_75, WhoseManz_74, Yndexa_74,

Genes that have the "Most Annotated" start but do not call it:
• GTE5_63,

Genes that do not have the "Most Annotated" start:
• BaronJohn_61, Casey_58, Chepli_62, Fury_84, HerculesXL_60, HomeFry_81, Ixel_60, Juicer_62, KatChan_61, Kavo_58, LilTerminator_61, Luna18_62, Mercedes_56, Morrigan_63, Pajaza_58, Penta_58, Pikmin_58, Pleakley_84, Schimmels22_59, Scissor2024_60, Scuba_84, Tinyman4_58, TwoBits_60, Wardwill_63, WestPM_58, WilliamStrong_62,

Summary by start number:

Start 18:
• Found in 1 of 58 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 53
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mercedes_56 (EA),

Start 19:
• Found in 1 of 58 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 53
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ixel_60 (EA11),

Start 20:
• Found in 5 of 58 (8.6%) of genes in pham
• Manual Annotations of this start: 3 of 53
• Called 60.0% of time when present
• Phage (with cluster) where this start called: BaronJohn_61 (EA5), LilTerminator_61 (EA5), Wardwill_63 (EA5),

Start 21:
• Found in 8 of 58 (13.8%) of genes in pham
• Manual Annotations of this start: 6 of 53
• Called 100.0% of time when present
• Phage (with cluster) where this start called: HerculesXL_60 (EA11), Kavo_58 (EA11), Penta_58 (EA11), Schimmels22_59 (EA11), Scissor2024_60 (EA11), Tinyman4_58 (EA11), WestPM_58 (EA11), WilliamStrong_62 (EA6),

Start 22:
• Found in 1 of 58 (1.7%) of genes in pham

• Manual Annotations of this start: 1 of 53
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Juicer_62 (EA6),

Start 23:
• Found in 4 of 58 (6.9%) of genes in pham
• Manual Annotations of this start: 4 of 53
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chepli_62 (EA6), KatChan_61 (EA6), Luna18_62 (EA6), Morrigan_63 (EA6),

Start 25:
• Found in 5 of 58 (8.6%) of genes in pham
• Manual Annotations of this start: 1 of 53
• Called 20.0% of time when present
• Phage (with cluster) where this start called: TwoBits_60 (EA5),

Start 27:
• Found in 4 of 58 (6.9%) of genes in pham
• Manual Annotations of this start: 3 of 53
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Fury_84 (CR5), Pleakley_84 (CR5), Scuba_84 (CR5),

Start 29:
• Found in 3 of 58 (5.2%) of genes in pham
• Manual Annotations of this start: 3 of 53
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Casey_58 (EA3), Pajaza_58 (EA3), Pikmin_58 (EA3),

Start 32:
• Found in 32 of 58 (55.2%) of genes in pham
• Manual Annotations of this start: 29 of 53
• Called 96.9% of time when present
• Phage (with cluster) where this start called: Arti_74 (CR2), BiPauneto_77 (CR4), Commandaria_75 (CR2), Dalilpop_78 (CR1), Emianna_75 (CR2), Ennea_82 (CR3), Flapper_79 (CR1), Float294_77 (CR3), Foxboro_75 (CR2), GRU1_64 (CR1), GTE8_64 (CR2), GrootJr_77 (CR2), Jifall16_74 (CR2), KidneyBean_75 (CR2), Kurt_75 (CR2), Lollipop1437_78 (CR3), Marietta_75 (CR4), NadineRae_74 (CR4), NatB6_75 (CR2), NovumRegina_75 (CR2), Patio_77 (CR3), Pemberton_75 (CR4), Phomeo_74 (CR2), RedRaider_82 (CR3), Skysand_79 (CR3), Sukkupi_74 (CR4), Tracker_75 (CR2), Turuncu_79 (CR1), Wheezy_75 (CR2), WhoseManz_74 (CR4), Yndexa_74 (CR4),

Start 33:
• Found in 4 of 58 (6.9%) of genes in pham
• Manual Annotations of this start: 1 of 53
• Called 25.0% of time when present
• Phage (with cluster) where this start called: HomeFry_81 (CR5),

Start 36:
• Found in 18 of 58 (31.0%) of genes in pham

• No Manual Annotations of this start.
• Called 5.6% of time when present
• Phage (with cluster) where this start called: GTE5_63 (CR1),

Summary by clusters:

There are 10 clusters represented in this pham: CR2, CR3, CR1, EA11, CR4, CR5, EA, EA3, EA5, EA6,

Info for manual annotations of cluster CR1:
•Start number 32 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 32 was manually annotated 13 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 32 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 32 was manually annotated 7 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 27 was manually annotated 3 times for cluster CR5.
•Start number 33 was manually annotated 1 time for cluster CR5.

Info for manual annotations of cluster EA:
•Start number 18 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA11:
•Start number 19 was manually annotated 1 time for cluster EA11.
•Start number 21 was manually annotated 5 times for cluster EA11.

Info for manual annotations of cluster EA3:
•Start number 29 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA5:
•Start number 20 was manually annotated 3 times for cluster EA5.
•Start number 25 was manually annotated 1 time for cluster EA5.

Info for manual annotations of cluster EA6:
•Start number 21 was manually annotated 1 time for cluster EA6.
•Start number 22 was manually annotated 1 time for cluster EA6.
•Start number 23 was manually annotated 4 times for cluster EA6.

Gene Information:

Gene: Arti_74 Start: 56369, Stop: 56244, Start Num: 32
Candidate Starts for Arti_74:
(Start: 32 @56369 has 29 MA's), (36, 56351), (41, 56306), (43, 56300),

Gene: BaronJohn_61 Start: 39618, Stop: 39818, Start Num: 20

Candidate Starts for BaronJohn_61:
(Start: 20 @39618 has 3 MA's), (24, 39645), (Start: 25 @39654 has 1 MA's), (38, 39729), (46, 39777),

Gene: BiPauneto_77 Start: 55729, Stop: 55604, Start Num: 32
Candidate Starts for BiPauneto_77:
(Start: 32 @55729 has 29 MA's), (42, 55663), (47, 55633),

Gene: Casey_58 Start: 38627, Stop: 38773, Start Num: 29
Candidate Starts for Casey_58:
(Start: 29 @38627 has 3 MA's), (34, 38654), (40, 38708),

Gene: Chepli_62 Start: 39549, Stop: 39731, Start Num: 23
Candidate Starts for Chepli_62:
(Start: 23 @39549 has 4 MA's), (31, 39594), (42, 39672),

Gene: Commandaria_75 Start: 57325, Stop: 57200, Start Num: 32
Candidate Starts for Commandaria_75:
(Start: 32 @57325 has 29 MA's), (36, 57307), (38, 57286), (42, 57259),

Gene: Dalilpop_78 Start: 58244, Stop: 58119, Start Num: 32
Candidate Starts for Dalilpop_78:
(Start: 32 @58244 has 29 MA's), (36, 58226), (38, 58205),

Gene: Emianna_75 Start: 57580, Stop: 57455, Start Num: 32
Candidate Starts for Emianna_75:
(Start: 32 @57580 has 29 MA's), (36, 57562), (41, 57517), (43, 57511),

Gene: Ennea_82 Start: 58711, Stop: 58586, Start Num: 32
Candidate Starts for Ennea_82:
(Start: 32 @58711 has 29 MA's), (36, 58693), (46, 58627),

Gene: Flapper_79 Start: 57983, Stop: 57858, Start Num: 32
Candidate Starts for Flapper_79:
(Start: 32 @57983 has 29 MA's), (36, 57965), (38, 57944), (42, 57917),

Gene: Float294_77 Start: 58617, Stop: 58492, Start Num: 32
Candidate Starts for Float294_77:
(Start: 32 @58617 has 29 MA's), (36, 58599), (46, 58533),

Gene: Foxboro_75 Start: 57792, Stop: 57667, Start Num: 32
Candidate Starts for Foxboro_75:
(Start: 32 @57792 has 29 MA's), (41, 57729), (43, 57723),

Gene: Fury_84 Start: 56522, Stop: 56361, Start Num: 27
Candidate Starts for Fury_84:
(Start: 27 @56522 has 3 MA's), (Start: 33 @56483 has 1 MA's), (38, 56447), (47, 56390),

Gene: GRU1_64 Start: 49828, Stop: 49703, Start Num: 32
Candidate Starts for GRU1_64:
(1, 50275), (Start: 32 @49828 has 29 MA's),

Gene: GTE5_63 Start: 50458, Stop: 50351, Start Num: 36
Candidate Starts for GTE5_63:

(Start: 32 @50476 has 29 MA's), (36, 50458), (38, 50437),

Gene: GTE8_64 Start: 50743, Stop: 50618, Start Num: 32
Candidate Starts for GTE8_64:
(Start: 32 @50743 has 29 MA's), (41, 50680), (42, 50677), (44, 50668),

Gene: GrootJr_77 Start: 56973, Stop: 56848, Start Num: 32
Candidate Starts for GrootJr_77:
(Start: 32 @56973 has 29 MA's), (36, 56955), (37, 56937), (41, 56910), (43, 56904),

Gene: HerculesXL_60 Start: 38481, Stop: 38678, Start Num: 21
Candidate Starts for HerculesXL_60:
(9, 38394), (14, 38418), (17, 38436), (Start: 21 @38481 has 6 MA's), (28, 38526), (30, 38532), (39, 38604), (43, 38622), (45, 38631),

Gene: HomeFry_81 Start: 55538, Stop: 55416, Start Num: 33
Candidate Starts for HomeFry_81:
(Start: 27 @55577 has 3 MA's), (Start: 33 @55538 has 1 MA's),

Gene: Ixel_60 Start: 39807, Stop: 40037, Start Num: 19
Candidate Starts for Ixel_60:
(4, 39729), (8, 39741), (Start: 19 @39807 has 1 MA's), (Start: 25 @39867 has 1 MA's), (35, 39921),

Gene: Jifall16_74 Start: 57285, Stop: 57160, Start Num: 32
Candidate Starts for Jifall16_74:
(Start: 32 @57285 has 29 MA's), (41, 57222), (43, 57216),

Gene: Juicer_62 Start: 40291, Stop: 40506, Start Num: 22
Candidate Starts for Juicer_62:
(7, 40201), (11, 40216), (13, 40225), (15, 40231), (Start: 22 @40291 has 1 MA's), (42, 40447), (47, 40477),

Gene: KatChan_61 Start: 39566, Stop: 39748, Start Num: 23
Candidate Starts for KatChan_61:
(Start: 23 @39566 has 4 MA's), (31, 39611), (42, 39689),

Gene: Kavo_58 Start: 38533, Stop: 38739, Start Num: 21
Candidate Starts for Kavo_58:
(9, 38446), (14, 38470), (17, 38488), (Start: 21 @38533 has 6 MA's), (39, 38665), (43, 38683), (45, 38692),

Gene: KidneyBean_75 Start: 57409, Stop: 57284, Start Num: 32
Candidate Starts for KidneyBean_75:
(Start: 32 @57409 has 29 MA's), (41, 57346), (43, 57340),

Gene: Kurt_75 Start: 57595, Stop: 57470, Start Num: 32
Candidate Starts for Kurt_75:
(Start: 32 @57595 has 29 MA's), (36, 57577), (41, 57532), (43, 57526),

Gene: LilTerminator_61 Start: 39040, Stop: 39240, Start Num: 20
Candidate Starts for LilTerminator_61:
(Start: 20 @39040 has 3 MA's), (24, 39067), (Start: 25 @39076 has 1 MA's), (38, 39151), (46, 39199),

Gene: Lollipop1437_78 Start: 58391, Stop: 58266, Start Num: 32
Candidate Starts for Lollipop1437_78:
(Start: 32 @58391 has 29 MA's), (36, 58373), (46, 58307),

Gene: Luna18_62 Start: 39566, Stop: 39748, Start Num: 23
Candidate Starts for Luna18_62:
(Start: 23 @39566 has 4 MA's), (31, 39611), (42, 39689),

Gene: Marietta_75 Start: 53624, Stop: 53499, Start Num: 32
Candidate Starts for Marietta_75:
(Start: 32 @53624 has 29 MA's), (47, 53528),

Gene: Mercedes_56 Start: 39258, Stop: 39485, Start Num: 18
Candidate Starts for Mercedes_56:
(Start: 18 @39258 has 1 MA's), (Start: 20 @39285 has 3 MA's), (26, 39327), (46, 39444),

Gene: Morrigan_63 Start: 39618, Stop: 39800, Start Num: 23
Candidate Starts for Morrigan_63:
(Start: 23 @39618 has 4 MA's), (31, 39663), (42, 39741),

Gene: NadineRae_74 Start: 53232, Stop: 53107, Start Num: 32
Candidate Starts for NadineRae_74:
(Start: 32 @53232 has 29 MA's), (47, 53136),

Gene: NatB6_75 Start: 56685, Stop: 56560, Start Num: 32
Candidate Starts for NatB6_75:
(Start: 32 @56685 has 29 MA's), (41, 56622), (43, 56616),

Gene: NovumRegina_75 Start: 56972, Stop: 56847, Start Num: 32
Candidate Starts for NovumRegina_75:
(Start: 32 @56972 has 29 MA's), (36, 56954), (37, 56936), (41, 56909), (43, 56903),

Gene: Pajaza_58 Start: 38627, Stop: 38773, Start Num: 29
Candidate Starts for Pajaza_58:
(Start: 29 @38627 has 3 MA's), (34, 38654), (40, 38708),

Gene: Patio_77 Start: 57623, Stop: 57498, Start Num: 32
Candidate Starts for Patio_77:
(Start: 32 @57623 has 29 MA's), (36, 57605), (46, 57539),

Gene: Pemberton_75 Start: 53804, Stop: 53679, Start Num: 32
Candidate Starts for Pemberton_75:
(Start: 32 @53804 has 29 MA's), (42, 53738), (47, 53708),

Gene: Penta_58 Start: 38690, Stop: 38887, Start Num: 21
Candidate Starts for Penta_58:
(9, 38603), (14, 38627), (17, 38645), (Start: 21 @38690 has 6 MA's), (39, 38813), (45, 38840),

Gene: Phomeo_74 Start: 57281, Stop: 57156, Start Num: 32
Candidate Starts for Phomeo_74:
(Start: 32 @57281 has 29 MA's), (41, 57218), (43, 57212),

Gene: Pikmin_58 Start: 38627, Stop: 38773, Start Num: 29

Candidate Starts for Pikmin_58:
(Start: 29 @38627 has 3 MA's), (34, 38654), (40, 38708),

Gene: Pleakley_84 Start: 56523, Stop: 56362, Start Num: 27
Candidate Starts for Pleakley_84:
(Start: 27 @56523 has 3 MA's), (Start: 33 @56484 has 1 MA's), (38, 56448), (47, 56391),

Gene: RedRaider_82 Start: 59750, Stop: 59625, Start Num: 32
Candidate Starts for RedRaider_82:
(Start: 32 @59750 has 29 MA's), (36, 59732), (39, 59699), (46, 59666),

Gene: Schimmels22_59 Start: 38802, Stop: 38999, Start Num: 21
Candidate Starts for Schimmels22_59:
(9, 38715), (14, 38739), (17, 38757), (Start: 21 @38802 has 6 MA's), (39, 38925), (45, 38952),

Gene: Scissor2024_60 Start: 38444, Stop: 38650, Start Num: 21
Candidate Starts for Scissor2024_60:
(2, 38174), (3, 38276), (6, 38348), (12, 38372), (16, 38393), (Start: 21 @38444 has 6 MA's), (39, 38576), (43, 38594), (45, 38603),

Gene: Scuba_84 Start: 56595, Stop: 56434, Start Num: 27
Candidate Starts for Scuba_84:
(Start: 27 @56595 has 3 MA's), (Start: 33 @56556 has 1 MA's), (38, 56520), (47, 56463),

Gene: Skysand_79 Start: 58286, Stop: 58161, Start Num: 32
Candidate Starts for Skysand_79:
(Start: 32 @58286 has 29 MA's), (36, 58268), (46, 58202),

Gene: Sukkupi_74 Start: 55276, Stop: 55151, Start Num: 32
Candidate Starts for Sukkupi_74:
(Start: 32 @55276 has 29 MA's), (42, 55210), (47, 55180),

Gene: Tinyman4_58 Start: 38476, Stop: 38673, Start Num: 21
Candidate Starts for Tinyman4_58:
(9, 38389), (14, 38413), (17, 38431), (Start: 21 @38476 has 6 MA's), (28, 38521), (30, 38527), (39, 38599), (43, 38617), (45, 38626),

Gene: Tracker_75 Start: 56428, Stop: 56303, Start Num: 32
Candidate Starts for Tracker_75:
(Start: 32 @56428 has 29 MA's), (36, 56410), (37, 56392), (41, 56365), (43, 56359),

Gene: Turuncu_79 Start: 57805, Stop: 57680, Start Num: 32
Candidate Starts for Turuncu_79:
(Start: 32 @57805 has 29 MA's), (36, 57787),

Gene: TwoBits_60 Start: 39449, Stop: 39613, Start Num: 25
Candidate Starts for TwoBits_60:
(5, 39305), (10, 39320), (14, 39341), (Start: 20 @39401 has 3 MA's), (Start: 25 @39449 has 1 MA's), (30, 39467), (46, 39572),

Gene: Wardwill_63 Start: 39187, Stop: 39387, Start Num: 20
Candidate Starts for Wardwill_63:
(Start: 20 @39187 has 3 MA's), (Start: 25 @39223 has 1 MA's), (38, 39298), (46, 39346),

Gene: WestPM_58 Start: 38661, Stop: 38858, Start Num: 21
Candidate Starts for WestPM_58:
(9, 38574), (14, 38598), (17, 38616), (Start: 21 @38661 has 6 MA's), (28, 38706), (30, 38712), (39, 38784), (45, 38811),

Gene: Wheezy_75 Start: 56643, Stop: 56518, Start Num: 32
Candidate Starts for Wheezy_75:
(Start: 32 @56643 has 29 MA's), (36, 56625), (37, 56607), (41, 56580), (43, 56574),

Gene: WhoseManz_74 Start: 53291, Stop: 53166, Start Num: 32
Candidate Starts for WhoseManz_74:
(Start: 32 @53291 has 29 MA's), (47, 53195),

Gene: WilliamStrong_62 Start: 39951, Stop: 40172, Start Num: 21
Candidate Starts for WilliamStrong_62:
(Start: 21 @39951 has 6 MA's), (28, 40005), (39, 40098), (43, 40116), (45, 40125),

Gene: Yndexa_74 Start: 55276, Stop: 55151, Start Num: 32
Candidate Starts for Yndexa_74:
(Start: 32 @55276 has 29 MA's), (42, 55210), (47, 55180),