Pham 283991

1: Target_68 + 1
2: Khan1_54 + 2
3: Chuni_54
4: LeiMonet_55
5: BoogieWoogie_54
6: SwainyDoc_52 + 3
7: Olivio_51 + 1
8: InterFolia_6 + 3
9: StephanieG_6
10: JigglyPuff_5
11: Gumball_84 + 1
12: Periwinkle_85
13: Jant_56 + 3
14: Latretium_77
15: MadMen_62
16: MulchExplorer_70
17: MilleniumForce_52
18: Enby_53 + 1
19: Superphikiman_80
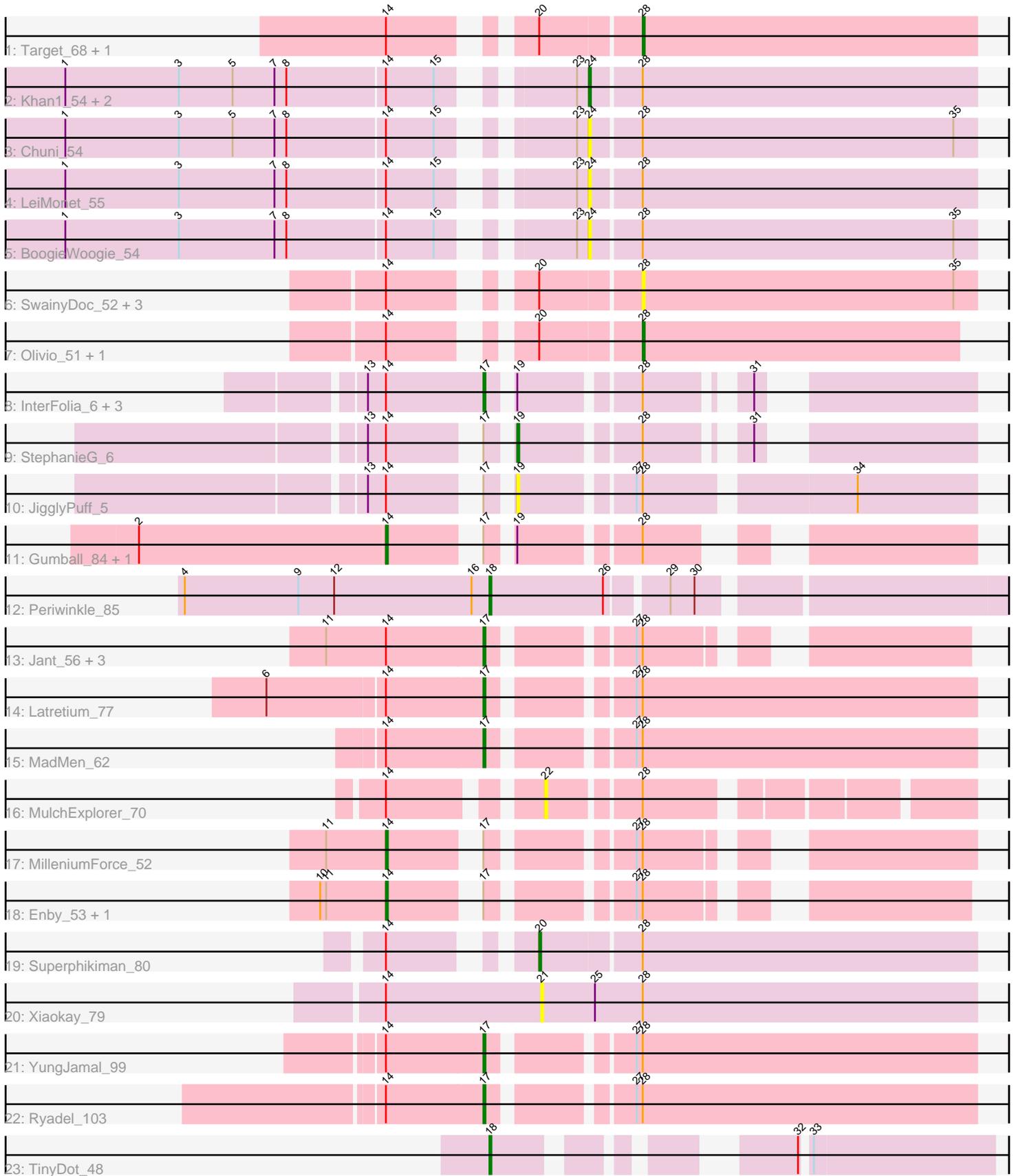20: Xiaokay_79
21: YungJamal_99
22: Ryadel_103
23: TinyDot_48

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 283991 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283991 has 38 members, 18 are drafts.

Phages represented in each track:
• Track 1 : Target_68, Raid_65
• Track 2 : Khan1_54, Gwilliam_54, DolOn_57
• Track 3 : Chuni_54
• Track 4 : LeiMonet_55
• Track 5 : BoogieWoogie_54
• Track 6 : SwainyDoc_52, Marlia_52, SlippinJimmy_53, Mulaychimus_52
• Track 7 : Olivio_51, Heathcliff_51
• Track 8 : InterFolia_6, PharkleMinkus_6, Pupusa_6, Tainan_6
• Track 9 : StephanieG_6
• Track 10 : JigglyPuff_5
• Track 11 : Gumball_84, SirHarley_86
• Track 12 : Periwinkle_85
• Track 13 : Jant_56, Bobi_55, Krakatau_50, Harley_54
• Track 14 : Latretium_77
• Track 15 : MadMen_62
• Track 16 : MulchExplorer_70
• Track 17 : MilleniumForce_52
• Track 18 : Enby_53, Lorde_53
• Track 19 : Superphikiman_80
• Track 20 : Xiaokay_79
• Track 21 : YungJamal_99
• Track 22 : Ryadel_103
• Track 23 : TinyDot_48

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

The start number called the most often in the published annotations is 17, it was called in 8 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Bobi_55, Harley_54, InterFolia_6, Jant_56, Krakatau_50, Latretium_77, MadMen_62, PharkleMinkus_6, Pupusa_6, Ryadel_103, Tainan_6, YungJamal_99,

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

• Enby_53, Gumball_84, JigglyPuff_5, Lorde_53, MilleniumForce_52, SirHarley_86, StephanieG_6,

Genes that do not have the "Most Annotated" start:
• BoogieWoogie_54, Chuni_54, DolOn_57, Gwilliam_54, Heathcliff_51, Khan1_54, LeiMonet_55, Marlia_52, Mulaychimus_52, MulchExplorer_70, Olivio_51, Periwinkle_85, Raid_65, SlippinJimmy_53, Superphikiman_80, SwainyDoc_52, Target_68, TinyDot_48, Xiaokay_79,

Summary by start number:

Start 14:
• Found in 36 of 38 (94.7%) of genes in pham
• Manual Annotations of this start: 5 of 20
• Called 13.9% of time when present
• Phage (with cluster) where this start called: Enby_53 (F1), Gumball_84 (D1), Lorde_53 (F1), MilleniumForce_52 (F1), SirHarley_86 (D1),

Start 17:
• Found in 19 of 38 (50.0%) of genes in pham
• Manual Annotations of this start: 8 of 20
• Called 63.2% of time when present
• Phage (with cluster) where this start called: Bobi_55 (F1), Harley_54 (F1), InterFolia_6 (C1), Jant_56 (F1), Krakatau_50 (F1), Latretium_77 (F1), MadMen_62 (F1), PharkleMinkus_6 (C1), Pupusa_6 (C1), Ryadel_103 (O), Tainan_6 (C1), YungJamal_99 (O),

Start 18:
• Found in 2 of 38 (5.3%) of genes in pham
• Manual Annotations of this start: 2 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Periwinkle_85 (DN1), TinyDot_48 (singleton),

Start 19:
• Found in 8 of 38 (21.1%) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 25.0% of time when present
• Phage (with cluster) where this start called: JigglyPuff_5 (C1), StephanieG_6 (C1),

Start 20:
• Found in 9 of 38 (23.7%) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Superphikiman_80 (J),

Start 21:
• Found in 1 of 38 (2.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Xiaokay_79 (J),

Start 22:

• Found in 1 of 38 (2.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MulchExplorer_70 (F1),

Start 24:
• Found in 6 of 38 (15.8%) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BoogieWoogie_54 (B1), Chuni_54 (B1), DolOn_57 (B1), Gwilliam_54 (B1), Khan1_54 (B1), LeiMonet_55 (B1),

Start 28:
• Found in 36 of 38 (94.7%) of genes in pham
• Manual Annotations of this start: 2 of 20
• Called 22.2% of time when present
• Phage (with cluster) where this start called: Heathcliff_51 (B3), Marlia_52 (B3), Mulaychimus_52 (B3), Olivio_51 (B3), Raid_65 (A1), SlippinJimmy_53 (B3), SwainyDoc_52 (B3), Target_68 (A1),

Summary by clusters:

There are 10 clusters represented in this pham: F1, singleton, J, O, A1, DN1, B1, B3, C1, D1,

Info for manual annotations of cluster A1:
•Start number 28 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster B1:
•Start number 24 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster B3:
•Start number 28 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster C1:
•Start number 17 was manually annotated 1 time for cluster C1.
•Start number 19 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster D1:
•Start number 14 was manually annotated 2 times for cluster D1.

Info for manual annotations of cluster DN1:
•Start number 18 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster F1:
•Start number 14 was manually annotated 3 times for cluster F1.
•Start number 17 was manually annotated 5 times for cluster F1.

Info for manual annotations of cluster J:
•Start number 20 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster O:
•Start number 17 was manually annotated 2 times for cluster O.

Gene Information:

Gene: Bobi_55 Start: 38256, Stop: 38450, Start Num: 17
Candidate Starts for Bobi_55:
(11, 38190), (Start: 14 @38220 has 5 MA's), (Start: 17 @38256 has 8 MA's), (27, 38316), (Start: 28 @38319 has 2 MA's),

Gene: BoogieWoogie_54 Start: 47559, Stop: 47368, Start Num: 24
Candidate Starts for BoogieWoogie_54:
(1, 47796), (3, 47739), (7, 47691), (8, 47685), (Start: 14 @47637 has 5 MA's), (15, 47613), (23, 47565), (Start: 24 @47559 has 1 MA's), (Start: 28 @47535 has 2 MA's), (35, 47379),

Gene: Chuni_54 Start: 48106, Stop: 47915, Start Num: 24
Candidate Starts for Chuni_54:
(1, 48343), (3, 48286), (5, 48259), (7, 48238), (8, 48232), (Start: 14 @48184 has 5 MA's), (15, 48160), (23, 48112), (Start: 24 @48106 has 1 MA's), (Start: 28 @48082 has 2 MA's), (35, 47926),

Gene: DolOn_57 Start: 48236, Stop: 48045, Start Num: 24
Candidate Starts for DolOn_57:
(1, 48473), (3, 48416), (5, 48389), (7, 48368), (8, 48362), (Start: 14 @48314 has 5 MA's), (15, 48290), (23, 48242), (Start: 24 @48236 has 1 MA's), (Start: 28 @48212 has 2 MA's),

Gene: Enby_53 Start: 35552, Stop: 35782, Start Num: 14
Candidate Starts for Enby_53:
(10, 35519), (11, 35522), (Start: 14 @35552 has 5 MA's), (Start: 17 @35588 has 8 MA's), (27, 35648), (Start: 28 @35651 has 2 MA's),

Gene: Gumball_84 Start: 60133, Stop: 60360, Start Num: 14
Candidate Starts for Gumball_84:
(2, 60010), (Start: 14 @60133 has 5 MA's), (Start: 17 @60169 has 8 MA's), (Start: 19 @60178 has 1 MA's), (Start: 28 @60232 has 2 MA's),

Gene: Gwilliam_54 Start: 47871, Stop: 47680, Start Num: 24
Candidate Starts for Gwilliam_54:
(1, 48108), (3, 48051), (5, 48024), (7, 48003), (8, 47997), (Start: 14 @47949 has 5 MA's), (15, 47925), (23, 47877), (Start: 24 @47871 has 1 MA's), (Start: 28 @47847 has 2 MA's),

Gene: Harley_54 Start: 37188, Stop: 37382, Start Num: 17
Candidate Starts for Harley_54:
(11, 37122), (Start: 14 @37152 has 5 MA's), (Start: 17 @37188 has 8 MA's), (27, 37248), (Start: 28 @37251 has 2 MA's),

Gene: Heathcliff_51 Start: 45274, Stop: 45107, Start Num: 28
Candidate Starts for Heathcliff_51:
(Start: 14 @45376 has 5 MA's), (Start: 20 @45322 has 1 MA's), (Start: 28 @45274 has 2 MA's),

Gene: InterFolia_6 Start: 1924, Stop: 2115, Start Num: 17
Candidate Starts for InterFolia_6:
(13, 1879), (Start: 14 @1888 has 5 MA's), (Start: 17 @1924 has 8 MA's), (Start: 19 @1933 has 1 MA's), (Start: 28 @1987 has 2 MA's), (31, 2026),

Gene: Jant_56 Start: 38892, Stop: 39086, Start Num: 17
Candidate Starts for Jant_56:
(11, 38826), (Start: 14 @38856 has 5 MA's), (Start: 17 @38892 has 8 MA's), (27, 38952), (Start: 28 @38955 has 2 MA's),

Gene: JigglyPuff_5 Start: 1776, Stop: 1985, Start Num: 19
Candidate Starts for JigglyPuff_5:
(13, 1722), (Start: 14 @1731 has 5 MA's), (Start: 17 @1767 has 8 MA's), (Start: 19 @1776 has 1 MA's), (27, 1827), (Start: 28 @1830 has 2 MA's), (34, 1926),

Gene: Khan1_54 Start: 47495, Stop: 47304, Start Num: 24
Candidate Starts for Khan1_54:
(1, 47732), (3, 47675), (5, 47648), (7, 47627), (8, 47621), (Start: 14 @47573 has 5 MA's), (15, 47549), (23, 47501), (Start: 24 @47495 has 1 MA's), (Start: 28 @47471 has 2 MA's),

Gene: Krakatau_50 Start: 36883, Stop: 37077, Start Num: 17
Candidate Starts for Krakatau_50:
(11, 36817), (Start: 14 @36847 has 5 MA's), (Start: 17 @36883 has 8 MA's), (27, 36943), (Start: 28 @36946 has 2 MA's),

Gene: Latretium_77 Start: 46947, Stop: 47177, Start Num: 17
Candidate Starts for Latretium_77:
(6, 46854), (Start: 14 @46911 has 5 MA's), (Start: 17 @46947 has 8 MA's), (27, 47007), (Start: 28 @47010 has 2 MA's),

Gene: LeiMonet_55 Start: 47494, Stop: 47303, Start Num: 24
Candidate Starts for LeiMonet_55:
(1, 47731), (3, 47674), (7, 47626), (8, 47620), (Start: 14 @47572 has 5 MA's), (15, 47548), (23, 47500), (Start: 24 @47494 has 1 MA's), (Start: 28 @47470 has 2 MA's),

Gene: Lorde_53 Start: 35527, Stop: 35757, Start Num: 14
Candidate Starts for Lorde_53:
(10, 35494), (11, 35497), (Start: 14 @35527 has 5 MA's), (Start: 17 @35563 has 8 MA's), (27, 35623), (Start: 28 @35626 has 2 MA's),

Gene: MadMen_62 Start: 41080, Stop: 41310, Start Num: 17
Candidate Starts for MadMen_62:
(Start: 14 @41044 has 5 MA's), (Start: 17 @41080 has 8 MA's), (27, 41140), (Start: 28 @41143 has 2 MA's),

Gene: Marlia_52 Start: 45756, Stop: 45589, Start Num: 28
Candidate Starts for Marlia_52:
(Start: 14 @45858 has 5 MA's), (Start: 20 @45804 has 1 MA's), (Start: 28 @45756 has 2 MA's), (35, 45600),

Gene: MilleniumForce_52 Start: 38325, Stop: 38558, Start Num: 14
Candidate Starts for MilleniumForce_52:
(11, 38295), (Start: 14 @38325 has 5 MA's), (Start: 17 @38361 has 8 MA's), (27, 38421), (Start: 28 @38424 has 2 MA's),

Gene: Mulaychimus_52 Start: 45738, Stop: 45571, Start Num: 28
Candidate Starts for Mulaychimus_52:

(Start: 14 @45840 has 5 MA's), (Start: 20 @45786 has 1 MA's), (Start: 28 @45738 has 2 MA's), (35, 45582),

Gene: MulchExplorer_70 Start: 43157, Stop: 43342, Start Num: 22
Candidate Starts for MulchExplorer_70:
(Start: 14 @43094 has 5 MA's), (22, 43157), (Start: 28 @43199 has 2 MA's),

Gene: Olivio_51 Start: 45617, Stop: 45459, Start Num: 28
Candidate Starts for Olivio_51:
(Start: 14 @45719 has 5 MA's), (Start: 20 @45665 has 1 MA's), (Start: 28 @45617 has 2 MA's),

Gene: Periwinkle_85 Start: 46796, Stop: 47035, Start Num: 18
Candidate Starts for Periwinkle_85:
(4, 46643), (9, 46700), (12, 46718), (16, 46787), (Start: 18 @46796 has 2 MA's), (26, 46853), (29, 46880), (30, 46892),

Gene: PharkleMinkus_6 Start: 1924, Stop: 2115, Start Num: 17
Candidate Starts for PharkleMinkus_6:
(13, 1879), (Start: 14 @1888 has 5 MA's), (Start: 17 @1924 has 8 MA's), (Start: 19 @1933 has 1 MA's), (Start: 28 @1987 has 2 MA's), (31, 2026),

Gene: Pupusa_6 Start: 1924, Stop: 2115, Start Num: 17
Candidate Starts for Pupusa_6:
(13, 1879), (Start: 14 @1888 has 5 MA's), (Start: 17 @1924 has 8 MA's), (Start: 19 @1933 has 1 MA's), (Start: 28 @1987 has 2 MA's), (31, 2026),

Gene: Raid_65 Start: 42540, Stop: 42373, Start Num: 28
Candidate Starts for Raid_65:
(Start: 14 @42642 has 5 MA's), (Start: 20 @42588 has 1 MA's), (Start: 28 @42540 has 2 MA's),

Gene: Ryadel_103 Start: 62455, Stop: 62225, Start Num: 17
Candidate Starts for Ryadel_103:
(Start: 14 @62491 has 5 MA's), (Start: 17 @62455 has 8 MA's), (27, 62395), (Start: 28 @62392 has 2 MA's),

Gene: SirHarley_86 Start: 60117, Stop: 60344, Start Num: 14
Candidate Starts for SirHarley_86:
(2, 59994), (Start: 14 @60117 has 5 MA's), (Start: 17 @60153 has 8 MA's), (Start: 19 @60162 has 1 MA's), (Start: 28 @60216 has 2 MA's),

Gene: SlippinJimmy_53 Start: 46540, Stop: 46373, Start Num: 28
Candidate Starts for SlippinJimmy_53:
(Start: 14 @46642 has 5 MA's), (Start: 20 @46588 has 1 MA's), (Start: 28 @46540 has 2 MA's), (35, 46384),

Gene: StephanieG_6 Start: 1933, Stop: 2115, Start Num: 19
Candidate Starts for StephanieG_6:
(13, 1879), (Start: 14 @1888 has 5 MA's), (Start: 17 @1924 has 8 MA's), (Start: 19 @1933 has 1 MA's), (Start: 28 @1987 has 2 MA's), (31, 2026),

Gene: Superphikiman_80 Start: 49081, Stop: 48866, Start Num: 20
Candidate Starts for Superphikiman_80:
(Start: 14 @49135 has 5 MA's), (Start: 20 @49081 has 1 MA's), (Start: 28 @49033 has 2 MA's),

Gene: SwainyDoc_52 Start: 45770, Stop: 45603, Start Num: 28
Candidate Starts for SwainyDoc_52:
(Start: 14 @45872 has 5 MA's), (Start: 20 @45818 has 1 MA's), (Start: 28 @45770 has 2 MA's), (35, 45614),

Gene: Tainan_6 Start: 1924, Stop: 2115, Start Num: 17
Candidate Starts for Tainan_6:
(13, 1879), (Start: 14 @1888 has 5 MA's), (Start: 17 @1924 has 8 MA's), (Start: 19 @1933 has 1 MA's), (Start: 28 @1987 has 2 MA's), (31, 2026),

Gene: Target_68 Start: 42412, Stop: 42245, Start Num: 28
Candidate Starts for Target_68:
(Start: 14 @42514 has 5 MA's), (Start: 20 @42460 has 1 MA's), (Start: 28 @42412 has 2 MA's),

Gene: TinyDot_48 Start: 31963, Stop: 32163, Start Num: 18
Candidate Starts for TinyDot_48:
(Start: 18 @31963 has 2 MA's), (32, 32071), (33, 32074),

Gene: Xiaokay_79 Start: 52707, Stop: 52925, Start Num: 21
Candidate Starts for Xiaokay_79:
(Start: 14 @52629 has 5 MA's), (21, 52707), (25, 52734), (Start: 28 @52758 has 2 MA's),

Gene: YungJamal_99 Start: 61508, Stop: 61278, Start Num: 17
Candidate Starts for YungJamal_99:
(Start: 14 @61544 has 5 MA's), (Start: 17 @61508 has 8 MA's), (27, 61448), (Start: 28 @61445 has 2 MA's),