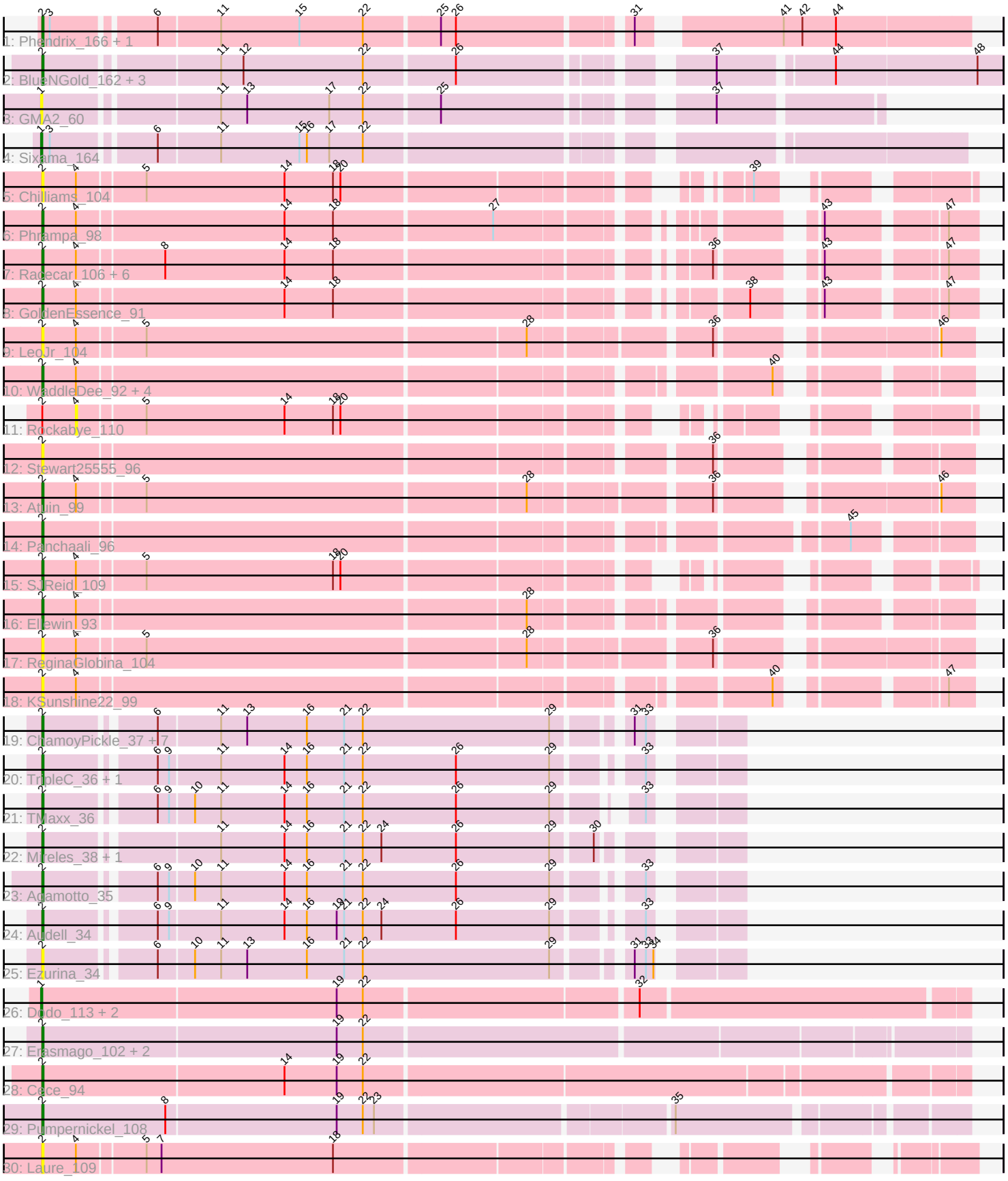
Pham 300108


1: Phendrix_166 + 1
2: BlueNGold_162 + 3
3: GMA2_60
4: Sixama_164
5: Chilliams_104
6: Phrampa_98
7: Racecar_106 + 6
8: GoldenEssence_91
9: LeoJr_104
10: WaddleDee_92 + 4
11: Rockabye_110
12: Stewart25555_96
13: Atuin_99
14: Panchaali_96
15: SJReid_109
16: Ellewin_93
17: ReginaGlobina_104
18: KSunshine22_99
19: ChamoyPickle_37 + 7
20: TripleC_36 + 1
21: TMaxx_36
22: Mireles_38 + 1
23: Agamotto_35
24: Audell_34
25: Ezurina_34
26: Dodo_113 + 2
27: Erasmago_102 + 2
28: Cece_94
29: Pumpernickel_108
30: Laure_109

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 300108 Report

This analysis was run 06/08/26 on database version 649.

Pham number 300108 has 57 members, 20 are drafts.

Phages represented in each track:
- Track 1 : Phendrix_166, GodonK_177
- Track 2 : BlueNGold_162, Forza_166, Boopy_165, Mareelih_163
- Track 3 : GMA2_60
- Track 4 : Sixama_164
- Track 5 : Chilliams_104
- Track 6 : Phrampa_98
- Track 7 : Racecar_106, Mimi_105, FloraSnap32_105, Talia1610_105, Bloom_109, Patbob_104, FrostedClock_108
- Track 8 : GoldenEssence_91
- Track 9 : LeoJr_104
- Track 10 : WaddleDee_92, BooTeria_101, DunneganBoMo_94, Emmetator_97, Artu_97
- Track 11 : Rockabye_110
- Track 12 : Stewart25555_96
- Track 13 : Atuin_99
- Track 14 : Panchaali_96
- Track 15 : SJReid_109
- Track 16 : Ellewin_93
- Track 17 : ReginaGlobina_104
- Track 18 : KSunshine22_99
- Track 19 : ChamoyPickle_37, Gerri43_35, Studio_37, Roberts_35, AnnabelLee_35, CardboardBox_36, Neuvillette_35, ChipsNGuac_35
- Track 20 : TripleC_36, LastNadiia_37
- Track 21 : TMaxx_36
- Track 22 : Mireles_38, Makima_35
- Track 23 : Agamotto_35
- Track 24 : Audell_34
- Track 25 : Ezurina_34
- Track 26 : Dodo_113, PauloDiaboli_111, A3Wally_111
- Track 27 : Erasmago_102, Big4_100, Zooman_95
- Track 28 : Cece_94
- Track 29 : Pumpernickel_108
- Track 30 : Laure_109

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

The start number called the most often in the published annotations is 2, it was called in 33 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Agamotto_35, AnnabelLee_35, Artu_97, Atuin_99, Audell_34, Big4_100, Bloom_109, BlueNGold_162, BooTeria_101, Boopy_165, CardboardBox_36, Cece_94, ChamoyPickle_37, Chilliams_104, ChipsNGuac_35, DunneganBoMo_94, Ellewin_93, Emmetator_97, Erasmago_102, Ezurina_34, FloraSnap32_105, Forza_166, FrostedClock_108, Gerri43_35, GodonK_177, GoldenEssence_91, KSunshine22_99, LastNadiia_37, Laure_109, LeoJr_104, Makima_35, Mareelih_163, Mimi_105, Mireles_38, Neuvillette_35, Panchaali_96, Patbob_104, Phendrix_166, Phrampa_98, Pumpernickel_108, Racecar_106, ReginaGlobina_104, Roberts_35, SJReid_109, Stewart25555_96, Studio_37, TMaxx_36, Talia1610_105, TripleC_36, WaddleDee_92, Zooman_95,

Genes that have the "Most Annotated" start but do not call it:
• Rockabye_110,

Genes that do not have the "Most Annotated" start:
• A3Wally_111, Dodo_113, GMA2_60, PauloDiaboli_111, Sixama_164,

Summary by start number:

Start 1:
• Found in 5 of 57 (8.8%) of genes in pham
• Manual Annotations of this start: 4 of 37
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A3Wally_111 (GD1), Dodo_113 (GD1), GMA2_60 (DS), PauloDiaboli_111 (GD1), Sixama_164 (DS),

Start 2:
• Found in 52 of 57 (91.2%) of genes in pham
• Manual Annotations of this start: 33 of 37
• Called 98.1% of time when present
• Phage (with cluster) where this start called: Agamotto_35 (FR), AnnabelLee_35 (FR), Artu_97 (FC), Atuin_99 (FC), Audell_34 (FR), Big4_100 (GD2), Bloom_109 (FC), BlueNGold_162 (DS), BooTeria_101 (FC), Boopy_165 (DS), CardboardBox_36 (FR), Cece_94 (GD3), ChamoyPickle_37 (FR), Chilliams_104 (FC), ChipsNGuac_35 (FR), DunneganBoMo_94 (FC), Ellewin_93 (FC), Emmetator_97 (FC), Erasmago_102 (GD2), Ezurina_34 (FR), FloraSnap32_105 (FC), Forza_166 (DS), FrostedClock_108 (FC), Gerri43_35 (FR), GodonK_177 (DK), GoldenEssence_91 (FC), KSunshine22_99 (FC), LastNadiia_37 (FR), Laure_109 (UNK), LeoJr_104 (FC), Makima_35 (FR), Mareelih_163 (DS), Mimi_105 (FC), Mireles_38 (FR), Neuvillette_35 (FR), Panchaali_96 (FC), Patbob_104 (FC), Phendrix_166 (DK), Phrampa_98 (FC), Pumpernickel_108 (GD4), Racecar_106 (FC), ReginaGlobina_104 (FC), Roberts_35 (FR), SJReid_109 (FC), Stewart25555_96 (FC), Studio_37 (FR), TMaxx_36 (FR), Talia1610_105 (FC), TripleC_36 (FR), WaddleDee_92 (FC), Zooman_95 (GD2),

Start 4:
• Found in 23 of 57 (40.4%) of genes in pham
• No Manual Annotations of this start.

• Called 4.3% of time when present
• Phage (with cluster) where this start called: Rockabye_110 (FC),

Summary by clusters:

There are 9 clusters represented in this pham: GD1, GD2, GD3, GD4, DK, FR, FC, UNK, DS,

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

Info for manual annotations of cluster DS:
•Start number 1 was manually annotated 1 time for cluster DS.
•Start number 2 was manually annotated 4 times for cluster DS.

Info for manual annotations of cluster FC:
•Start number 2 was manually annotated 12 times for cluster FC.

Info for manual annotations of cluster FR:
•Start number 2 was manually annotated 11 times for cluster FR.

Info for manual annotations of cluster GD1:
•Start number 1 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 2 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 2 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 2 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_111 Start: 75589, Stop: 74876, Start Num: 1
Candidate Starts for A3Wally_111:
(Start: 1 @75589 has 4 MA's), (19, 75355), (22, 75334), (32, 75127),

Gene: Agamotto_35 Start: 25602, Stop: 25099, Start Num: 2
Candidate Starts for Agamotto_35:
(Start: 2 @25602 has 33 MA's), (6, 25524), (9, 25515), (10, 25497), (11, 25476), (14, 25425), (16, 25407), (21, 25377), (22, 25362), (26, 25287), (29, 25212), (33, 25158),

Gene: AnnabelLee_35 Start: 22785, Stop: 22279, Start Num: 2
Candidate Starts for AnnabelLee_35:
(Start: 2 @22785 has 33 MA's), (6, 22707), (11, 22659), (13, 22638), (16, 22590), (21, 22560), (22, 22545), (29, 22395), (31, 22347), (33, 22338),

Gene: Artu_97 Start: 81740, Stop: 82399, Start Num: 2

Candidate Starts for Artu_97:
(Start: 2 @81740 has 33 MA's), (4, 81767), (40, 82277),

Gene: Atuin_99 Start: 85221, Stop: 85898, Start Num: 2
Candidate Starts for Atuin_99:
(Start: 2 @85221 has 33 MA's), (4, 85248), (5, 85299), (28, 85596), (36, 85725), (46, 85872),

Gene: Audell_34 Start: 25184, Stop: 24681, Start Num: 2
Candidate Starts for Audell_34:
(Start: 2 @25184 has 33 MA's), (6, 25106), (9, 25097), (11, 25058), (14, 25007), (16, 24989), (19, 24965), (21, 24959), (22, 24944), (24, 24929), (26, 24869), (29, 24794), (33, 24740),

Gene: Big4_100 Start: 74707, Stop: 74009, Start Num: 2
Candidate Starts for Big4_100:
(Start: 2 @74707 has 33 MA's), (19, 74473), (22, 74452),

Gene: Bloom_109 Start: 85355, Stop: 86011, Start Num: 2
Candidate Starts for Bloom_109:
(Start: 2 @85355 has 33 MA's), (4, 85382), (8, 85448), (14, 85544), (18, 85583), (36, 85844), (43, 85904), (47, 85988),

Gene: BlueNGold_162 Start: 92754, Stop: 92056, Start Num: 2
Candidate Starts for BlueNGold_162:
(Start: 2 @92754 has 33 MA's), (11, 92625), (12, 92607), (22, 92511), (26, 92442), (37, 92271), (44, 92187), (48, 92076),

Gene: BooTeria_101 Start: 81853, Stop: 82512, Start Num: 2
Candidate Starts for BooTeria_101:
(Start: 2 @81853 has 33 MA's), (4, 81880), (40, 82390),

Gene: Boopy_165 Start: 92765, Stop: 92067, Start Num: 2
Candidate Starts for Boopy_165:
(Start: 2 @92765 has 33 MA's), (11, 92636), (12, 92618), (22, 92522), (26, 92453), (37, 92282), (44, 92198), (48, 92087),

Gene: CardboardBox_36 Start: 22788, Stop: 22282, Start Num: 2
Candidate Starts for CardboardBox_36:
(Start: 2 @22788 has 33 MA's), (6, 22710), (11, 22662), (13, 22641), (16, 22593), (21, 22563), (22, 22548), (29, 22398), (31, 22350), (33, 22341),

Gene: Cece_94 Start: 77750, Stop: 77037, Start Num: 2
Candidate Starts for Cece_94:
(Start: 2 @77750 has 33 MA's), (14, 77558), (19, 77516), (22, 77495),

Gene: ChamoyPickle_37 Start: 23328, Stop: 22822, Start Num: 2
Candidate Starts for ChamoyPickle_37:
(Start: 2 @23328 has 33 MA's), (6, 23250), (11, 23202), (13, 23181), (16, 23133), (21, 23103), (22, 23088), (29, 22938), (31, 22890), (33, 22881),

Gene: Chilliams_104 Start: 78152, Stop: 78772, Start Num: 2
Candidate Starts for Chilliams_104:
(Start: 2 @78152 has 33 MA's), (4, 78179), (5, 78230), (14, 78341), (18, 78380), (20, 78386), (39, 78647),

Gene: ChipsNGuac_35 Start: 22788, Stop: 22282, Start Num: 2
Candidate Starts for ChipsNGuac_35:
(Start: 2 @22788 has 33 MA's), (6, 22710), (11, 22662), (13, 22641), (16, 22593), (21, 22563), (22, 22548), (29, 22398), (31, 22350), (33, 22341),

Gene: Dodo_113 Start: 75911, Stop: 75198, Start Num: 1
Candidate Starts for Dodo_113:
(Start: 1 @75911 has 4 MA's), (19, 75677), (22, 75656), (32, 75449),

Gene: DunneganBoMo_94 Start: 81122, Stop: 81781, Start Num: 2
Candidate Starts for DunneganBoMo_94:
(Start: 2 @81122 has 33 MA's), (4, 81149), (40, 81659),

Gene: Ellewin_93 Start: 80533, Stop: 81192, Start Num: 2
Candidate Starts for Ellewin_93:
(Start: 2 @80533 has 33 MA's), (4, 80560), (28, 80908),

Gene: Emmetator_97 Start: 81077, Stop: 81736, Start Num: 2
Candidate Starts for Emmetator_97:
(Start: 2 @81077 has 33 MA's), (4, 81104), (40, 81614),

Gene: Erasmago_102 Start: 72387, Stop: 71674, Start Num: 2
Candidate Starts for Erasmago_102:
(Start: 2 @72387 has 33 MA's), (19, 72153), (22, 72132),

Gene: Ezurina_34 Start: 23846, Stop: 23340, Start Num: 2
Candidate Starts for Ezurina_34:
(Start: 2 @23846 has 33 MA's), (6, 23768), (10, 23741), (11, 23720), (13, 23699), (16, 23651), (21, 23621), (22, 23606), (29, 23456), (31, 23408), (33, 23399), (34, 23393),

Gene: FloraSnap32_105 Start: 84252, Stop: 84908, Start Num: 2
Candidate Starts for FloraSnap32_105:
(Start: 2 @84252 has 33 MA's), (4, 84279), (8, 84345), (14, 84441), (18, 84480), (36, 84741), (43, 84801), (47, 84885),

Gene: Forza_166 Start: 92682, Stop: 91984, Start Num: 2
Candidate Starts for Forza_166:
(Start: 2 @92682 has 33 MA's), (11, 92553), (12, 92535), (22, 92439), (26, 92370), (37, 92199), (44, 92115), (48, 92004),

Gene: FrostedClock_108 Start: 85552, Stop: 86208, Start Num: 2
Candidate Starts for FrostedClock_108:
(Start: 2 @85552 has 33 MA's), (4, 85579), (8, 85645), (14, 85741), (18, 85780), (36, 86041), (43, 86101), (47, 86185),

Gene: GMA2_60 Start: 63482, Stop: 62877, Start Num: 1
Candidate Starts for GMA2_60:
(Start: 1 @63482 has 4 MA's), (11, 63353), (13, 63332), (17, 63266), (22, 63239), (25, 63182), (37, 62999),

Gene: Gerri43_35 Start: 22788, Stop: 22282, Start Num: 2
Candidate Starts for Gerri43_35:

(Start: 2 @22788 has 33 MA's), (6, 22710), (11, 22662), (13, 22641), (16, 22593), (21, 22563), (22, 22548), (29, 22398), (31, 22350), (33, 22341),

Gene: GodonK_177 Start: 88708, Stop: 88028, Start Num: 2
Candidate Starts for GodonK_177:
(Start: 2 @88708 has 33 MA's), (3, 88702), (6, 88627), (11, 88579), (15, 88516), (22, 88465), (25, 88408), (26, 88396), (31, 88270), (41, 88174), (42, 88159), (44, 88132),

Gene: GoldenEssence_91 Start: 79147, Stop: 79803, Start Num: 2
Candidate Starts for GoldenEssence_91:
(Start: 2 @79147 has 33 MA's), (4, 79174), (14, 79336), (18, 79375), (38, 79660), (43, 79696), (47, 79780),

Gene: KSunshine22_99 Start: 82134, Stop: 82793, Start Num: 2
Candidate Starts for KSunshine22_99:
(Start: 2 @82134 has 33 MA's), (4, 82161), (40, 82671), (47, 82773),

Gene: LastNadiia_37 Start: 25143, Stop: 24640, Start Num: 2
Candidate Starts for LastNadiia_37:
(Start: 2 @25143 has 33 MA's), (6, 25065), (9, 25056), (11, 25017), (14, 24966), (16, 24948), (21, 24918), (22, 24903), (26, 24828), (29, 24753), (33, 24699),

Gene: Laure_109 Start: 78077, Stop: 78706, Start Num: 2
Candidate Starts for Laure_109:
(Start: 2 @78077 has 33 MA's), (4, 78104), (5, 78155), (7, 78167), (18, 78305),

Gene: LeoJr_104 Start: 85456, Stop: 86133, Start Num: 2
Candidate Starts for LeoJr_104:
(Start: 2 @85456 has 33 MA's), (4, 85483), (5, 85534), (28, 85831), (36, 85960), (46, 86107),

Gene: Makima_35 Start: 24262, Stop: 23753, Start Num: 2
Candidate Starts for Makima_35:
(Start: 2 @24262 has 33 MA's), (11, 24136), (14, 24085), (16, 24067), (21, 24037), (22, 24022), (24, 24007), (26, 23947), (29, 23872), (30, 23842),

Gene: Mareelih_163 Start: 92200, Stop: 91502, Start Num: 2
Candidate Starts for Mareelih_163:
(Start: 2 @92200 has 33 MA's), (11, 92071), (12, 92053), (22, 91957), (26, 91888), (37, 91717), (44, 91633), (48, 91522),

Gene: Mimi_105 Start: 84702, Stop: 85358, Start Num: 2
Candidate Starts for Mimi_105:
(Start: 2 @84702 has 33 MA's), (4, 84729), (8, 84795), (14, 84891), (18, 84930), (36, 85191), (43, 85251), (47, 85335),

Gene: Mireles_38 Start: 23820, Stop: 23314, Start Num: 2
Candidate Starts for Mireles_38:
(Start: 2 @23820 has 33 MA's), (11, 23694), (14, 23643), (16, 23625), (21, 23595), (22, 23580), (24, 23565), (26, 23505), (29, 23430), (30, 23400),

Gene: Neuvillette_35 Start: 22788, Stop: 22282, Start Num: 2
Candidate Starts for Neuvillette_35:

(Start: 2 @22788 has 33 MA's), (6, 22710), (11, 22662), (13, 22641), (16, 22593), (21, 22563), (22, 22548), (29, 22398), (31, 22350), (33, 22341),

Gene: Panchaali_96 Start: 82099, Stop: 82770, Start Num: 2
Candidate Starts for Panchaali_96:
(Start: 2 @82099 has 33 MA's), (45, 82687),

Gene: Patbob_104 Start: 85437, Stop: 86093, Start Num: 2
Candidate Starts for Patbob_104:
(Start: 2 @85437 has 33 MA's), (4, 85464), (8, 85530), (14, 85626), (18, 85665), (36, 85926), (43, 85986), (47, 86070),

Gene: PauloDiaboli_111 Start: 74946, Stop: 74233, Start Num: 1
Candidate Starts for PauloDiaboli_111:
(Start: 1 @74946 has 4 MA's), (19, 74712), (22, 74691), (32, 74484),

Gene: Phendrix_166 Start: 87805, Stop: 87125, Start Num: 2
Candidate Starts for Phendrix_166:
(Start: 2 @87805 has 33 MA's), (3, 87799), (6, 87724), (11, 87676), (15, 87613), (22, 87562), (25, 87505), (26, 87493), (31, 87367), (41, 87271), (42, 87256), (44, 87229),

Gene: Phrampa_98 Start: 86836, Stop: 87489, Start Num: 2
Candidate Starts for Phrampa_98:
(Start: 2 @86836 has 33 MA's), (4, 86863), (14, 87025), (18, 87064), (27, 87187), (43, 87382), (47, 87466),

Gene: Pumpernickel_108 Start: 76513, Stop: 75818, Start Num: 2
Candidate Starts for Pumpernickel_108:
(Start: 2 @76513 has 33 MA's), (8, 76414), (19, 76279), (22, 76258), (23, 76249), (35, 76027),

Gene: Racecar_106 Start: 85355, Stop: 86011, Start Num: 2
Candidate Starts for Racecar_106:
(Start: 2 @85355 has 33 MA's), (4, 85382), (8, 85448), (14, 85544), (18, 85583), (36, 85844), (43, 85904), (47, 85988),

Gene: ReginaGlobina_104 Start: 85021, Stop: 85698, Start Num: 2
Candidate Starts for ReginaGlobina_104:
(Start: 2 @85021 has 33 MA's), (4, 85048), (5, 85099), (28, 85396), (36, 85525),

Gene: Roberts_35 Start: 22788, Stop: 22282, Start Num: 2
Candidate Starts for Roberts_35:
(Start: 2 @22788 has 33 MA's), (6, 22710), (11, 22662), (13, 22641), (16, 22593), (21, 22563), (22, 22548), (29, 22398), (31, 22350), (33, 22341),

Gene: Rockabye_110 Start: 78617, Stop: 79210, Start Num: 4
Candidate Starts for Rockabye_110:
(Start: 2 @78590 has 33 MA's), (4, 78617), (5, 78668), (14, 78779), (18, 78818), (20, 78824),

Gene: SJReid_109 Start: 77627, Stop: 78247, Start Num: 2
Candidate Starts for SJReid_109:
(Start: 2 @77627 has 33 MA's), (4, 77654), (5, 77705), (18, 77855), (20, 77861),

Gene: Sixama_164 Start: 92202, Stop: 91534, Start Num: 1

Candidate Starts for Sixama_164:
(Start: 1 @92202 has 4 MA's), (3, 92196), (6, 92121), (11, 92073), (15, 92010), (16, 92004), (17, 91986), (22, 91959),

Gene: Stewart25555_96 Start: 81859, Stop: 82521, Start Num: 2
Candidate Starts for Stewart25555_96:
(Start: 2 @81859 has 33 MA's), (36, 82357),

Gene: Studio_37 Start: 24154, Stop: 23648, Start Num: 2
Candidate Starts for Studio_37:
(Start: 2 @24154 has 33 MA's), (6, 24076), (11, 24028), (13, 24007), (16, 23959), (21, 23929), (22, 23914), (29, 23764), (31, 23716), (33, 23707),

Gene: TMaxx_36 Start: 23432, Stop: 22935, Start Num: 2
Candidate Starts for TMaxx_36:
(Start: 2 @23432 has 33 MA's), (6, 23354), (9, 23345), (10, 23327), (11, 23306), (14, 23255), (16, 23237), (21, 23207), (22, 23192), (26, 23117), (29, 23042), (33, 22994),

Gene: Talia1610_105 Start: 84720, Stop: 85376, Start Num: 2
Candidate Starts for Talia1610_105:
(Start: 2 @84720 has 33 MA's), (4, 84747), (8, 84813), (14, 84909), (18, 84948), (36, 85209), (43, 85269), (47, 85353),

Gene: TripleC_36 Start: 25783, Stop: 25280, Start Num: 2
Candidate Starts for TripleC_36:
(Start: 2 @25783 has 33 MA's), (6, 25705), (9, 25696), (11, 25657), (14, 25606), (16, 25588), (21, 25558), (22, 25543), (26, 25468), (29, 25393), (33, 25339),

Gene: WaddleDee_92 Start: 80308, Stop: 80967, Start Num: 2
Candidate Starts for WaddleDee_92:
(Start: 2 @80308 has 33 MA's), (4, 80335), (40, 80845),

Gene: Zooman_95 Start: 72552, Stop: 71857, Start Num: 2
Candidate Starts for Zooman_95:
(Start: 2 @72552 has 33 MA's), (19, 72318), (22, 72297),