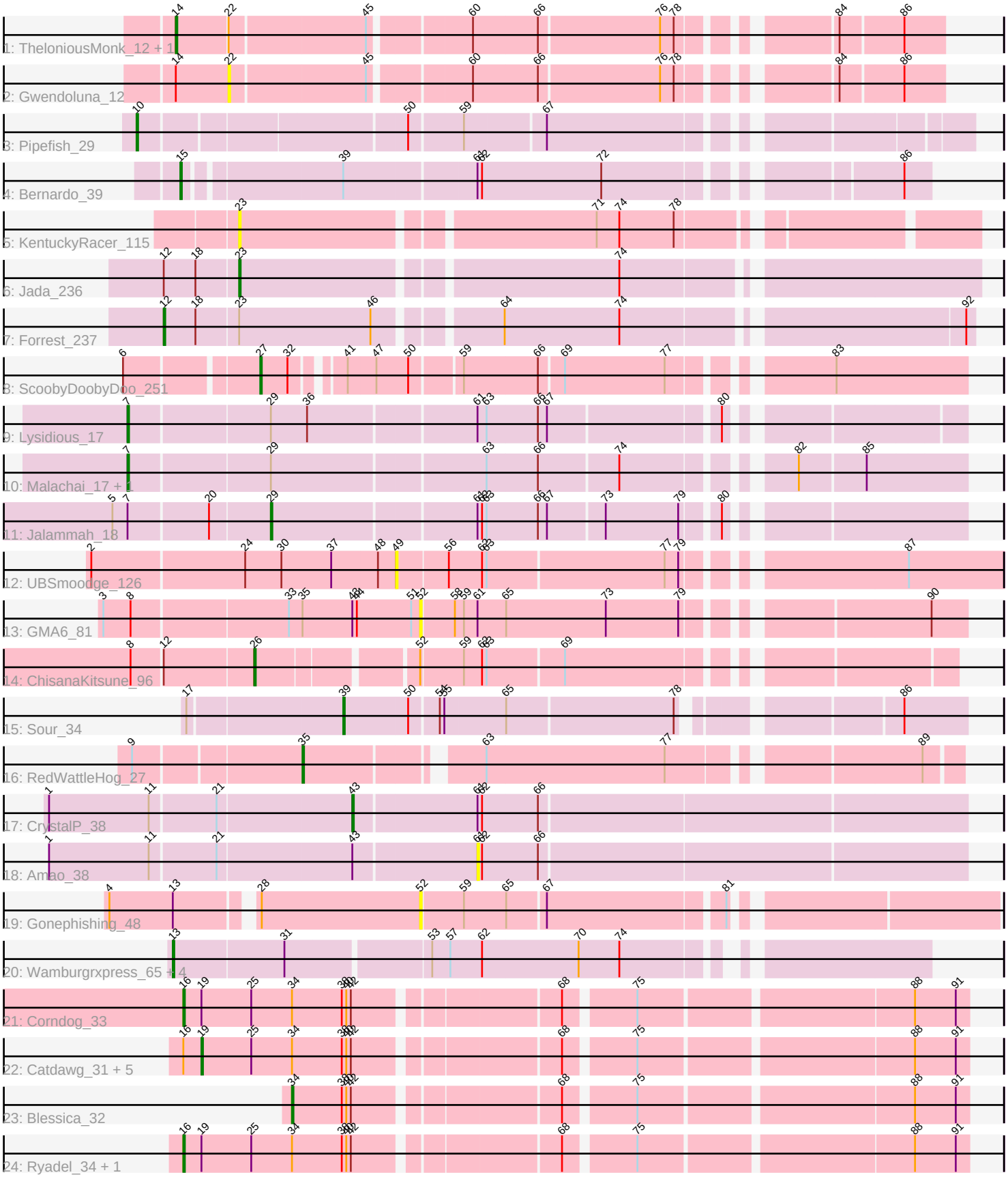
Pham 163775


1: TheloniousMonk_12 + 1
2: Gwendoluna_12
3: Pipefish_29
4: Bernardo_39
5: KentuckyRacer_115
6: Jada_236
7: Forrest_237
8: ScoobyDoobyDoo_251
9: Lysidious_17
10: Malachai_17 + 1
11: Jalammah_18
12: UBSmoodge_126
13: GMA6_81
14: ChisanaKitsune_96
15: Sour_34
16: RedWattleHog_27
17: CrystalP_38
18: Amao_38
19: Gonephishing_48
20: Wamburgrxpress_65 + 4
21: Corndog_33
22: Catdawg_31 + 5
23: Blessica_32
24: Ryadel_34 + 1

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 163775 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163775 has 36 members, 6 are drafts.

Phages represented in each track:
• Track 1 : TheloniousMonk_12, Target_12
• Track 2 : Gwendoluna_12
• Track 3 : Pipefish_29
• Track 4 : Bernardo_39
• Track 5 : KentuckyRacer_115
• Track 6 : Jada_236
• Track 7 : Forrest_237
• Track 8 : ScoobyDoobyDoo_251
• Track 9 : Lysidious_17
• Track 10 : Malachai_17, Begonia_17
• Track 11 : Jalammah_18
• Track 12 : UBSmoodge_126
• Track 13 : GMA6_81
• Track 14 : ChisanaKitsune_96
• Track 15 : Sour_34
• Track 16 : RedWattleHog_27
• Track 17 : CrystalP_38
• Track 18 : Amao_38
• Track 19 : Gonephishing_48
• Track 20 : Wamburgrxpress_65, JoeDirt_64, Rose5_65, UPIE_65, Enceladus_63
• Track 21 : Corndog_33
• Track 22 : Catdawg_31, YungJamal_34, Idergollasper_31, JangDynasty_31, Familton_32, SchoolBus_31
• Track 23 : Blessica_32
• Track 24 : Ryadel_34, Winget_32

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

The start number called the most often in the published annotations is 19, it was called in 6 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Catdawg_31, Familton_32, Idergollasper_31, JangDynasty_31, SchoolBus_31, YungJamal_34,

Genes that have the "Most Annotated" start but do not call it:
• Corndog_33, Ryadel_34, Winget_32,

Genes that do not have the "Most Annotated" start:
• Amao_38, Begonia_17, Bernardo_39, Blessica_32, ChisanaKitsune_96, CrystalP_38, Enceladus_63, Forrest_237, GMA6_81, Gonephishing_48, Gwendoluna_12, Jada_236, Jalammah_18, JoeDirt_64, KentuckyRacer_115, Lysidious_17, Malachai_17, Pipefish_29, RedWattleHog_27, Rose5_65, ScoobyDoobyDoo_251, Sour_34, Target_12, TheloniousMonk_12, UBSmoodge_126, UPIE_65, Wamburgrxpress_65,

Summary by start number:

Start 7:
• Found in 4 of 36 (11.1%) of genes in pham
• Manual Annotations of this start: 3 of 30
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Begonia_17 (CV), Lysidious_17 (CV), Malachai_17 (CV),

Start 10:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pipefish_29 (B3),

Start 12:
• Found in 3 of 36 (8.3%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Forrest_237 (BK1),

Start 13:
• Found in 6 of 36 (16.7%) of genes in pham
• Manual Annotations of this start: 5 of 30
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Enceladus_63 (L1), JoeDirt_64 (L1), Rose5_65 (L1), UPIE_65 (L1), Wamburgrxpress_65 (L1),

Start 14:
• Found in 3 of 36 (8.3%) of genes in pham
• Manual Annotations of this start: 2 of 30
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Target_12 (A1), TheloniousMonk_12 (A1),

Start 15:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bernardo_39 (B3),

Start 16:
• Found in 9 of 36 (25.0%) of genes in pham
• Manual Annotations of this start: 3 of 30
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Corndog_33 (O), Ryadel_34 (O), Winget_32 (O),

Start 19:
• Found in 9 of 36 (25.0%) of genes in pham
• Manual Annotations of this start: 6 of 30
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Catdawg_31 (O), Familton_32 (O), Idergollasper_31 (O), JangDynasty_31 (O), SchoolBus_31 (O), YungJamal_34 (O),

Start 22:
• Found in 3 of 36 (8.3%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Gwendoluna_12 (A1),

Start 23:
• Found in 3 of 36 (8.3%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Jada_236 (BK1), KentuckyRacer_115 (BE2),

Start 26:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ChisanaKitsune_96 (DQ),

Start 27:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ScoobyDoobyDoo_251 (C2),

Start 29:
• Found in 4 of 36 (11.1%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Jalammah_18 (CV),

Start 34:
• Found in 10 of 36 (27.8%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Blessica_32 (O),

Start 35:
• Found in 2 of 36 (5.6%) of genes in pham

• Manual Annotations of this start: 1 of 30
• Called 50.0% of time when present
• Phage (with cluster) where this start called: RedWattleHog_27 (DX),

Start 39:
• Found in 2 of 36 (5.6%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Sour_34 (DR),

Start 43:
• Found in 3 of 36 (8.3%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 33.3% of time when present
• Phage (with cluster) where this start called: CrystalP_38 (E),

Start 49:
• Found in 1 of 36 (2.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: UBSmoodge_126 (DQ),

Start 52:
• Found in 3 of 36 (8.3%) of genes in pham
• No Manual Annotations of this start.
• Called 66.7% of time when present
• Phage (with cluster) where this start called: GMA6_81 (DQ), Gonephishing_48 (J),

Start 61:
• Found in 6 of 36 (16.7%) of genes in pham
• No Manual Annotations of this start.
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Amao_38 (E),

Summary by clusters:

There are 13 clusters represented in this pham: E, L1, J, O, A1, BK1, DX, B3, BE2, C2, DR, CV, DQ,

Info for manual annotations of cluster A1:
•Start number 14 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster B3:
•Start number 10 was manually annotated 1 time for cluster B3.
•Start number 15 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster BK1:
•Start number 12 was manually annotated 1 time for cluster BK1.
•Start number 23 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster C2:
•Start number 27 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CV:
•Start number 7 was manually annotated 3 times for cluster CV.
•Start number 29 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DQ:
•Start number 26 was manually annotated 1 time for cluster DQ.

Info for manual annotations of cluster DR:
•Start number 39 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster DX:
•Start number 35 was manually annotated 1 time for cluster DX.

Info for manual annotations of cluster E:
•Start number 43 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster L1:
•Start number 13 was manually annotated 5 times for cluster L1.

Info for manual annotations of cluster O:
•Start number 16 was manually annotated 3 times for cluster O.
•Start number 19 was manually annotated 6 times for cluster O.
•Start number 34 was manually annotated 1 time for cluster O.

Gene Information:

Gene: Amao_38 Start: 33060, Stop: 32746, Start Num: 61
Candidate Starts for Amao_38:
(1, 33333), (11, 33267), (21, 33225), (Start: 43 @33138 has 1 MA's), (61, 33060), (62, 33057), (66, 33021),

Gene: Begonia_17 Start: 10279, Stop: 10785, Start Num: 7
Candidate Starts for Begonia_17:
(Start: 7 @10279 has 3 MA's), (Start: 29 @10369 has 1 MA's), (63, 10504), (66, 10537), (74, 10588), (82, 10681), (85, 10723),

Gene: Bernardo_39 Start: 36994, Stop: 37440, Start Num: 15
Candidate Starts for Bernardo_39:
(Start: 15 @36994 has 1 MA's), (Start: 39 @37090 has 1 MA's), (61, 37174), (62, 37177), (72, 37255), (86, 37423),

Gene: Blessica_32 Start: 14991, Stop: 15401, Start Num: 34
Candidate Starts for Blessica_32:
(Start: 34 @14991 has 1 MA's), (38, 15024), (40, 15027), (42, 15030), (68, 15153), (75, 15195), (88, 15366), (91, 15393),

Gene: Catdawg_31 Start: 14620, Stop: 15090, Start Num: 19
Candidate Starts for Catdawg_31:

(Start: 16 @14608 has 3 MA's), (Start: 19 @14620 has 6 MA's), (25, 14653), (Start: 34 @14680 has 1 MA's), (38, 14713), (40, 14716), (42, 14719), (68, 14842), (75, 14884), (88, 15055), (91, 15082),

Gene: ChisanaKitsune_96 Start: 72440, Stop: 72853, Start Num: 26
Candidate Starts for ChisanaKitsune_96:
(8, 72365), (Start: 12 @72383 has 1 MA's), (Start: 26 @72440 has 1 MA's), (52, 72536), (59, 72563), (62, 72575), (63, 72578), (69, 72626),

Gene: Corndog_33 Start: 15066, Stop: 15548, Start Num: 16
Candidate Starts for Corndog_33:
(Start: 16 @15066 has 3 MA's), (Start: 19 @15078 has 6 MA's), (25, 15111), (Start: 34 @15138 has 1 MA's), (38, 15171), (40, 15174), (42, 15177), (68, 15300), (75, 15342), (88, 15513), (91, 15540),

Gene: CrystalP_38 Start: 33934, Stop: 33542, Start Num: 43
Candidate Starts for CrystalP_38:
(1, 34129), (11, 34063), (21, 34021), (Start: 43 @33934 has 1 MA's), (61, 33856), (62, 33853), (66, 33817),

Gene: Enceladus_63 Start: 44580, Stop: 45038, Start Num: 13
Candidate Starts for Enceladus_63:
(Start: 13 @44580 has 5 MA's), (31, 44652), (53, 44742), (57, 44754), (62, 44775), (70, 44838), (74, 44865),

Gene: Familton_32 Start: 14624, Stop: 15094, Start Num: 19
Candidate Starts for Familton_32:
(Start: 16 @14612 has 3 MA's), (Start: 19 @14624 has 6 MA's), (25, 14657), (Start: 34 @14684 has 1 MA's), (38, 14717), (40, 14720), (42, 14723), (68, 14846), (75, 14888), (88, 15059), (91, 15086),

Gene: Forrest_237 Start: 114096, Stop: 114590, Start Num: 12
Candidate Starts for Forrest_237:
(Start: 12 @114096 has 1 MA's), (18, 114117), (Start: 23 @114144 has 1 MA's), (46, 114231), (64, 114303), (74, 114378), (92, 114585),

Gene: GMA6_81 Start: 64168, Stop: 64497, Start Num: 52
Candidate Starts for GMA6_81:
(3, 63964), (8, 63982), (33, 64081), (Start: 35 @64090 has 1 MA's), (Start: 43 @64123 has 1 MA's), (44, 64126), (51, 64162), (52, 64168), (58, 64189), (59, 64195), (61, 64204), (65, 64222), (73, 64288), (79, 64336), (90, 64474),

Gene: Gonephishing_48 Start: 38804, Stop: 38457, Start Num: 52
Candidate Starts for Gonephishing_48:
(4, 38996), (Start: 13 @38954 has 5 MA's), (28, 38909), (52, 38804), (59, 38777), (65, 38750), (67, 38726), (81, 38615),

Gene: Gwendoluna_12 Start: 7699, Stop: 8121, Start Num: 22
Candidate Starts for Gwendoluna_12:
(Start: 14 @7666 has 2 MA's), (22, 7699), (45, 7786), (60, 7846), (66, 7888), (76, 7966), (78, 7975), (84, 8056), (86, 8095),

Gene: Idergollasper_31 Start: 14618, Stop: 15088, Start Num: 19
Candidate Starts for Idergollasper_31:
(Start: 16 @14606 has 3 MA's), (Start: 19 @14618 has 6 MA's), (25, 14651), (Start: 34 @14678 has 1 MA's), (38, 14711), (40, 14714), (42, 14717), (68, 14840), (75, 14882), (88, 15053), (91, 15080),

Gene: Jada_236 Start: 113382, Stop: 113834, Start Num: 23
Candidate Starts for Jada_236:
(Start: 12 @113334 has 1 MA's), (18, 113355), (Start: 23 @113382 has 1 MA's), (74, 113616),

Gene: Jalammah_18 Start: 10634, Stop: 11050, Start Num: 29
Candidate Starts for Jalammah_18:
(5, 10535), (Start: 7 @10544 has 3 MA's), (20, 10595), (Start: 29 @10634 has 1 MA's), (61, 10763), (62, 10766), (63, 10769), (66, 10802), (67, 10808), (73, 10844), (79, 10892), (80, 10913),

Gene: JangDynasty_31 Start: 14713, Stop: 15183, Start Num: 19
Candidate Starts for JangDynasty_31:
(Start: 16 @14701 has 3 MA's), (Start: 19 @14713 has 6 MA's), (25, 14746), (Start: 34 @14773 has 1 MA's), (38, 14806), (40, 14809), (42, 14812), (68, 14935), (75, 14977), (88, 15148), (91, 15175),

Gene: JoeDirt_64 Start: 45013, Stop: 45471, Start Num: 13
Candidate Starts for JoeDirt_64:
(Start: 13 @45013 has 5 MA's), (31, 45085), (53, 45175), (57, 45187), (62, 45208), (70, 45271), (74, 45298),

Gene: KentuckyRacer_115 Start: 73819, Stop: 74262, Start Num: 23
Candidate Starts for KentuckyRacer_115:
(Start: 23 @73819 has 1 MA's), (71, 74038), (74, 74053), (78, 74089),

Gene: Lysidious_17 Start: 10274, Stop: 10777, Start Num: 7
Candidate Starts for Lysidious_17:
(Start: 7 @10274 has 3 MA's), (Start: 29 @10364 has 1 MA's), (36, 10388), (61, 10493), (63, 10499), (66, 10532), (67, 10538), (80, 10643),

Gene: Malachai_17 Start: 10279, Stop: 10785, Start Num: 7
Candidate Starts for Malachai_17:
(Start: 7 @10279 has 3 MA's), (Start: 29 @10369 has 1 MA's), (63, 10504), (66, 10537), (74, 10588), (82, 10681), (85, 10723),

Gene: Pipefish_29 Start: 27509, Stop: 27015, Start Num: 10
Candidate Starts for Pipefish_29:
(Start: 10 @27509 has 1 MA's), (50, 27344), (59, 27311), (67, 27260),

Gene: RedWattleHog_27 Start: 28545, Stop: 28156, Start Num: 35
Candidate Starts for RedWattleHog_27:
(9, 28650), (Start: 35 @28545 has 1 MA's), (63, 28443), (77, 28326), (89, 28179),

Gene: Rose5_65 Start: 45033, Stop: 45491, Start Num: 13
Candidate Starts for Rose5_65:
(Start: 13 @45033 has 5 MA's), (31, 45105), (53, 45195), (57, 45207), (62, 45228), (70, 45291), (74, 45318),

Gene: Ryadel_34 Start: 15422, Stop: 15904, Start Num: 16
Candidate Starts for Ryadel_34:
(Start: 16 @15422 has 3 MA's), (Start: 19 @15434 has 6 MA's), (25, 15467), (Start: 34 @15494 has 1 MA's), (38, 15527), (40, 15530), (42, 15533), (68, 15656), (75, 15698), (88, 15869), (91, 15896),

Gene: SchoolBus_31 Start: 14621, Stop: 15091, Start Num: 19

Candidate Starts for SchoolBus_31:
(Start: 16 @14609 has 3 MA's), (Start: 19 @14621 has 6 MA's), (25, 14654), (Start: 34 @14681 has 1 MA's), (38, 14714), (40, 14717), (42, 14720), (68, 14843), (75, 14885), (88, 15056), (91, 15083),

Gene: ScoobyDoobyDoo_251 Start: 151338, Stop: 151754, Start Num: 27
Candidate Starts for ScoobyDoobyDoo_251:
(6, 151257), (Start: 27 @151338 has 1 MA's), (32, 151356), (41, 151383), (47, 151401), (50, 151422), (59, 151452), (66, 151500), (69, 151515), (77, 151581), (83, 151668),

Gene: Sour_34 Start: 32659, Stop: 32288, Start Num: 39
Candidate Starts for Sour_34:
(17, 32755), (Start: 39 @32659 has 1 MA's), (50, 32617), (54, 32599), (55, 32596), (65, 32557), (78, 32449), (86, 32329),

Gene: Target_12 Start: 7244, Stop: 7699, Start Num: 14
Candidate Starts for Target_12:
(Start: 14 @7244 has 2 MA's), (22, 7277), (45, 7364), (60, 7424), (66, 7466), (76, 7544), (78, 7553), (84, 7634), (86, 7673),

Gene: TheloniousMonk_12 Start: 7471, Stop: 7926, Start Num: 14
Candidate Starts for TheloniousMonk_12:
(Start: 14 @7471 has 2 MA's), (22, 7504), (45, 7591), (60, 7651), (66, 7693), (76, 7771), (78, 7780), (84, 7861), (86, 7900),

Gene: UBSmoodge_126 Start: 91583, Stop: 91951, Start Num: 49
Candidate Starts for UBSmoodge_126:
(2, 91385), (24, 91484), (30, 91508), (37, 91541), (48, 91571), (49, 91583), (56, 91616), (62, 91637), (63, 91640), (77, 91754), (79, 91763), (87, 91889),

Gene: UPIE_65 Start: 44559, Stop: 45017, Start Num: 13
Candidate Starts for UPIE_65:
(Start: 13 @44559 has 5 MA's), (31, 44631), (53, 44721), (57, 44733), (62, 44754), (70, 44817), (74, 44844),

Gene: Wamburgrxpress_65 Start: 44589, Stop: 45047, Start Num: 13
Candidate Starts for Wamburgrxpress_65:
(Start: 13 @44589 has 5 MA's), (31, 44661), (53, 44751), (57, 44763), (62, 44784), (70, 44847), (74, 44874),

Gene: Winget_32 Start: 14875, Stop: 15357, Start Num: 16
Candidate Starts for Winget_32:
(Start: 16 @14875 has 3 MA's), (Start: 19 @14887 has 6 MA's), (25, 14920), (Start: 34 @14947 has 1 MA's), (38, 14980), (40, 14983), (42, 14986), (68, 15109), (75, 15151), (88, 15322), (91, 15349),

Gene: YungJamal_34 Start: 14950, Stop: 15420, Start Num: 19
Candidate Starts for YungJamal_34:
(Start: 16 @14938 has 3 MA's), (Start: 19 @14950 has 6 MA's), (25, 14983), (Start: 34 @15010 has 1 MA's), (38, 15043), (40, 15046), (42, 15049), (68, 15172), (75, 15214), (88, 15385), (91, 15412),