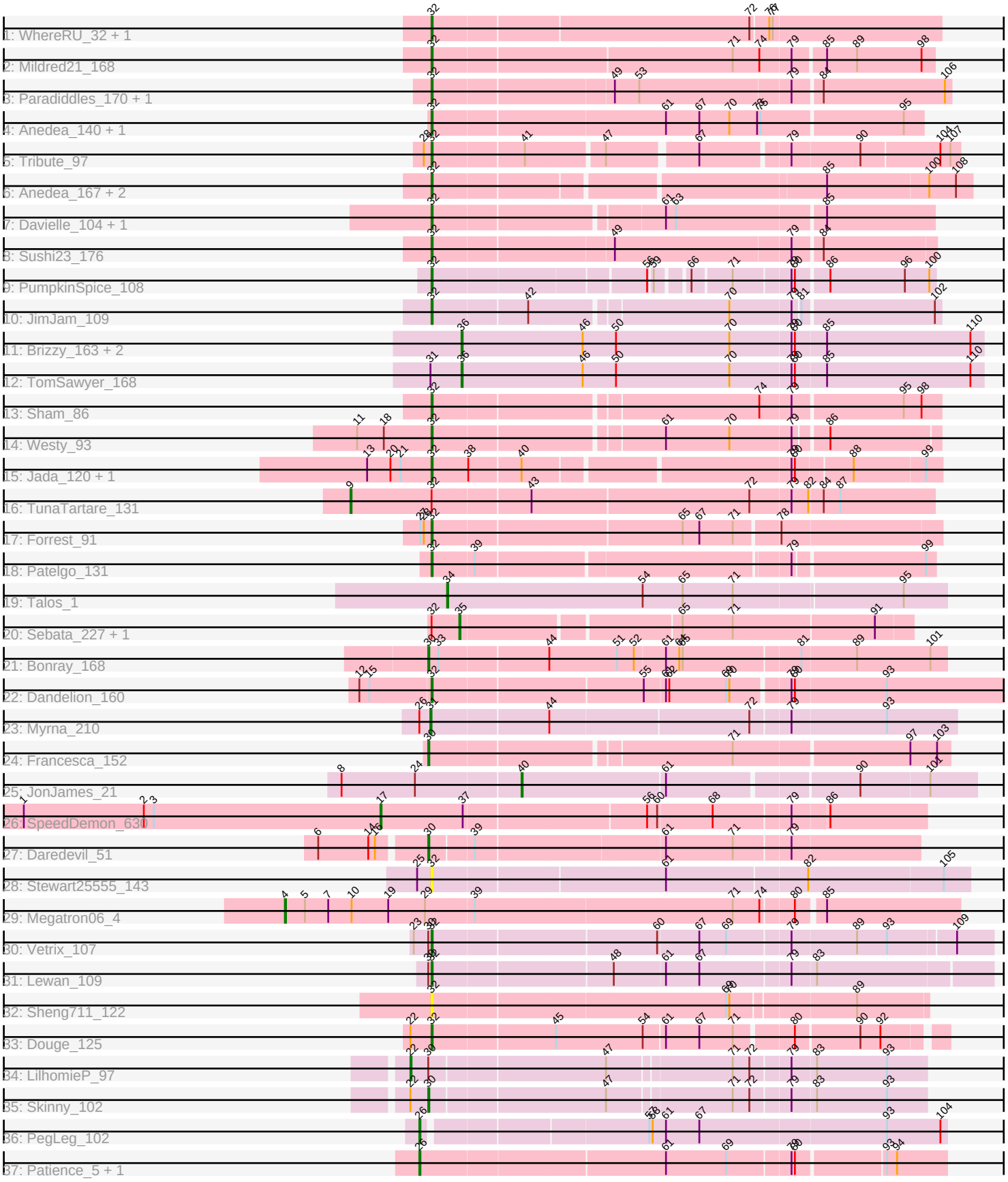
Pham 291269


1: WhereRU_32 + 1
2: Mildred21_168
3: Paradiddles_170 + 1
4: Anedea_140 + 1
5: Tribute_97
6: Anedea_167 + 2
7: Davielle_104 + 1
8: Sushi23_176
9: PumpkinSpice_108
10: JimJam_109
11: Brizzy_163 + 2
12: TomSawyer_168
13: Sham_86
14: Westy_93
15: Jada_120 + 1
16: TunaTartare_131
17: Forrest_91
18: Patelgo_131
19: Talos_1
20: Sebata_227 + 1
21: Bonray_168
22: Dandelion_160
23: Myrna_210
24: Francesca_152
25: JonJames_21
26: SpeedDemon_630
27: Daredevil_51
28: Stewart25555_143
29: Megatron06_4
30: Vetrix_107
31: Lewan_109
32: Sheng711_122
33: Douge_125
34: LilhomieP_97
35: Skinny_102
36: PegLeg_102
37: Patience_5 + 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 291269 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291269 has 48 members, 2 are drafts.

Phages represented in each track:
- Track 1 : WhereRU_32, Davielle_32
- Track 2 : Mildred21_168
- Track 3 : Paradiddles_170, Leo04_177
- Track 4 : Anedea_140, Mildred21_142
- Track 5 : Tribute_97
- Track 6 : Anedea_167, Wofford_171, Riptide_160
- Track 7 : Davielle_104, WhereRU_103
- Track 8 : Sushi23_176
- Track 9 : PumpkinSpice_108
- Track 10 : JimJam_109
- Track 11 : Brizzy_163, Enygma_167, Quaran19_166
- Track 12 : TomSawyer_168
- Track 13 : Sham_86
- Track 14 : Westy_93
- Track 15 : Jada_120, Forrest_124
- Track 16 : TunaTartare_131
- Track 17 : Forrest_91
- Track 18 : Patelgo_131
- Track 19 : Talos_1
- Track 20 : Sebata_227, Salacia_226
- Track 21 : Bonray_168
- Track 22 : Dandelion_160
- Track 23 : Myrna_210
- Track 24 : Francesca_152
- Track 25 : JonJames_21
- Track 26 : SpeedDemon_630
- Track 27 : Daredevil_51
- Track 28 : Stewart25555_143
- Track 29 : Megatron06_4
- Track 30 : Vetrix_107
- Track 31 : Lewan_109
- Track 32 : Sheng711_122
- Track 33 : Douge_125
- Track 34 : LilhomieP_97
- Track 35 : Skinny_102
- Track 36 : PegLeg_102
- Track 37 : Patience_5, Labelle_5

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 26 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Anedea_140, Anedea_167, Dandelion_160, Davielle_104, Davielle_32, Douge_125, Forrest_124, Forrest_91, Jada_120, JimJam_109, Leo04_177, Lewan_109, Mildred21_142, Mildred21_168, Paradiddles_170, Patelgo_131, PumpkinSpice_108, Riptide_160, Sham_86, Sheng711_122, Stewart25555_143, Sushi23_176, Tribute_97, Vetrix_107, Westy_93, WhereRU_103, WhereRU_32, Wofford_171,

Genes that have the "Most Annotated" start but do not call it:
• Salacia_226, Sebata_227, TunaTartare_131,

Genes that do not have the "Most Annotated" start:
• Bonray_168, Brizzy_163, Daredevil_51, Enygma_167, Francesca_152, JonJames_21, Labelle_5, LilhomieP_97, Megatron06_4, Myrna_210, Patience_5, PegLeg_102, Quaran19_166, Skinny_102, SpeedDemon_630, Talos_1, TomSawyer_168,

Summary by start number:

Start 4:
• Found in 1 of 48 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Megatron06_4 (H1),

Start 9:
• Found in 1 of 48 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TunaTartare_131 (BK1),

Start 17:
• Found in 1 of 48 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SpeedDemon_630 (DL),

Start 22:
• Found in 3 of 48 (6.2%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 33.3% of time when present
• Phage (with cluster) where this start called: LilhomieP_97 (M1),

Start 26:
• Found in 4 of 48 (8.3%) of genes in pham

• Manual Annotations of this start: 3 of 46
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Labelle_5 (U), Patience_5 (U), PegLeg_102 (M1),

Start 30:
• Found in 7 of 48 (14.6%) of genes in pham
• Manual Annotations of this start: 4 of 46
• Called 57.1% of time when present
• Phage (with cluster) where this start called: Bonray_168 (C1), Daredevil_51 (DL), Francesca_152 (CG), Skinny_102 (M1),

Start 31:
• Found in 2 of 48 (4.2%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Myrna_210 (C2),

Start 32:
• Found in 31 of 48 (64.6%) of genes in pham
• Manual Annotations of this start: 26 of 46
• Called 90.3% of time when present
• Phage (with cluster) where this start called: Anedea_140 (BE1), Anedea_167 (BE1), Dandelion_160 (C1), Davielle_104 (BE1), Davielle_32 (BE1), Douge_125 (L4), Forrest_124 (BK1), Forrest_91 (BK1), Jada_120 (BK1), JimJam_109 (BE2), Leo04_177 (BE1), Lewan_109 (L2), Mildred21_142 (BE1), Mildred21_168 (BE1), Paradiddles_170 (BE1), Patelgo_131 (BK1), PumpkinSpice_108 (BE2), Riptide_160 (BE1), Sham_86 (BK1), Sheng711_122 (L4), Stewart25555_143 (FC), Sushi23_176 (BE1), Tribute_97 (BE1), Vetrix_107 (L2), Westy_93 (BK1), WhereRU_103 (BE1), WhereRU_32 (BE1), Wofford_171 (BE2),

Start 34:
• Found in 1 of 48 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Talos_1 (BS),

Start 35:
• Found in 2 of 48 (4.2%) of genes in pham
• Manual Annotations of this start: 2 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Salacia_226 (C1), Sebata_227 (C1),

Start 36:
• Found in 4 of 48 (8.3%) of genes in pham
• Manual Annotations of this start: 4 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Brizzy_163 (BE2), Enygma_167 (BE2), Quaran19_166 (BE2), TomSawyer_168 (BE2),

Start 40:
• Found in 3 of 48 (6.2%) of genes in pham
• Manual Annotations of this start: 1 of 46

• Called 33.3% of time when present
• Phage (with cluster) where this start called: JonJames_21 (DD),

Summary by clusters:

There are 15 clusters represented in this pham: DL, CG, DD, H1, L2, L4, FC, M1, BK1, BS, BE2, C2, C1, BE1, U,

Info for manual annotations of cluster BE1:
•Start number 32 was manually annotated 13 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 32 was manually annotated 3 times for cluster BE2.
•Start number 36 was manually annotated 4 times for cluster BE2.

Info for manual annotations of cluster BK1:
•Start number 9 was manually annotated 1 time for cluster BK1.
•Start number 32 was manually annotated 6 times for cluster BK1.

Info for manual annotations of cluster BS:
•Start number 34 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster C1:
•Start number 30 was manually annotated 1 time for cluster C1.
•Start number 32 was manually annotated 1 time for cluster C1.
•Start number 35 was manually annotated 2 times for cluster C1.

Info for manual annotations of cluster C2:
•Start number 31 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CG:
•Start number 30 was manually annotated 1 time for cluster CG.

Info for manual annotations of cluster DD:
•Start number 40 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DL:
•Start number 17 was manually annotated 1 time for cluster DL.
•Start number 30 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster H1:
•Start number 4 was manually annotated 1 time for cluster H1.

Info for manual annotations of cluster L2:
•Start number 32 was manually annotated 2 times for cluster L2.

Info for manual annotations of cluster L4:
•Start number 32 was manually annotated 1 time for cluster L4.

Info for manual annotations of cluster M1:
•Start number 22 was manually annotated 1 time for cluster M1.
•Start number 26 was manually annotated 1 time for cluster M1.

•Start number 30 was manually annotated 1 time for cluster M1.

Info for manual annotations of cluster U:
•Start number 26 was manually annotated 2 times for cluster U.

Gene Information:

Gene: Anedea_140 Start: 84644, Stop: 85069, Start Num: 32
Candidate Starts for Anedea_140:
(Start: 32 @84644 has 26 MA's), (61, 84845), (67, 84875), (70, 84902), (73, 84926), (75, 84929), (95, 85052),

Gene: Anedea_167 Start: 92344, Stop: 92802, Start Num: 32
Candidate Starts for Anedea_167:
(Start: 32 @92344 has 26 MA's), (85, 92674), (100, 92764), (108, 92788),

Gene: Bonray_168 Start: 94840, Stop: 95289, Start Num: 30
Candidate Starts for Bonray_168:
(Start: 30 @94840 has 4 MA's), (33, 94849), (44, 94942), (51, 95002), (52, 95017), (61, 95044), (64, 95056), (65, 95059), (81, 95161), (89, 95209), (101, 95275),

Gene: Brizzy_163 Start: 90852, Stop: 91316, Start Num: 36
Candidate Starts for Brizzy_163:
(Start: 36 @90852 has 4 MA's), (46, 90960), (50, 90990), (70, 91092), (79, 91146), (80, 91149), (85, 91176), (110, 91305),

Gene: Dandelion_160 Start: 94845, Stop: 95354, Start Num: 32
Candidate Starts for Dandelion_160:
(12, 94782), (15, 94791), (Start: 32 @94845 has 26 MA's), (55, 95025), (61, 95043), (62, 95046), (69, 95097), (70, 95100), (79, 95148), (80, 95151), (93, 95232),

Gene: Daredevil_51 Start: 40951, Stop: 41370, Start Num: 30
Candidate Starts for Daredevil_51:
(6, 40861), (14, 40906), (16, 40912), (Start: 30 @40951 has 4 MA's), (39, 40987), (61, 41149), (71, 41209), (79, 41257),

Gene: Davielle_32 Start: 14821, Stop: 14384, Start Num: 32
Candidate Starts for Davielle_32:
(Start: 32 @14821 has 26 MA's), (72, 14548), (76, 14533), (77, 14530),

Gene: Davielle_104 Start: 73218, Stop: 73643, Start Num: 32
Candidate Starts for Davielle_104:
(Start: 32 @73218 has 26 MA's), (61, 73410), (63, 73419), (85, 73548),

Gene: Douge_125 Start: 66042, Stop: 66473, Start Num: 32
Candidate Starts for Douge_125:
(Start: 22 @66024 has 1 MA's), (Start: 32 @66042 has 26 MA's), (45, 66147), (54, 66225), (61, 66243), (67, 66273), (71, 66303), (80, 66351), (90, 66405), (92, 66423),

Gene: Enygma_167 Start: 93249, Stop: 93713, Start Num: 36
Candidate Starts for Enygma_167:

(Start: 36 @93249 has 4 MA's), (46, 93357), (50, 93387), (70, 93489), (79, 93543), (80, 93546), (85, 93573), (110, 93702),

Gene: Forrest_91 Start: 63801, Stop: 64238, Start Num: 32
Candidate Starts for Forrest_91:
(27, 63792), (28, 63795), (Start: 32 @63801 has 26 MA's), (65, 64017), (67, 64032), (71, 64062), (78, 64098),

Gene: Forrest_124 Start: 77019, Stop: 77447, Start Num: 32
Candidate Starts for Forrest_124:
(13, 76962), (20, 76983), (21, 76992), (Start: 32 @77019 has 26 MA's), (38, 77049), (Start: 40 @77094 has 1 MA's), (79, 77319), (80, 77322), (88, 77370), (99, 77433),

Gene: Francesca_152 Start: 89986, Stop: 90429, Start Num: 30
Candidate Starts for Francesca_152:
(Start: 30 @89986 has 4 MA's), (71, 90241), (97, 90394), (103, 90418),

Gene: Jada_120 Start: 75949, Stop: 76377, Start Num: 32
Candidate Starts for Jada_120:
(13, 75892), (20, 75913), (21, 75922), (Start: 32 @75949 has 26 MA's), (38, 75979), (Start: 40 @76024 has 1 MA's), (79, 76249), (80, 76252), (88, 76300), (99, 76363),

Gene: JimJam_109 Start: 73736, Stop: 74164, Start Num: 32
Candidate Starts for JimJam_109:
(Start: 32 @73736 has 26 MA's), (42, 73817), (70, 73985), (79, 74039), (81, 74045), (102, 74159),

Gene: JonJames_21 Start: 7188, Stop: 7577, Start Num: 40
Candidate Starts for JonJames_21:
(8, 7032), (24, 7098), (Start: 40 @7188 has 1 MA's), (61, 7314), (90, 7476), (101, 7536),

Gene: Labelle_5 Start: 2590, Stop: 3042, Start Num: 26
Candidate Starts for Labelle_5:
(Start: 26 @2590 has 3 MA's), (61, 2803), (69, 2857), (79, 2911), (80, 2914), (93, 2989), (94, 2998),

Gene: Leo04_177 Start: 96224, Stop: 96667, Start Num: 32
Candidate Starts for Leo04_177:
(Start: 32 @96224 has 26 MA's), (49, 96377), (53, 96398), (79, 96530), (84, 96554), (106, 96662),

Gene: Lewan_109 Start: 63302, Stop: 63781, Start Num: 32
Candidate Starts for Lewan_109:
(Start: 30 @63299 has 4 MA's), (Start: 32 @63302 has 26 MA's), (48, 63455), (61, 63500), (67, 63530), (79, 63608), (83, 63629),

Gene: LilhomieP_97 Start: 57511, Stop: 57948, Start Num: 22
Candidate Starts for LilhomieP_97:
(Start: 22 @57511 has 1 MA's), (Start: 30 @57526 has 4 MA's), (47, 57676), (71, 57781), (72, 57796), (79, 57829), (83, 57850), (93, 57913),

Gene: Megatron06_4 Start: 2094, Stop: 2681, Start Num: 4
Candidate Starts for Megatron06_4:
(Start: 4 @2094 has 1 MA's), (5, 2112), (7, 2133), (10, 2154), (19, 2187), (29, 2220), (39, 2262), (71, 2490), (74, 2514), (80, 2541), (85, 2562),

Gene: Mildred21_168 Start: 90931, Stop: 91365, Start Num: 32
Candidate Starts for Mildred21_168:
(Start: 32 @90931 has 26 MA's), (71, 91192), (74, 91216), (79, 91243), (85, 91270), (89, 91297), (98, 91354),

Gene: Mildred21_142 Start: 85401, Stop: 85826, Start Num: 32
Candidate Starts for Mildred21_142:
(Start: 32 @85401 has 26 MA's), (61, 85602), (67, 85632), (70, 85659), (73, 85683), (75, 85686), (95, 85809),

Gene: Myrna_210 Start: 122711, Stop: 123163, Start Num: 31
Candidate Starts for Myrna_210:
(Start: 26 @122702 has 3 MA's), (Start: 31 @122711 has 1 MA's), (44, 122810), (72, 122984), (79, 123017), (93, 123101),

Gene: Paradiddles_170 Start: 96596, Stop: 97039, Start Num: 32
Candidate Starts for Paradiddles_170:
(Start: 32 @96596 has 26 MA's), (49, 96749), (53, 96770), (79, 96902), (84, 96926), (106, 97034),

Gene: Patelgo_131 Start: 78593, Stop: 79012, Start Num: 32
Candidate Starts for Patelgo_131:
(Start: 32 @78593 has 26 MA's), (39, 78629), (79, 78893), (99, 79004),

Gene: Patience_5 Start: 2590, Stop: 3042, Start Num: 26
Candidate Starts for Patience_5:
(Start: 26 @2590 has 3 MA's), (61, 2803), (69, 2857), (79, 2911), (80, 2914), (93, 2989), (94, 2998),

Gene: PegLeg_102 Start: 57809, Stop: 58258, Start Num: 26
Candidate Starts for PegLeg_102:
(Start: 26 @57809 has 3 MA's), (57, 57995), (58, 57998), (61, 58010), (67, 58040), (93, 58205), (104, 58253),

Gene: PumpkinSpice_108 Start: 73788, Stop: 74195, Start Num: 32
Candidate Starts for PumpkinSpice_108:
(Start: 32 @73788 has 26 MA's), (56, 73965), (59, 73968), (66, 73992), (71, 74025), (79, 74073), (80, 74076), (86, 74103), (96, 74169), (100, 74190),

Gene: Quaran19_166 Start: 91061, Stop: 91525, Start Num: 36
Candidate Starts for Quaran19_166:
(Start: 36 @91061 has 4 MA's), (46, 91169), (50, 91199), (70, 91301), (79, 91355), (80, 91358), (85, 91385), (110, 91514),

Gene: Riptide_160 Start: 90983, Stop: 91441, Start Num: 32
Candidate Starts for Riptide_160:
(Start: 32 @90983 has 26 MA's), (85, 91313), (100, 91403), (108, 91427),

Gene: Salacia_226 Start: 127343, Stop: 126957, Start Num: 35
Candidate Starts for Salacia_226:
(Start: 32 @127367 has 26 MA's), (Start: 35 @127343 has 2 MA's), (65, 127157), (71, 127112), (91, 126989),

Gene: Sebata_227 Start: 127157, Stop: 126771, Start Num: 35
Candidate Starts for Sebata_227:

(Start: 32 @127181 has 26 MA's), (Start: 35 @127157 has 2 MA's), (65, 126971), (71, 126926), (91, 126803),

Gene: Sham_86 Start: 65422, Stop: 65853, Start Num: 32
Candidate Starts for Sham_86:
(Start: 32 @65422 has 26 MA's), (74, 65698), (79, 65725), (95, 65821), (98, 65836),

Gene: Sheng711_122 Start: 64965, Stop: 65390, Start Num: 32
Candidate Starts for Sheng711_122:
(Start: 32 @64965 has 26 MA's), (69, 65220), (70, 65223), (89, 65328),

Gene: Skinny_102 Start: 57955, Stop: 58377, Start Num: 30
Candidate Starts for Skinny_102:
(Start: 22 @57940 has 1 MA's), (Start: 30 @57955 has 4 MA's), (47, 58105), (71, 58210), (72, 58225), (79, 58258), (83, 58279), (93, 58342),

Gene: SpeedDemon_630 Start: 48321, Stop: 48788, Start Num: 17
Candidate Starts for SpeedDemon_630:
(1, 48000), (2, 48108), (3, 48117), (Start: 17 @48321 has 1 MA's), (37, 48393), (56, 48549), (60, 48558), (68, 48606), (79, 48672), (86, 48702),

Gene: Stewart25555_143 Start: 101011, Stop: 101472, Start Num: 32
Candidate Starts for Stewart25555_143:
(25, 100999), (Start: 32 @101011 has 26 MA's), (61, 101209), (82, 101332), (105, 101449),

Gene: Sushi23_176 Start: 96586, Stop: 97014, Start Num: 32
Candidate Starts for Sushi23_176:
(Start: 32 @96586 has 26 MA's), (49, 96739), (79, 96892), (84, 96916),

Gene: Talos_1 Start: 667, Stop: 230, Start Num: 34
Candidate Starts for Talos_1:
(Start: 34 @667 has 1 MA's), (54, 496), (65, 460), (71, 415), (95, 268),

Gene: TomSawyer_168 Start: 92075, Stop: 92539, Start Num: 36
Candidate Starts for TomSawyer_168:
(Start: 31 @92048 has 1 MA's), (Start: 36 @92075 has 4 MA's), (46, 92183), (50, 92213), (70, 92315), (79, 92369), (80, 92372), (85, 92399), (110, 92528),

Gene: Tribute_97 Start: 71749, Stop: 72189, Start Num: 32
Candidate Starts for Tribute_97:
(28, 71743), (Start: 32 @71749 has 26 MA's), (41, 71827), (47, 71893), (67, 71968), (79, 72043), (90, 72103), (104, 72172), (107, 72181),

Gene: TunaTartare_131 Start: 79206, Stop: 79715, Start Num: 9
Candidate Starts for TunaTartare_131:
(Start: 9 @79206 has 1 MA's), (Start: 32 @79278 has 26 MA's), (43, 79362), (72, 79554), (79, 79590), (82, 79605), (84, 79617), (87, 79632),

Gene: Vetrix_107 Start: 63521, Stop: 64000, Start Num: 32
Candidate Starts for Vetrix_107:
(23, 63506), (Start: 30 @63518 has 4 MA's), (Start: 32 @63521 has 26 MA's), (60, 63713), (67, 63749), (69, 63773), (79, 63827), (89, 63884), (93, 63911), (109, 63968),

Gene: Westy_93 Start: 66532, Stop: 66957, Start Num: 32
Candidate Starts for Westy_93:
(11, 66466), (18, 66490), (Start: 32 @66532 has 26 MA's), (61, 66724), (70, 66781), (79, 66835), (86, 66862),

Gene: WhereRU_32 Start: 14821, Stop: 14384, Start Num: 32
Candidate Starts for WhereRU_32:
(Start: 32 @14821 has 26 MA's), (72, 14548), (76, 14533), (77, 14530),

Gene: WhereRU_103 Start: 73218, Stop: 73643, Start Num: 32
Candidate Starts for WhereRU_103:
(Start: 32 @73218 has 26 MA's), (61, 73410), (63, 73419), (85, 73548),

Gene: Wofford_171 Start: 96384, Stop: 96842, Start Num: 32
Candidate Starts for Wofford_171:
(Start: 32 @96384 has 26 MA's), (85, 96714), (100, 96804), (108, 96828),