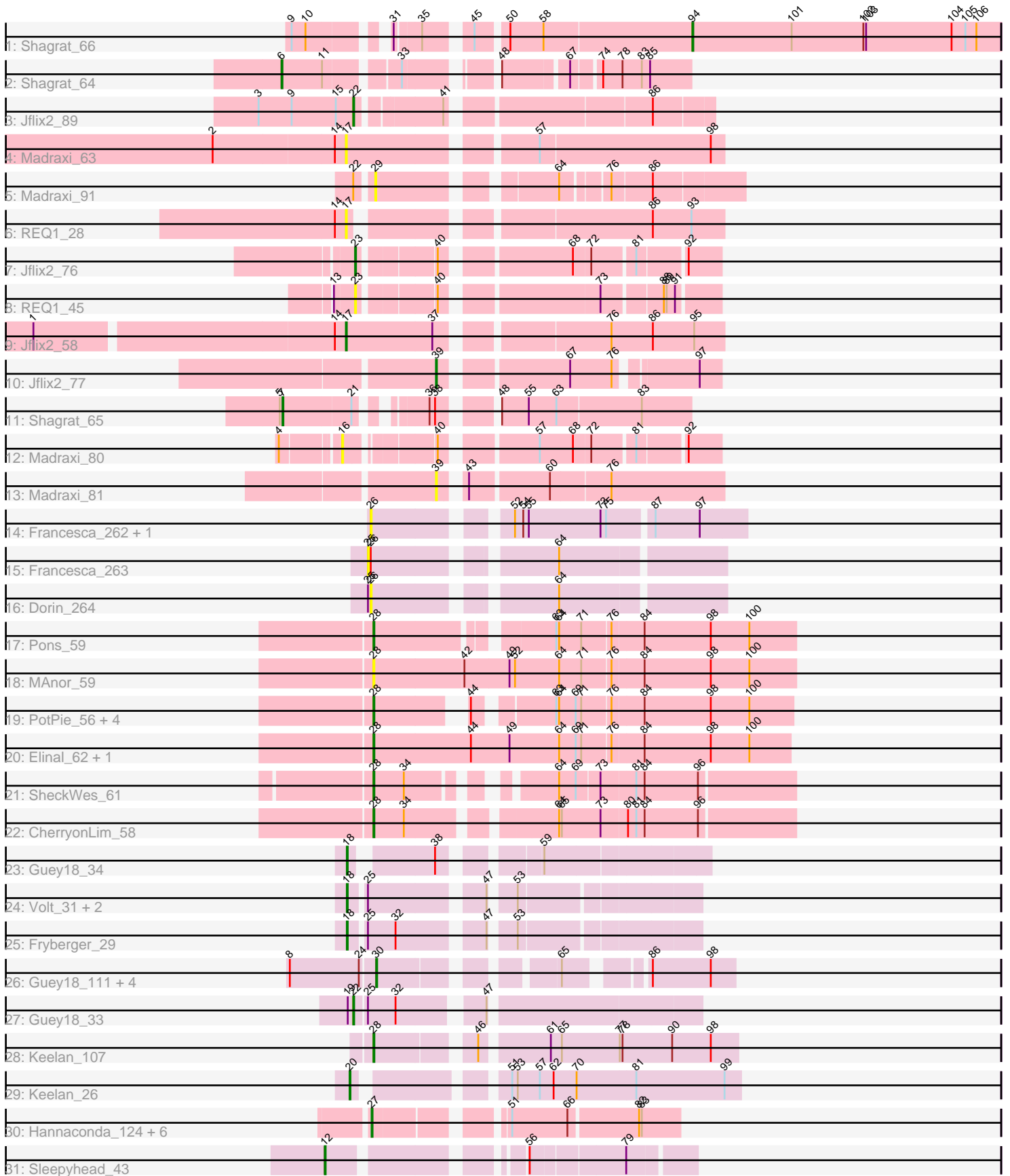# Pham 163677

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 163677 Report

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

Pham number 163677 has 49 members, 15 are drafts.

Phages represented in each track:
• Track 1 : Shagrat_66
• Track 2 : Shagrat_64
• Track 3 : Jflix2_89
• Track 4 : Madraxi_63
• Track 5 : Madraxi_91
• Track 6 : REQ1_28
• Track 7 : Jflix2_76
• Track 8 : REQ1_45
• Track 9 : Jflix2_58
• Track 10 : Jflix2_77
• Track 11 : Shagrat_65
• Track 12 : Madraxi_80
• Track 13 : Madraxi_81
• Track 14 : Francesca_262, Dorin_263
• Track 15 : Francesca_263
• Track 16 : Dorin_264
• Track 17 : Pons_59
• Track 18 : MAnor_59
• Track 19 : PotPie_56, BigChungus_57, SummitAcademy_57, Vine_60, Feastonyeet_57
• Track 20 : Elinal_62, KayGee_59
• Track 21 : SheckWes_61
• Track 22 : CherryonLim_58
• Track 23 : Guey18_34
• Track 24 : Volt_31, Ronaldo_32, Ziko_32
• Track 25 : Fryberger_29
• Track 26 : Guey18_111, Volt_110, Fryberger_106, Ziko_109, Ronaldo_108
• Track 27 : Guey18_33
• Track 28 : Keelan_107
• Track 29 : Keelan_26
• Track 30 : Hannaconda_124, Gonephishing_125, Yeet_125, Odette_135, Superphikiman_128, HokkenD_123, Courthouse_126
• Track 31 : Sleepyhead_43

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

The start number called the most often in the published annotations is 28, it was called in 9 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BigChungus_57, CherryonLim_58, Elinal_62, Feastonyeet_57, KayGee_59, Keelan_107, MAnor_59, Pons_59, PotPie_56, SheckWes_61, SummitAcademy_57, Vine_60,

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

Genes that do not have the "Most Annotated" start:
• Courthouse_126, Dorin_263, Dorin_264, Francesca_262, Francesca_263, Fryberger_106, Fryberger_29, Gonephishing_125, Guey18_111, Guey18_33, Guey18_34, Hannaconda_124, HokkenD_123, Jflix2_58, Jflix2_76, Jflix2_77, Jflix2_89, Keelan_26, Madraxi_63, Madraxi_80, Madraxi_81, Madraxi_91, Odette_135, REQ1_28, REQ1_45, Ronaldo_108, Ronaldo_32, Shagrat_64, Shagrat_65, Shagrat_66, Sleepyhead_43, Superphikiman_128, Volt_110, Volt_31, Yeet_125, Ziko_109, Ziko_32,

Summary by start number:

Start 6:
• Found in 1 of 49 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shagrat_64 (CF),

Start 7:
• Found in 1 of 49 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shagrat_65 (CF),

Start 12:
• Found in 1 of 49 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sleepyhead_43 (singleton),

Start 16:
• Found in 1 of 49 (2.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Madraxi_80 (CF),

Start 17:
• Found in 3 of 49 (6.1%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_58 (CF), Madraxi_63 (CF), REQ1_28 (CF),

Start 18:
• Found in 5 of 49 (10.2%) of genes in pham
• Manual Annotations of this start: 5 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fryberger_29 (DP), Guey18_34 (DP), Ronaldo_32 (DP), Volt_31 (DP), Ziko_32 (DP),

Start 20:
• Found in 1 of 49 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Keelan_26 (DP),

Start 22:
• Found in 3 of 49 (6.1%) of genes in pham
• Manual Annotations of this start: 2 of 34
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Guey18_33 (DP), Jflix2_89 (CF),

Start 23:
• Found in 2 of 49 (4.1%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_76 (CF), REQ1_45 (CF),

Start 25:
• Found in 7 of 49 (14.3%) of genes in pham
• No Manual Annotations of this start.
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Francesca_263 (CG),

Start 26:
• Found in 4 of 49 (8.2%) of genes in pham
• No Manual Annotations of this start.
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Dorin_263 (CG), Dorin_264 (CG), Francesca_262 (CG),

Start 27:
• Found in 7 of 49 (14.3%) of genes in pham
• Manual Annotations of this start: 5 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Courthouse_126 (J), Gonephishing_125 (J), Hannaconda_124 (J), HokkenD_123 (J), Odette_135 (J), Superphikiman_128 (J), Yeet_125 (J),

Start 28:
• Found in 12 of 49 (24.5%) of genes in pham
• Manual Annotations of this start: 9 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BigChungus_57 (CT), CherryonLim_58 (CT), Elinal_62 (CT), Feastonyeet_57 (CT), KayGee_59 (CT), Keelan_107 (DP),

MAnor_59 (CT), Pons_59 (CT), PotPie_56 (CT), SheckWes_61 (CT),
SummitAcademy_57 (CT), Vine_60 (CT),

Start 29:
• Found in 1 of 49 (2.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Madraxi_91 (CF),

Start 30:
• Found in 5 of 49 (10.2%) of genes in pham
• Manual Annotations of this start: 5 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fryberger_106 (DP), Guey18_111 (DP),
Ronaldo_108 (DP), Volt_110 (DP), Ziko_109 (DP),

Start 39:
• Found in 2 of 49 (4.1%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_77 (CF), Madraxi_81 (CF),

Start 94:
• Found in 1 of 49 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shagrat_66 (CF),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, J, CG, CF, DP, CT,

Info for manual annotations of cluster CF:
•Start number 6 was manually annotated 1 time for cluster CF.
•Start number 7 was manually annotated 1 time for cluster CF.
•Start number 17 was manually annotated 1 time for cluster CF.
•Start number 22 was manually annotated 1 time for cluster CF.
•Start number 23 was manually annotated 1 time for cluster CF.
•Start number 39 was manually annotated 1 time for cluster CF.
•Start number 94 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster CT:
•Start number 28 was manually annotated 8 times for cluster CT.

Info for manual annotations of cluster DP:
•Start number 18 was manually annotated 5 times for cluster DP.
•Start number 20 was manually annotated 1 time for cluster DP.
•Start number 22 was manually annotated 1 time for cluster DP.
•Start number 28 was manually annotated 1 time for cluster DP.
•Start number 30 was manually annotated 5 times for cluster DP.

Info for manual annotations of cluster J:

•Start number 27 was manually annotated 5 times for cluster J.

Gene Information:

Gene: BigChungus_57 Start: 40681, Stop: 40280, Start Num: 28
Candidate Starts for BigChungus_57:
(Start: 28 @40681 has 9 MA's), (44, 40603), (63, 40531), (64, 40528), (69, 40510), (71, 40504), (76, 40474), (84, 40441), (98, 40369), (100, 40327),

Gene: CherryonLim_58 Start: 42157, Stop: 41738, Start Num: 28
Candidate Starts for CherryonLim_58:
(Start: 28 @42157 has 9 MA's), (34, 42124), (64, 41986), (65, 41983), (73, 41941), (80, 41914), (81, 41905), (84, 41896), (96, 41839),

Gene: Courthouse_126 Start: 68736, Stop: 69029, Start Num: 27
Candidate Starts for Courthouse_126:
(Start: 27 @68736 has 5 MA's), (51, 68853), (66, 68913), (82, 68985), (83, 68988),

Gene: Dorin_263 Start: 128550, Stop: 128915, Start Num: 26
Candidate Starts for Dorin_263:
(26, 128550), (52, 128673), (54, 128682), (55, 128688), (73, 128766), (75, 128772), (87, 128817), (97, 128865),

Gene: Dorin_264 Start: 128893, Stop: 129231, Start Num: 26
Candidate Starts for Dorin_264:
(25, 128890), (26, 128893), (64, 129061),

Gene: Elinal_62 Start: 41462, Stop: 41016, Start Num: 28
Candidate Starts for Elinal_62:
(Start: 28 @41462 has 9 MA's), (44, 41357), (49, 41315), (64, 41261), (69, 41243), (71, 41237), (76, 41207), (84, 41174), (98, 41102), (100, 41060),

Gene: Feastonyeet_57 Start: 40681, Stop: 40280, Start Num: 28
Candidate Starts for Feastonyeet_57:
(Start: 28 @40681 has 9 MA's), (44, 40603), (63, 40531), (64, 40528), (69, 40510), (71, 40504), (76, 40474), (84, 40441), (98, 40369), (100, 40327),

Gene: Francesca_262 Start: 129192, Stop: 129557, Start Num: 26
Candidate Starts for Francesca_262:
(26, 129192), (52, 129315), (54, 129324), (55, 129330), (73, 129408), (75, 129414), (87, 129459), (97, 129507),

Gene: Francesca_263 Start: 129532, Stop: 129873, Start Num: 25
Candidate Starts for Francesca_263:
(25, 129532), (26, 129535), (64, 129703),

Gene: Fryberger_29 Start: 8784, Stop: 8455, Start Num: 18
Candidate Starts for Fryberger_29:
(Start: 18 @8784 has 5 MA's), (25, 8769), (32, 8739), (47, 8658), (53, 8637),

Gene: Fryberger_106 Start: 52384, Stop: 52698, Start Num: 30

Candidate Starts for Fryberger_106:
(8, 52294), (24, 52369), (Start: 30 @52384 has 5 MA's), (65, 52540), (86, 52609), (98, 52672),

Gene: Gonephishing_125 Start: 68379, Stop: 68672, Start Num: 27
Candidate Starts for Gonephishing_125:
(Start: 27 @68379 has 5 MA's), (51, 68496), (66, 68556), (82, 68628), (83, 68631),

Gene: Guey18_34 Start: 9973, Stop: 9644, Start Num: 18
Candidate Starts for Guey18_34:
(Start: 18 @9973 has 5 MA's), (38, 9898), (59, 9814),

Gene: Guey18_111 Start: 53707, Stop: 54021, Start Num: 30
Candidate Starts for Guey18_111:
(8, 53617), (24, 53692), (Start: 30 @53707 has 5 MA's), (65, 53863), (86, 53932), (98, 53995),

Gene: Guey18_33 Start: 9651, Stop: 9316, Start Num: 22
Candidate Starts for Guey18_33:
(19, 9657), (Start: 22 @9651 has 2 MA's), (25, 9639), (32, 9609), (47, 9531),

Gene: Hannaconda_124 Start: 69032, Stop: 69325, Start Num: 27
Candidate Starts for Hannaconda_124:
(Start: 27 @69032 has 5 MA's), (51, 69149), (66, 69209), (82, 69281), (83, 69284),

Gene: HokkenD_123 Start: 71913, Stop: 72206, Start Num: 27
Candidate Starts for HokkenD_123:
(Start: 27 @71913 has 5 MA's), (51, 72030), (66, 72090), (82, 72162), (83, 72165),

Gene: Jflix2_89 Start: 50660, Stop: 51001, Start Num: 22
Candidate Starts for Jflix2_89:
(3, 50558), (9, 50594), (15, 50642), (Start: 22 @50660 has 2 MA's), (41, 50741), (86, 50939),

Gene: Jflix2_76 Start: 46571, Stop: 46909, Start Num: 23
Candidate Starts for Jflix2_76:
(Start: 23 @46571 has 1 MA's), (40, 46643), (68, 46766), (72, 46784), (81, 46826), (92, 46874),

Gene: Jflix2_58 Start: 39721, Stop: 40101, Start Num: 17
Candidate Starts for Jflix2_58:
(1, 39397), (14, 39709), (Start: 17 @39721 has 1 MA's), (37, 39814), (76, 39979), (86, 40024), (95, 40069),

Gene: Jflix2_77 Start: 46906, Stop: 47172, Start Num: 39
Candidate Starts for Jflix2_77:
(Start: 39 @46906 has 1 MA's), (67, 47026), (76, 47071), (97, 47149),

Gene: KayGee_59 Start: 41462, Stop: 41016, Start Num: 28
Candidate Starts for KayGee_59:
(Start: 28 @41462 has 9 MA's), (44, 41357), (49, 41315), (64, 41261), (69, 41243), (71, 41237), (76, 41207), (84, 41174), (98, 41102), (100, 41060),

Gene: Keelan_107 Start: 53290, Stop: 53652, Start Num: 28
Candidate Starts for Keelan_107:
(Start: 28 @53290 has 9 MA's), (46, 53383), (61, 53449), (65, 53461), (77, 53524), (78, 53527), (90, 53581), (98, 53623),

Gene: Keelan_26 Start: 8252, Stop: 7875, Start Num: 20
Candidate Starts for Keelan_26:
(Start: 20 @8252 has 1 MA's), (51, 8120), (53, 8114), (57, 8090), (62, 8075), (70, 8051), (81, 7988), (99, 7892),

Gene: MAnor_59 Start: 41593, Stop: 41144, Start Num: 28
Candidate Starts for MAnor_59:
(Start: 28 @41593 has 9 MA's), (42, 41497), (49, 41449), (52, 41443), (64, 41395), (71, 41371), (76, 41341), (84, 41308), (98, 41236), (100, 41194),

Gene: Madraxi_63 Start: 42224, Stop: 42604, Start Num: 17
Candidate Starts for Madraxi_63:
(2, 42083), (14, 42212), (Start: 17 @42224 has 1 MA's), (57, 42407), (98, 42590),

Gene: Madraxi_91 Start: 52826, Stop: 53170, Start Num: 29
Candidate Starts for Madraxi_91:
(Start: 22 @52811 has 2 MA's), (29, 52826), (64, 52988), (76, 53033), (86, 53075),

Gene: Madraxi_80 Start: 49350, Stop: 49697, Start Num: 16
Candidate Starts for Madraxi_80:
(4, 49296), (16, 49350), (40, 49431), (57, 49518), (68, 49554), (72, 49572), (81, 49614), (92, 49662),

Gene: Madraxi_81 Start: 49694, Stop: 49978, Start Num: 39
Candidate Starts for Madraxi_81:
(Start: 39 @49694 has 1 MA's), (43, 49712), (60, 49793), (76, 49856),

Gene: Odette_135 Start: 73830, Stop: 74123, Start Num: 27
Candidate Starts for Odette_135:
(Start: 27 @73830 has 5 MA's), (51, 73947), (66, 74007), (82, 74079), (83, 74082),

Gene: Pons_59 Start: 41198, Stop: 40776, Start Num: 28
Candidate Starts for Pons_59:
(Start: 28 @41198 has 9 MA's), (63, 41030), (64, 41027), (71, 41003), (76, 40973), (84, 40940), (98, 40868), (100, 40826),

Gene: PotPie_56 Start: 41716, Stop: 41315, Start Num: 28
Candidate Starts for PotPie_56:
(Start: 28 @41716 has 9 MA's), (44, 41638), (63, 41566), (64, 41563), (69, 41545), (71, 41539), (76, 41509), (84, 41476), (98, 41404), (100, 41362),

Gene: REQ1_28 Start: 11269, Stop: 11631, Start Num: 17
Candidate Starts for REQ1_28:
(14, 11257), (Start: 17 @11269 has 1 MA's), (86, 11554), (93, 11596),

Gene: REQ1_45 Start: 18020, Stop: 18358, Start Num: 23
Candidate Starts for REQ1_45:
(13, 17999), (Start: 23 @18020 has 1 MA's), (40, 18092), (73, 18242), (88, 18302), (89, 18305), (91, 18314),

Gene: Ronaldo_32 Start: 9713, Stop: 9384, Start Num: 18
Candidate Starts for Ronaldo_32:
(Start: 18 @9713 has 5 MA's), (25, 9698), (47, 9587), (53, 9566),

Gene: Ronaldo_108 Start: 53289, Stop: 53603, Start Num: 30
Candidate Starts for Ronaldo_108:
(8, 53199), (24, 53274), (Start: 30 @53289 has 5 MA's), (65, 53445), (86, 53514), (98, 53577),

Gene: Shagrat_66 Start: 40915, Stop: 41250, Start Num: 94
Candidate Starts for Shagrat_66:
(9, 40549), (10, 40564), (31, 40630), (35, 40654), (45, 40693), (50, 40720), (58, 40756), (Start: 94 @40915 has 1 MA's), (101, 41023), (102, 41101), (103, 41104), (104, 41197), (105, 41212), (106, 41224),

Gene: Shagrat_64 Start: 40165, Stop: 40536, Start Num: 6
Candidate Starts for Shagrat_64:
(Start: 6 @40165 has 1 MA's), (11, 40207), (33, 40276), (48, 40351), (67, 40414), (74, 40441), (78, 40462), (83, 40483), (85, 40492),

Gene: Shagrat_65 Start: 40539, Stop: 40913, Start Num: 7
Candidate Starts for Shagrat_65:
(5, 40536), (Start: 7 @40539 has 1 MA's), (21, 40611), (36, 40662), (38, 40668), (48, 40713), (55, 40740), (63, 40770), (83, 40860),

Gene: SheckWes_61 Start: 40759, Stop: 40364, Start Num: 28
Candidate Starts for SheckWes_61:
(Start: 28 @40759 has 9 MA's), (34, 40726), (64, 40609), (69, 40591), (73, 40567), (81, 40531), (84, 40522), (96, 40465),

Gene: Sleepyhead_43 Start: 31028, Stop: 31363, Start Num: 12
Candidate Starts for Sleepyhead_43:
(Start: 12 @31028 has 1 MA's), (56, 31199), (79, 31295),

Gene: SummitAcademy_57 Start: 40859, Stop: 40458, Start Num: 28
Candidate Starts for SummitAcademy_57:
(Start: 28 @40859 has 9 MA's), (44, 40781), (63, 40709), (64, 40706), (69, 40688), (71, 40682), (76, 40652), (84, 40619), (98, 40547), (100, 40505),

Gene: Superphikiman_128 Start: 69018, Stop: 69311, Start Num: 27
Candidate Starts for Superphikiman_128:
(Start: 27 @69018 has 5 MA's), (51, 69135), (66, 69195), (82, 69267), (83, 69270),

Gene: Vine_60 Start: 41482, Stop: 41081, Start Num: 28
Candidate Starts for Vine_60:
(Start: 28 @41482 has 9 MA's), (44, 41404), (63, 41332), (64, 41329), (69, 41311), (71, 41305), (76, 41275), (84, 41242), (98, 41170), (100, 41128),

Gene: Volt_31 Start: 9713, Stop: 9384, Start Num: 18
Candidate Starts for Volt_31:
(Start: 18 @9713 has 5 MA's), (25, 9698), (47, 9587), (53, 9566),

Gene: Volt_110 Start: 53453, Stop: 53767, Start Num: 30
Candidate Starts for Volt_110:
(8, 53363), (24, 53438), (Start: 30 @53453 has 5 MA's), (65, 53609), (86, 53678), (98, 53741),

Gene: Yeet_125 Start: 71942, Stop: 72235, Start Num: 27

Candidate Starts for Yeet_125:
(Start: 27 @71942 has 5 MA's), (51, 72059), (66, 72119), (82, 72191), (83, 72194),

Gene: Ziko_32 Start: 9653, Stop: 9324, Start Num: 18
Candidate Starts for Ziko_32:
(Start: 18 @9653 has 5 MA's), (25, 9638), (47, 9527), (53, 9506),

Gene: Ziko_109 Start: 53295, Stop: 53609, Start Num: 30
Candidate Starts for Ziko_109:
(8, 53205), (24, 53280), (Start: 30 @53295 has 5 MA's), (65, 53451), (86, 53520), (98, 53583),