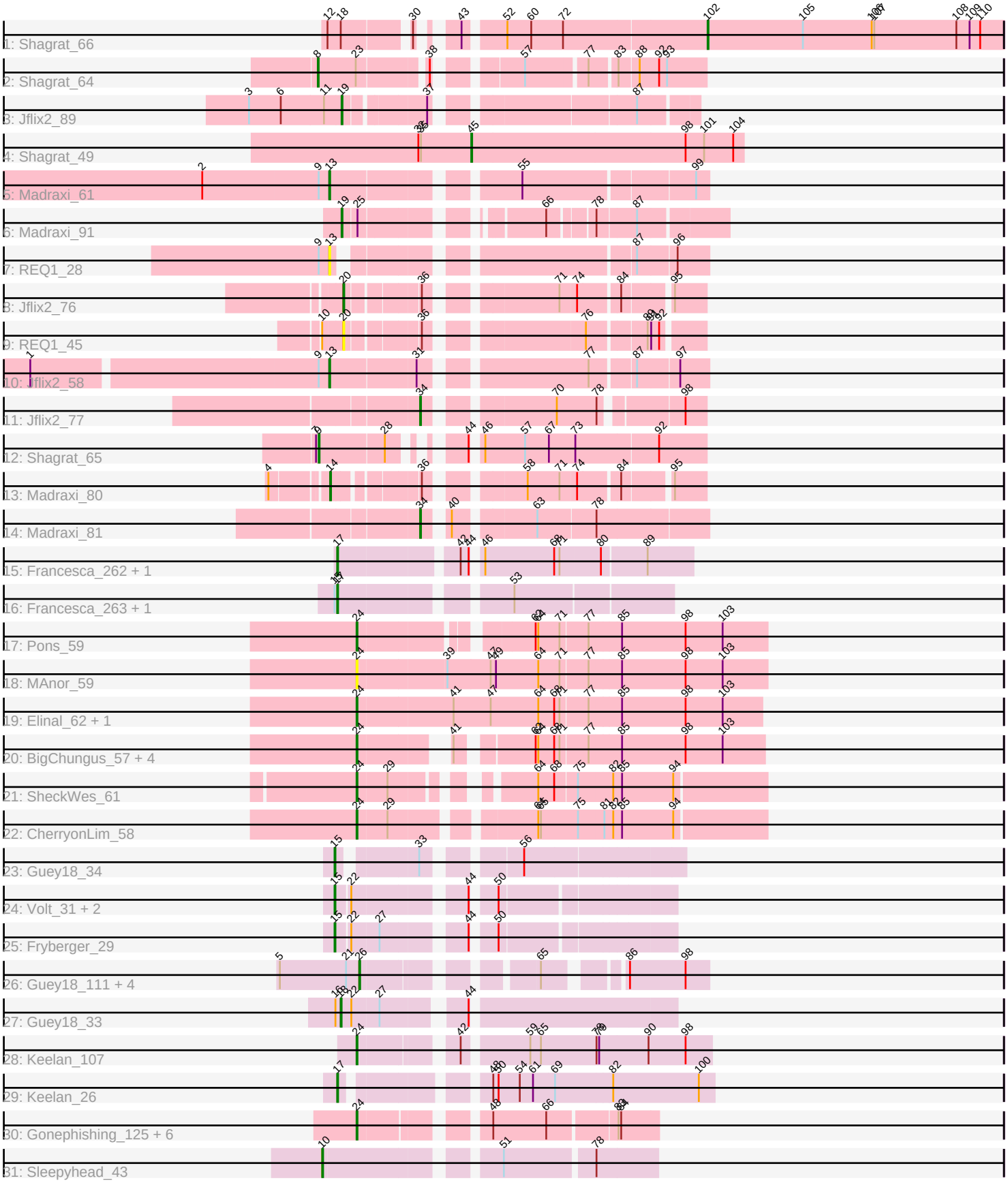
Pham 171532


1: Shagrat_66
2: Shagrat_64
3: Jflix2_89
4: Shagrat_49
5: Madraxi_61
6: Madraxi_91
7: REQ1_28
8: Jflix2_76
9: REQ1_45
10: Jflix2_58
11: Jflix2_77
12: Shagrat_65
13: Madraxi_80
14: Madraxi_81
15: Francesca_262 + 1
16: Francesca_263 + 1
17: Pons_59
18: MAnor_59
19: Elinal_62 + 1
20: BigChungus_57 + 4
21: SheckWes_61
22: CherryonLim_58
23: Guey18_34
24: Volt_31 + 2
25: Fryberger_29
26: Guey18_111 + 4
27: Guey18_33
28: Keelan_107
29: Keelan_26
30: Gonephishing_125 + 6
31: Sleepyhead_43

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 171532 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171532 has 50 members, 8 are drafts.

Phages represented in each track:
- Track 1 : Shagrat_66
- Track 2 : Shagrat_64
- Track 3 : Jflix2_89
- Track 4 : Shagrat_49
- Track 5 : Madraxi_61
- Track 6 : Madraxi_91
- Track 7 : REQ1_28
- Track 8 : Jflix2_76
- Track 9 : REQ1_45
- Track 10 : Jflix2_58
- Track 11 : Jflix2_77
- Track 12 : Shagrat_65
- Track 13 : Madraxi_80
- Track 14 : Madraxi_81
- Track 15 : Francesca_262, Dorin_263
- Track 16 : Francesca_263, Dorin_264
- Track 17 : Pons_59
- Track 18 : MAnor_59
- Track 19 : Elinal_62, KayGee_59
- Track 20 : BigChungus_57, SummitAcademy_57, PotPie_57, Vine_60, Feastonyeet_57
- 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 : Gonephishing_125, Hannaconda_124, 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 24, it was called in 15 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BigChungus_57, CherryonLim_58, Courthouse_126, Elinal_62, Feastonyeet_57, Gonephishing_125, Hannaconda_124, HokkenD_123, KayGee_59, Keelan_107, MAnor_59, Odette_135, Pons_59, PotPie_57, SheckWes_61, SummitAcademy_57, Superphikiman_128, Vine_60, Yeet_125,

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

Genes that do not have the "Most Annotated" start:
• Dorin_263, Dorin_264, Francesca_262, Francesca_263, Fryberger_106, Fryberger_29, Guey18_111, Guey18_33, Guey18_34, Jflix2_58, Jflix2_76, Jflix2_77, Jflix2_89, Keelan_26, Madraxi_61, Madraxi_80, Madraxi_81, Madraxi_91, REQ1_28, REQ1_45, Ronaldo_108, Ronaldo_32, Shagrat_49, Shagrat_64, Shagrat_65, Shagrat_66, Sleepyhead_43, Volt_110, Volt_31, Ziko_109, Ziko_32,

Summary by start number:

Start 8:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shagrat_64 (CF),

Start 9:
• Found in 4 of 50 (8.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Shagrat_65 (CF),

Start 10:
• Found in 2 of 50 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Sleepyhead_43 (singleton),

Start 13:
• Found in 3 of 50 (6.0%) of genes in pham
• Manual Annotations of this start: 2 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_58 (CF), Madraxi_61 (CF), REQ1_28 (CF),

Start 14:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Madraxi_80 (CF),

Start 15:
• Found in 7 of 50 (14.0%) of genes in pham
• Manual Annotations of this start: 5 of 42
• Called 71.4% 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 17:
• Found in 5 of 50 (10.0%) of genes in pham
• Manual Annotations of this start: 3 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dorin_263 (CG), Dorin_264 (CG), Francesca_262 (CG), Francesca_263 (CG), Keelan_26 (DP),

Start 18:
• Found in 2 of 50 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Guey18_33 (DP),

Start 19:
• Found in 2 of 50 (4.0%) of genes in pham
• Manual Annotations of this start: 2 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_89 (CF), Madraxi_91 (CF),

Start 20:
• Found in 2 of 50 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_76 (CF), REQ1_45 (CF),

Start 24:
• Found in 19 of 50 (38.0%) of genes in pham
• Manual Annotations of this start: 15 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BigChungus_57 (CT), CherryonLim_58 (CT), Courthouse_126 (J), Elinal_62 (CT), Feastonyeet_57 (CT), Gonephishing_125 (J), Hannaconda_124 (J), HokkenD_123 (J), KayGee_59 (CT), Keelan_107 (DP), MAnor_59 (CT), Odette_135 (J), Pons_59 (CT), PotPie_57 (CT), SheckWes_61 (CT), SummitAcademy_57 (CT), Superphikiman_128 (J), Vine_60 (CT), Yeet_125 (J),

Start 26:
• Found in 5 of 50 (10.0%) of genes in pham
• Manual Annotations of this start: 5 of 42
• 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 34:
• Found in 2 of 50 (4.0%) of genes in pham
• Manual Annotations of this start: 2 of 42
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Jflix2_77 (CF), Madraxi_81 (CF),

Start 45:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shagrat_49 (CF),

Start 102:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• 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 8 was manually annotated 1 time for cluster CF.
•Start number 9 was manually annotated 1 time for cluster CF.
•Start number 13 was manually annotated 2 times for cluster CF.
•Start number 14 was manually annotated 1 time for cluster CF.
•Start number 19 was manually annotated 2 times for cluster CF.
•Start number 20 was manually annotated 1 time for cluster CF.
•Start number 34 was manually annotated 2 times for cluster CF.
•Start number 45 was manually annotated 1 time for cluster CF.
•Start number 102 was manually annotated 1 time for cluster CF.

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

Info for manual annotations of cluster CT:
•Start number 24 was manually annotated 9 times for cluster CT.

Info for manual annotations of cluster DP:
•Start number 15 was manually annotated 5 times for cluster DP.
•Start number 17 was manually annotated 1 time for cluster DP.
•Start number 18 was manually annotated 1 time for cluster DP.
•Start number 24 was manually annotated 1 time for cluster DP.
•Start number 26 was manually annotated 5 times for cluster DP.

Info for manual annotations of cluster J:
•Start number 24 was manually annotated 5 times for cluster J.

Gene Information:

Gene: BigChungus_57 Start: 40681, Stop: 40280, Start Num: 24
Candidate Starts for BigChungus_57:
(Start: 24 @40681 has 15 MA's), (41, 40603), (62, 40531), (64, 40528), (68, 40510), (71, 40504), (77, 40474), (85, 40441), (98, 40369), (103, 40327),

Gene: CherryonLim_58 Start: 42157, Stop: 41738, Start Num: 24
Candidate Starts for CherryonLim_58:
(Start: 24 @42157 has 15 MA's), (29, 42124), (64, 41986), (65, 41983), (75, 41941), (81, 41914), (82, 41905), (85, 41896), (94, 41839),

Gene: Courthouse_126 Start: 68736, Stop: 69029, Start Num: 24
Candidate Starts for Courthouse_126:
(Start: 24 @68736 has 15 MA's), (48, 68853), (66, 68913), (83, 68985), (84, 68988),

Gene: Dorin_263 Start: 128550, Stop: 128915, Start Num: 17
Candidate Starts for Dorin_263:
(Start: 17 @128550 has 3 MA's), (42, 128673), (44, 128682), (46, 128688), (68, 128766), (71, 128772), (80, 128817), (89, 128865),

Gene: Dorin_264 Start: 128893, Stop: 129231, Start Num: 17
Candidate Starts for Dorin_264:
(Start: 15 @128890 has 5 MA's), (Start: 17 @128893 has 3 MA's), (53, 129061),

Gene: Elinal_62 Start: 41462, Stop: 41016, Start Num: 24
Candidate Starts for Elinal_62:
(Start: 24 @41462 has 15 MA's), (41, 41357), (47, 41315), (64, 41261), (68, 41243), (71, 41237), (77, 41207), (85, 41174), (98, 41102), (103, 41060),

Gene: Feastonyeet_57 Start: 40681, Stop: 40280, Start Num: 24
Candidate Starts for Feastonyeet_57:
(Start: 24 @40681 has 15 MA's), (41, 40603), (62, 40531), (64, 40528), (68, 40510), (71, 40504), (77, 40474), (85, 40441), (98, 40369), (103, 40327),

Gene: Francesca_262 Start: 129192, Stop: 129557, Start Num: 17
Candidate Starts for Francesca_262:
(Start: 17 @129192 has 3 MA's), (42, 129315), (44, 129324), (46, 129330), (68, 129408), (71, 129414), (80, 129459), (89, 129507),

Gene: Francesca_263 Start: 129535, Stop: 129873, Start Num: 17
Candidate Starts for Francesca_263:
(Start: 15 @129532 has 5 MA's), (Start: 17 @129535 has 3 MA's), (53, 129703),

Gene: Fryberger_29 Start: 8784, Stop: 8455, Start Num: 15
Candidate Starts for Fryberger_29:
(Start: 15 @8784 has 5 MA's), (22, 8769), (27, 8739), (44, 8658), (50, 8637),

Gene: Fryberger_106 Start: 52384, Stop: 52698, Start Num: 26
Candidate Starts for Fryberger_106:
(5, 52294), (21, 52369), (Start: 26 @52384 has 5 MA's), (65, 52540), (86, 52609), (98, 52672),

Gene: Gonephishing_125 Start: 68379, Stop: 68672, Start Num: 24
Candidate Starts for Gonephishing_125:
(Start: 24 @68379 has 15 MA's), (48, 68496), (66, 68556), (83, 68628), (84, 68631),

Gene: Guey18_34 Start: 9973, Stop: 9644, Start Num: 15
Candidate Starts for Guey18_34:
(Start: 15 @9973 has 5 MA's), (33, 9898), (56, 9814),

Gene: Guey18_111 Start: 53707, Stop: 54021, Start Num: 26
Candidate Starts for Guey18_111:
(5, 53617), (21, 53692), (Start: 26 @53707 has 5 MA's), (65, 53863), (86, 53932), (98, 53995),

Gene: Guey18_33 Start: 9651, Stop: 9316, Start Num: 18
Candidate Starts for Guey18_33:
(16, 9657), (Start: 18 @9651 has 1 MA's), (22, 9639), (27, 9609), (44, 9531),

Gene: Hannaconda_124 Start: 69032, Stop: 69325, Start Num: 24
Candidate Starts for Hannaconda_124:
(Start: 24 @69032 has 15 MA's), (48, 69149), (66, 69209), (83, 69281), (84, 69284),

Gene: HokkenD_123 Start: 71913, Stop: 72206, Start Num: 24
Candidate Starts for HokkenD_123:
(Start: 24 @71913 has 15 MA's), (48, 72030), (66, 72090), (83, 72162), (84, 72165),

Gene: Jflix2_89 Start: 50660, Stop: 51001, Start Num: 19
Candidate Starts for Jflix2_89:
(3, 50558), (6, 50594), (11, 50642), (Start: 19 @50660 has 2 MA's), (37, 50741), (87, 50939),

Gene: Jflix2_76 Start: 46571, Stop: 46909, Start Num: 20
Candidate Starts for Jflix2_76:
(Start: 20 @46571 has 1 MA's), (36, 46643), (71, 46766), (74, 46784), (84, 46826), (95, 46874),

Gene: Jflix2_58 Start: 39721, Stop: 40101, Start Num: 13
Candidate Starts for Jflix2_58:
(1, 39397), (Start: 9 @39709 has 1 MA's), (Start: 13 @39721 has 2 MA's), (31, 39814), (77, 39979), (87, 40024), (97, 40069),

Gene: Jflix2_77 Start: 46906, Stop: 47172, Start Num: 34
Candidate Starts for Jflix2_77:
(Start: 34 @46906 has 2 MA's), (70, 47026), (78, 47071), (98, 47149),

Gene: KayGee_59 Start: 41462, Stop: 41016, Start Num: 24
Candidate Starts for KayGee_59:
(Start: 24 @41462 has 15 MA's), (41, 41357), (47, 41315), (64, 41261), (68, 41243), (71, 41237), (77, 41207), (85, 41174), (98, 41102), (103, 41060),

Gene: Keelan_107 Start: 53290, Stop: 53652, Start Num: 24
Candidate Starts for Keelan_107:
(Start: 24 @53290 has 15 MA's), (42, 53383), (59, 53449), (65, 53461), (78, 53524), (79, 53527), (90, 53581), (98, 53623),

Gene: Keelan_26 Start: 8252, Stop: 7875, Start Num: 17
Candidate Starts for Keelan_26:
(Start: 17 @8252 has 3 MA's), (48, 8120), (50, 8114), (54, 8090), (61, 8075), (69, 8051), (82, 7988), (100, 7892),

Gene: MAnor_59 Start: 41593, Stop: 41144, Start Num: 24
Candidate Starts for MAnor_59:
(Start: 24 @41593 has 15 MA's), (39, 41497), (47, 41449), (49, 41443), (64, 41395), (71, 41371), (77, 41341), (85, 41308), (98, 41236), (103, 41194),

Gene: Madraxi_61 Start: 42224, Stop: 42604, Start Num: 13
Candidate Starts for Madraxi_61:
(2, 42083), (Start: 9 @42212 has 1 MA's), (Start: 13 @42224 has 2 MA's), (55, 42407), (99, 42590),

Gene: Madraxi_91 Start: 52811, Stop: 53170, Start Num: 19
Candidate Starts for Madraxi_91:
(Start: 19 @52811 has 2 MA's), (25, 52826), (66, 52988), (78, 53033), (87, 53075),

Gene: Madraxi_80 Start: 49350, Stop: 49697, Start Num: 14
Candidate Starts for Madraxi_80:
(4, 49296), (Start: 14 @49350 has 1 MA's), (36, 49431), (58, 49518), (71, 49554), (74, 49572), (84, 49614), (95, 49662),

Gene: Madraxi_81 Start: 49694, Stop: 49978, Start Num: 34
Candidate Starts for Madraxi_81:
(Start: 34 @49694 has 2 MA's), (40, 49712), (63, 49793), (78, 49856),

Gene: Odette_135 Start: 73830, Stop: 74123, Start Num: 24
Candidate Starts for Odette_135:
(Start: 24 @73830 has 15 MA's), (48, 73947), (66, 74007), (83, 74079), (84, 74082),

Gene: Pons_59 Start: 41198, Stop: 40776, Start Num: 24
Candidate Starts for Pons_59:
(Start: 24 @41198 has 15 MA's), (62, 41030), (64, 41027), (71, 41003), (77, 40973), (85, 40940), (98, 40868), (103, 40826),

Gene: PotPie_57 Start: 41716, Stop: 41315, Start Num: 24
Candidate Starts for PotPie_57:
(Start: 24 @41716 has 15 MA's), (41, 41638), (62, 41566), (64, 41563), (68, 41545), (71, 41539), (77, 41509), (85, 41476), (98, 41404), (103, 41362),

Gene: REQ1_28 Start: 11269, Stop: 11631, Start Num: 13
Candidate Starts for REQ1_28:
(Start: 9 @11257 has 1 MA's), (Start: 13 @11269 has 2 MA's), (87, 11554), (96, 11596),

Gene: REQ1_45 Start: 18020, Stop: 18358, Start Num: 20
Candidate Starts for REQ1_45:
(Start: 10 @17999 has 1 MA's), (Start: 20 @18020 has 1 MA's), (36, 18092), (76, 18242), (89, 18302), (91, 18305), (92, 18314),

Gene: Ronaldo_32 Start: 9713, Stop: 9384, Start Num: 15
Candidate Starts for Ronaldo_32:
(Start: 15 @9713 has 5 MA's), (22, 9698), (44, 9587), (50, 9566),

Gene: Ronaldo_108 Start: 53289, Stop: 53603, Start Num: 26
Candidate Starts for Ronaldo_108:
(5, 53199), (21, 53274), (Start: 26 @53289 has 5 MA's), (65, 53445), (86, 53514), (98, 53577),

Gene: Shagrat_66 Start: 40915, Stop: 41250, Start Num: 102
Candidate Starts for Shagrat_66:
(12, 40549), (Start: 18 @40564 has 1 MA's), (30, 40630), (43, 40654), (52, 40693), (60, 40720), (72, 40756), (Start: 102 @40915 has 1 MA's), (105, 41023), (106, 41101), (107, 41104), (108, 41197),

(109, 41212), (110, 41224),

Gene: Shagrat_64 Start: 40165, Stop: 40536, Start Num: 8
Candidate Starts for Shagrat_64:
(Start: 8 @40165 has 1 MA's), (23, 40207), (38, 40276), (57, 40351), (77, 40414), (83, 40441), (88, 40462), (92, 40483), (93, 40492),

Gene: Shagrat_49 Start: 36435, Stop: 36740, Start Num: 45
Candidate Starts for Shagrat_49:
(32, 36375), (35, 36378), (Start: 45 @36435 has 1 MA's), (98, 36675), (101, 36696), (104, 36729),

Gene: Shagrat_65 Start: 40539, Stop: 40913, Start Num: 9
Candidate Starts for Shagrat_65:
(7, 40536), (Start: 9 @40539 has 1 MA's), (28, 40611), (44, 40662), (46, 40668), (57, 40713), (67, 40740), (73, 40770), (92, 40860),

Gene: SheckWes_61 Start: 40759, Stop: 40364, Start Num: 24
Candidate Starts for SheckWes_61:
(Start: 24 @40759 has 15 MA's), (29, 40726), (64, 40609), (68, 40591), (75, 40567), (82, 40531), (85, 40522), (94, 40465),

Gene: Sleepyhead_43 Start: 31028, Stop: 31363, Start Num: 10
Candidate Starts for Sleepyhead_43:
(Start: 10 @31028 has 1 MA's), (51, 31199), (78, 31295),

Gene: SummitAcademy_57 Start: 40859, Stop: 40458, Start Num: 24
Candidate Starts for SummitAcademy_57:
(Start: 24 @40859 has 15 MA's), (41, 40781), (62, 40709), (64, 40706), (68, 40688), (71, 40682), (77, 40652), (85, 40619), (98, 40547), (103, 40505),

Gene: Superphikiman_128 Start: 69018, Stop: 69311, Start Num: 24
Candidate Starts for Superphikiman_128:
(Start: 24 @69018 has 15 MA's), (48, 69135), (66, 69195), (83, 69267), (84, 69270),

Gene: Vine_60 Start: 41482, Stop: 41081, Start Num: 24
Candidate Starts for Vine_60:
(Start: 24 @41482 has 15 MA's), (41, 41404), (62, 41332), (64, 41329), (68, 41311), (71, 41305), (77, 41275), (85, 41242), (98, 41170), (103, 41128),

Gene: Volt_31 Start: 9713, Stop: 9384, Start Num: 15
Candidate Starts for Volt_31:
(Start: 15 @9713 has 5 MA's), (22, 9698), (44, 9587), (50, 9566),

Gene: Volt_110 Start: 53453, Stop: 53767, Start Num: 26
Candidate Starts for Volt_110:
(5, 53363), (21, 53438), (Start: 26 @53453 has 5 MA's), (65, 53609), (86, 53678), (98, 53741),

Gene: Yeet_125 Start: 71942, Stop: 72235, Start Num: 24
Candidate Starts for Yeet_125:
(Start: 24 @71942 has 15 MA's), (48, 72059), (66, 72119), (83, 72191), (84, 72194),

Gene: Ziko_32 Start: 9653, Stop: 9324, Start Num: 15
Candidate Starts for Ziko_32:

(Start: 15 @9653 has 5 MA's), (22, 9638), (44, 9527), (50, 9506),

Gene: Ziko_109 Start: 53295, Stop: 53609, Start Num: 26
Candidate Starts for Ziko_109:
(5, 53205), (21, 53280), (Start: 26 @53295 has 5 MA's), (65, 53451), (86, 53520), (98, 53583),