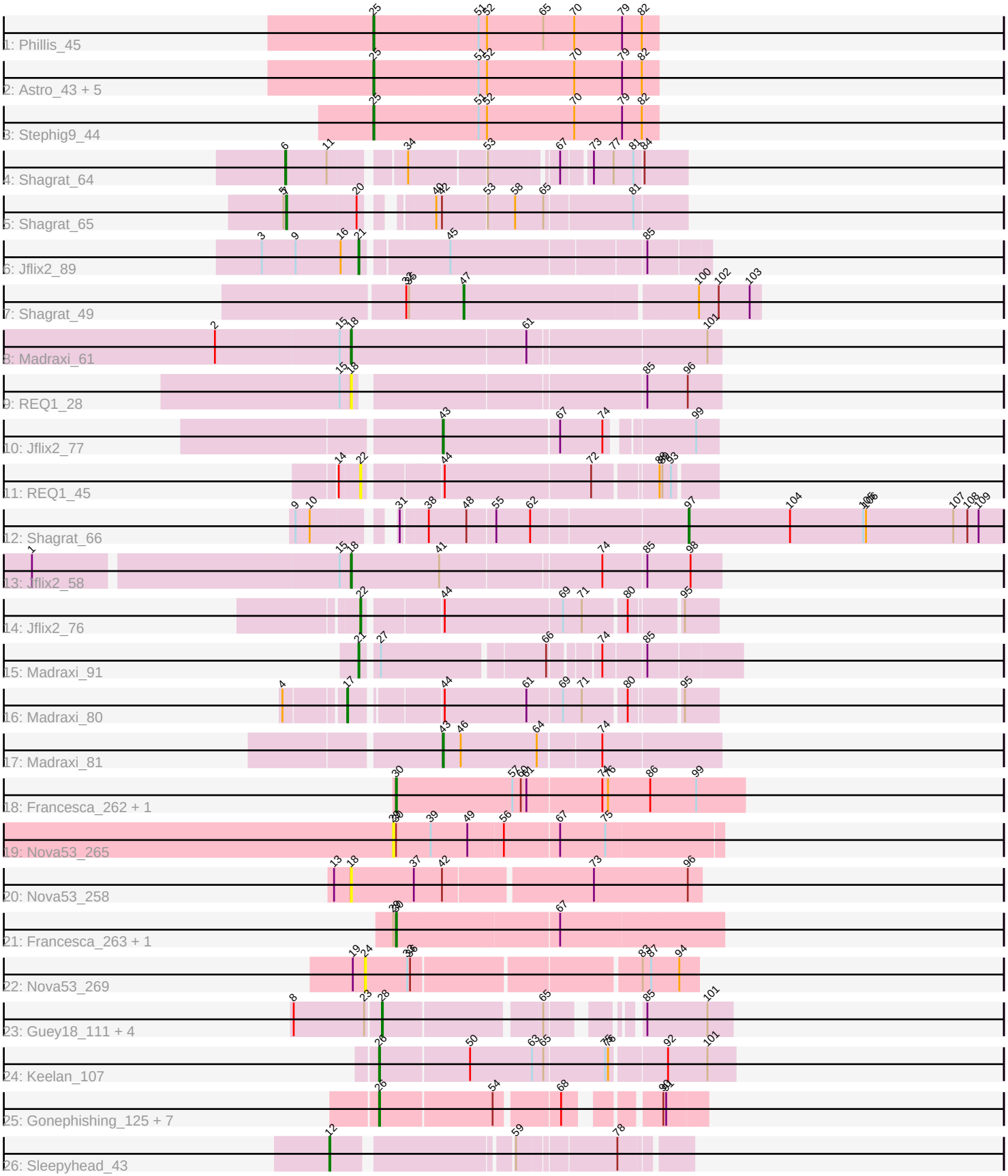
Pham 212754


1: Phillis_45
2: Astro_43 + 5
3: Stephig9_44
4: Shagrat_64
5: Shagrat_65
6: Jflix2_89
7: Shagrat_49
8: Madraxi_61
9: REQ1_28
10: Jflix2_77
11: REQ1_45
12: Shagrat_66
13: Jflix2_58
14: Jflix2_76
15: Madraxi_91
16: Madraxi_80
17: Madraxi_81
18: Francesca_262 + 1
19: Nova53_265
20: Nova53_258
21: Francesca_263 + 1
22: Nova53_269
23: Guey18_111 + 4
24: Keelan_107
25: Gonephishing_125 + 7
26: 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 212754 Report

This analysis was run 02/22/25 on database version 588.

Pham number 212754 has 44 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Phillis_45
• Track 2 : Astro_43, Roary_44, Expelliarmus_43, Smeadley_44, Danforth_43, Groundhog_42
• Track 3 : Stephig9_44
• Track 4 : Shagrat_64
• Track 5 : Shagrat_65
• Track 6 : Jflix2_89
• Track 7 : Shagrat_49
• Track 8 : Madraxi_61
• Track 9 : REQ1_28
• Track 10 : Jflix2_77
• Track 11 : REQ1_45
• Track 12 : Shagrat_66
• Track 13 : Jflix2_58
• Track 14 : Jflix2_76
• Track 15 : Madraxi_91
• Track 16 : Madraxi_80
• Track 17 : Madraxi_81
• Track 18 : Francesca_262, Dorin_262
• Track 19 : Nova53_265
• Track 20 : Nova53_258
• Track 21 : Francesca_263, Dorin_263
• Track 22 : Nova53_269
• Track 23 : Guey18_111, Volt_110, Ziko_109, Fryberger_106, Ronaldo_108
• Track 24 : Keelan_107
• Track 25 : Gonephishing_125, Hannaconda_124, Yeet_125, Odette_135, Superphikiman_128, HokkenD_123, Courthouse_126, Rearden_129
• Track 26 : 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 25, it was called in 8 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Astro_43, Danforth_43, Expelliarmus_43, Groundhog_42, Phillis_45, Roary_44, Smeadley_44, Stephig9_44,

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

Genes that do not have the "Most Annotated" start:
• Courthouse_126, Dorin_262, Dorin_263, Francesca_262, Francesca_263, Fryberger_106, Gonephishing_125, Guey18_111, Hannaconda_124, HokkenD_123, Jflix2_58, Jflix2_76, Jflix2_77, Jflix2_89, Keelan_107, Madraxi_61, Madraxi_80, Madraxi_81, Madraxi_91, Nova53_258, Nova53_265, Nova53_269, Odette_135, REQ1_28, REQ1_45, Rearden_129, Ronaldo_108, Shagrat_49, Shagrat_64, Shagrat_65, Shagrat_66, Sleepyhead_43, Superphikiman_128, Volt_110, Yeet_125, Ziko_109,

Summary by start number:

Start 6:
• Found in 1 of 44 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shagrat_64 (CF),

Start 7:
• Found in 1 of 44 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shagrat_65 (CF),

Start 12:
• Found in 1 of 44 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sleepyhead_43 (singleton),

Start 17:
• Found in 1 of 44 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Madraxi_80 (CF),

Start 18:
• Found in 4 of 44 (9.1%) of genes in pham
• Manual Annotations of this start: 2 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_58 (CF), Madraxi_61 (CF), Nova53_258 (CG), REQ1_28 (CF),

Start 21:
• Found in 2 of 44 (4.5%) of genes in pham
• Manual Annotations of this start: 2 of 36
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Jflix2_89 (CF), Madraxi_91 (CF),

Start 22:
• Found in 2 of 44 (4.5%) of genes in pham
• Manual Annotations of this start: 1 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_76 (CF), REQ1_45 (CF),

Start 24:
• Found in 1 of 44 (2.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nova53_269 (CG),

Start 25:
• Found in 8 of 44 (18.2%) of genes in pham
• Manual Annotations of this start: 8 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Astro_43 (A8), Danforth_43 (A8), Expelliarmus_43 (A8), Groundhog_42 (A8), Phillis_45 (A8), Roary_44 (A8), Smeadley_44 (A8), Stephig9_44 (A8),

Start 26:
• Found in 9 of 44 (20.5%) of genes in pham
• Manual Annotations of this start: 6 of 36
• 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), Keelan_107 (DP), Odette_135 (J), Rearden_129 (J), Superphikiman_128 (J), Yeet_125 (J),

Start 28:
• Found in 5 of 44 (11.4%) of genes in pham
• Manual Annotations of this start: 5 of 36
• 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 29:
• Found in 3 of 44 (6.8%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Nova53_265 (CG),

Start 30:
• Found in 5 of 44 (11.4%) of genes in pham
• Manual Annotations of this start: 4 of 36
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Dorin_262 (CG), Dorin_263 (CG), Francesca_262 (CG), Francesca_263 (CG),

Start 43:
• Found in 2 of 44 (4.5%) of genes in pham
• Manual Annotations of this start: 2 of 36

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_77 (CF), Madraxi_81 (CF),

Start 47:
• Found in 1 of 44 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shagrat_49 (CF),

Start 97:
• Found in 1 of 44 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 36
• 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, A8, DP,

Info for manual annotations of cluster A8:
•Start number 25 was manually annotated 8 times for cluster A8.

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 18 was manually annotated 2 times for cluster CF.
•Start number 21 was manually annotated 2 times for cluster CF.
•Start number 22 was manually annotated 1 time for cluster CF.
•Start number 43 was manually annotated 2 times for cluster CF.
•Start number 47 was manually annotated 1 time for cluster CF.
•Start number 97 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster CG:
•Start number 30 was manually annotated 4 times for cluster CG.

Info for manual annotations of cluster DP:
•Start number 26 was manually annotated 1 time for cluster DP.
•Start number 28 was manually annotated 5 times for cluster DP.

Info for manual annotations of cluster J:
•Start number 26 was manually annotated 5 times for cluster J.

Gene Information:

Gene: Astro_43 Start: 30852, Stop: 30550, Start Num: 25
Candidate Starts for Astro_43:
(Start: 25 @30852 has 8 MA's), (51, 30741), (52, 30732), (70, 30639), (79, 30588), (82, 30567),

Gene: Courthouse_126 Start: 68736, Stop: 69029, Start Num: 26
Candidate Starts for Courthouse_126:

(Start: 26 @68736 has 6 MA's), (54, 68853), (68, 68913), (90, 68985), (91, 68988),

Gene: Danforth_43 Start: 30881, Stop: 30579, Start Num: 25
Candidate Starts for Danforth_43:
(Start: 25 @30881 has 8 MA's), (51, 30770), (52, 30761), (70, 30668), (79, 30617), (82, 30596),

Gene: Dorin_262 Start: 128550, Stop: 128915, Start Num: 30
Candidate Starts for Dorin_262:
(Start: 30 @128550 has 4 MA's), (57, 128673), (60, 128682), (61, 128688), (74, 128766), (76, 128772), (86, 128817), (99, 128865),

Gene: Dorin_263 Start: 128893, Stop: 129231, Start Num: 30
Candidate Starts for Dorin_263:
(29, 128890), (Start: 30 @128893 has 4 MA's), (67, 129061),

Gene: Expelliarmus_43 Start: 30910, Stop: 30608, Start Num: 25
Candidate Starts for Expelliarmus_43:
(Start: 25 @30910 has 8 MA's), (51, 30799), (52, 30790), (70, 30697), (79, 30646), (82, 30625),

Gene: Francesca_262 Start: 129192, Stop: 129557, Start Num: 30
Candidate Starts for Francesca_262:
(Start: 30 @129192 has 4 MA's), (57, 129315), (60, 129324), (61, 129330), (74, 129408), (76, 129414), (86, 129459), (99, 129507),

Gene: Francesca_263 Start: 129535, Stop: 129873, Start Num: 30
Candidate Starts for Francesca_263:
(29, 129532), (Start: 30 @129535 has 4 MA's), (67, 129703),

Gene: Fryberger_106 Start: 52384, Stop: 52698, Start Num: 28
Candidate Starts for Fryberger_106:
(8, 52294), (23, 52369), (Start: 28 @52384 has 5 MA's), (65, 52540), (85, 52609), (101, 52672),

Gene: Gonephishing_125 Start: 68379, Stop: 68672, Start Num: 26
Candidate Starts for Gonephishing_125:
(Start: 26 @68379 has 6 MA's), (54, 68496), (68, 68556), (90, 68628), (91, 68631),

Gene: Groundhog_42 Start: 30817, Stop: 30515, Start Num: 25
Candidate Starts for Groundhog_42:
(Start: 25 @30817 has 8 MA's), (51, 30706), (52, 30697), (70, 30604), (79, 30553), (82, 30532),

Gene: Guey18_111 Start: 53707, Stop: 54021, Start Num: 28
Candidate Starts for Guey18_111:
(8, 53617), (23, 53692), (Start: 28 @53707 has 5 MA's), (65, 53863), (85, 53932), (101, 53995),

Gene: Hannaconda_124 Start: 69032, Stop: 69325, Start Num: 26
Candidate Starts for Hannaconda_124:
(Start: 26 @69032 has 6 MA's), (54, 69149), (68, 69209), (90, 69281), (91, 69284),

Gene: HokkenD_123 Start: 71913, Stop: 72206, Start Num: 26
Candidate Starts for HokkenD_123:
(Start: 26 @71913 has 6 MA's), (54, 72030), (68, 72090), (90, 72162), (91, 72165),

Gene: Jflix2_89 Start: 50660, Stop: 51001, Start Num: 21

Candidate Starts for Jflix2_89:
(3, 50558), (9, 50594), (16, 50642), (Start: 21 @50660 has 2 MA's), (45, 50741), (85, 50939),

Gene: Jflix2_77 Start: 46906, Stop: 47172, Start Num: 43
Candidate Starts for Jflix2_77:
(Start: 43 @46906 has 2 MA's), (67, 47026), (74, 47071), (99, 47149),

Gene: Jflix2_58 Start: 39721, Stop: 40101, Start Num: 18
Candidate Starts for Jflix2_58:
(1, 39397), (15, 39709), (Start: 18 @39721 has 2 MA's), (41, 39814), (74, 39979), (85, 40024), (98, 40069),

Gene: Jflix2_76 Start: 46571, Stop: 46909, Start Num: 22
Candidate Starts for Jflix2_76:
(Start: 22 @46571 has 1 MA's), (44, 46643), (69, 46766), (71, 46784), (80, 46826), (95, 46874),

Gene: Keelan_107 Start: 53290, Stop: 53652, Start Num: 26
Candidate Starts for Keelan_107:
(Start: 26 @53290 has 6 MA's), (50, 53383), (63, 53449), (65, 53461), (75, 53524), (76, 53527), (92, 53581), (101, 53623),

Gene: Madraxi_61 Start: 42224, Stop: 42604, Start Num: 18
Candidate Starts for Madraxi_61:
(2, 42083), (15, 42212), (Start: 18 @42224 has 2 MA's), (61, 42407), (101, 42590),

Gene: Madraxi_91 Start: 52811, Stop: 53170, Start Num: 21
Candidate Starts for Madraxi_91:
(Start: 21 @52811 has 2 MA's), (27, 52826), (66, 52988), (74, 53033), (85, 53075),

Gene: Madraxi_80 Start: 49350, Stop: 49697, Start Num: 17
Candidate Starts for Madraxi_80:
(4, 49296), (Start: 17 @49350 has 1 MA's), (44, 49431), (61, 49518), (69, 49554), (71, 49572), (80, 49614), (95, 49662),

Gene: Madraxi_81 Start: 49694, Stop: 49978, Start Num: 43
Candidate Starts for Madraxi_81:
(Start: 43 @49694 has 2 MA's), (46, 49712), (64, 49793), (74, 49856),

Gene: Nova53_265 Start: 130197, Stop: 130535, Start Num: 29
Candidate Starts for Nova53_265:
(29, 130197), (Start: 30 @130200 has 4 MA's), (39, 130236), (49, 130275), (56, 130311), (67, 130368), (75, 130416),

Gene: Nova53_258 Start: 128188, Stop: 128547, Start Num: 18
Candidate Starts for Nova53_258:
(13, 128170), (Start: 18 @128188 has 2 MA's), (37, 128254), (42, 128284), (73, 128434), (96, 128533),

Gene: Nova53_269 Start: 131044, Stop: 131379, Start Num: 24
Candidate Starts for Nova53_269:
(19, 131032), (24, 131044), (33, 131089), (36, 131092), (83, 131320), (87, 131329), (94, 131359),

Gene: Odette_135 Start: 73830, Stop: 74123, Start Num: 26
Candidate Starts for Odette_135:

(Start: 26 @73830 has 6 MA's), (54, 73947), (68, 74007), (90, 74079), (91, 74082),

Gene: Phillis_45 Start: 31235, Stop: 30933, Start Num: 25
Candidate Starts for Phillis_45:
(Start: 25 @31235 has 8 MA's), (51, 31124), (52, 31115), (65, 31055), (70, 31022), (79, 30971), (82, 30950),

Gene: REQ1_28 Start: 11269, Stop: 11631, Start Num: 18
Candidate Starts for REQ1_28:
(15, 11257), (Start: 18 @11269 has 2 MA's), (85, 11554), (96, 11596),

Gene: REQ1_45 Start: 18020, Stop: 18358, Start Num: 22
Candidate Starts for REQ1_45:
(14, 17999), (Start: 22 @18020 has 1 MA's), (44, 18092), (72, 18242), (88, 18302), (89, 18305), (93, 18314),

Gene: Rearden_129 Start: 69937, Stop: 70230, Start Num: 26
Candidate Starts for Rearden_129:
(Start: 26 @69937 has 6 MA's), (54, 70054), (68, 70114), (90, 70186), (91, 70189),

Gene: Roary_44 Start: 30866, Stop: 30564, Start Num: 25
Candidate Starts for Roary_44:
(Start: 25 @30866 has 8 MA's), (51, 30755), (52, 30746), (70, 30653), (79, 30602), (82, 30581),

Gene: Ronaldo_108 Start: 53289, Stop: 53603, Start Num: 28
Candidate Starts for Ronaldo_108:
(8, 53199), (23, 53274), (Start: 28 @53289 has 5 MA's), (65, 53445), (85, 53514), (101, 53577),

Gene: Shagrat_64 Start: 40165, Stop: 40536, Start Num: 6
Candidate Starts for Shagrat_64:
(Start: 6 @40165 has 1 MA's), (11, 40207), (34, 40276), (53, 40351), (67, 40414), (73, 40441), (77, 40462), (81, 40483), (84, 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), (20, 40611), (40, 40662), (42, 40668), (53, 40713), (58, 40740), (65, 40770), (81, 40860),

Gene: Shagrat_49 Start: 36435, Stop: 36740, Start Num: 47
Candidate Starts for Shagrat_49:
(32, 36375), (35, 36378), (Start: 47 @36435 has 1 MA's), (100, 36675), (102, 36696), (103, 36729),

Gene: Shagrat_66 Start: 40915, Stop: 41250, Start Num: 97
Candidate Starts for Shagrat_66:
(9, 40549), (10, 40564), (31, 40630), (38, 40654), (48, 40693), (55, 40720), (62, 40756), (Start: 97 @40915 has 1 MA's), (104, 41023), (105, 41101), (106, 41104), (107, 41197), (108, 41212), (109, 41224),

Gene: Sleepyhead_43 Start: 31028, Stop: 31363, Start Num: 12
Candidate Starts for Sleepyhead_43:
(Start: 12 @31028 has 1 MA's), (59, 31199), (78, 31295),

Gene: Smeadley_44 Start: 31032, Stop: 30730, Start Num: 25

Candidate Starts for Smeadley_44:
(Start: 25 @31032 has 8 MA's), (51, 30921), (52, 30912), (70, 30819), (79, 30768), (82, 30747),

Gene: Stephig9_44 Start: 30891, Stop: 30589, Start Num: 25
Candidate Starts for Stephig9_44:
(Start: 25 @30891 has 8 MA's), (51, 30780), (52, 30771), (70, 30678), (79, 30627), (82, 30606),

Gene: Superphikiman_128 Start: 69018, Stop: 69311, Start Num: 26
Candidate Starts for Superphikiman_128:
(Start: 26 @69018 has 6 MA's), (54, 69135), (68, 69195), (90, 69267), (91, 69270),

Gene: Volt_110 Start: 53453, Stop: 53767, Start Num: 28
Candidate Starts for Volt_110:
(8, 53363), (23, 53438), (Start: 28 @53453 has 5 MA's), (65, 53609), (85, 53678), (101, 53741),

Gene: Yeet_125 Start: 71942, Stop: 72235, Start Num: 26
Candidate Starts for Yeet_125:
(Start: 26 @71942 has 6 MA's), (54, 72059), (68, 72119), (90, 72191), (91, 72194),

Gene: Ziko_109 Start: 53295, Stop: 53609, Start Num: 28
Candidate Starts for Ziko_109:
(8, 53205), (23, 53280), (Start: 28 @53295 has 5 MA's), (65, 53451), (85, 53520), (101, 53583),