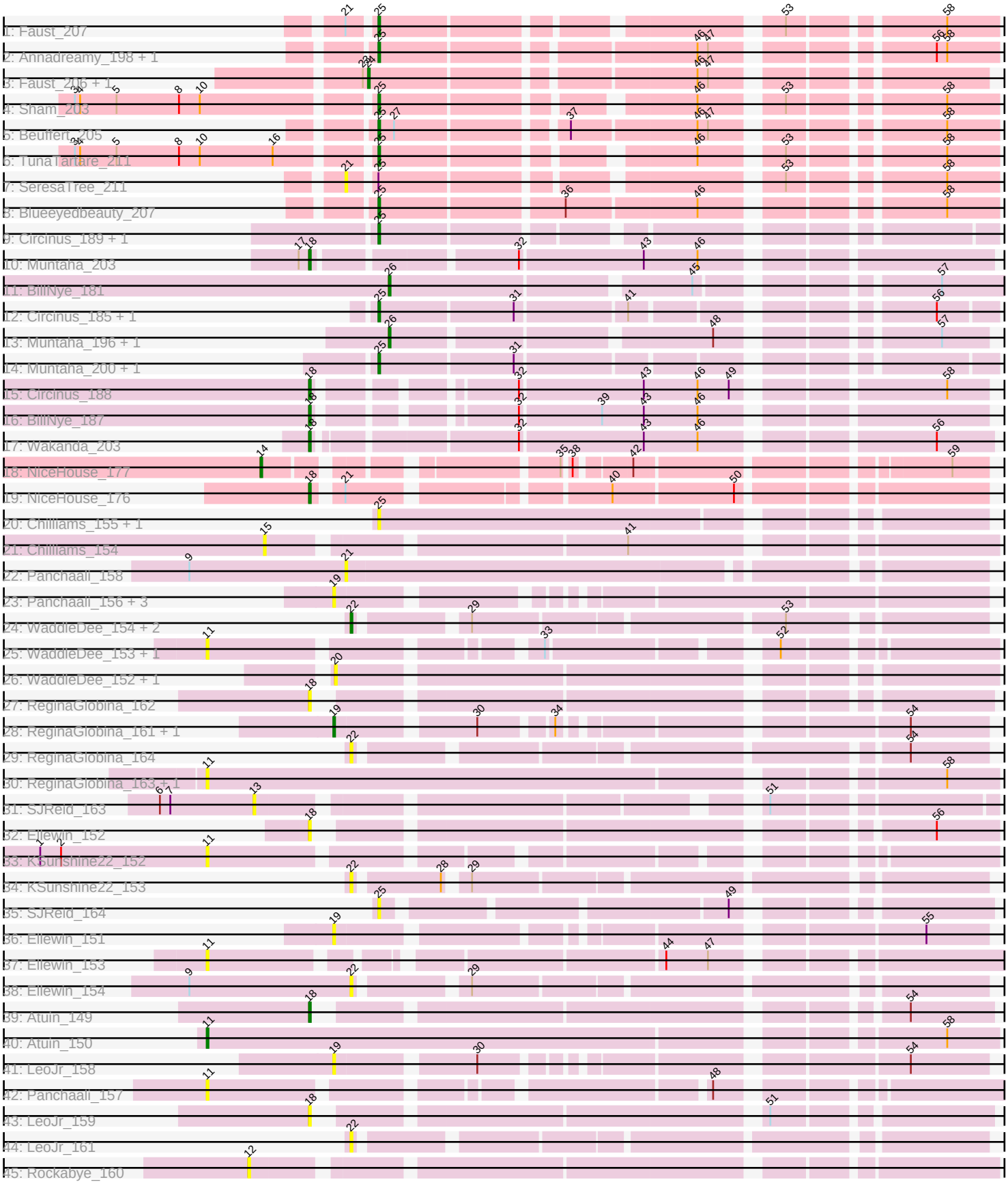
Pham 224591


1: Faust_207
2: Annadreamy_198 + 1
3: Faust_216 + 1
4: Sham_203
5: Beuffert_205
6: TunaTantare_211
7: SeresaTree_211
8: Blueeyedbeauty_207
9: Circinus_189 + 1
10: Muntaha_203
11: BillNye_181
12: Circinus_185 + 1
13: Muntaha_196 + 1
14: Muntaha_200 + 1
15: Circinus_188
16: BillNye_187
17: Wakanda_203
18: NiceHouse_177
19: NiceHouse_176
20: Chilliams_155 + 1
21: Chilliams_154
22: Panchaali_158
23: Panchaali_156 + 3
24: WaddleDee_154 + 2
25: WaddleDee_153 + 1
26: WaddleDee_152 + 1
27: ReginaGlobina_162
28: ReginaGlobina_161 + 1
29: ReginaGlobina_164
30: ReginaGlobina_163 + 1
31: SJReid_163
32: Ellewin_152
33: KSunshine22_152
34: KSunshine22_153
35: SJReid_164
36: Ellewin_151
37: Ellewin_153
38: Ellewin_154
39: Atuin_149
40: Atuin_150
41: LeoJr_158
42: Panchaali_157
43: LeoJr_159
44: LeoJr_161
45: Rockabye_160

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 224591 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224591 has 61 members, 34 are drafts.

Phages represented in each track:
- Track 1 : Faust_207
- Track 2 : Annadreamy_198, Limpid_205
- Track 3 : Faust_206, SeresaTree_210
- Track 4 : Sham_203
- Track 5 : Beuffert_205
- Track 6 : TunaTartare_211
- Track 7 : SeresaTree_211
- Track 8 : Blueeyedbeauty_207
- Track 9 : Circinus_189, BillNye_188
- Track 10 : Muntaha_203
- Track 11 : BillNye_181
- Track 12 : Circinus_185, BillNye_184
- Track 13 : Muntaha_196, Wakanda_196
- Track 14 : Muntaha_200, Wakanda_200
- Track 15 : Circinus_188
- Track 16 : BillNye_187
- Track 17 : Wakanda_203
- Track 18 : NiceHouse_177
- Track 19 : NiceHouse_176
- Track 20 : Chilliams_155, Rockabye_161
- Track 21 : Chilliams_154
- Track 22 : Panchaali_158
- Track 23 : Panchaali_156, WaddleDee_151, KSunshine22_151, DunneganBoMo_152
- Track 24 : WaddleDee_154, Atuin_151, DunneganBoMo_155
- Track 25 : WaddleDee_153, DunneganBoMo_154
- Track 26 : WaddleDee_152, DunneganBoMo_153
- Track 27 : ReginaGlobina_162
- Track 28 : ReginaGlobina_161, Atuin_148
- Track 29 : ReginaGlobina_164
- Track 30 : ReginaGlobina_163, LeoJr_160
- Track 31 : SJReid_163
- Track 32 : Ellewin_152
- Track 33 : KSunshine22_152
- Track 34 : KSunshine22_153
- Track 35 : SJReid_164
- Track 36 : Ellewin_151

• Track 37 : Ellewin_153
• Track 38 : Ellewin_154
• Track 39 : Atuin_149
• Track 40 : Atuin_150
• Track 41 : LeoJr_158
• Track 42 : Panchaali_157
• Track 43 : LeoJr_159
• Track 44 : LeoJr_161
• Track 45 : Rockabye_160

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 13 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Annadreamy_198, Beuffert_205, BillNye_184, BillNye_188, Blueeyedbeauty_207, Chilliams_155, Circinus_185, Circinus_189, Faust_207, Limpid_205, Muntaha_200, Rockabye_161, SJReid_164, Sham_203, TunaTartare_211, Wakanda_200,

Genes that have the "Most Annotated" start but do not call it:
• SeresaTree_211,

Genes that do not have the "Most Annotated" start:
• Atuin_148, Atuin_149, Atuin_150, Atuin_151, BillNye_181, BillNye_187, Chilliams_154, Circinus_188, DunneganBoMo_152, DunneganBoMo_153, DunneganBoMo_154, DunneganBoMo_155, Ellewin_151, Ellewin_152, Ellewin_153, Ellewin_154, Faust_206, KSunshine22_151, KSunshine22_152, KSunshine22_153, LeoJr_158, LeoJr_159, LeoJr_160, LeoJr_161, Muntaha_196, Muntaha_203, NiceHouse_176, NiceHouse_177, Panchaali_156, Panchaali_157, Panchaali_158, ReginaGlobina_161, ReginaGlobina_162, ReginaGlobina_163, ReginaGlobina_164, Rockabye_160, SJReid_163, SeresaTree_210, WaddleDee_151, WaddleDee_152, WaddleDee_153, WaddleDee_154, Wakanda_196, Wakanda_203,

Summary by start number:

Start 11:
• Found in 8 of 61 (13.1%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atuin_150 (FC), DunneganBoMo_154 (FC), Ellewin_153 (FC), KSunshine22_152 (FC), LeoJr_160 (FC), Panchaali_157 (FC), ReginaGlobina_163 (FC), WaddleDee_153 (FC),

Start 12:
• Found in 1 of 61 (1.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rockabye_160 (FC),

Start 13:
• Found in 1 of 61 (1.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SJReid_163 (FC),

Start 14:
• Found in 1 of 61 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NiceHouse_177 (CE),

Start 15:
• Found in 1 of 61 (1.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chilliams_154 (FC),

Start 18:
• Found in 9 of 61 (14.8%) of genes in pham
• Manual Annotations of this start: 6 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atuin_149 (FC), BillNye_187 (BK2), Circinus_188 (BK2), Ellewin_152 (FC), LeoJr_159 (FC), Muntaha_203 (BK2), NiceHouse_176 (CE), ReginaGlobina_162 (FC), Wakanda_203 (BK2),

Start 19:
• Found in 8 of 61 (13.1%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atuin_148 (FC), DunneganBoMo_152 (FC), Ellewin_151 (FC), KSunshine22_151 (FC), LeoJr_158 (FC), Panchaali_156 (FC), ReginaGlobina_161 (FC), WaddleDee_151 (FC),

Start 20:
• Found in 2 of 61 (3.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DunneganBoMo_153 (FC), WaddleDee_152 (FC),

Start 21:
• Found in 4 of 61 (6.6%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Panchaali_158 (FC), SeresaTree_211 (BK1),

Start 22:
• Found in 7 of 61 (11.5%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Atuin_151 (FC), DunneganBoMo_155 (FC), Ellewin_154 (FC), KSunshine22_153 (FC), LeoJr_161 (FC), ReginaGlobina_164 (FC), WaddleDee_154 (FC),

Start 24:
• Found in 2 of 61 (3.3%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Faust_206 (BK1), SeresaTree_210 (BK1),

Start 25:
• Found in 17 of 61 (27.9%) of genes in pham
• Manual Annotations of this start: 13 of 27
• Called 94.1% of time when present
• Phage (with cluster) where this start called: Annadreamy_198 (BK1), Beuffert_205 (BK1), BillNye_184 (BK2), BillNye_188 (BK2), Blueeyedbeauty_207 (BK1), Chilliams_155 (FC), Circinus_185 (BK2), Circinus_189 (BK2), Faust_207 (BK1), Limpid_205 (BK1), Muntaha_200 (BK2), Rockabye_161 (FC), SJReid_164 (FC), Sham_203 (BK1), TunaTartare_211 (BK1), Wakanda_200 (BK2),

Start 26:
• Found in 3 of 61 (4.9%) of genes in pham
• Manual Annotations of this start: 3 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BillNye_181 (BK2), Muntaha_196 (BK2), Wakanda_196 (BK2),

Summary by clusters:

There are 4 clusters represented in this pham: FC, CE, BK1, BK2,

Info for manual annotations of cluster BK1:
•Start number 24 was manually annotated 1 time for cluster BK1.
•Start number 25 was manually annotated 7 times for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 18 was manually annotated 4 times for cluster BK2.
•Start number 25 was manually annotated 6 times for cluster BK2.
•Start number 26 was manually annotated 3 times for cluster BK2.

Info for manual annotations of cluster CE:
•Start number 14 was manually annotated 1 time for cluster CE.
•Start number 18 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster FC:
•Start number 11 was manually annotated 1 time for cluster FC.
•Start number 18 was manually annotated 1 time for cluster FC.
•Start number 19 was manually annotated 1 time for cluster FC.
•Start number 22 was manually annotated 1 time for cluster FC.

Gene Information:

Gene: Annadreamy_198 Start: 100559, Stop: 100870, Start Num: 25
Candidate Starts for Annadreamy_198:
(Start: 25 @100559 has 13 MA's), (46, 100724), (47, 100730), (56, 100835), (58, 100841),

Gene: Atuin_149 Start: 104650, Stop: 104988, Start Num: 18
Candidate Starts for Atuin_149:
(Start: 18 @104650 has 6 MA's), (54, 104941),

Gene: Atuin_148 Start: 104321, Stop: 104644, Start Num: 19
Candidate Starts for Atuin_148:
(Start: 19 @104321 has 1 MA's), (30, 104393), (34, 104429), (54, 104600),

Gene: Atuin_151 Start: 105420, Stop: 105743, Start Num: 22
Candidate Starts for Atuin_151:
(Start: 22 @105420 has 1 MA's), (29, 105474), (53, 105639),

Gene: Atuin_150 Start: 104992, Stop: 105420, Start Num: 11
Candidate Starts for Atuin_150:
(Start: 11 @104992 has 1 MA's), (58, 105391),

Gene: Beuffert_205 Start: 104551, Stop: 104862, Start Num: 25
Candidate Starts for Beuffert_205:
(Start: 25 @104551 has 13 MA's), (27, 104560), (37, 104647), (46, 104716), (47, 104722), (58, 104833),

Gene: BillNye_181 Start: 99832, Stop: 100167, Start Num: 26
Candidate Starts for BillNye_181:
(Start: 26 @99832 has 3 MA's), (45, 99994), (57, 100108),

Gene: BillNye_184 Start: 100624, Stop: 100935, Start Num: 25
Candidate Starts for BillNye_184:
(Start: 25 @100624 has 13 MA's), (31, 100699), (41, 100759), (56, 100903),

Gene: BillNye_187 Start: 101461, Stop: 101799, Start Num: 18
Candidate Starts for BillNye_187:
(Start: 18 @101461 has 6 MA's), (32, 101554), (39, 101599), (43, 101623), (46, 101653),

Gene: BillNye_188 Start: 101849, Stop: 102151, Start Num: 25
Candidate Starts for BillNye_188:
(Start: 25 @101849 has 13 MA's),

Gene: Blueeyedbeauty_207 Start: 104279, Stop: 104596, Start Num: 25
Candidate Starts for Blueeyedbeauty_207:
(Start: 25 @104279 has 13 MA's), (36, 104378), (46, 104450), (58, 104567),

Gene: Chilliams_155 Start: 96358, Stop: 96678, Start Num: 25
Candidate Starts for Chilliams_155:
(Start: 25 @96358 has 13 MA's),

Gene: Chilliams_154 Start: 95980, Stop: 96354, Start Num: 15
Candidate Starts for Chilliams_154:

(15, 95980), (41, 96166),

Gene: Circinus_189 Start: 101656, Stop: 101958, Start Num: 25
Candidate Starts for Circinus_189:
(Start: 25 @101656 has 13 MA's),

Gene: Circinus_185 Start: 100431, Stop: 100742, Start Num: 25
Candidate Starts for Circinus_185:
(Start: 25 @100431 has 13 MA's), (31, 100506), (41, 100566), (56, 100710),

Gene: Circinus_188 Start: 101268, Stop: 101606, Start Num: 18
Candidate Starts for Circinus_188:
(Start: 18 @101268 has 6 MA's), (32, 101361), (43, 101430), (46, 101460), (49, 101478), (58, 101583),

Gene: DunneganBoMo_155 Start: 102327, Stop: 102650, Start Num: 22
Candidate Starts for DunneganBoMo_155:
(Start: 22 @102327 has 1 MA's), (29, 102381), (53, 102546),

Gene: DunneganBoMo_153 Start: 101601, Stop: 101942, Start Num: 20
Candidate Starts for DunneganBoMo_153:
(20, 101601),

Gene: DunneganBoMo_154 Start: 101944, Stop: 102327, Start Num: 11
Candidate Starts for DunneganBoMo_154:
(Start: 11 @101944 has 1 MA's), (33, 102106), (52, 102217),

Gene: DunneganBoMo_152 Start: 101261, Stop: 101590, Start Num: 19
Candidate Starts for DunneganBoMo_152:
(Start: 19 @101261 has 1 MA's),

Gene: Ellewin_152 Start: 101696, Stop: 102037, Start Num: 18
Candidate Starts for Ellewin_152:
(Start: 18 @101696 has 6 MA's), (56, 102002),

Gene: Ellewin_151 Start: 101365, Stop: 101691, Start Num: 19
Candidate Starts for Ellewin_151:
(Start: 19 @101365 has 1 MA's), (55, 101656),

Gene: Ellewin_153 Start: 102039, Stop: 102437, Start Num: 11
Candidate Starts for Ellewin_153:
(Start: 11 @102039 has 1 MA's), (44, 102267), (47, 102291),

Gene: Ellewin_154 Start: 102437, Stop: 102760, Start Num: 22
Candidate Starts for Ellewin_154:
(9, 102344), (Start: 22 @102437 has 1 MA's), (29, 102491),

Gene: Faust_207 Start: 105783, Stop: 106088, Start Num: 25
Candidate Starts for Faust_207:
(21, 105771), (Start: 25 @105783 has 13 MA's), (53, 105981), (58, 106059),

Gene: Faust_206 Start: 105463, Stop: 105774, Start Num: 24
Candidate Starts for Faust_206:
(23, 105460), (Start: 24 @105463 has 1 MA's), (46, 105634), (47, 105640),

Gene: KSunshine22_151 Start: 102661, Stop: 102990, Start Num: 19
Candidate Starts for KSunshine22_151:
(Start: 19 @102661 has 1 MA's),

Gene: KSunshine22_152 Start: 103001, Stop: 103387, Start Num: 11
Candidate Starts for KSunshine22_152:
(1, 102905), (2, 102917), (Start: 11 @103001 has 1 MA's),

Gene: KSunshine22_153 Start: 103387, Stop: 103710, Start Num: 22
Candidate Starts for KSunshine22_153:
(Start: 22 @103387 has 1 MA's), (28, 103432), (29, 103441),

Gene: LeoJr_158 Start: 104920, Stop: 105243, Start Num: 19
Candidate Starts for LeoJr_158:
(Start: 19 @104920 has 1 MA's), (30, 104992), (54, 105199),

Gene: LeoJr_160 Start: 105590, Stop: 106018, Start Num: 11
Candidate Starts for LeoJr_160:
(Start: 11 @105590 has 1 MA's), (58, 105989),

Gene: LeoJr_159 Start: 105249, Stop: 105587, Start Num: 18
Candidate Starts for LeoJr_159:
(Start: 18 @105249 has 6 MA's), (51, 105474),

Gene: LeoJr_161 Start: 106018, Stop: 106341, Start Num: 22
Candidate Starts for LeoJr_161:
(Start: 22 @106018 has 1 MA's),

Gene: Limpid_205 Start: 105872, Stop: 106183, Start Num: 25
Candidate Starts for Limpid_205:
(Start: 25 @105872 has 13 MA's), (46, 106037), (47, 106043), (56, 106148), (58, 106154),

Gene: Muntaha_203 Start: 101500, Stop: 101853, Start Num: 18
Candidate Starts for Muntaha_203:
(17, 101494), (Start: 18 @101500 has 6 MA's), (32, 101605), (43, 101674), (46, 101704),

Gene: Muntaha_196 Start: 99557, Stop: 99856, Start Num: 26
Candidate Starts for Muntaha_196:
(Start: 26 @99557 has 3 MA's), (48, 99725), (57, 99830),

Gene: Muntaha_200 Start: 100611, Stop: 100922, Start Num: 25
Candidate Starts for Muntaha_200:
(Start: 25 @100611 has 13 MA's), (31, 100686),

Gene: NiceHouse_177 Start: 100519, Stop: 100866, Start Num: 14
Candidate Starts for NiceHouse_177:
(Start: 14 @100519 has 1 MA's), (35, 100657), (38, 100660), (42, 100687), (59, 100846),

Gene: NiceHouse_176 Start: 100180, Stop: 100518, Start Num: 18
Candidate Starts for NiceHouse_176:
(Start: 18 @100180 has 6 MA's), (21, 100192), (40, 100324), (50, 100390),

Gene: Panchaali_158 Start: 102508, Stop: 102852, Start Num: 21
Candidate Starts for Panchaali_158:
(9, 102418), (21, 102508),

Gene: Panchaali_156 Start: 101776, Stop: 102108, Start Num: 19
Candidate Starts for Panchaali_156:
(Start: 19 @101776 has 1 MA's),

Gene: Panchaali_157 Start: 102119, Stop: 102511, Start Num: 11
Candidate Starts for Panchaali_157:
(Start: 11 @102119 has 1 MA's), (48, 102368),

Gene: ReginaGlobina_162 Start: 106523, Stop: 106861, Start Num: 18
Candidate Starts for ReginaGlobina_162:
(Start: 18 @106523 has 6 MA's),

Gene: ReginaGlobina_161 Start: 106194, Stop: 106517, Start Num: 19
Candidate Starts for ReginaGlobina_161:
(Start: 19 @106194 has 1 MA's), (30, 106266), (34, 106302), (54, 106473),

Gene: ReginaGlobina_164 Start: 107292, Stop: 107615, Start Num: 22
Candidate Starts for ReginaGlobina_164:
(Start: 22 @107292 has 1 MA's), (54, 107571),

Gene: ReginaGlobina_163 Start: 106864, Stop: 107292, Start Num: 11
Candidate Starts for ReginaGlobina_163:
(Start: 11 @106864 has 1 MA's), (58, 107263),

Gene: Rockabye_161 Start: 97934, Stop: 98251, Start Num: 25
Candidate Starts for Rockabye_161:
(Start: 25 @97934 has 13 MA's),

Gene: Rockabye_160 Start: 97547, Stop: 97930, Start Num: 12
Candidate Starts for Rockabye_160:
(12, 97547),

Gene: SJReid_163 Start: 96607, Stop: 96969, Start Num: 13
Candidate Starts for SJReid_163:
(6, 96553), (7, 96559), (13, 96607), (51, 96853),

Gene: SJReid_164 Start: 96973, Stop: 97275, Start Num: 25
Candidate Starts for SJReid_164:
(Start: 25 @96973 has 13 MA's), (49, 97150),

Gene: SeresaTree_211 Start: 105756, Stop: 106073, Start Num: 21
Candidate Starts for SeresaTree_211:
(21, 105756), (Start: 25 @105768 has 13 MA's), (53, 105966), (58, 106044),

Gene: SeresaTree_210 Start: 105448, Stop: 105759, Start Num: 24
Candidate Starts for SeresaTree_210:
(23, 105445), (Start: 24 @105448 has 1 MA's), (46, 105619), (47, 105625),

Gene: Sham_203 Start: 106846, Stop: 107148, Start Num: 25

Candidate Starts for Sham_203:
(3, 106684), (4, 106687), (5, 106708), (8, 106744), (10, 106756), (Start: 25 @106846 has 13 MA's), (46, 107002), (53, 107041), (58, 107119),

Gene: TunaTartare_211 Start: 109144, Stop: 109446, Start Num: 25
Candidate Starts for TunaTartare_211:
(3, 108982), (4, 108985), (5, 109006), (8, 109042), (10, 109054), (16, 109096), (Start: 25 @109144 has 13 MA's), (46, 109300), (53, 109339), (58, 109417),

Gene: WaddleDee_154 Start: 101513, Stop: 101836, Start Num: 22
Candidate Starts for WaddleDee_154:
(Start: 22 @101513 has 1 MA's), (29, 101567), (53, 101732),

Gene: WaddleDee_153 Start: 101130, Stop: 101513, Start Num: 11
Candidate Starts for WaddleDee_153:
(Start: 11 @101130 has 1 MA's), (33, 101292), (52, 101403),

Gene: WaddleDee_152 Start: 100787, Stop: 101128, Start Num: 20
Candidate Starts for WaddleDee_152:
(20, 100787),

Gene: WaddleDee_151 Start: 100447, Stop: 100776, Start Num: 19
Candidate Starts for WaddleDee_151:
(Start: 19 @100447 has 1 MA's),

Gene: Wakanda_200 Start: 100892, Stop: 101203, Start Num: 25
Candidate Starts for Wakanda_200:
(Start: 25 @100892 has 13 MA's), (31, 100967),

Gene: Wakanda_196 Start: 99838, Stop: 100137, Start Num: 26
Candidate Starts for Wakanda_196:
(Start: 26 @99838 has 3 MA's), (48, 100006), (57, 100111),

Gene: Wakanda_203 Start: 101737, Stop: 102090, Start Num: 18
Candidate Starts for Wakanda_203:
(Start: 18 @101737 has 6 MA's), (32, 101842), (43, 101911), (46, 101941), (56, 102058),