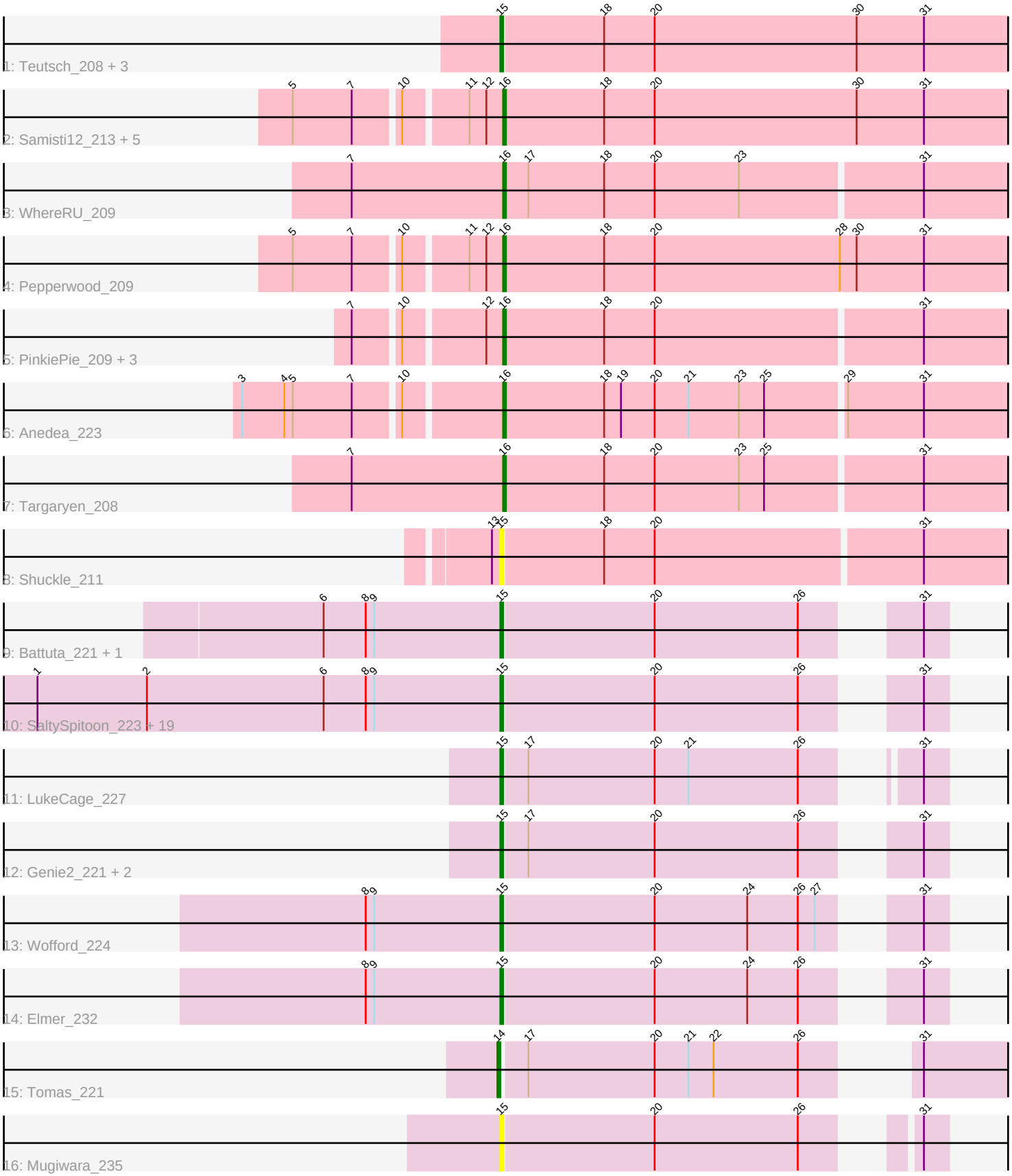
Pham 214377


1: Teutsch_208 + 3
2: Samisti12_213 + 5
3: WhereRU_209
4: Pepperwood_209
5: PinkiePie_209 + 3
6: Anedea_223
7: Targaryen_208
8: Shuckle_211
9: Battuta_221 + 1
10: SaltySpitoon_223 + 19
11: LukeCage_227
12: Genie2_221 + 2
13: Wofford_224
14: Elmer_232
15: Tomas_221
16: Mugiwara_235

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 214377 Report

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

Pham number 214377 has 49 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Teutsch_208, EGole_212, Leo04_210, Peebs_206
• Track 2 : Samisti12_213, Cross_208, Watermoore_208, PacManQ_206, Lululemon_206, Cursive_211
• Track 3 : WhereRU_209
• Track 4 : Pepperwood_209
• Track 5 : PinkiePie_209, Liandry_209, Paradiddles_201, Squillium_212
• Track 6 : Anedea_223
• Track 7 : Targaryen_208
• Track 8 : Shuckle_211
• Track 9 : Battuta_221, Bordeaux_221
• Track 10 : SaltySpitoon_223, Starbow_220, TomSawyer_227, Birchlyn_222, JimJam_230, Jollison_220, Gibbi_231, Spelly_228, Quaran19_223, Rikishi_231, Karimac_223, Amabiko_227, Spilled_230, Wipeout_214, PumpkinSpice_226, CeilingFan_227, KentuckyRacer_229, MindFlayer_216, IchabodCrane_217, Enygma_231
• Track 11 : LukeCage_227
• Track 12 : Genie2_221, BoomerJR_221, StarPlatinum_231
• Track 13 : Wofford_224
• Track 14 : Elmer_232
• Track 15 : Tomas_221
• Track 16 : Mugiwara_235

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

The start number called the most often in the published annotations is 15, it was called in 30 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amabiko_227, Battuta_221, Birchlyn_222, BoomerJR_221, Bordeaux_221, CeilingFan_227, EGole_212, Elmer_232, Enygma_231, Genie2_221, Gibbi_231, IchabodCrane_217, JimJam_230, Jollison_220, Karimac_223, KentuckyRacer_229, Leo04_210, LukeCage_227, MindFlayer_216, Mugiwara_235, Peebs_206, PumpkinSpice_226, Quaran19_223, Rikishi_231, SaltySpitoon_223, Shuckle_211, Spelly_228, Spilled_230, StarPlatinum_231, Starbow_220, Teutsch_208,

TomSawyer_227, Wipeout_214, Wofford_224,

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

Genes that do not have the "Most Annotated" start:
• Anedea_223, Cross_208, Cursive_211, Liandry_209, Lululemon_206, PacManQ_206, Paradiddles_201, Pepperwood_209, PinkiePie_209, Samisti12_213, Squillium_212, Targaryen_208, Tomas_221, Watermoore_208, WhereRU_209,

Summary by start number:

Start 14:
• Found in 1 of 49 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Tomas_221 (BE2),

Start 15:
• Found in 34 of 49 (69.4%) of genes in pham
• Manual Annotations of this start: 30 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amabiko_227 (BE2), Battuta_221 (BE2), Birchlyn_222 (BE2), BoomerJR_221 (BE2), Bordeaux_221 (BE2), CeilingFan_227 (BE2), EGole_212 (BE1), Elmer_232 (BE2), Enygma_231 (BE2), Genie2_221 (BE2), Gibbi_231 (BE2), IchabodCrane_217 (BE2), JimJam_230 (BE2), Jollison_220 (BE2), Karimac_223 (BE2), KentuckyRacer_229 (BE2), Leo04_210 (BE1), LukeCage_227 (BE2), MindFlayer_216 (BE2), Mugiwara_235 (BE2), Peebs_206 (BE1), PumpkinSpice_226 (BE2), Quaran19_223 (BE2), Rikishi_231 (BE2), SaltySpitoon_223 (BE2), Shuckle_211 (BE1), Spelly_228 (BE2), Spilled_230 (BE2), StarPlatinum_231 (BE2), Starbow_220 (BE2), Teutsch_208 (BE1), TomSawyer_227 (BE2), Wipeout_214 (BE2), Wofford_224 (BE2),

Start 16:
• Found in 14 of 49 (28.6%) of genes in pham
• Manual Annotations of this start: 14 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anedea_223 (BE1), Cross_208 (BE1), Cursive_211 (BE1), Liandry_209 (BE1), Lululemon_206 (BE1), PacManQ_206 (BE1), Paradiddles_201 (BE1), Pepperwood_209 (BE1), PinkiePie_209 (BE1), Samisti12_213 (BE1), Squillium_212 (BE1), Targaryen_208 (BE1), Watermoore_208 (BE1), WhereRU_209 (BE1),

Summary by clusters:

There are 2 clusters represented in this pham: BE2, BE1,

Info for manual annotations of cluster BE1:
•Start number 15 was manually annotated 4 times for cluster BE1.
•Start number 16 was manually annotated 14 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 14 was manually annotated 1 time for cluster BE2.

•Start number 15 was manually annotated 26 times for cluster BE2.

Gene Information:

Gene: Amabiko_227 Start: 107130, Stop: 107270, Start Num: 15
Candidate Starts for Amabiko_227:
(1, 106965), (2, 107004), (6, 107067), (8, 107082), (9, 107085), (Start: 15 @107130 has 30 MA's), (20, 107184), (26, 107235), (31, 107262),

Gene: Anedea_223 Start: 108049, Stop: 108228, Start Num: 16
Candidate Starts for Anedea_223:
(3, 107962), (4, 107977), (5, 107980), (7, 108001), (10, 108016), (Start: 16 @108049 has 14 MA's), (18, 108085), (19, 108091), (20, 108103), (21, 108115), (23, 108133), (25, 108142), (29, 108169), (31, 108196),

Gene: Battuta_221 Start: 106445, Stop: 106585, Start Num: 15
Candidate Starts for Battuta_221:
(6, 106382), (8, 106397), (9, 106400), (Start: 15 @106445 has 30 MA's), (20, 106499), (26, 106550), (31, 106577),

Gene: Birchlyn_222 Start: 104378, Stop: 104518, Start Num: 15
Candidate Starts for Birchlyn_222:
(1, 104213), (2, 104252), (6, 104315), (8, 104330), (9, 104333), (Start: 15 @104378 has 30 MA's), (20, 104432), (26, 104483), (31, 104510),

Gene: BoomerJR_221 Start: 107448, Stop: 107588, Start Num: 15
Candidate Starts for BoomerJR_221:
(Start: 15 @107448 has 30 MA's), (17, 107457), (20, 107502), (26, 107553), (31, 107580),

Gene: Bordeaux_221 Start: 107028, Stop: 107168, Start Num: 15
Candidate Starts for Bordeaux_221:
(6, 106965), (8, 106980), (9, 106983), (Start: 15 @107028 has 30 MA's), (20, 107082), (26, 107133), (31, 107160),

Gene: CeilingFan_227 Start: 107823, Stop: 107963, Start Num: 15
Candidate Starts for CeilingFan_227:
(1, 107658), (2, 107697), (6, 107760), (8, 107775), (9, 107778), (Start: 15 @107823 has 30 MA's), (20, 107877), (26, 107928), (31, 107955),

Gene: Cross_208 Start: 106465, Stop: 106668, Start Num: 16
Candidate Starts for Cross_208:
(5, 106396), (7, 106417), (10, 106432), (11, 106453), (12, 106459), (Start: 16 @106465 has 14 MA's), (18, 106501), (20, 106519), (30, 106591), (31, 106615),

Gene: Cursive_211 Start: 106149, Stop: 106352, Start Num: 16
Candidate Starts for Cursive_211:
(5, 106080), (7, 106101), (10, 106116), (11, 106137), (12, 106143), (Start: 16 @106149 has 14 MA's), (18, 106185), (20, 106203), (30, 106275), (31, 106299),

Gene: EGole_212 Start: 108162, Stop: 108365, Start Num: 15
Candidate Starts for EGole_212:

(Start: 15 @108162 has 30 MA's), (18, 108198), (20, 108216), (30, 108288), (31, 108312),

Gene: Elmer_232 Start: 110772, Stop: 110912, Start Num: 15
Candidate Starts for Elmer_232:
(8, 110724), (9, 110727), (Start: 15 @110772 has 30 MA's), (20, 110826), (24, 110859), (26, 110877), (31, 110904),

Gene: Enygma_231 Start: 110232, Stop: 110372, Start Num: 15
Candidate Starts for Enygma_231:
(1, 110067), (2, 110106), (6, 110169), (8, 110184), (9, 110187), (Start: 15 @110232 has 30 MA's), (20, 110286), (26, 110337), (31, 110364),

Gene: Genie2_221 Start: 107573, Stop: 107713, Start Num: 15
Candidate Starts for Genie2_221:
(Start: 15 @107573 has 30 MA's), (17, 107582), (20, 107627), (26, 107678), (31, 107705),

Gene: Gibbi_231 Start: 107316, Stop: 107456, Start Num: 15
Candidate Starts for Gibbi_231:
(1, 107151), (2, 107190), (6, 107253), (8, 107268), (9, 107271), (Start: 15 @107316 has 30 MA's), (20, 107370), (26, 107421), (31, 107448),

Gene: IchabodCrane_217 Start: 106831, Stop: 106971, Start Num: 15
Candidate Starts for IchabodCrane_217:
(1, 106666), (2, 106705), (6, 106768), (8, 106783), (9, 106786), (Start: 15 @106831 has 30 MA's), (20, 106885), (26, 106936), (31, 106963),

Gene: JimJam_230 Start: 108752, Stop: 108892, Start Num: 15
Candidate Starts for JimJam_230:
(1, 108587), (2, 108626), (6, 108689), (8, 108704), (9, 108707), (Start: 15 @108752 has 30 MA's), (20, 108806), (26, 108857), (31, 108884),

Gene: Jollison_220 Start: 106962, Stop: 107102, Start Num: 15
Candidate Starts for Jollison_220:
(1, 106797), (2, 106836), (6, 106899), (8, 106914), (9, 106917), (Start: 15 @106962 has 30 MA's), (20, 107016), (26, 107067), (31, 107094),

Gene: Karimac_223 Start: 107147, Stop: 107287, Start Num: 15
Candidate Starts for Karimac_223:
(1, 106982), (2, 107021), (6, 107084), (8, 107099), (9, 107102), (Start: 15 @107147 has 30 MA's), (20, 107201), (26, 107252), (31, 107279),

Gene: KentuckyRacer_229 Start: 108667, Stop: 108807, Start Num: 15
Candidate Starts for KentuckyRacer_229:
(1, 108502), (2, 108541), (6, 108604), (8, 108619), (9, 108622), (Start: 15 @108667 has 30 MA's), (20, 108721), (26, 108772), (31, 108799),

Gene: Leo04_210 Start: 106846, Stop: 107049, Start Num: 15
Candidate Starts for Leo04_210:
(Start: 15 @106846 has 30 MA's), (18, 106882), (20, 106900), (30, 106972), (31, 106996),

Gene: Liandry_209 Start: 105926, Stop: 106126, Start Num: 16
Candidate Starts for Liandry_209:

(7, 105878), (10, 105893), (12, 105920), (Start: 16 @105926 has 14 MA's), (18, 105962), (20, 105980), (31, 106073),

Gene: LukeCage_227 Start: 109429, Stop: 109566, Start Num: 15
Candidate Starts for LukeCage_227:
(Start: 15 @109429 has 30 MA's), (17, 109438), (20, 109483), (21, 109495), (26, 109534), (31, 109558),

Gene: Lululemon_206 Start: 105201, Stop: 105404, Start Num: 16
Candidate Starts for Lululemon_206:
(5, 105132), (7, 105153), (10, 105168), (11, 105189), (12, 105195), (Start: 16 @105201 has 14 MA's), (18, 105237), (20, 105255), (30, 105327), (31, 105351),

Gene: MindFlayer_216 Start: 106347, Stop: 106487, Start Num: 15
Candidate Starts for MindFlayer_216:
(1, 106182), (2, 106221), (6, 106284), (8, 106299), (9, 106302), (Start: 15 @106347 has 30 MA's), (20, 106401), (26, 106452), (31, 106479),

Gene: Mugiwara_235 Start: 109929, Stop: 110066, Start Num: 15
Candidate Starts for Mugiwara_235:
(Start: 15 @109929 has 30 MA's), (20, 109983), (26, 110034), (31, 110058),

Gene: PacManQ_206 Start: 105201, Stop: 105404, Start Num: 16
Candidate Starts for PacManQ_206:
(5, 105132), (7, 105153), (10, 105168), (11, 105189), (12, 105195), (Start: 16 @105201 has 14 MA's), (18, 105237), (20, 105255), (30, 105327), (31, 105351),

Gene: Paradiddles_201 Start: 107113, Stop: 107313, Start Num: 16
Candidate Starts for Paradiddles_201:
(7, 107065), (10, 107080), (12, 107107), (Start: 16 @107113 has 14 MA's), (18, 107149), (20, 107167), (31, 107260),

Gene: Peebs_206 Start: 106252, Stop: 106455, Start Num: 15
Candidate Starts for Peebs_206:
(Start: 15 @106252 has 30 MA's), (18, 106288), (20, 106306), (30, 106378), (31, 106402),

Gene: Pepperwood_209 Start: 106487, Stop: 106690, Start Num: 16
Candidate Starts for Pepperwood_209:
(5, 106418), (7, 106439), (10, 106454), (11, 106475), (12, 106481), (Start: 16 @106487 has 14 MA's), (18, 106523), (20, 106541), (28, 106607), (30, 106613), (31, 106637),

Gene: PinkiePie_209 Start: 105926, Stop: 106126, Start Num: 16
Candidate Starts for PinkiePie_209:
(7, 105878), (10, 105893), (12, 105920), (Start: 16 @105926 has 14 MA's), (18, 105962), (20, 105980), (31, 106073),

Gene: PumpkinSpice_226 Start: 107568, Stop: 107708, Start Num: 15
Candidate Starts for PumpkinSpice_226:
(1, 107403), (2, 107442), (6, 107505), (8, 107520), (9, 107523), (Start: 15 @107568 has 30 MA's), (20, 107622), (26, 107673), (31, 107700),

Gene: Quaran19_223 Start: 107009, Stop: 107149, Start Num: 15
Candidate Starts for Quaran19_223:

(1, 106844), (2, 106883), (6, 106946), (8, 106961), (9, 106964), (Start: 15 @107009 has 30 MA's), (20, 107063), (26, 107114), (31, 107141),

Gene: Rikishi_231 Start: 107290, Stop: 107430, Start Num: 15
Candidate Starts for Rikishi_231:
(1, 107125), (2, 107164), (6, 107227), (8, 107242), (9, 107245), (Start: 15 @107290 has 30 MA's), (20, 107344), (26, 107395), (31, 107422),

Gene: SaltySpitoon_223 Start: 106551, Stop: 106691, Start Num: 15
Candidate Starts for SaltySpitoon_223:
(1, 106386), (2, 106425), (6, 106488), (8, 106503), (9, 106506), (Start: 15 @106551 has 30 MA's), (20, 106605), (26, 106656), (31, 106683),

Gene: Samisti12_213 Start: 108111, Stop: 108314, Start Num: 16
Candidate Starts for Samisti12_213:
(5, 108042), (7, 108063), (10, 108078), (11, 108099), (12, 108105), (Start: 16 @108111 has 14 MA's), (18, 108147), (20, 108165), (30, 108237), (31, 108261),

Gene: Shuckle_211 Start: 106484, Stop: 106684, Start Num: 15
Candidate Starts for Shuckle_211:
(13, 106481), (Start: 15 @106484 has 30 MA's), (18, 106520), (20, 106538), (31, 106631),

Gene: Spelly_228 Start: 106480, Stop: 106620, Start Num: 15
Candidate Starts for Spelly_228:
(1, 106315), (2, 106354), (6, 106417), (8, 106432), (9, 106435), (Start: 15 @106480 has 30 MA's), (20, 106534), (26, 106585), (31, 106612),

Gene: Spilled_230 Start: 107684, Stop: 107824, Start Num: 15
Candidate Starts for Spilled_230:
(1, 107519), (2, 107558), (6, 107621), (8, 107636), (9, 107639), (Start: 15 @107684 has 30 MA's), (20, 107738), (26, 107789), (31, 107816),

Gene: Squillium_212 Start: 105928, Stop: 106128, Start Num: 16
Candidate Starts for Squillium_212:
(7, 105880), (10, 105895), (12, 105922), (Start: 16 @105928 has 14 MA's), (18, 105964), (20, 105982), (31, 106075),

Gene: StarPlatinum_231 Start: 109660, Stop: 109797, Start Num: 15
Candidate Starts for StarPlatinum_231:
(Start: 15 @109660 has 30 MA's), (17, 109669), (20, 109714), (26, 109765), (31, 109789),

Gene: Starbow_220 Start: 106524, Stop: 106664, Start Num: 15
Candidate Starts for Starbow_220:
(1, 106359), (2, 106398), (6, 106461), (8, 106476), (9, 106479), (Start: 15 @106524 has 30 MA's), (20, 106578), (26, 106629), (31, 106656),

Gene: Targaryen_208 Start: 107305, Stop: 107505, Start Num: 16
Candidate Starts for Targaryen_208:
(7, 107251), (Start: 16 @107305 has 14 MA's), (18, 107341), (20, 107359), (23, 107389), (25, 107398), (31, 107452),

Gene: Teutsch_208 Start: 106940, Stop: 107143, Start Num: 15
Candidate Starts for Teutsch_208:

(Start: 15 @106940 has 30 MA's), (18, 106976), (20, 106994), (30, 107066), (31, 107090),

Gene: TomSawyer_227 Start: 108995, Stop: 109135, Start Num: 15
Candidate Starts for TomSawyer_227:
(1, 108830), (2, 108869), (6, 108932), (8, 108947), (9, 108950), (Start: 15 @108995 has 30 MA's), (20, 109049), (26, 109100), (31, 109127),

Gene: Tomas_221 Start: 107946, Stop: 108128, Start Num: 14
Candidate Starts for Tomas_221:
(Start: 14 @107946 has 1 MA's), (17, 107955), (20, 108000), (21, 108012), (22, 108021), (26, 108051), (31, 108069),

Gene: Watermoore_208 Start: 107463, Stop: 107666, Start Num: 16
Candidate Starts for Watermoore_208:
(5, 107394), (7, 107415), (10, 107430), (11, 107451), (12, 107457), (Start: 16 @107463 has 14 MA's), (18, 107499), (20, 107517), (30, 107589), (31, 107613),

Gene: WhereRU_209 Start: 105731, Stop: 105931, Start Num: 16
Candidate Starts for WhereRU_209:
(7, 105677), (Start: 16 @105731 has 14 MA's), (17, 105740), (18, 105767), (20, 105785), (23, 105815), (31, 105878),

Gene: Wipeout_214 Start: 107947, Stop: 108087, Start Num: 15
Candidate Starts for Wipeout_214:
(1, 107782), (2, 107821), (6, 107884), (8, 107899), (9, 107902), (Start: 15 @107947 has 30 MA's), (20, 108001), (26, 108052), (31, 108079),

Gene: Wofford_224 Start: 110638, Stop: 110778, Start Num: 15
Candidate Starts for Wofford_224:
(8, 110590), (9, 110593), (Start: 15 @110638 has 30 MA's), (20, 110692), (24, 110725), (26, 110743), (27, 110749), (31, 110770),