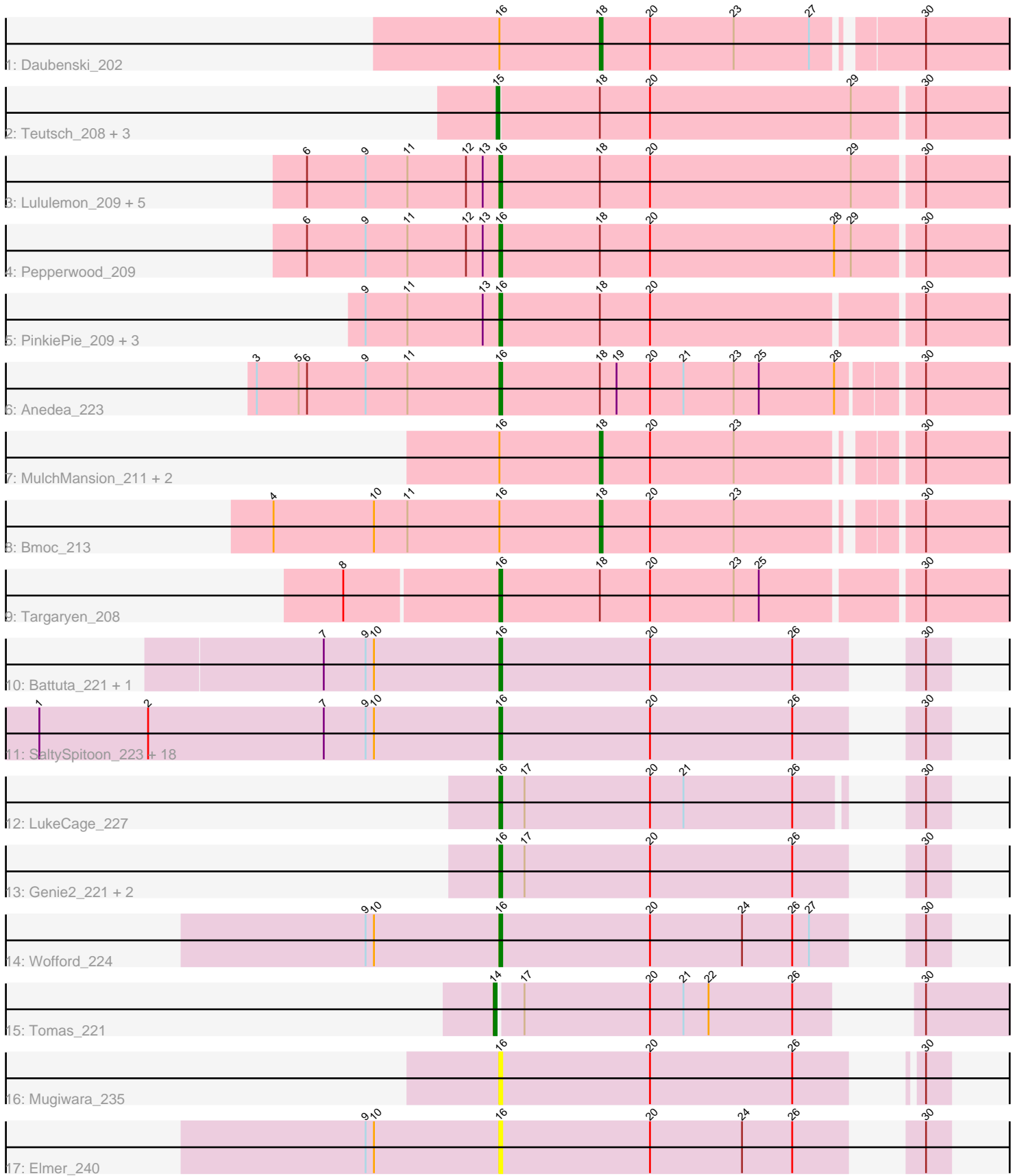


Pham 171523



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 171523 Report

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

Pham number 171523 has 51 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Daubenski_202
- Track 2 : Teutsch_208, Leo04_210, EGole_212, Peebs_206
- Track 3 : Lululemon_209, Samisti12_213, Cross_208, Watermoore_208, PacManQ_210, Cursive_211
- Track 4 : Pepperwood_209
- Track 5 : PinkiePie_209, Liandry_209, Paradiddles_201, Squillium_212
- Track 6 : Anedea_223
- Track 7 : MulchMansion_211, LilMartin_207, Angela_210
- Track 8 : Bmoc_213
- Track 9 : Targaryen_208
- Track 10 : Battuta_221, Bordeaux_221
- Track 11 : SaltySpittoon_223, KentuckyRacer_234, TomSawyer_227, Birchlyn_222, JimJam_230, Starbow_220, Gibbi_231, CeilingFan_235, Spelly_228, Quaran19_223, Jollison_227, Karimac_223, IchabodCrane_217, Amabiko_227, Spilled_230, Wipeout_214, PumpkinSpice_226, MindFlayer_216, Enygma_231
- Track 12 : LukeCage_227
- Track 13 : Genie2_221, StarPlatinum_231, BoomerJR_221
- Track 14 : Wofford_224
- Track 15 : Tomas_221
- Track 16 : Mugiwara_235
- Track 17 : Elmer_240

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

The start number called the most often in the published annotations is 16, it was called in 33 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko_227, Anedea_223, Battuta_221, Birchlyn_222, BoomerJR_221, Bordeaux_221, CeilingFan_235, Cross_208, Cursive_211, Elmer_240, Enygma_231, Genie2_221, Gibbi_231, IchabodCrane_217, JimJam_230, Jollison_227, Karimac_223, KentuckyRacer_234, Liandry_209, LukeCage_227, Lululemon_209, MindFlayer_216, Mugiwara_235, PacManQ_210, Paradiddles_201, Pepperwood_209, PinkiePie_209, PumpkinSpice_226, Quaran19_223,

SaltySpitoon_223, Samisti12_213, Spelly_228, Spilled_230, Squillium_212, StarPlatinum_231, Starbow_220, Targaryen_208, TomSawyer_227, Watermoore_208, Wipeout_214, Wofford_224,

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

- Angela_210, Bmoc_213, Daubenski_202, LilMartin_207, MulchMansion_211,

Genes that do not have the "Most Annotated" start:

- EGole_212, Leo04_210, Peebs_206, Teutsch_208, Tomas_221,

Summary by start number:

Start 14:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tomas_221 (BE2),

Start 15:

- Found in 4 of 51 (7.8%) of genes in pham
- Manual Annotations of this start: 4 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EGole_212 (BE1), Leo04_210 (BE1), Peebs_206 (BE1), Teutsch_208 (BE1),

Start 16:

- Found in 46 of 51 (90.2%) of genes in pham
- Manual Annotations of this start: 33 of 43
- Called 89.1% of time when present
- Phage (with cluster) where this start called: Amabiko_227 (BE2), Anedea_223 (BE1), Battuta_221 (BE2), Birchlyn_222 (BE2), BoomerJR_221 (BE2), Bordeaux_221 (BE2), CeilingFan_235 (BE2), Cross_208 (BE1), Cursive_211 (BE1), Elmer_240 (BE2), Enygma_231 (BE2), Genie2_221 (BE2), Gibbi_231 (BE2), IchabodCrane_217 (BE2), JimJam_230 (BE2), Jollison_227 (BE2), Karimac_223 (BE2), KentuckyRacer_234 (BE2), Liandry_209 (BE1), LukeCage_227 (BE2), Lululemon_209 (BE1), MindFlayer_216 (BE2), Mugiwara_235 (BE2), PacManQ_210 (BE1), Paradiddles_201 (BE1), Pepperwood_209 (BE1), PinkiePie_209 (BE1), PumpkinSpice_226 (BE2), Quaran19_223 (BE2), SaltySpitoon_223 (BE2), Samisti12_213 (BE1), Spelly_228 (BE2), Spilled_230 (BE2), Squillium_212 (BE1), StarPlatinum_231 (BE2), Starbow_220 (BE2), Targaryen_208 (BE1), TomSawyer_227 (BE2), Watermoore_208 (BE1), Wipeout_214 (BE2), Wofford_224 (BE2),

Start 18:

- Found in 22 of 51 (43.1%) of genes in pham
- Manual Annotations of this start: 5 of 43
- Called 22.7% of time when present
- Phage (with cluster) where this start called: Angela_210 (BE1), Bmoc_213 (BE1), Daubenski_202 (BE1), LilMartin_207 (BE1), MulchMansion_211 (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 11 times for cluster BE1.
- Start number 18 was manually annotated 5 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 14 was manually annotated 1 time for cluster BE2.
- Start number 16 was manually annotated 22 times for cluster BE2.

Gene Information:

Gene: Amabiko_227 Start: 107130, Stop: 107270, Start Num: 16

Candidate Starts for Amabiko_227:

(1, 106965), (2, 107004), (7, 107067), (9, 107082), (10, 107085), (Start: 16 @107130 has 33 MA's), (20, 107184), (26, 107235), (30, 107262),

Gene: Anedea_223 Start: 108049, Stop: 108228, Start Num: 16

Candidate Starts for Anedea_223:

(3, 107962), (5, 107977), (6, 107980), (9, 108001), (11, 108016), (Start: 16 @108049 has 33 MA's), (Start: 18 @108085 has 5 MA's), (19, 108091), (20, 108103), (21, 108115), (23, 108133), (25, 108142), (28, 108169), (30, 108196),

Gene: Angela_210 Start: 105164, Stop: 105301, Start Num: 18

Candidate Starts for Angela_210:

(Start: 16 @105128 has 33 MA's), (Start: 18 @105164 has 5 MA's), (20, 105182), (23, 105212), (30, 105269),

Gene: Battuta_221 Start: 106445, Stop: 106585, Start Num: 16

Candidate Starts for Battuta_221:

(7, 106382), (9, 106397), (10, 106400), (Start: 16 @106445 has 33 MA's), (20, 106499), (26, 106550), (30, 106577),

Gene: Birchlyn_222 Start: 104378, Stop: 104518, Start Num: 16

Candidate Starts for Birchlyn_222:

(1, 104213), (2, 104252), (7, 104315), (9, 104330), (10, 104333), (Start: 16 @104378 has 33 MA's), (20, 104432), (26, 104483), (30, 104510),

Gene: Bmoc_213 Start: 105977, Stop: 106114, Start Num: 18

Candidate Starts for Bmoc_213:

(4, 105860), (10, 105896), (11, 105908), (Start: 16 @105941 has 33 MA's), (Start: 18 @105977 has 5 MA's), (20, 105995), (23, 106025), (30, 106082),

Gene: BoomerJR_221 Start: 107448, Stop: 107588, Start Num: 16

Candidate Starts for BoomerJR_221:

(Start: 16 @107448 has 33 MA's), (17, 107457), (20, 107502), (26, 107553), (30, 107580),

Gene: Bordeaux_221 Start: 107028, Stop: 107168, Start Num: 16

Candidate Starts for Bordeaux_221:

(7, 106965), (9, 106980), (10, 106983), (Start: 16 @107028 has 33 MA's), (20, 107082), (26, 107133), (30, 107160),

Gene: CeilingFan_235 Start: 107823, Stop: 107963, Start Num: 16

Candidate Starts for CeilingFan_235:

(1, 107658), (2, 107697), (7, 107760), (9, 107775), (10, 107778), (Start: 16 @107823 has 33 MA's), (20, 107877), (26, 107928), (30, 107955),

Gene: Cross_208 Start: 106465, Stop: 106668, Start Num: 16

Candidate Starts for Cross_208:

(6, 106396), (9, 106417), (11, 106432), (12, 106453), (13, 106459), (Start: 16 @106465 has 33 MA's), (Start: 18 @106501 has 5 MA's), (20, 106519), (29, 106591), (30, 106615),

Gene: Cursive_211 Start: 106149, Stop: 106352, Start Num: 16

Candidate Starts for Cursive_211:

(6, 106080), (9, 106101), (11, 106116), (12, 106137), (13, 106143), (Start: 16 @106149 has 33 MA's), (Start: 18 @106185 has 5 MA's), (20, 106203), (29, 106275), (30, 106299),

Gene: Daubenski_202 Start: 106555, Stop: 106716, Start Num: 18

Candidate Starts for Daubenski_202:

(Start: 16 @106519 has 33 MA's), (Start: 18 @106555 has 5 MA's), (20, 106573), (23, 106603), (27, 106630), (30, 106663),

Gene: EGole_212 Start: 108162, Stop: 108365, Start Num: 15

Candidate Starts for EGole_212:

(Start: 15 @108162 has 4 MA's), (Start: 18 @108198 has 5 MA's), (20, 108216), (29, 108288), (30, 108312),

Gene: Elmer_240 Start: 110772, Stop: 110912, Start Num: 16

Candidate Starts for Elmer_240:

(9, 110724), (10, 110727), (Start: 16 @110772 has 33 MA's), (20, 110826), (24, 110859), (26, 110877), (30, 110904),

Gene: Enygma_231 Start: 110232, Stop: 110372, Start Num: 16

Candidate Starts for Enygma_231:

(1, 110067), (2, 110106), (7, 110169), (9, 110184), (10, 110187), (Start: 16 @110232 has 33 MA's), (20, 110286), (26, 110337), (30, 110364),

Gene: Genie2_221 Start: 107573, Stop: 107713, Start Num: 16

Candidate Starts for Genie2_221:

(Start: 16 @107573 has 33 MA's), (17, 107582), (20, 107627), (26, 107678), (30, 107705),

Gene: Gibbi_231 Start: 107316, Stop: 107456, Start Num: 16

Candidate Starts for Gibbi_231:

(1, 107151), (2, 107190), (7, 107253), (9, 107268), (10, 107271), (Start: 16 @107316 has 33 MA's), (20, 107370), (26, 107421), (30, 107448),

Gene: IchabodCrane_217 Start: 106831, Stop: 106971, Start Num: 16

Candidate Starts for IchabodCrane_217:

(1, 106666), (2, 106705), (7, 106768), (9, 106783), (10, 106786), (Start: 16 @106831 has 33 MA's), (20, 106885), (26, 106936), (30, 106963),

Gene: JimJam_230 Start: 108752, Stop: 108892, Start Num: 16

Candidate Starts for JimJam_230:

(1, 108587), (2, 108626), (7, 108689), (9, 108704), (10, 108707), (Start: 16 @108752 has 33 MA's), (20, 108806), (26, 108857), (30, 108884),

Gene: Jollison_227 Start: 106962, Stop: 107102, Start Num: 16

Candidate Starts for Jollison_227:

(1, 106797), (2, 106836), (7, 106899), (9, 106914), (10, 106917), (Start: 16 @106962 has 33 MA's), (20, 107016), (26, 107067), (30, 107094),

Gene: Karimac_223 Start: 107147, Stop: 107287, Start Num: 16

Candidate Starts for Karimac_223:

(1, 106982), (2, 107021), (7, 107084), (9, 107099), (10, 107102), (Start: 16 @107147 has 33 MA's), (20, 107201), (26, 107252), (30, 107279),

Gene: KentuckyRacer_234 Start: 108667, Stop: 108807, Start Num: 16

Candidate Starts for KentuckyRacer_234:

(1, 108502), (2, 108541), (7, 108604), (9, 108619), (10, 108622), (Start: 16 @108667 has 33 MA's), (20, 108721), (26, 108772), (30, 108799),

Gene: Leo04_210 Start: 106846, Stop: 107049, Start Num: 15

Candidate Starts for Leo04_210:

(Start: 15 @106846 has 4 MA's), (Start: 18 @106882 has 5 MA's), (20, 106900), (29, 106972), (30, 106996),

Gene: Liandry_209 Start: 105926, Stop: 106126, Start Num: 16

Candidate Starts for Liandry_209:

(9, 105878), (11, 105893), (13, 105920), (Start: 16 @105926 has 33 MA's), (Start: 18 @105962 has 5 MA's), (20, 105980), (30, 106073),

Gene: LilMartin_207 Start: 104528, Stop: 104665, Start Num: 18

Candidate Starts for LilMartin_207:

(Start: 16 @104492 has 33 MA's), (Start: 18 @104528 has 5 MA's), (20, 104546), (23, 104576), (30, 104633),

Gene: LukeCage_227 Start: 109429, Stop: 109566, Start Num: 16

Candidate Starts for LukeCage_227:

(Start: 16 @109429 has 33 MA's), (17, 109438), (20, 109483), (21, 109495), (26, 109534), (30, 109558),

Gene: Lululemon_209 Start: 105201, Stop: 105404, Start Num: 16

Candidate Starts for Lululemon_209:

(6, 105132), (9, 105153), (11, 105168), (12, 105189), (13, 105195), (Start: 16 @105201 has 33 MA's), (Start: 18 @105237 has 5 MA's), (20, 105255), (29, 105327), (30, 105351),

Gene: MindFlayer_216 Start: 106347, Stop: 106487, Start Num: 16

Candidate Starts for MindFlayer_216:

(1, 106182), (2, 106221), (7, 106284), (9, 106299), (10, 106302), (Start: 16 @106347 has 33 MA's), (20, 106401), (26, 106452), (30, 106479),

Gene: Mugiwara_235 Start: 109929, Stop: 110066, Start Num: 16

Candidate Starts for Mugiwara_235:

(Start: 16 @109929 has 33 MA's), (20, 109983), (26, 110034), (30, 110058),

Gene: MulchMansion_211 Start: 106162, Stop: 106299, Start Num: 18

Candidate Starts for MulchMansion_211:

(Start: 16 @106126 has 33 MA's), (Start: 18 @106162 has 5 MA's), (20, 106180), (23, 106210), (30, 106267),

Gene: PacManQ_210 Start: 105201, Stop: 105404, Start Num: 16

Candidate Starts for PacManQ_210:

(6, 105132), (9, 105153), (11, 105168), (12, 105189), (13, 105195), (Start: 16 @105201 has 33 MA's), (Start: 18 @105237 has 5 MA's), (20, 105255), (29, 105327), (30, 105351),

Gene: Paradiddles_201 Start: 107113, Stop: 107313, Start Num: 16

Candidate Starts for Paradiddles_201:

(9, 107065), (11, 107080), (13, 107107), (Start: 16 @107113 has 33 MA's), (Start: 18 @107149 has 5 MA's), (20, 107167), (30, 107260),

Gene: Peebs_206 Start: 106252, Stop: 106455, Start Num: 15

Candidate Starts for Peebs_206:

(Start: 15 @106252 has 4 MA's), (Start: 18 @106288 has 5 MA's), (20, 106306), (29, 106378), (30, 106402),

Gene: Pepperwood_209 Start: 106487, Stop: 106690, Start Num: 16

Candidate Starts for Pepperwood_209:

(6, 106418), (9, 106439), (11, 106454), (12, 106475), (13, 106481), (Start: 16 @106487 has 33 MA's), (Start: 18 @106523 has 5 MA's), (20, 106541), (28, 106607), (29, 106613), (30, 106637),

Gene: PinkiePie_209 Start: 105926, Stop: 106126, Start Num: 16

Candidate Starts for PinkiePie_209:

(9, 105878), (11, 105893), (13, 105920), (Start: 16 @105926 has 33 MA's), (Start: 18 @105962 has 5 MA's), (20, 105980), (30, 106073),

Gene: PumpkinSpice_226 Start: 107568, Stop: 107708, Start Num: 16

Candidate Starts for PumpkinSpice_226:

(1, 107403), (2, 107442), (7, 107505), (9, 107520), (10, 107523), (Start: 16 @107568 has 33 MA's), (20, 107622), (26, 107673), (30, 107700),

Gene: Quaran19_223 Start: 107009, Stop: 107149, Start Num: 16

Candidate Starts for Quaran19_223:

(1, 106844), (2, 106883), (7, 106946), (9, 106961), (10, 106964), (Start: 16 @107009 has 33 MA's), (20, 107063), (26, 107114), (30, 107141),

Gene: SaltySpittoon_223 Start: 106551, Stop: 106691, Start Num: 16

Candidate Starts for SaltySpittoon_223:

(1, 106386), (2, 106425), (7, 106488), (9, 106503), (10, 106506), (Start: 16 @106551 has 33 MA's), (20, 106605), (26, 106656), (30, 106683),

Gene: Samisti12_213 Start: 108111, Stop: 108314, Start Num: 16

Candidate Starts for Samisti12_213:

(6, 108042), (9, 108063), (11, 108078), (12, 108099), (13, 108105), (Start: 16 @108111 has 33 MA's), (Start: 18 @108147 has 5 MA's), (20, 108165), (29, 108237), (30, 108261),

Gene: Spelly_228 Start: 106480, Stop: 106620, Start Num: 16

Candidate Starts for Spelly_228:

(1, 106315), (2, 106354), (7, 106417), (9, 106432), (10, 106435), (Start: 16 @106480 has 33 MA's), (20, 106534), (26, 106585), (30, 106612),

Gene: Spilled_230 Start: 107684, Stop: 107824, Start Num: 16
Candidate Starts for Spilled_230:
(1, 107519), (2, 107558), (7, 107621), (9, 107636), (10, 107639), (Start: 16 @107684 has 33 MA's),
(20, 107738), (26, 107789), (30, 107816),

Gene: Squillium_212 Start: 105928, Stop: 106128, Start Num: 16
Candidate Starts for Squillium_212:
(9, 105880), (11, 105895), (13, 105922), (Start: 16 @105928 has 33 MA's), (Start: 18 @105964 has 5
MA's), (20, 105982), (30, 106075),

Gene: StarPlatinum_231 Start: 109660, Stop: 109797, Start Num: 16
Candidate Starts for StarPlatinum_231:
(Start: 16 @109660 has 33 MA's), (17, 109669), (20, 109714), (26, 109765), (30, 109789),

Gene: Starbow_220 Start: 106524, Stop: 106664, Start Num: 16
Candidate Starts for Starbow_220:
(1, 106359), (2, 106398), (7, 106461), (9, 106476), (10, 106479), (Start: 16 @106524 has 33 MA's),
(20, 106578), (26, 106629), (30, 106656),

Gene: Targaryen_208 Start: 107305, Stop: 107505, Start Num: 16
Candidate Starts for Targaryen_208:
(8, 107251), (Start: 16 @107305 has 33 MA's), (Start: 18 @107341 has 5 MA's), (20, 107359), (23,
107389), (25, 107398), (30, 107452),

Gene: Teutsch_208 Start: 106940, Stop: 107143, Start Num: 15
Candidate Starts for Teutsch_208:
(Start: 15 @106940 has 4 MA's), (Start: 18 @106976 has 5 MA's), (20, 106994), (29, 107066), (30,
107090),

Gene: TomSawyer_227 Start: 108995, Stop: 109135, Start Num: 16
Candidate Starts for TomSawyer_227:
(1, 108830), (2, 108869), (7, 108932), (9, 108947), (10, 108950), (Start: 16 @108995 has 33 MA's),
(20, 109049), (26, 109100), (30, 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), (30, 108069),

Gene: Watermoore_208 Start: 107463, Stop: 107666, Start Num: 16
Candidate Starts for Watermoore_208:
(6, 107394), (9, 107415), (11, 107430), (12, 107451), (13, 107457), (Start: 16 @107463 has 33 MA's),
(Start: 18 @107499 has 5 MA's), (20, 107517), (29, 107589), (30, 107613),

Gene: Wipeout_214 Start: 107947, Stop: 108087, Start Num: 16
Candidate Starts for Wipeout_214:
(1, 107782), (2, 107821), (7, 107884), (9, 107899), (10, 107902), (Start: 16 @107947 has 33 MA's),
(20, 108001), (26, 108052), (30, 108079),

Gene: Wofford_224 Start: 110638, Stop: 110778, Start Num: 16
Candidate Starts for Wofford_224:

(9, 110590), (10, 110593), (Start: 16 @110638 has 33 MA's), (20, 110692), (24, 110725), (26, 110743), (27, 110749), (30, 110770),