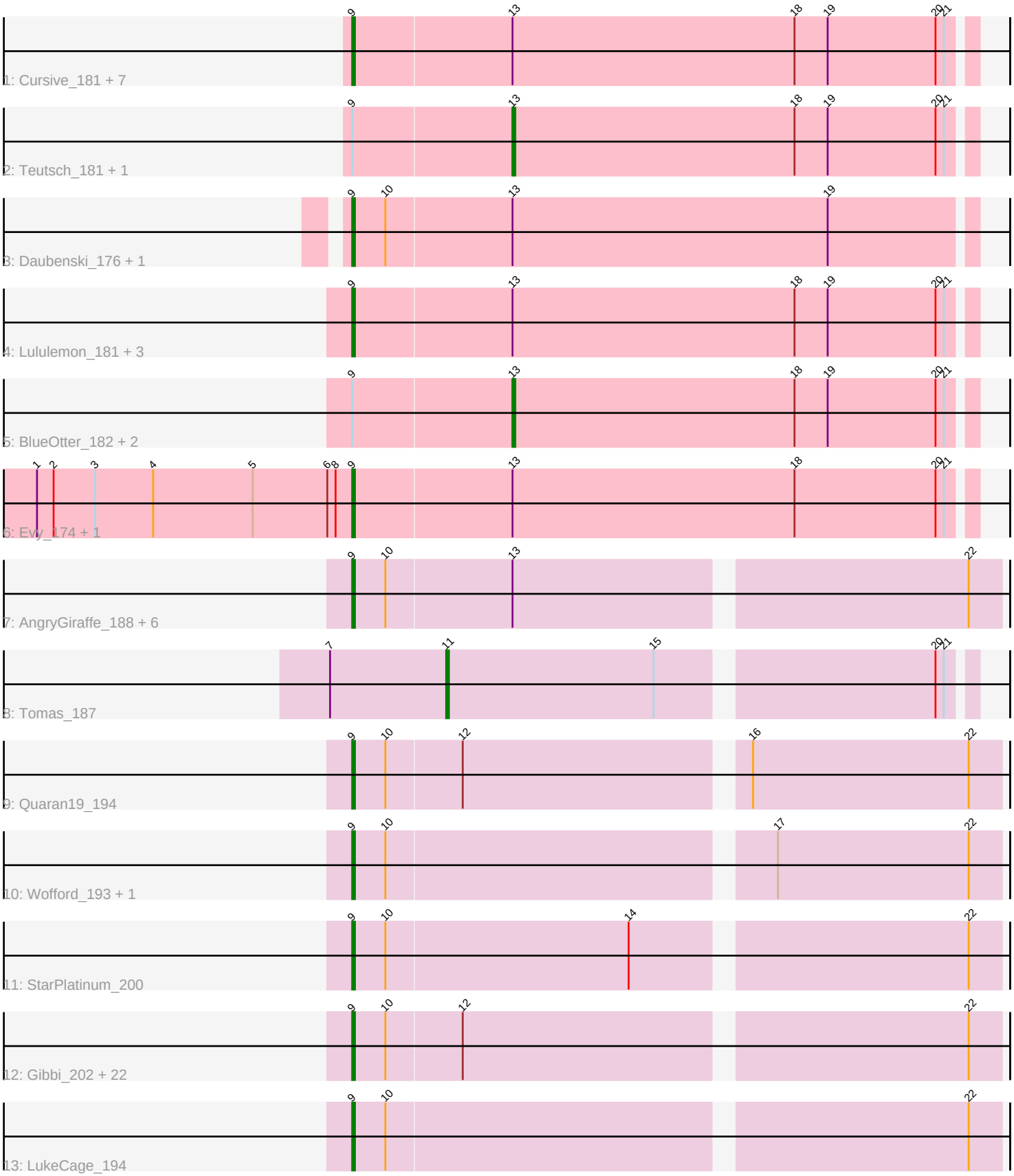
Pham 291200


1: Cursive_181 + 7
2: Teutsch_181 + 1
3: Daubenski_176 + 1
4: Lululemon_181 + 3
5: BlueOtter_182 + 2
6: Evy_174 + 1
7: AngryGiraffe_188 + 6
8: Tomas_187
9: Quaran19_194
10: Wofford_193 + 1
11: StarPlatinum_200
12: Gibbi_202 + 22
13: LukeCage_194

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 291200 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291200 has 57 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Cursive_181, Samisti12_185, Pepperwood_182, Tribute_180, Leo04_184, Sushi23_183, Scheme_186, Peebs_180
• Track 2 : Teutsch_181, Larnav_183
• Track 3 : Daubenski_176, Cadmus_177
• Track 4 : Lululemon_181, PacManQ_181, Cross_182, Coogler_181
• Track 5 : BlueOtter_182, Watermoore_181, HangryHippo_182
• Track 6 : Evy_174, Targaryen_182
• Track 7 : AngryGiraffe_188, Enygma_199, Sollertia_190, Yaboi_193, Genie2_189, BoomerJR_189, Stanimal_189
• Track 8 : Tomas_187
• Track 9 : Quaran19_194
• Track 10 : Wofford_193, Elmer_200
• Track 11 : StarPlatinum_200
• Track 12 : Gibbi_202, Battuta_192, JimJam_201, KentuckyRacer_200, Spelly_197, Amabiko_198, PumpkinSpice_196, Mugiwara_196, Karimac_194, CeilingFan_198, Rikishi_194, AcciDwight_202, TomSawyer_199, Wipeout_186, Jollison_191, Bordeaux_193, Brizzy_194, SaltySpitoon_193, Birchlyn_193, IchabodCrane_190, Spilled_200, MindFlayer_187, Starbow_192
• Track 13 : LukeCage_194

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

The start number called the most often in the published annotations is 9, it was called in 49 of the 55 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AcciDwight_202, Amabiko_198, AngryGiraffe_188, Battuta_192, Birchlyn_193, BoomerJR_189, Bordeaux_193, Brizzy_194, Cadmus_177, CeilingFan_198, Coogler_181, Cross_182, Cursive_181, Daubenski_176, Elmer_200, Enygma_199, Evy_174, Genie2_189, Gibbi_202, IchabodCrane_190, JimJam_201, Jollison_191, Karimac_194, KentuckyRacer_200, Leo04_184, LukeCage_194, Lululemon_181, MindFlayer_187, Mugiwara_196, PacManQ_181, Peebs_180, Pepperwood_182, PumpkinSpice_196, Quaran19_194, Rikishi_194, SaltySpitoon_193, Samisti12_185, Scheme_186, Sollertia_190, Spelly_197, Spilled_200, Stanimal_189,

StarPlatinum_200, Starbow_192, Sushi23_183, Targaryen_182, TomSawyer_199, Tribute_180, Wipeout_186, Wofford_193, Yaboi_193,

Genes that have the "Most Annotated" start but do not call it:
• BlueOtter_182, HangryHippo_182, Larnav_183, Teutsch_181, Watermoore_181,

Genes that do not have the "Most Annotated" start:
• Tomas_187,

Summary by start number:

Start 9:
• Found in 56 of 57 (98.2%) of genes in pham
• Manual Annotations of this start: 49 of 55
• Called 91.1% of time when present
• Phage (with cluster) where this start called: AcciDwight_202 (BE2), Amabiko_198 (BE2), AngryGiraffe_188 (BE2), Battuta_192 (BE2), Birchlyn_193 (BE2), BoomerJR_189 (BE2), Bordeaux_193 (BE2), Brizzy_194 (BE2), Cadmus_177 (BE1), CeilingFan_198 (BE2), Coogler_181 (BE1), Cross_182 (BE1), Cursive_181 (BE1), Daubenski_176 (BE1), Elmer_200 (BE2), Enygma_199 (BE2), Evy_174 (BE1), Genie2_189 (BE2), Gibbi_202 (BE2), IchabodCrane_190 (BE2), JimJam_201 (BE2), Jollison_191 (BE2), Karimac_194 (BE2), KentuckyRacer_200 (BE2), Leo04_184 (BE1), LukeCage_194 (BE2), Lululemon_181 (BE1), MindFlayer_187 (BE2), Mugiwara_196 (BE2), PacManQ_181 (BE1), Peebs_180 (BE1), Pepperwood_182 (BE1), PumpkinSpice_196 (BE2), Quaran19_194 (BE2), Rikishi_194 (BE2), SaltySpitoon_193 (BE2), Samisti12_185 (BE1), Scheme_186 (BE1), Sollertia_190 (BE2), Spelly_197 (BE2), Spilled_200 (BE2), Stanimal_189 (BE2), StarPlatinum_200 (BE2), Starbow_192 (BE2), Sushi23_183 (BE1), Targaryen_182 (BE1), TomSawyer_199 (BE2), Tribute_180 (BE1), Wipeout_186 (BE2), Wofford_193 (BE2), Yaboi_193 (BE2),

Start 11:
• Found in 1 of 57 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 55
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Tomas_187 (BE2),

Start 13:
• Found in 28 of 57 (49.1%) of genes in pham
• Manual Annotations of this start: 5 of 55
• Called 17.9% of time when present
• Phage (with cluster) where this start called: BlueOtter_182 (BE1), HangryHippo_182 (BE1), Larnav_183 (BE1), Teutsch_181 (BE1), Watermoore_181 (BE1),

Summary by clusters:

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

Info for manual annotations of cluster BE1:
•Start number 9 was manually annotated 16 times for cluster BE1.
•Start number 13 was manually annotated 5 times for cluster BE1.

Info for manual annotations of cluster BE2:

•Start number 9 was manually annotated 33 times for cluster BE2.
•Start number 11 was manually annotated 1 time for cluster BE2.

Gene Information:

Gene: AcciDwight_202 Start: 98523, Stop: 98747, Start Num: 9
Candidate Starts for AcciDwight_202:
(Start: 9 @98523 has 49 MA's), (10, 98535), (12, 98562), (22, 98736),

Gene: Amabiko_198 Start: 98341, Stop: 98565, Start Num: 9
Candidate Starts for Amabiko_198:
(Start: 9 @98341 has 49 MA's), (10, 98353), (12, 98380), (22, 98554),

Gene: AngryGiraffe_188 Start: 97200, Stop: 97424, Start Num: 9
Candidate Starts for AngryGiraffe_188:
(Start: 9 @97200 has 49 MA's), (10, 97212), (Start: 13 @97257 has 5 MA's), (22, 97413),

Gene: Battuta_192 Start: 97657, Stop: 97881, Start Num: 9
Candidate Starts for Battuta_192:
(Start: 9 @97657 has 49 MA's), (10, 97669), (12, 97696), (22, 97870),

Gene: Birchlyn_193 Start: 95589, Stop: 95813, Start Num: 9
Candidate Starts for Birchlyn_193:
(Start: 9 @95589 has 49 MA's), (10, 95601), (12, 95628), (22, 95802),

Gene: BlueOtter_182 Start: 97284, Stop: 97448, Start Num: 13
Candidate Starts for BlueOtter_182:
(Start: 9 @97227 has 49 MA's), (Start: 13 @97284 has 5 MA's), (18, 97386), (19, 97398), (20, 97437), (21, 97440),

Gene: BoomerJR_189 Start: 97633, Stop: 97857, Start Num: 9
Candidate Starts for BoomerJR_189:
(Start: 9 @97633 has 49 MA's), (10, 97645), (Start: 13 @97690 has 5 MA's), (22, 97846),

Gene: Bordeaux_193 Start: 98240, Stop: 98464, Start Num: 9
Candidate Starts for Bordeaux_193:
(Start: 9 @98240 has 49 MA's), (10, 98252), (12, 98279), (22, 98453),

Gene: Brizzy_194 Start: 98785, Stop: 99009, Start Num: 9
Candidate Starts for Brizzy_194:
(Start: 9 @98785 has 49 MA's), (10, 98797), (12, 98824), (22, 98998),

Gene: Cadmus_177 Start: 96509, Stop: 96730, Start Num: 9
Candidate Starts for Cadmus_177:
(Start: 9 @96509 has 49 MA's), (10, 96521), (Start: 13 @96566 has 5 MA's), (19, 96680),

Gene: CeilingFan_198 Start: 99034, Stop: 99258, Start Num: 9
Candidate Starts for CeilingFan_198:
(Start: 9 @99034 has 49 MA's), (10, 99046), (12, 99073), (22, 99247),

Gene: Coogler_181 Start: 97896, Stop: 98117, Start Num: 9

Candidate Starts for Coogler_181:
(Start: 9 @97896 has 49 MA's), (Start: 13 @97953 has 5 MA's), (18, 98055), (19, 98067), (20, 98106), (21, 98109),

Gene: Cross_182 Start: 97872, Stop: 98093, Start Num: 9
Candidate Starts for Cross_182:
(Start: 9 @97872 has 49 MA's), (Start: 13 @97929 has 5 MA's), (18, 98031), (19, 98043), (20, 98082), (21, 98085),

Gene: Cursive_181 Start: 96082, Stop: 96303, Start Num: 9
Candidate Starts for Cursive_181:
(Start: 9 @96082 has 49 MA's), (Start: 13 @96139 has 5 MA's), (18, 96241), (19, 96253), (20, 96292), (21, 96295),

Gene: Daubenski_176 Start: 97746, Stop: 97967, Start Num: 9
Candidate Starts for Daubenski_176:
(Start: 9 @97746 has 49 MA's), (10, 97758), (Start: 13 @97803 has 5 MA's), (19, 97917),

Gene: Elmer_200 Start: 101140, Stop: 101364, Start Num: 9
Candidate Starts for Elmer_200:
(Start: 9 @101140 has 49 MA's), (10, 101152), (17, 101284), (22, 101353),

Gene: Enygma_199 Start: 100871, Stop: 101095, Start Num: 9
Candidate Starts for Enygma_199:
(Start: 9 @100871 has 49 MA's), (10, 100883), (Start: 13 @100928 has 5 MA's), (22, 101084),

Gene: Evy_174 Start: 97572, Stop: 97793, Start Num: 9
Candidate Starts for Evy_174:
(1, 97458), (2, 97464), (3, 97479), (4, 97500), (5, 97536), (6, 97563), (8, 97566), (Start: 9 @97572 has 49 MA's), (Start: 13 @97629 has 5 MA's), (18, 97731), (20, 97782), (21, 97785),

Gene: Genie2_189 Start: 97747, Stop: 97971, Start Num: 9
Candidate Starts for Genie2_189:
(Start: 9 @97747 has 49 MA's), (10, 97759), (Start: 13 @97804 has 5 MA's), (22, 97960),

Gene: Gibbi_202 Start: 98527, Stop: 98751, Start Num: 9
Candidate Starts for Gibbi_202:
(Start: 9 @98527 has 49 MA's), (10, 98539), (12, 98566), (22, 98740),

Gene: HangryHippo_182 Start: 97284, Stop: 97448, Start Num: 13
Candidate Starts for HangryHippo_182:
(Start: 9 @97227 has 49 MA's), (Start: 13 @97284 has 5 MA's), (18, 97386), (19, 97398), (20, 97437), (21, 97440),

Gene: IchabodCrane_190 Start: 98042, Stop: 98266, Start Num: 9
Candidate Starts for IchabodCrane_190:
(Start: 9 @98042 has 49 MA's), (10, 98054), (12, 98081), (22, 98255),

Gene: JimJam_201 Start: 99963, Stop: 100187, Start Num: 9
Candidate Starts for JimJam_201:
(Start: 9 @99963 has 49 MA's), (10, 99975), (12, 100002), (22, 100176),

Gene: Jollison_191 Start: 98173, Stop: 98400, Start Num: 9

Candidate Starts for Jollison_191:
(Start: 9 @98173 has 49 MA's), (10, 98185), (12, 98212), (22, 98386),

Gene: Karimac_194 Start: 98367, Stop: 98591, Start Num: 9
Candidate Starts for Karimac_194:
(Start: 9 @98367 has 49 MA's), (10, 98379), (12, 98406), (22, 98580),

Gene: KentuckyRacer_200 Start: 99878, Stop: 100102, Start Num: 9
Candidate Starts for KentuckyRacer_200:
(Start: 9 @99878 has 49 MA's), (10, 99890), (12, 99917), (22, 100091),

Gene: Larnav_183 Start: 97904, Stop: 98068, Start Num: 13
Candidate Starts for Larnav_183:
(Start: 9 @97847 has 49 MA's), (Start: 13 @97904 has 5 MA's), (18, 98006), (19, 98018), (20, 98057), (21, 98060),

Gene: Leo04_184 Start: 98238, Stop: 98459, Start Num: 9
Candidate Starts for Leo04_184:
(Start: 9 @98238 has 49 MA's), (Start: 13 @98295 has 5 MA's), (18, 98397), (19, 98409), (20, 98448), (21, 98451),

Gene: LukeCage_194 Start: 99297, Stop: 99521, Start Num: 9
Candidate Starts for LukeCage_194:
(Start: 9 @99297 has 49 MA's), (10, 99309), (22, 99510),

Gene: Lululemon_181 Start: 96608, Stop: 96829, Start Num: 9
Candidate Starts for Lululemon_181:
(Start: 9 @96608 has 49 MA's), (Start: 13 @96665 has 5 MA's), (18, 96767), (19, 96779), (20, 96818), (21, 96821),

Gene: MindFlayer_187 Start: 97558, Stop: 97782, Start Num: 9
Candidate Starts for MindFlayer_187:
(Start: 9 @97558 has 49 MA's), (10, 97570), (12, 97597), (22, 97771),

Gene: Mugiwara_196 Start: 99700, Stop: 99924, Start Num: 9
Candidate Starts for Mugiwara_196:
(Start: 9 @99700 has 49 MA's), (10, 99712), (12, 99739), (22, 99913),

Gene: PacManQ_181 Start: 96608, Stop: 96829, Start Num: 9
Candidate Starts for PacManQ_181:
(Start: 9 @96608 has 49 MA's), (Start: 13 @96665 has 5 MA's), (18, 96767), (19, 96779), (20, 96818), (21, 96821),

Gene: Peebs_180 Start: 97550, Stop: 97771, Start Num: 9
Candidate Starts for Peebs_180:
(Start: 9 @97550 has 49 MA's), (Start: 13 @97607 has 5 MA's), (18, 97709), (19, 97721), (20, 97760), (21, 97763),

Gene: Pepperwood_182 Start: 97508, Stop: 97729, Start Num: 9
Candidate Starts for Pepperwood_182:
(Start: 9 @97508 has 49 MA's), (Start: 13 @97565 has 5 MA's), (18, 97667), (19, 97679), (20, 97718), (21, 97721),

Gene: PumpkinSpice_196 Start: 98779, Stop: 99003, Start Num: 9
Candidate Starts for PumpkinSpice_196:
(Start: 9 @98779 has 49 MA's), (10, 98791), (12, 98818), (22, 98992),

Gene: Quaran19_194 Start: 98220, Stop: 98444, Start Num: 9
Candidate Starts for Quaran19_194:
(Start: 9 @98220 has 49 MA's), (10, 98232), (12, 98259), (16, 98355), (22, 98433),

Gene: Rikishi_194 Start: 98501, Stop: 98725, Start Num: 9
Candidate Starts for Rikishi_194:
(Start: 9 @98501 has 49 MA's), (10, 98513), (12, 98540), (22, 98714),

Gene: SaltySpitoon_193 Start: 97762, Stop: 97986, Start Num: 9
Candidate Starts for SaltySpitoon_193:
(Start: 9 @97762 has 49 MA's), (10, 97774), (12, 97801), (22, 97975),

Gene: Samisti12_185 Start: 98934, Stop: 99155, Start Num: 9
Candidate Starts for Samisti12_185:
(Start: 9 @98934 has 49 MA's), (Start: 13 @98991 has 5 MA's), (18, 99093), (19, 99105), (20, 99144), (21, 99147),

Gene: Scheme_186 Start: 99115, Stop: 99336, Start Num: 9
Candidate Starts for Scheme_186:
(Start: 9 @99115 has 49 MA's), (Start: 13 @99172 has 5 MA's), (18, 99274), (19, 99286), (20, 99325), (21, 99328),

Gene: Sollertia_190 Start: 97747, Stop: 97971, Start Num: 9
Candidate Starts for Sollertia_190:
(Start: 9 @97747 has 49 MA's), (10, 97759), (Start: 13 @97804 has 5 MA's), (22, 97960),

Gene: Spelly_197 Start: 97691, Stop: 97915, Start Num: 9
Candidate Starts for Spelly_197:
(Start: 9 @97691 has 49 MA's), (10, 97703), (12, 97730), (22, 97904),

Gene: Spilled_200 Start: 98895, Stop: 99119, Start Num: 9
Candidate Starts for Spilled_200:
(Start: 9 @98895 has 49 MA's), (10, 98907), (12, 98934), (22, 99108),

Gene: Stanimal_189 Start: 98108, Stop: 98332, Start Num: 9
Candidate Starts for Stanimal_189:
(Start: 9 @98108 has 49 MA's), (10, 98120), (Start: 13 @98165 has 5 MA's), (22, 98321),

Gene: StarPlatinum_200 Start: 100164, Stop: 100388, Start Num: 9
Candidate Starts for StarPlatinum_200:
(Start: 9 @100164 has 49 MA's), (10, 100176), (14, 100263), (22, 100377),

Gene: Starbow_192 Start: 97735, Stop: 97959, Start Num: 9
Candidate Starts for Starbow_192:
(Start: 9 @97735 has 49 MA's), (10, 97747), (12, 97774), (22, 97948),

Gene: Sushi23_183 Start: 98614, Stop: 98835, Start Num: 9
Candidate Starts for Sushi23_183:

(Start: 9 @98614 has 49 MA's), (Start: 13 @98671 has 5 MA's), (18, 98773), (19, 98785), (20, 98824), (21, 98827),

Gene: Targaryen_182 Start: 98781, Stop: 99002, Start Num: 9
Candidate Starts for Targaryen_182:
(1, 98667), (2, 98673), (3, 98688), (4, 98709), (5, 98745), (6, 98772), (8, 98775), (Start: 9 @98781 has 49 MA's), (Start: 13 @98838 has 5 MA's), (18, 98940), (20, 98991), (21, 98994),

Gene: Teutsch_181 Start: 98089, Stop: 98253, Start Num: 13
Candidate Starts for Teutsch_181:
(Start: 9 @98032 has 49 MA's), (Start: 13 @98089 has 5 MA's), (18, 98191), (19, 98203), (20, 98242), (21, 98245),

Gene: TomSawyer_199 Start: 100206, Stop: 100430, Start Num: 9
Candidate Starts for TomSawyer_199:
(Start: 9 @100206 has 49 MA's), (10, 100218), (12, 100245), (22, 100419),

Gene: Tomas_187 Start: 97430, Stop: 97609, Start Num: 11
Candidate Starts for Tomas_187:
(7, 97388), (Start: 11 @97430 has 1 MA's), (15, 97505), (20, 97598), (21, 97601),

Gene: Tribute_180 Start: 98049, Stop: 98270, Start Num: 9
Candidate Starts for Tribute_180:
(Start: 9 @98049 has 49 MA's), (Start: 13 @98106 has 5 MA's), (18, 98208), (19, 98220), (20, 98259), (21, 98262),

Gene: Watermoore_181 Start: 98500, Stop: 98664, Start Num: 13
Candidate Starts for Watermoore_181:
(Start: 9 @98443 has 49 MA's), (Start: 13 @98500 has 5 MA's), (18, 98602), (19, 98614), (20, 98653), (21, 98656),

Gene: Wipeout_186 Start: 99158, Stop: 99382, Start Num: 9
Candidate Starts for Wipeout_186:
(Start: 9 @99158 has 49 MA's), (10, 99170), (12, 99197), (22, 99371),

Gene: Wofford_193 Start: 101100, Stop: 101324, Start Num: 9
Candidate Starts for Wofford_193:
(Start: 9 @101100 has 49 MA's), (10, 101112), (17, 101244), (22, 101313),

Gene: Yaboi_193 Start: 97682, Stop: 97906, Start Num: 9
Candidate Starts for Yaboi_193:
(Start: 9 @97682 has 49 MA's), (10, 97694), (Start: 13 @97739 has 5 MA's), (22, 97895),