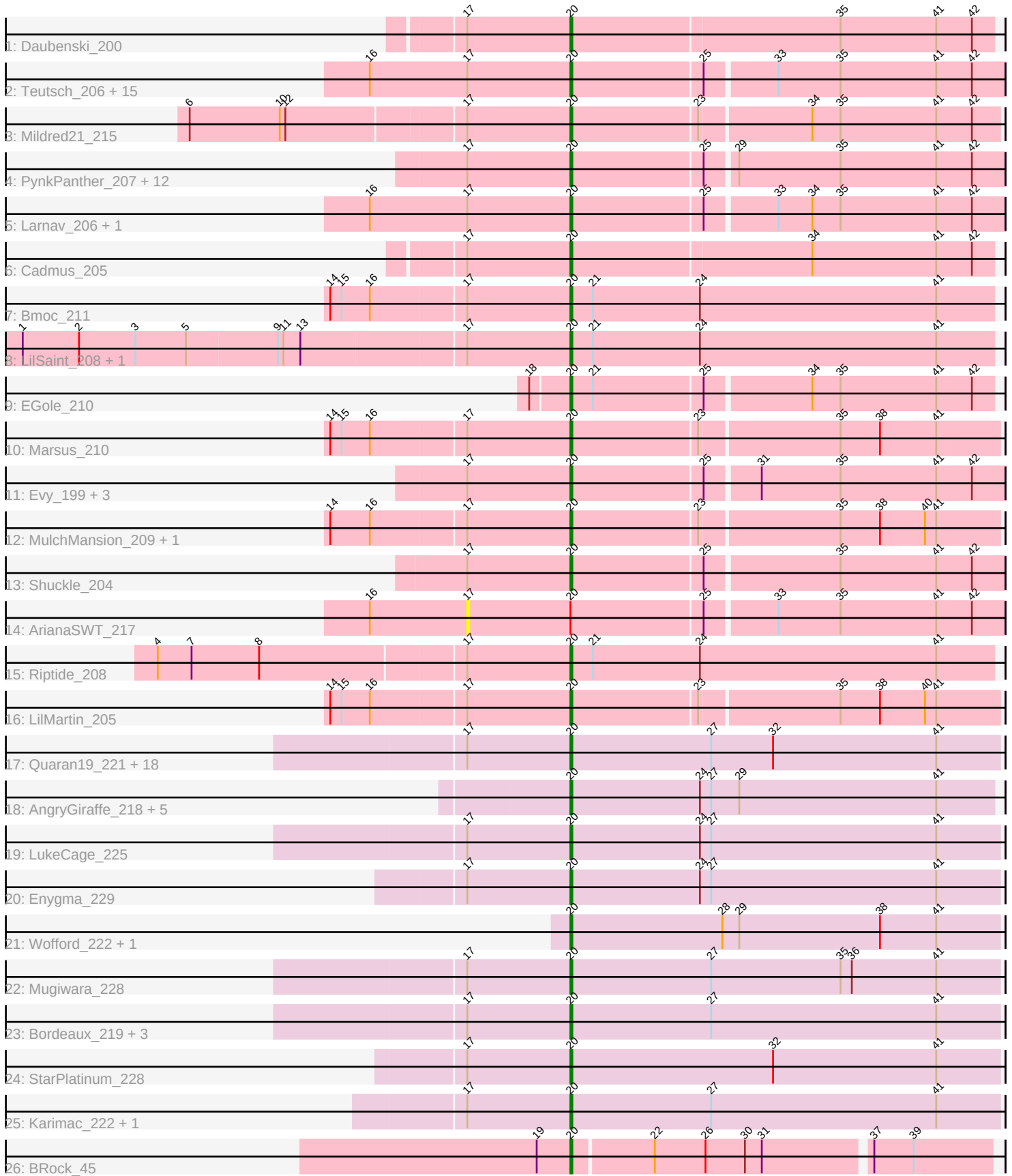


Pham 317427



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 317427 Report

This analysis was run 09/05/26 on database version 662.

Pham number 317427 has 87 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Daubenski_200
- Track 2 : Deutsch_206, Lululemon_203, Tribute_204, PacManQ_203, Watermoore_205, Sushi23_206, HangryHippo_204, WashU_203, Peebs_204, Samisti12_210, Scheme_209, BlueOtter_204, Cursive_208, Pepperwood_206, Cross_205, Leo04_208
- Track 3 : Mildred21_215
- Track 4 : PynkPanther_207, Bartholomune_207, Davielle_207, PinkiePie_206, Persimmon_209, Eliot67_207, Braelyn_204, WhereRU_206, Navo_201, NootNoot_203, Liandry_206, Squillium_209, FreddyDRoo_206
- Track 5 : Larnav_206, Coogler_204
- Track 6 : Cadmus_205
- Track 7 : Bmoc_211
- Track 8 : LilSaint_208, Anedea_220
- Track 9 : EGole_210
- Track 10 : Marsus_210
- Track 11 : Evy_199, Warpy_210, Jay2Jay_212, Targaryen_206
- Track 12 : MulchMansion_209, Angela_208
- Track 13 : Shuckle_204
- Track 14 : ArianaSWT_217
- Track 15 : Riptide_208
- Track 16 : LilMartin_205
- Track 17 : Quarant19_221, Spilled_228, PumpkinSpice_224, Birchlyn_220, IchabodCrane_216, Starbow_218, SaltySpittoon_221, Gibbi_229, Spelly_226, AcciDwight_229, Amabiko_225, Daisy123_229, JimJam_228, Jollison_218, KentuckyRacer_227, Rikishi_222, Tuesday_228, CeilingFan_225, MindFlayer_214
- Track 18 : AngryGiraffe_218, BoomerJR_218, Sollertia_220, Genie2_218, Yaboi_224, Stanimal_219
- Track 19 : LukeCage_225
- Track 20 : Enygma_229
- Track 21 : Wofford_222, Elmer_231
- Track 22 : Mugiwara_228
- Track 23 : Bordeaux_219, Wipeout_212, TomSawyer_225, Battuta_219
- Track 24 : StarPlatinum_228
- Track 25 : Karimac_222, Brizzy_220
- Track 26 : BRock_45

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

The start number called the most often in the published annotations is 20, it was called in 81 of the 81 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AcciDwight_229, Amabiko_225, Anedea_220, Angela_208, AngryGiraffe_218, BRock_45, Bartholomune_207, Battuta_219, Birchlyn_220, BlueOtter_204, Bmoc_211, BoomerJR_218, Bordeaux_219, Braelyn_204, Brizzy_220, Cadmus_205, CeilingFan_225, Coogler_204, Cross_205, Cursive_208, Daisy123_229, Daubenski_200, Davielle_207, EGole_210, Eliot67_207, Elmer_231, Enygma_229, Evy_199, FreddyDRoo_206, Genie2_218, Gibbi_229, HangryHippo_204, IchabodCrane_216, Jay2Jay_212, JimJam_228, Jollison_218, Karimac_222, KentuckyRacer_227, Larnav_206, Leo04_208, Liandry_206, LilMartin_205, LilSaint_208, LukeCage_225, Lululemon_203, Marsus_210, Mildred21_215, MindFlayer_214, Mugiwara_228, MulchMansion_209, Navo_201, NootNoot_203, PacManQ_203, Peebs_204, Pepperwood_206, Persimmon_209, PinkiePie_206, PumpkinSpice_224, PynkPanther_207, Quarant19_221, Rikishi_222, Riptide_208, SaltySpittoon_221, Samisti12_210, Scheme_209, Shuckle_204, Sollertia_220, Spelly_226, Spilled_228, Squillium_209, Stanimal_219, StarPlatinum_228, Starbow_218, Sushi23_206, Targaryen_206, Teutsch_206, TomSawyer_225, Tribute_204, Tuesday_228, Warpy_210, WashU_203, Watermoore_205, WhereRU_206, Wipeout_212, Wofford_222, Yaboi_224,

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

- ArianaSWT_217,

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

-

Summary by start number:

Start 17:

- Found in 77 of 87 (88.5%) of genes in pham
- No Manual Annotations of this start.
- Called 1.3% of time when present
- Phage (with cluster) where this start called: ArianaSWT_217 (BE1),

Start 20:

- Found in 87 of 87 (100.0%) of genes in pham
- Manual Annotations of this start: 81 of 81
- Called 98.9% of time when present
- Phage (with cluster) where this start called: AcciDwight_229 (BE2), Amabiko_225 (BE2), Anedea_220 (BE1), Angela_208 (BE1), AngryGiraffe_218 (BE2), BRock_45 (BS), Bartholomune_207 (BE1), Battuta_219 (BE2), Birchlyn_220 (BE2), BlueOtter_204 (BE1), Bmoc_211 (BE1), BoomerJR_218 (BE2), Bordeaux_219 (BE2), Braelyn_204 (BE1), Brizzy_220 (BE2), Cadmus_205 (BE1), CeilingFan_225 (BE2), Coogler_204 (BE1), Cross_205 (BE1), Cursive_208 (BE1), Daisy123_229 (BE2), Daubenski_200 (BE1), Davielle_207 (BE1), EGole_210 (BE1), Eliot67_207 (BE1), Elmer_231 (BE2), Enygma_229 (BE2), Evy_199 (BE1), FreddyDRoo_206 (BE1), Genie2_218 (BE2), Gibbi_229 (BE2), HangryHippo_204 (BE1), IchabodCrane_216 (BE2), Jay2Jay_212 (BE1), JimJam_228 (BE2), Jollison_218 (BE2), Karimac_222

(BE2), KentuckyRacer_227 (BE2), Larnav_206 (BE1), Leo04_208 (BE1), Liandry_206 (BE1), LilMartin_205 (BE1), LilSaint_208 (BE1), LukeCage_225 (BE2), Lululemon_203 (BE1), Marsus_210 (BE1), Mildred21_215 (BE1), MindFlayer_214 (BE2), Mugiwara_228 (BE2), MulchMansion_209 (BE1), Navo_201 (BE1), NootNoot_203 (BE1), PacManQ_203 (BE1), Peebs_204 (BE1), Pepperwood_206 (BE1), Persimmon_209 (BE1), PinkiePie_206 (BE1), PumpkinSpice_224 (BE2), PynkPanther_207 (BE1), Quarant19_221 (BE2), Rikishi_222 (BE2), Riptide_208 (BE1), SaltySpittoon_221 (BE2), Samisti12_210 (BE1), Scheme_209 (BE1), Shuckle_204 (BE1), Sollertia_220 (BE2), Spelly_226 (BE2), Spilled_228 (BE2), Squillum_209 (BE1), Stanimal_219 (BE2), StarPlatinum_228 (BE2), Starbow_218 (BE2), Sushi23_206 (BE1), Targaryen_206 (BE1), Teutsch_206 (BE1), TomSawyer_225 (BE2), Tribute_204 (BE1), Tuesday_228 (BE2), Warpy_210 (BE1), WashU_203 (BE1), Watermoore_205 (BE1), WhereRU_206 (BE1), Wipeout_212 (BE2), Wofford_222 (BE2), Yabo1_224 (BE2),

Summary by clusters:

There are 3 clusters represented in this pham: BE2, BE1, BS,

Info for manual annotations of cluster BE1:

- Start number 20 was manually annotated 47 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 20 was manually annotated 33 times for cluster BE2.

Info for manual annotations of cluster BS:

- Start number 20 was manually annotated 1 time for cluster BS.

Gene Information:

Gene: AcciDwight_229 Start: 106907, Stop: 107134, Start Num: 20

Candidate Starts for AcciDwight_229:

(17, 106853), (Start: 20 @106907 has 81 MA's), (27, 106982), (32, 107015), (41, 107102),

Gene: Amabiko_225 Start: 106725, Stop: 106952, Start Num: 20

Candidate Starts for Amabiko_225:

(17, 106671), (Start: 20 @106725 has 81 MA's), (27, 106800), (32, 106833), (41, 106920),

Gene: Anedea_220 Start: 107420, Stop: 107644, Start Num: 20

Candidate Starts for Anedea_220:

(1, 107135), (2, 107165), (3, 107195), (5, 107222), (9, 107270), (11, 107273), (13, 107282), (17, 107366), (Start: 20 @107420 has 81 MA's), (21, 107432), (24, 107489), (41, 107615),

Gene: Angela_208 Start: 104813, Stop: 105034, Start Num: 20

Candidate Starts for Angela_208:

(14, 104690), (16, 104711), (17, 104759), (Start: 20 @104813 has 81 MA's), (23, 104879), (35, 104951), (38, 104972), (40, 104996), (41, 105002),

Gene: AngryGiraffe_218 Start: 106382, Stop: 106606, Start Num: 20

Candidate Starts for AngryGiraffe_218:

(Start: 20 @106382 has 81 MA's), (24, 106451), (27, 106457), (29, 106472), (41, 106577),

Gene: ArianaSWT_217 Start: 106885, Stop: 107163, Start Num: 17

Candidate Starts for ArianaSWT_217:

(16, 106834), (17, 106885), (Start: 20 @106939 has 81 MA's), (25, 107008), (33, 107044), (35, 107077), (41, 107128), (42, 107146),

Gene: BRock_45 Start: 15607, Stop: 15822, Start Num: 20

Candidate Starts for BRock_45:

(19, 15589), (Start: 20 @15607 has 81 MA's), (22, 15649), (26, 15676), (30, 15697), (31, 15706), (37, 15760), (39, 15781),

Gene: Bartholomune_207 Start: 104979, Stop: 105203, Start Num: 20

Candidate Starts for Bartholomune_207:

(17, 104925), (Start: 20 @104979 has 81 MA's), (25, 105048), (29, 105063), (35, 105117), (41, 105168), (42, 105186),

Gene: Battuta_219 Start: 106041, Stop: 106268, Start Num: 20

Candidate Starts for Battuta_219:

(17, 105987), (Start: 20 @106041 has 81 MA's), (27, 106116), (41, 106236),

Gene: Birchlyn_220 Start: 103973, Stop: 104200, Start Num: 20

Candidate Starts for Birchlyn_220:

(17, 103919), (Start: 20 @103973 has 81 MA's), (27, 104048), (32, 104081), (41, 104168),

Gene: BlueOtter_204 Start: 105192, Stop: 105416, Start Num: 20

Candidate Starts for BlueOtter_204:

(16, 105087), (17, 105138), (Start: 20 @105192 has 81 MA's), (25, 105261), (33, 105297), (35, 105330), (41, 105381), (42, 105399),

Gene: Bmoc_211 Start: 105620, Stop: 105844, Start Num: 20

Candidate Starts for Bmoc_211:

(14, 105497), (15, 105503), (16, 105518), (17, 105566), (Start: 20 @105620 has 81 MA's), (21, 105632), (24, 105689), (41, 105815),

Gene: BoomerJR_218 Start: 106815, Stop: 107039, Start Num: 20

Candidate Starts for BoomerJR_218:

(Start: 20 @106815 has 81 MA's), (24, 106884), (27, 106890), (29, 106905), (41, 107010),

Gene: Bordeaux_219 Start: 106624, Stop: 106851, Start Num: 20

Candidate Starts for Bordeaux_219:

(17, 106570), (Start: 20 @106624 has 81 MA's), (27, 106699), (41, 106819),

Gene: Braelyn_204 Start: 104626, Stop: 104850, Start Num: 20

Candidate Starts for Braelyn_204:

(17, 104572), (Start: 20 @104626 has 81 MA's), (25, 104695), (29, 104710), (35, 104764), (41, 104815), (42, 104833),

Gene: Brizzy_220 Start: 107151, Stop: 107378, Start Num: 20

Candidate Starts for Brizzy_220:

(17, 107097), (Start: 20 @107151 has 81 MA's), (27, 107226), (41, 107346),

Gene: Cadmus_205 Start: 106312, Stop: 106533, Start Num: 20

Candidate Starts for Cadmus_205:

(17, 106258), (Start: 20 @106312 has 81 MA's), (34, 106438), (41, 106504), (42, 106522),

Gene: CeilingFan_225 Start: 107418, Stop: 107645, Start Num: 20

Candidate Starts for CeilingFan_225:

(17, 107364), (Start: 20 @107418 has 81 MA's), (27, 107493), (32, 107526), (41, 107613),

Gene: Coogler_204 Start: 105862, Stop: 106086, Start Num: 20

Candidate Starts for Coogler_204:

(16, 105757), (17, 105808), (Start: 20 @105862 has 81 MA's), (25, 105931), (33, 105967), (34, 105985), (35, 106000), (41, 106051), (42, 106069),

Gene: Cross_205 Start: 105837, Stop: 106061, Start Num: 20

Candidate Starts for Cross_205:

(16, 105732), (17, 105783), (Start: 20 @105837 has 81 MA's), (25, 105906), (33, 105942), (35, 105975), (41, 106026), (42, 106044),

Gene: Cursive_208 Start: 105521, Stop: 105745, Start Num: 20

Candidate Starts for Cursive_208:

(16, 105416), (17, 105467), (Start: 20 @105521 has 81 MA's), (25, 105590), (33, 105626), (35, 105659), (41, 105710), (42, 105728),

Gene: Daisy123_229 Start: 107280, Stop: 107507, Start Num: 20

Candidate Starts for Daisy123_229:

(17, 107226), (Start: 20 @107280 has 81 MA's), (27, 107355), (32, 107388), (41, 107475),

Gene: Daubenski_200 Start: 106207, Stop: 106428, Start Num: 20

Candidate Starts for Daubenski_200:

(17, 106153), (Start: 20 @106207 has 81 MA's), (35, 106348), (41, 106399), (42, 106417),

Gene: Davielle_207 Start: 105024, Stop: 105248, Start Num: 20

Candidate Starts for Davielle_207:

(17, 104970), (Start: 20 @105024 has 81 MA's), (25, 105093), (29, 105108), (35, 105162), (41, 105213), (42, 105231),

Gene: EGole_210 Start: 107815, Stop: 108033, Start Num: 20

Candidate Starts for EGole_210:

(18, 107797), (Start: 20 @107815 has 81 MA's), (21, 107827), (25, 107884), (34, 107938), (35, 107953), (41, 108004), (42, 108022),

Gene: Eliot67_207 Start: 104591, Stop: 104815, Start Num: 20

Candidate Starts for Eliot67_207:

(17, 104537), (Start: 20 @104591 has 81 MA's), (25, 104660), (29, 104675), (35, 104729), (41, 104780), (42, 104798),

Gene: Elmer_231 Start: 110367, Stop: 110594, Start Num: 20

Candidate Starts for Elmer_231:

(Start: 20 @110367 has 81 MA's), (28, 110448), (29, 110457), (38, 110532), (41, 110562),

Gene: Enygma_229 Start: 109827, Stop: 110054, Start Num: 20

Candidate Starts for Enygma_229:

(17, 109773), (Start: 20 @109827 has 81 MA's), (24, 109896), (27, 109902), (41, 110022),

Gene: Evy_199 Start: 106304, Stop: 106528, Start Num: 20

Candidate Starts for Evy_199:

(17, 106250), (Start: 20 @106304 has 81 MA's), (25, 106373), (31, 106400), (35, 106442), (41, 106493), (42, 106511),

Gene: FreddyDRoo_206 Start: 104591, Stop: 104815, Start Num: 20

Candidate Starts for FreddyDRoo_206:

(17, 104537), (Start: 20 @104591 has 81 MA's), (25, 104660), (29, 104675), (35, 104729), (41, 104780), (42, 104798),

Gene: Genie2_218 Start: 106940, Stop: 107164, Start Num: 20

Candidate Starts for Genie2_218:

(Start: 20 @106940 has 81 MA's), (24, 107009), (27, 107015), (29, 107030), (41, 107135),

Gene: Gibbi_229 Start: 106911, Stop: 107138, Start Num: 20

Candidate Starts for Gibbi_229:

(17, 106857), (Start: 20 @106911 has 81 MA's), (27, 106986), (32, 107019), (41, 107106),

Gene: HangryHippo_204 Start: 105192, Stop: 105416, Start Num: 20

Candidate Starts for HangryHippo_204:

(16, 105087), (17, 105138), (Start: 20 @105192 has 81 MA's), (25, 105261), (33, 105297), (35, 105330), (41, 105381), (42, 105399),

Gene: IchabodCrane_216 Start: 106426, Stop: 106653, Start Num: 20

Candidate Starts for IchabodCrane_216:

(17, 106372), (Start: 20 @106426 has 81 MA's), (27, 106501), (32, 106534), (41, 106621),

Gene: Jay2Jay_212 Start: 106459, Stop: 106683, Start Num: 20

Candidate Starts for Jay2Jay_212:

(17, 106405), (Start: 20 @106459 has 81 MA's), (25, 106528), (31, 106555), (35, 106597), (41, 106648), (42, 106666),

Gene: JimJam_228 Start: 108347, Stop: 108574, Start Num: 20

Candidate Starts for JimJam_228:

(17, 108293), (Start: 20 @108347 has 81 MA's), (27, 108422), (32, 108455), (41, 108542),

Gene: Jollison_218 Start: 106557, Stop: 106784, Start Num: 20

Candidate Starts for Jollison_218:

(17, 106503), (Start: 20 @106557 has 81 MA's), (27, 106632), (32, 106665), (41, 106752),

Gene: Karimac_222 Start: 106742, Stop: 106969, Start Num: 20

Candidate Starts for Karimac_222:

(17, 106688), (Start: 20 @106742 has 81 MA's), (27, 106817), (41, 106937),

Gene: KentuckyRacer_227 Start: 108262, Stop: 108489, Start Num: 20

Candidate Starts for KentuckyRacer_227:

(17, 108208), (Start: 20 @108262 has 81 MA's), (27, 108337), (32, 108370), (41, 108457),

Gene: Larnav_206 Start: 105931, Stop: 106155, Start Num: 20

Candidate Starts for Larnav_206:

(16, 105826), (17, 105877), (Start: 20 @105931 has 81 MA's), (25, 106000), (33, 106036), (34, 106054), (35, 106069), (41, 106120), (42, 106138),

Gene: Leo04_208 Start: 106496, Stop: 106720, Start Num: 20

Candidate Starts for Leo04_208:

(16, 106391), (17, 106442), (Start: 20 @106496 has 81 MA's), (25, 106565), (33, 106601), (35, 106634), (41, 106685), (42, 106703),

Gene: Liandry_206 Start: 105298, Stop: 105522, Start Num: 20

Candidate Starts for Liandry_206:

(17, 105244), (Start: 20 @105298 has 81 MA's), (25, 105367), (29, 105382), (35, 105436), (41, 105487), (42, 105505),

Gene: LilMartin_205 Start: 104177, Stop: 104398, Start Num: 20

Candidate Starts for LilMartin_205:

(14, 104054), (15, 104060), (16, 104075), (17, 104123), (Start: 20 @104177 has 81 MA's), (23, 104243), (35, 104315), (38, 104336), (40, 104360), (41, 104366),

Gene: LilSaint_208 Start: 105792, Stop: 106016, Start Num: 20

Candidate Starts for LilSaint_208:

(1, 105507), (2, 105537), (3, 105567), (5, 105594), (9, 105642), (11, 105645), (13, 105654), (17, 105738), (Start: 20 @105792 has 81 MA's), (21, 105804), (24, 105861), (41, 105987),

Gene: LukeCage_225 Start: 108793, Stop: 109020, Start Num: 20

Candidate Starts for LukeCage_225:

(17, 108739), (Start: 20 @108793 has 81 MA's), (24, 108862), (27, 108868), (41, 108988),

Gene: Lululemon_203 Start: 104573, Stop: 104797, Start Num: 20

Candidate Starts for Lululemon_203:

(16, 104468), (17, 104519), (Start: 20 @104573 has 81 MA's), (25, 104642), (33, 104678), (35, 104711), (41, 104762), (42, 104780),

Gene: Marsus_210 Start: 105921, Stop: 106142, Start Num: 20

Candidate Starts for Marsus_210:

(14, 105798), (15, 105804), (16, 105819), (17, 105867), (Start: 20 @105921 has 81 MA's), (23, 105987), (35, 106059), (38, 106080), (41, 106110),

Gene: Mildred21_215 Start: 103945, Stop: 104166, Start Num: 20

Candidate Starts for Mildred21_215:

(6, 103750), (10, 103798), (12, 103801), (17, 103891), (Start: 20 @103945 has 81 MA's), (23, 104011), (34, 104068), (35, 104083), (41, 104134), (42, 104152),

Gene: MindFlayer_214 Start: 105942, Stop: 106169, Start Num: 20

Candidate Starts for MindFlayer_214:

(17, 105888), (Start: 20 @105942 has 81 MA's), (27, 106017), (32, 106050), (41, 106137),

Gene: Mugiwara_228 Start: 109243, Stop: 109470, Start Num: 20

Candidate Starts for Mugiwara_228:

(17, 109189), (Start: 20 @109243 has 81 MA's), (27, 109318), (35, 109387), (36, 109393), (41, 109438),

Gene: MulchMansion_209 Start: 105811, Stop: 106032, Start Num: 20

Candidate Starts for MulchMansion_209:

(14, 105688), (16, 105709), (17, 105757), (Start: 20 @105811 has 81 MA's), (23, 105877), (35, 105949), (38, 105970), (40, 105994), (41, 106000),

Gene: Navo_201 Start: 103830, Stop: 104054, Start Num: 20

Candidate Starts for Navo_201:

(17, 103776), (Start: 20 @103830 has 81 MA's), (25, 103899), (29, 103914), (35, 103968), (41, 104019), (42, 104037),

Gene: NootNoot_203 Start: 104110, Stop: 104334, Start Num: 20

Candidate Starts for NootNoot_203:

(17, 104056), (Start: 20 @104110 has 81 MA's), (25, 104179), (29, 104194), (35, 104248), (41, 104299), (42, 104317),

Gene: PacManQ_203 Start: 104573, Stop: 104797, Start Num: 20

Candidate Starts for PacManQ_203:

(16, 104468), (17, 104519), (Start: 20 @104573 has 81 MA's), (25, 104642), (33, 104678), (35, 104711), (41, 104762), (42, 104780),

Gene: Peebs_204 Start: 105902, Stop: 106126, Start Num: 20

Candidate Starts for Peebs_204:

(16, 105797), (17, 105848), (Start: 20 @105902 has 81 MA's), (25, 105971), (33, 106007), (35, 106040), (41, 106091), (42, 106109),

Gene: Pepperwood_206 Start: 105859, Stop: 106083, Start Num: 20

Candidate Starts for Pepperwood_206:

(16, 105754), (17, 105805), (Start: 20 @105859 has 81 MA's), (25, 105928), (33, 105964), (35, 105997), (41, 106048), (42, 106066),

Gene: Persimmon_209 Start: 104848, Stop: 105072, Start Num: 20

Candidate Starts for Persimmon_209:

(17, 104794), (Start: 20 @104848 has 81 MA's), (25, 104917), (29, 104932), (35, 104986), (41, 105037), (42, 105055),

Gene: PinkiePie_206 Start: 105298, Stop: 105522, Start Num: 20

Candidate Starts for PinkiePie_206:

(17, 105244), (Start: 20 @105298 has 81 MA's), (25, 105367), (29, 105382), (35, 105436), (41, 105487), (42, 105505),

Gene: PumpkinSpice_224 Start: 107163, Stop: 107390, Start Num: 20

Candidate Starts for PumpkinSpice_224:

(17, 107109), (Start: 20 @107163 has 81 MA's), (27, 107238), (32, 107271), (41, 107358),

Gene: PynkPanther_207 Start: 106051, Stop: 106275, Start Num: 20

Candidate Starts for PynkPanther_207:

(17, 105997), (Start: 20 @106051 has 81 MA's), (25, 106120), (29, 106135), (35, 106189), (41, 106240), (42, 106258),

Gene: Quaran19_221 Start: 106604, Stop: 106831, Start Num: 20

Candidate Starts for Quaran19_221:

(17, 106550), (Start: 20 @106604 has 81 MA's), (27, 106679), (32, 106712), (41, 106799),

Gene: Rikishi_222 Start: 106885, Stop: 107112, Start Num: 20

Candidate Starts for Rikishi_222:

(17, 106831), (Start: 20 @106885 has 81 MA's), (27, 106960), (32, 106993), (41, 107080),

Gene: Riptide_208 Start: 104950, Stop: 105174, Start Num: 20

Candidate Starts for Riptide_208:

(4, 104737), (7, 104755), (8, 104791), (17, 104896), (Start: 20 @104950 has 81 MA's), (21, 104962), (24, 105019), (41, 105145),

Gene: SaltySpittoon_221 Start: 106146, Stop: 106373, Start Num: 20

Candidate Starts for SaltySpittoon_221:

(17, 106092), (Start: 20 @106146 has 81 MA's), (27, 106221), (32, 106254), (41, 106341),

Gene: Samisti12_210 Start: 107483, Stop: 107707, Start Num: 20

Candidate Starts for Samisti12_210:

(16, 107378), (17, 107429), (Start: 20 @107483 has 81 MA's), (25, 107552), (33, 107588), (35, 107621), (41, 107672), (42, 107690),

Gene: Scheme_209 Start: 107078, Stop: 107302, Start Num: 20

Candidate Starts for Scheme_209:

(16, 106973), (17, 107024), (Start: 20 @107078 has 81 MA's), (25, 107147), (33, 107183), (35, 107216), (41, 107267), (42, 107285),

Gene: Shuckle_204 Start: 105980, Stop: 106204, Start Num: 20

Candidate Starts for Shuckle_204:

(17, 105926), (Start: 20 @105980 has 81 MA's), (25, 106049), (35, 106118), (41, 106169), (42, 106187),

Gene: Sollertia_220 Start: 106929, Stop: 107153, Start Num: 20

Candidate Starts for Sollertia_220:

(Start: 20 @106929 has 81 MA's), (24, 106998), (27, 107004), (29, 107019), (41, 107124),

Gene: Spelly_226 Start: 106075, Stop: 106302, Start Num: 20

Candidate Starts for Spelly_226:

(17, 106021), (Start: 20 @106075 has 81 MA's), (27, 106150), (32, 106183), (41, 106270),

Gene: Spilled_228 Start: 107279, Stop: 107506, Start Num: 20

Candidate Starts for Spilled_228:

(17, 107225), (Start: 20 @107279 has 81 MA's), (27, 107354), (32, 107387), (41, 107474),

Gene: Squillum_209 Start: 105300, Stop: 105524, Start Num: 20

Candidate Starts for Squillum_209:

(17, 105246), (Start: 20 @105300 has 81 MA's), (25, 105369), (29, 105384), (35, 105438), (41, 105489), (42, 105507),

Gene: Stanimal_219 Start: 107301, Stop: 107525, Start Num: 20

Candidate Starts for Stanimal_219:

(Start: 20 @107301 has 81 MA's), (24, 107370), (27, 107376), (29, 107391), (41, 107496),

Gene: StarPlatinum_228 Start: 109024, Stop: 109251, Start Num: 20

Candidate Starts for StarPlatinum_228:

(17, 108970), (Start: 20 @109024 has 81 MA's), (32, 109132), (41, 109219),

Gene: Starbow_218 Start: 106119, Stop: 106346, Start Num: 20

Candidate Starts for Starbow_218:

(17, 106065), (Start: 20 @106119 has 81 MA's), (27, 106194), (32, 106227), (41, 106314),

Gene: Sushi23_206 Start: 106493, Stop: 106717, Start Num: 20

Candidate Starts for Sushi23_206:

(16, 106388), (17, 106439), (Start: 20 @106493 has 81 MA's), (25, 106562), (33, 106598), (35, 106631), (41, 106682), (42, 106700),

Gene: Targaryen_206 Start: 106988, Stop: 107212, Start Num: 20

Candidate Starts for Targaryen_206:

(17, 106934), (Start: 20 @106988 has 81 MA's), (25, 107057), (31, 107084), (35, 107126), (41, 107177), (42, 107195),

Gene: Teutsch_206 Start: 106590, Stop: 106814, Start Num: 20

Candidate Starts for Teutsch_206:

(16, 106485), (17, 106536), (Start: 20 @106590 has 81 MA's), (25, 106659), (33, 106695), (35, 106728), (41, 106779), (42, 106797),

Gene: TomSawyer_225 Start: 108590, Stop: 108817, Start Num: 20

Candidate Starts for TomSawyer_225:

(17, 108536), (Start: 20 @108590 has 81 MA's), (27, 108665), (41, 108785),

Gene: Tribute_204 Start: 106430, Stop: 106654, Start Num: 20

Candidate Starts for Tribute_204:

(16, 106325), (17, 106376), (Start: 20 @106430 has 81 MA's), (25, 106499), (33, 106535), (35, 106568), (41, 106619), (42, 106637),

Gene: Tuesday_228 Start: 107130, Stop: 107357, Start Num: 20

Candidate Starts for Tuesday_228:

(17, 107076), (Start: 20 @107130 has 81 MA's), (27, 107205), (32, 107238), (41, 107325),

Gene: Warpy_210 Start: 105897, Stop: 106121, Start Num: 20

Candidate Starts for Warpy_210:

(17, 105843), (Start: 20 @105897 has 81 MA's), (25, 105966), (31, 105993), (35, 106035), (41, 106086), (42, 106104),

Gene: WashU_203 Start: 106381, Stop: 106605, Start Num: 20

Candidate Starts for WashU_203:

(16, 106276), (17, 106327), (Start: 20 @106381 has 81 MA's), (25, 106450), (33, 106486), (35, 106519), (41, 106570), (42, 106588),

Gene: Watermoore_205 Start: 106835, Stop: 107059, Start Num: 20

Candidate Starts for Watermoore_205:

(16, 106730), (17, 106781), (Start: 20 @106835 has 81 MA's), (25, 106904), (33, 106940), (35, 106973), (41, 107024), (42, 107042),

Gene: WhereRU_206 Start: 105027, Stop: 105251, Start Num: 20

Candidate Starts for WhereRU_206:

(17, 104973), (Start: 20 @105027 has 81 MA's), (25, 105096), (29, 105111), (35, 105165), (41, 105216), (42, 105234),

Gene: Wipeout_212 Start: 107542, Stop: 107769, Start Num: 20

Candidate Starts for Wipeout_212:

(17, 107488), (Start: 20 @107542 has 81 MA's), (27, 107617), (41, 107737),

Gene: Wofford_222 Start: 110235, Stop: 110462, Start Num: 20

Candidate Starts for Wofford_222:

(Start: 20 @110235 has 81 MA's), (28, 110316), (29, 110325), (38, 110400), (41, 110430),

Gene: Yaboi_224 Start: 106864, Stop: 107088, Start Num: 20

Candidate Starts for Yaboi_224:

(Start: 20 @106864 has 81 MA's), (24, 106933), (27, 106939), (29, 106954), (41, 107059),