

Pham 325072



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 325072 Report

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

Pham number 325072 has 89 members, 4 are drafts.

Phages represented in each track:

- Track 1 : LilMartin_270, LilMartin_18, MulchMansion_18, Angela_275, MulchMansion_274, Angela_18
- Track 2 : Braelyn_17, Navo_258, Davielle_16, Braelyn_262, Davielle_265, WhereRU_16, WhereRU_265, Navo_16, Persimmon_267, Persimmon_16
- Track 3 : BlueOtter_266, WashU_19, Leo04_269, Watermoore_265, Cross_266, Peebs_265, Pepperwood_19, Cursive_16, Scheme_272, Pepperwood_268, Cursive_270, HangryHippo_18, Peebs_18, HangryHippo_266, Leo04_18, PacManQ_264, Watermoore_18, Lululemon_264, PacManQ_17, WashU_263, Scheme_19, Cross_18, BlueOtter_18, Lululemon_17
- Track 4 : Evy_18, Bartholomune_17, Bartholomune_267, FreddyDRoo_17, FreddyDRoo_267, PinkiePie_17, Paradiddles_17, Squillium_269, Warpy_273, Liandry_266, Warpy_21, Jay2Jay_276, Jay2Jay_21, Liandry_17, Paradiddles_258, PinkiePie_267, Evy_256, Targaryen_267, NootNoot_262, Eliot67_268, NootNoot_17, Squillium_17, Eliot67_17, Targaryen_16
- Track 5 : Daubenski_17, Daubenski_261, Cadmus_264, Cadmus_16
- Track 6 : ArianaSWT_282, Larnav_268, Larnav_18, Coogler_18, Sushi23_19, Sushi23_269, ArianaSWT_21, Coogler_264
- Track 7 : Mildred21_281, Mildred21_18
- Track 8 : PynkPanther_265, PynkPanther_17
- Track 9 : Tribute_18, Tribute_264
- Track 10 : Bmoc_273, Bmoc_17
- Track 11 : BillNye_174, Circinus_175
- Track 12 : Wakanda_187, Muntaha_188
- Track 13 : Chaewon_183

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

The start number called the most often in the published annotations is 1, it was called in 85 of the 85 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Angela_18, Angela_275, ArianaSWT_21, ArianaSWT_282, Bartholomune_17, Bartholomune_267, BillNye_174, BlueOtter_18, BlueOtter_266, Bmoc_17, Bmoc_273, Braelyn_17, Braelyn_262, Cadmus_16, Cadmus_264, Chaewon_183,

Circinus_175, Coogler_18, Coogler_264, Cross_18, Cross_266, Cursive_16, Cursive_270, Daubenski_17, Daubenski_261, Davielle_16, Davielle_265, Eliot67_17, Eliot67_268, Evy_18, Evy_256, FreddyDRoo_17, FreddyDRoo_267, HangryHippo_18, HangryHippo_266, Jay2Jay_21, Jay2Jay_276, Larnav_18, Larnav_268, Leo04_18, Leo04_269, Liandry_17, Liandry_266, LilMartin_18, LilMartin_270, Lululemon_17, Lululemon_264, Mildred21_18, Mildred21_281, MulchMansion_18, MulchMansion_274, Muntaha_188, Navo_16, Navo_258, NootNoot_17, NootNoot_262, PacManQ_17, PacManQ_264, Paradiddles_17, Paradiddles_258, Peebs_18, Peebs_265, Pepperwood_19, Pepperwood_268, Persimmon_16, Persimmon_267, PinkiePie_17, PinkiePie_267, PynkPanther_17, PynkPanther_265, Scheme_19, Scheme_272, Squillium_17, Squillium_269, Sushi23_19, Sushi23_269, Targaryen_16, Targaryen_267, Tribute_18, Tribute_264, Wakanda_187, Warpy_21, Warpy_273, WashU_19, WashU_263, Watermoore_18, Watermoore_265, WhereRU_16, WhereRU_265,

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

-

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

-

Summary by start number:

Start 1:

- Found in 89 of 89 (100.0%) of genes in pham
- Manual Annotations of this start: 85 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angela_18 (BE1), Angela_275 (BE1), ArianaSWT_21 (BE1), ArianaSWT_282 (BE1), Bartholomune_17 (BE1), Bartholomune_267 (BE1), BillNye_174 (BK2), BlueOtter_18 (BE1), BlueOtter_266 (BE1), Bmoc_17 (BE1), Bmoc_273 (BE1), Braelyn_17 (BE1), Braelyn_262 (BE1), Cadmus_16 (BE1), Cadmus_264 (BE1), Chaewon_183 (BK2), Circinus_175 (BK2), Coogler_18 (BE1), Coogler_264 (BE1), Cross_18 (BE1), Cross_266 (BE1), Cursive_16 (BE1), Cursive_270 (BE1), Daubenski_17 (BE1), Daubenski_261 (BE1), Davielle_16 (BE1), Davielle_265 (BE1), Eliot67_17 (BE1), Eliot67_268 (BE1), Evy_18 (BE1), Evy_256 (BE1), FreddyDRoo_17 (BE1), FreddyDRoo_267 (BE1), HangryHippo_18 (BE1), HangryHippo_266 (BE1), Jay2Jay_21 (BE1), Jay2Jay_276 (BE1), Larnav_18 (BE1), Larnav_268 (BE1), Leo04_18 (BE1), Leo04_269 (BE1), Liandry_17 (BE1), Liandry_266 (BE1), LilMartin_18 (BE1), LilMartin_270 (BE1), Lululemon_17 (BE1), Lululemon_264 (BE1), Mildred21_18 (BE1), Mildred21_281 (BE1), MulchMansion_18 (BE1), MulchMansion_274 (BE1), Muntaha_188 (BK2), Navo_16 (BE1), Navo_258 (BE1), NootNoot_17 (BE1), NootNoot_262 (BE1), PacManQ_17 (BE1), PacManQ_264 (BE1), Paradiddles_17 (BE1), Paradiddles_258 (BE1), Peebs_18 (BE1), Peebs_265 (BE1), Pepperwood_19 (BE1), Pepperwood_268 (BE1), Persimmon_16 (BE1), Persimmon_267 (BE1), PinkiePie_17 (BE1), PinkiePie_267 (BE1), PynkPanther_17 (BE1), PynkPanther_265 (BE1), Scheme_19 (BE1), Scheme_272 (BE1), Squillium_17 (BE1), Squillium_269 (BE1), Sushi23_19 (BE1), Sushi23_269 (BE1), Targaryen_16 (BE1), Targaryen_267 (BE1), Tribute_18 (BE1), Tribute_264 (BE1), Wakanda_187 (BK2), Warpy_21 (BE1), Warpy_273 (BE1), WashU_19 (BE1), WashU_263 (BE1), Watermoore_18 (BE1), Watermoore_265 (BE1), WhereRU_16 (BE1), WhereRU_265 (BE1),

Summary by clusters:

There are 2 clusters represented in this pham: BE1, BK2,

Info for manual annotations of cluster BE1:

- Start number 1 was manually annotated 80 times for cluster BE1.

Info for manual annotations of cluster BK2:

- Start number 1 was manually annotated 5 times for cluster BK2.

Gene Information:

Gene: Angela_275 Start: 131597, Stop: 131268, Start Num: 1

Candidate Starts for Angela_275:

(Start: 1 @131597 has 85 MA's), (2, 131546), (5, 131495), (6, 131465), (11, 131348), (13, 131327),

Gene: Angela_18 Start: 9194, Stop: 8865, Start Num: 1

Candidate Starts for Angela_18:

(Start: 1 @9194 has 85 MA's), (2, 9143), (5, 9092), (6, 9062), (11, 8945), (13, 8924),

Gene: ArianaSWT_282 Start: 131727, Stop: 131404, Start Num: 1

Candidate Starts for ArianaSWT_282:

(Start: 1 @131727 has 85 MA's), (2, 131676), (9, 131541), (12, 131481), (14, 131445),

Gene: ArianaSWT_21 Start: 8893, Stop: 8570, Start Num: 1

Candidate Starts for ArianaSWT_21:

(Start: 1 @8893 has 85 MA's), (2, 8842), (9, 8707), (12, 8647), (14, 8611),

Gene: Bartholomune_17 Start: 8606, Stop: 8283, Start Num: 1

Candidate Starts for Bartholomune_17:

(Start: 1 @8606 has 85 MA's), (5, 8504), (6, 8474), (12, 8360),

Gene: Bartholomune_267 Start: 129705, Stop: 129382, Start Num: 1

Candidate Starts for Bartholomune_267:

(Start: 1 @129705 has 85 MA's), (5, 129603), (6, 129573), (12, 129459),

Gene: BillNye_174 Start: 97001, Stop: 97357, Start Num: 1

Candidate Starts for BillNye_174:

(Start: 1 @97001 has 85 MA's), (2, 97055), (3, 97097), (9, 97190), (15, 97340), (16, 97349),

Gene: BlueOtter_266 Start: 129979, Stop: 129656, Start Num: 1

Candidate Starts for BlueOtter_266:

(Start: 1 @129979 has 85 MA's), (2, 129928), (6, 129847), (9, 129793), (12, 129733), (14, 129697),

Gene: BlueOtter_18 Start: 8892, Stop: 8569, Start Num: 1

Candidate Starts for BlueOtter_18:

(Start: 1 @8892 has 85 MA's), (2, 8841), (6, 8760), (9, 8706), (12, 8646), (14, 8610),

Gene: Bmoc_273 Start: 130823, Stop: 130494, Start Num: 1

Candidate Starts for Bmoc_273:

(Start: 1 @130823 has 85 MA's), (5, 130721), (6, 130691), (7, 130661), (10, 130622), (11, 130574), (12, 130571),

Gene: Bmoc_17 Start: 9001, Stop: 8672, Start Num: 1

Candidate Starts for Bmoc_17:

(Start: 1 @9001 has 85 MA's), (5, 8899), (6, 8869), (7, 8839), (10, 8800), (11, 8752), (12, 8749),

Gene: Braelyn_17 Start: 8649, Stop: 8326, Start Num: 1

Candidate Starts for Braelyn_17:

(Start: 1 @8649 has 85 MA's), (5, 8547), (6, 8517), (7, 8487), (12, 8403),

Gene: Braelyn_262 Start: 129059, Stop: 128736, Start Num: 1

Candidate Starts for Braelyn_262:

(Start: 1 @129059 has 85 MA's), (5, 128957), (6, 128927), (7, 128897), (12, 128813),

Gene: Cadmus_264 Start: 131026, Stop: 130703, Start Num: 1

Candidate Starts for Cadmus_264:

(Start: 1 @131026 has 85 MA's), (2, 130975), (5, 130924), (6, 130894),

Gene: Cadmus_16 Start: 8545, Stop: 8222, Start Num: 1

Candidate Starts for Cadmus_16:

(Start: 1 @8545 has 85 MA's), (2, 8494), (5, 8443), (6, 8413),

Gene: Chaewon_183 Start: 98532, Stop: 98888, Start Num: 1

Candidate Starts for Chaewon_183:

(Start: 1 @98532 has 85 MA's), (3, 98628), (8, 98712), (9, 98721), (15, 98871), (16, 98880),

Gene: Circinus_175 Start: 96966, Stop: 97322, Start Num: 1

Candidate Starts for Circinus_175:

(Start: 1 @96966 has 85 MA's), (2, 97020), (3, 97062), (9, 97155), (15, 97305), (16, 97314),

Gene: Coogler_18 Start: 8893, Stop: 8570, Start Num: 1

Candidate Starts for Coogler_18:

(Start: 1 @8893 has 85 MA's), (2, 8842), (9, 8707), (12, 8647), (14, 8611),

Gene: Coogler_264 Start: 130405, Stop: 130082, Start Num: 1

Candidate Starts for Coogler_264:

(Start: 1 @130405 has 85 MA's), (2, 130354), (9, 130219), (12, 130159), (14, 130123),

Gene: Cross_266 Start: 130625, Stop: 130302, Start Num: 1

Candidate Starts for Cross_266:

(Start: 1 @130625 has 85 MA's), (2, 130574), (6, 130493), (9, 130439), (12, 130379), (14, 130343),

Gene: Cross_18 Start: 8893, Stop: 8570, Start Num: 1

Candidate Starts for Cross_18:

(Start: 1 @8893 has 85 MA's), (2, 8842), (6, 8761), (9, 8707), (12, 8647), (14, 8611),

Gene: Cursive_16 Start: 7710, Stop: 7387, Start Num: 1

Candidate Starts for Cursive_16:

(Start: 1 @7710 has 85 MA's), (2, 7659), (6, 7578), (9, 7524), (12, 7464), (14, 7428),

Gene: Cursive_270 Start: 129719, Stop: 129396, Start Num: 1

Candidate Starts for Cursive_270:

(Start: 1 @129719 has 85 MA's), (2, 129668), (6, 129587), (9, 129533), (12, 129473), (14, 129437),

Gene: Daubenski_17 Start: 8543, Stop: 8220, Start Num: 1

Candidate Starts for Daubenski_17:

(Start: 1 @8543 has 85 MA's), (2, 8492), (5, 8441), (6, 8411),

Gene: Daubenski_261 Start: 130919, Stop: 130596, Start Num: 1

Candidate Starts for Daubenski_261:

(Start: 1 @130919 has 85 MA's), (2, 130868), (5, 130817), (6, 130787),

Gene: Davielle_16 Start: 8435, Stop: 8112, Start Num: 1

Candidate Starts for Davielle_16:

(Start: 1 @8435 has 85 MA's), (5, 8333), (6, 8303), (7, 8273), (12, 8189),

Gene: Davielle_265 Start: 129595, Stop: 129272, Start Num: 1

Candidate Starts for Davielle_265:

(Start: 1 @129595 has 85 MA's), (5, 129493), (6, 129463), (7, 129433), (12, 129349),

Gene: Eliot67_268 Start: 129420, Stop: 129097, Start Num: 1

Candidate Starts for Eliot67_268:

(Start: 1 @129420 has 85 MA's), (5, 129318), (6, 129288), (12, 129174),

Gene: Eliot67_17 Start: 8606, Stop: 8283, Start Num: 1

Candidate Starts for Eliot67_17:

(Start: 1 @8606 has 85 MA's), (5, 8504), (6, 8474), (12, 8360),

Gene: Evy_18 Start: 9073, Stop: 8750, Start Num: 1

Candidate Starts for Evy_18:

(Start: 1 @9073 has 85 MA's), (5, 8971), (6, 8941), (12, 8827),

Gene: Evy_256 Start: 130802, Stop: 130479, Start Num: 1

Candidate Starts for Evy_256:

(Start: 1 @130802 has 85 MA's), (5, 130700), (6, 130670), (12, 130556),

Gene: FreddyDRoo_17 Start: 8606, Stop: 8283, Start Num: 1

Candidate Starts for FreddyDRoo_17:

(Start: 1 @8606 has 85 MA's), (5, 8504), (6, 8474), (12, 8360),

Gene: FreddyDRoo_267 Start: 129420, Stop: 129097, Start Num: 1

Candidate Starts for FreddyDRoo_267:

(Start: 1 @129420 has 85 MA's), (5, 129318), (6, 129288), (12, 129174),

Gene: HangryHippo_18 Start: 8892, Stop: 8569, Start Num: 1

Candidate Starts for HangryHippo_18:

(Start: 1 @8892 has 85 MA's), (2, 8841), (6, 8760), (9, 8706), (12, 8646), (14, 8610),

Gene: HangryHippo_266 Start: 129979, Stop: 129656, Start Num: 1

Candidate Starts for HangryHippo_266:

(Start: 1 @129979 has 85 MA's), (2, 129928), (6, 129847), (9, 129793), (12, 129733), (14, 129697),

Gene: Jay2Jay_276 Start: 131355, Stop: 131032, Start Num: 1

Candidate Starts for Jay2Jay_276:

(Start: 1 @131355 has 85 MA's), (5, 131253), (6, 131223), (12, 131109),

Gene: Jay2Jay_21 Start: 9262, Stop: 8939, Start Num: 1

Candidate Starts for Jay2Jay_21:

(Start: 1 @9262 has 85 MA's), (5, 9160), (6, 9130), (12, 9016),

Gene: Larnav_268 Start: 130898, Stop: 130575, Start Num: 1

Candidate Starts for Larnav_268:

(Start: 1 @130898 has 85 MA's), (2, 130847), (9, 130712), (12, 130652), (14, 130616),

Gene: Larnav_18 Start: 8893, Stop: 8570, Start Num: 1

Candidate Starts for Larnav_18:

(Start: 1 @8893 has 85 MA's), (2, 8842), (9, 8707), (12, 8647), (14, 8611),

Gene: Leo04_269 Start: 131009, Stop: 130686, Start Num: 1

Candidate Starts for Leo04_269:

(Start: 1 @131009 has 85 MA's), (2, 130958), (6, 130877), (9, 130823), (12, 130763), (14, 130727),

Gene: Leo04_18 Start: 8891, Stop: 8568, Start Num: 1

Candidate Starts for Leo04_18:

(Start: 1 @8891 has 85 MA's), (2, 8840), (6, 8759), (9, 8705), (12, 8645), (14, 8609),

Gene: Liandry_266 Start: 130126, Stop: 129803, Start Num: 1

Candidate Starts for Liandry_266:

(Start: 1 @130126 has 85 MA's), (5, 130024), (6, 129994), (12, 129880),

Gene: Liandry_17 Start: 8605, Stop: 8282, Start Num: 1

Candidate Starts for Liandry_17:

(Start: 1 @8605 has 85 MA's), (5, 8503), (6, 8473), (12, 8359),

Gene: LilMartin_270 Start: 130486, Stop: 130157, Start Num: 1

Candidate Starts for LilMartin_270:

(Start: 1 @130486 has 85 MA's), (2, 130435), (5, 130384), (6, 130354), (11, 130237), (13, 130216),

Gene: LilMartin_18 Start: 9142, Stop: 8813, Start Num: 1

Candidate Starts for LilMartin_18:

(Start: 1 @9142 has 85 MA's), (2, 9091), (5, 9040), (6, 9010), (11, 8893), (13, 8872),

Gene: Lululemon_264 Start: 129164, Stop: 128841, Start Num: 1

Candidate Starts for Lululemon_264:

(Start: 1 @129164 has 85 MA's), (2, 129113), (6, 129032), (9, 128978), (12, 128918), (14, 128882),

Gene: Lululemon_17 Start: 8272, Stop: 7949, Start Num: 1

Candidate Starts for Lululemon_17:

(Start: 1 @8272 has 85 MA's), (2, 8221), (6, 8140), (9, 8086), (12, 8026), (14, 7990),

Gene: Mildred21_281 Start: 129953, Stop: 129624, Start Num: 1

Candidate Starts for Mildred21_281:

(Start: 1 @129953 has 85 MA's), (4, 129854), (5, 129851), (6, 129821), (10, 129752), (12, 129701), (13, 129683), (14, 129665),

Gene: Mildred21_18 Start: 8795, Stop: 8466, Start Num: 1

Candidate Starts for Mildred21_18:

(Start: 1 @8795 has 85 MA's), (4, 8696), (5, 8693), (6, 8663), (10, 8594), (12, 8543), (13, 8525), (14, 8507),

Gene: MulchMansion_18 Start: 9142, Stop: 8813, Start Num: 1

Candidate Starts for MulchMansion_18:

(Start: 1 @9142 has 85 MA's), (2, 9091), (5, 9040), (6, 9010), (11, 8893), (13, 8872),

Gene: MulchMansion_274 Start: 132120, Stop: 131791, Start Num: 1

Candidate Starts for MulchMansion_274:

(Start: 1 @132120 has 85 MA's), (2, 132069), (5, 132018), (6, 131988), (11, 131871), (13, 131850),

Gene: Muntaha_188 Start: 96660, Stop: 97010, Start Num: 1

Candidate Starts for Muntaha_188:

(Start: 1 @96660 has 85 MA's), (9, 96852), (14, 96969), (16, 97002),

Gene: Navo_258 Start: 128029, Stop: 127706, Start Num: 1

Candidate Starts for Navo_258:

(Start: 1 @128029 has 85 MA's), (5, 127927), (6, 127897), (7, 127867), (12, 127783),

Gene: Navo_16 Start: 8404, Stop: 8081, Start Num: 1

Candidate Starts for Navo_16:

(Start: 1 @8404 has 85 MA's), (5, 8302), (6, 8272), (7, 8242), (12, 8158),

Gene: NootNoot_262 Start: 128915, Stop: 128592, Start Num: 1

Candidate Starts for NootNoot_262:

(Start: 1 @128915 has 85 MA's), (5, 128813), (6, 128783), (12, 128669),

Gene: NootNoot_17 Start: 8616, Stop: 8293, Start Num: 1

Candidate Starts for NootNoot_17:

(Start: 1 @8616 has 85 MA's), (5, 8514), (6, 8484), (12, 8370),

Gene: PacManQ_264 Start: 129164, Stop: 128841, Start Num: 1

Candidate Starts for PacManQ_264:

(Start: 1 @129164 has 85 MA's), (2, 129113), (6, 129032), (9, 128978), (12, 128918), (14, 128882),

Gene: PacManQ_17 Start: 8272, Stop: 7949, Start Num: 1

Candidate Starts for PacManQ_17:

(Start: 1 @8272 has 85 MA's), (2, 8221), (6, 8140), (9, 8086), (12, 8026), (14, 7990),

Gene: Paradiddles_17 Start: 8606, Stop: 8283, Start Num: 1

Candidate Starts for Paradiddles_17:

(Start: 1 @8606 has 85 MA's), (5, 8504), (6, 8474), (12, 8360),

Gene: Paradiddles_258 Start: 131314, Stop: 130991, Start Num: 1

Candidate Starts for Paradiddles_258:

(Start: 1 @131314 has 85 MA's), (5, 131212), (6, 131182), (12, 131068),

Gene: Peebs_265 Start: 130866, Stop: 130543, Start Num: 1

Candidate Starts for Peebs_265:

(Start: 1 @130866 has 85 MA's), (2, 130815), (6, 130734), (9, 130680), (12, 130620), (14, 130584),

Gene: Peebs_18 Start: 8891, Stop: 8568, Start Num: 1

Candidate Starts for Peebs_18:

(Start: 1 @8891 has 85 MA's), (2, 8840), (6, 8759), (9, 8705), (12, 8645), (14, 8609),

Gene: Pepperwood_19 Start: 9046, Stop: 8723, Start Num: 1

Candidate Starts for Pepperwood_19:

(Start: 1 @9046 has 85 MA's), (2, 8995), (6, 8914), (9, 8860), (12, 8800), (14, 8764),

Gene: Pepperwood_268 Start: 130831, Stop: 130508, Start Num: 1

Candidate Starts for Pepperwood_268:

(Start: 1 @130831 has 85 MA's), (2, 130780), (6, 130699), (9, 130645), (12, 130585), (14, 130549),

Gene: Persimmon_267 Start: 129246, Stop: 128923, Start Num: 1

Candidate Starts for Persimmon_267:

(Start: 1 @129246 has 85 MA's), (5, 129144), (6, 129114), (7, 129084), (12, 129000),

Gene: Persimmon_16 Start: 8435, Stop: 8112, Start Num: 1

Candidate Starts for Persimmon_16:

(Start: 1 @8435 has 85 MA's), (5, 8333), (6, 8303), (7, 8273), (12, 8189),

Gene: PinkiePie_17 Start: 8606, Stop: 8283, Start Num: 1

Candidate Starts for PinkiePie_17:

(Start: 1 @8606 has 85 MA's), (5, 8504), (6, 8474), (12, 8360),

Gene: PinkiePie_267 Start: 130127, Stop: 129804, Start Num: 1

Candidate Starts for PinkiePie_267:

(Start: 1 @130127 has 85 MA's), (5, 130025), (6, 129995), (12, 129881),

Gene: PynkPanther_265 Start: 130883, Stop: 130560, Start Num: 1

Candidate Starts for PynkPanther_265:

(Start: 1 @130883 has 85 MA's), (2, 130832), (5, 130781), (6, 130751), (7, 130721), (12, 130637),

Gene: PynkPanther_17 Start: 8594, Stop: 8271, Start Num: 1

Candidate Starts for PynkPanther_17:

(Start: 1 @8594 has 85 MA's), (2, 8543), (5, 8492), (6, 8462), (7, 8432), (12, 8348),

Gene: Scheme_272 Start: 132241, Stop: 131918, Start Num: 1

Candidate Starts for Scheme_272:

(Start: 1 @132241 has 85 MA's), (2, 132190), (6, 132109), (9, 132055), (12, 131995), (14, 131959),

Gene: Scheme_19 Start: 9046, Stop: 8723, Start Num: 1

Candidate Starts for Scheme_19:

(Start: 1 @9046 has 85 MA's), (2, 8995), (6, 8914), (9, 8860), (12, 8800), (14, 8764),

Gene: Squillium_269 Start: 130129, Stop: 129806, Start Num: 1

Candidate Starts for Squillium_269:

(Start: 1 @130129 has 85 MA's), (5, 130027), (6, 129997), (12, 129883),

Gene: Squillium_17 Start: 8605, Stop: 8282, Start Num: 1

Candidate Starts for Squillium_17:

(Start: 1 @8605 has 85 MA's), (5, 8503), (6, 8473), (12, 8359),

Gene: Sushi23_19 Start: 8893, Stop: 8570, Start Num: 1

Candidate Starts for Sushi23_19:

(Start: 1 @8893 has 85 MA's), (2, 8842), (9, 8707), (12, 8647), (14, 8611),

Gene: Sushi23_269 Start: 131736, Stop: 131413, Start Num: 1

Candidate Starts for Sushi23_269:

(Start: 1 @131736 has 85 MA's), (2, 131685), (9, 131550), (12, 131490), (14, 131454),

Gene: Targaryen_267 Start: 132745, Stop: 132422, Start Num: 1

Candidate Starts for Targaryen_267:

(Start: 1 @132745 has 85 MA's), (5, 132643), (6, 132613), (12, 132499),

Gene: Targaryen_16 Start: 9069, Stop: 8746, Start Num: 1

Candidate Starts for Targaryen_16:

(Start: 1 @9069 has 85 MA's), (5, 8967), (6, 8937), (12, 8823),

Gene: Tribute_18 Start: 8893, Stop: 8570, Start Num: 1

Candidate Starts for Tribute_18:

(Start: 1 @8893 has 85 MA's), (2, 8842), (6, 8761), (9, 8707), (12, 8647), (14, 8611),

Gene: Tribute_264 Start: 131437, Stop: 131114, Start Num: 1

Candidate Starts for Tribute_264:

(Start: 1 @131437 has 85 MA's), (2, 131386), (6, 131305), (9, 131251), (12, 131191), (14, 131155),

Gene: Wakanda_187 Start: 96721, Stop: 97071, Start Num: 1

Candidate Starts for Wakanda_187:

(Start: 1 @96721 has 85 MA's), (9, 96913), (14, 97030), (16, 97063),

Gene: Warpy_273 Start: 130821, Stop: 130498, Start Num: 1

Candidate Starts for Warpy_273:

(Start: 1 @130821 has 85 MA's), (5, 130719), (6, 130689), (12, 130575),

Gene: Warpy_21 Start: 9283, Stop: 8960, Start Num: 1

Candidate Starts for Warpy_21:

(Start: 1 @9283 has 85 MA's), (5, 9181), (6, 9151), (12, 9037),

Gene: WashU_19 Start: 9046, Stop: 8723, Start Num: 1

Candidate Starts for WashU_19:

(Start: 1 @9046 has 85 MA's), (2, 8995), (6, 8914), (9, 8860), (12, 8800), (14, 8764),

Gene: WashU_263 Start: 131040, Stop: 130717, Start Num: 1

Candidate Starts for WashU_263:

(Start: 1 @131040 has 85 MA's), (2, 130989), (6, 130908), (9, 130854), (12, 130794), (14, 130758),

Gene: Watermoore_265 Start: 131489, Stop: 131166, Start Num: 1

Candidate Starts for Watermoore_265:

(Start: 1 @131489 has 85 MA's), (2, 131438), (6, 131357), (9, 131303), (12, 131243), (14, 131207),

Gene: Watermoore_18 Start: 8893, Stop: 8570, Start Num: 1

Candidate Starts for Watermoore_18:

(Start: 1 @8893 has 85 MA's), (2, 8842), (6, 8761), (9, 8707), (12, 8647), (14, 8611),

Gene: WhereRU_16 Start: 8435, Stop: 8112, Start Num: 1

Candidate Starts for WhereRU_16:

(Start: 1 @8435 has 85 MA's), (5, 8333), (6, 8303), (7, 8273), (12, 8189),

Gene: WhereRU_265 Start: 129580, Stop: 129257, Start Num: 1

Candidate Starts for WhereRU_265:

(Start: 1 @129580 has 85 MA's), (5, 129478), (6, 129448), (7, 129418), (12, 129334),

