Pham 304967


1: Mildred21_34
2: LilSaint_35
3: Navo_32 + 5
4: Paradiddles_30 + 5
5: Anedea_32 + 1
6: Larnav_33
7: Shuckle_31 + 1
8: Sushi23_33 + 3
9: Cursive_31 + 8
10: MulchMansion_33 + 2
11: Marsus_33
12: Daubenski_35 + 1
13: EGole_33
14: Bmoc_32
15: Pepperwood_33
16: NootNoot_30
17: Brizzy_36 + 23
18: Stanimal_36 + 5
19: Mugiwara_36
20: Elmer_35 + 1
21: LukeCage_35

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 304967 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304967 has 76 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Mildred21_34
• Track 2 : LilSaint_35
• Track 3 : Navo_32, Liandry_33, Eliot67_33, FreddyDRoo_33, Squillium_33, PinkiePie_33
• Track 4 : Paradiddles_30, Braelyn_33, WhereRU_30, Persimmon_30, Davielle_30, Bartholomune_33
• Track 5 : Anedea_32, Riptide_32
• Track 6 : Larnav_33
• Track 7 : Shuckle_31, Peebs_32
• Track 8 : Sushi23_33, Teutsch_32, Scheme_33, Samisti12_32
• Track 9 : Cursive_31, Watermoore_33, Leo04_33, Lululemon_32, Coogler_33, Cross_33, BlueOtter_33, PacManQ_32, HangryHippo_33
• Track 10 : MulchMansion_33, LilMartin_33, Angela_33
• Track 11 : Marsus_33
• Track 12 : Daubenski_35, Cadmus_32
• Track 13 : EGole_33
• Track 14 : Bmoc_32
• Track 15 : Pepperwood_33
• Track 16 : NootNoot_30
• Track 17 : Brizzy_36, Wipeout_34, Bordeaux_34, PumpkinSpice_35, MindFlayer_34, IchabodCrane_34, Enygma_33, Gibbi_38, Birchlyn_33, Battuta_34, Rikishi_36, Quaran19_36, CeilingFan_35, KentuckyRacer_36, Spelly_36, Spilled_36, Karimac_35, TomSawyer_34, Jollison_35, Amabiko_36, AcciDwight_38, JimJam_36, Starbow_34, SaltySpitoon_36
• Track 18 : Stanimal_36, Sollertia_36, BoomerJR_36, AngryGiraffe_36, Yaboi_37, Genie2_36
• Track 19 : Mugiwara_36
• Track 20 : Elmer_35, Wofford_33
• Track 21 : LukeCage_35

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 32 of the 72 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AcciDwight_38, Amabiko_36, AngryGiraffe_36, Battuta_34, Birchlyn_33, BoomerJR_36, Bordeaux_34, Brizzy_36, CeilingFan_35, Elmer_35, Enygma_33, Genie2_36, Gibbi_38, IchabodCrane_34, JimJam_36, Jollison_35, Karimac_35, KentuckyRacer_36, LukeCage_35, MindFlayer_34, Mugiwara_36, PumpkinSpice_35, Quaran19_36, Rikishi_36, SaltySpitoon_36, Sollertia_36, Spelly_36, Spilled_36, Stanimal_36, Starbow_34, TomSawyer_34, Wipeout_34, Wofford_33, Yaboi_37,

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

Genes that do not have the "Most Annotated" start:
• Anedea_32, Angela_33, Bartholomune_33, BlueOtter_33, Bmoc_32, Braelyn_33, Cadmus_32, Coogler_33, Cross_33, Cursive_31, Daubenski_35, Davielle_30, EGole_33, Eliot67_33, FreddyDRoo_33, HangryHippo_33, Larnav_33, Leo04_33, Liandry_33, LilMartin_33, LilSaint_35, Lululemon_32, Marsus_33, Mildred21_34, MulchMansion_33, Navo_32, NootNoot_30, PacManQ_32, Paradiddles_30, Peebs_32, Pepperwood_33, Persimmon_30, PinkiePie_33, Riptide_32, Samisti12_32, Scheme_33, Shuckle_31, Squillium_33, Sushi23_33, Teutsch_32, Watermoore_33, WhereRU_30,

Summary by start number:

Start 8:
• Found in 9 of 76 (11.8%) of genes in pham
• Manual Annotations of this start: 9 of 72
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anedea_32 (BE1), Angela_33 (BE1), Cadmus_32 (BE1), Daubenski_35 (BE1), LilMartin_33 (BE1), LilSaint_35 (BE1), Marsus_33 (BE1), MulchMansion_33 (BE1), Riptide_32 (BE1),

Start 9:
• Found in 34 of 76 (44.7%) of genes in pham
• Manual Annotations of this start: 32 of 72
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AcciDwight_38 (BE2), Amabiko_36 (BE2), AngryGiraffe_36 (BE2), Battuta_34 (BE2), Birchlyn_33 (BE2), BoomerJR_36 (BE2), Bordeaux_34 (BE2), Brizzy_36 (BE2), CeilingFan_35 (BE2), Elmer_35 (BE2), Enygma_33 (BE2), Genie2_36 (BE2), Gibbi_38 (BE2), IchabodCrane_34 (BE2), JimJam_36 (BE2), Jollison_35 (BE2), Karimac_35 (BE2), KentuckyRacer_36 (BE2), LukeCage_35 (BE2), MindFlayer_34 (BE2), Mugiwara_36 (BE2), PumpkinSpice_35 (BE2), Quaran19_36 (BE2), Rikishi_36 (BE2), SaltySpitoon_36 (BE2), Sollertia_36 (BE2), Spelly_36 (BE2), Spilled_36 (BE2), Stanimal_36 (BE2), Starbow_34 (BE2), TomSawyer_34 (BE2), Wipeout_34 (BE2), Wofford_33 (BE2), Yaboi_37 (BE2),

Start 10:
• Found in 33 of 76 (43.4%) of genes in pham
• Manual Annotations of this start: 31 of 72
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bartholomune_33 (BE1), BlueOtter_33 (BE1), Bmoc_32 (BE1), Braelyn_33 (BE1), Coogler_33 (BE1), Cross_33 (BE1), Cursive_31 (BE1), Davielle_30 (BE1), EGole_33 (BE1), Eliot67_33 (BE1),

FreddyDRoo_33 (BE1), HangryHippo_33 (BE1), Larnav_33 (BE1), Leo04_33 (BE1), Liandry_33 (BE1), Lululemon_32 (BE1), Mildred21_34 (BE1), Navo_32 (BE1), NootNoot_30 (BE1), PacManQ_32 (BE1), Paradiddles_30 (BE1), Peebs_32 (BE1), Pepperwood_33 (BE1), Persimmon_30 (BE1), PinkiePie_33 (BE1), Samisti12_32 (BE1), Scheme_33 (BE1), Shuckle_31 (BE1), Squillium_33 (BE1), Sushi23_33 (BE1), Teutsch_32 (BE1), Watermoore_33 (BE1), WhereRU_30 (BE1),

Summary by clusters:

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

Info for manual annotations of cluster BE1:
•Start number 8 was manually annotated 9 times for cluster BE1.
•Start number 10 was manually annotated 31 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 9 was manually annotated 32 times for cluster BE2.

Gene Information:

Gene: AcciDwight_38 Start: 16181, Stop: 15975, Start Num: 9
Candidate Starts for AcciDwight_38:
(1, 16265), (Start: 9 @16181 has 32 MA's), (14, 16148), (23, 15989),

Gene: Amabiko_36 Start: 16226, Stop: 16020, Start Num: 9
Candidate Starts for Amabiko_36:
(1, 16310), (Start: 9 @16226 has 32 MA's), (14, 16193), (23, 16034),

Gene: Anedea_32 Start: 15212, Stop: 15003, Start Num: 8
Candidate Starts for Anedea_32:
(Start: 8 @15212 has 9 MA's), (15, 15173), (16, 15161), (17, 15149),

Gene: Angela_33 Start: 15247, Stop: 15038, Start Num: 8
Candidate Starts for Angela_33:
(Start: 8 @15247 has 9 MA's), (16, 15196), (17, 15184), (18, 15172), (22, 15064),

Gene: AngryGiraffe_36 Start: 16035, Stop: 15829, Start Num: 9
Candidate Starts for AngryGiraffe_36:
(Start: 9 @16035 has 32 MA's), (14, 16002), (20, 15906), (23, 15843),

Gene: Bartholomune_33 Start: 14992, Stop: 14789, Start Num: 10
Candidate Starts for Bartholomune_33:
(Start: 10 @14992 has 31 MA's), (11, 14974), (12, 14968), (16, 14947),

Gene: Battuta_34 Start: 16202, Stop: 15996, Start Num: 9
Candidate Starts for Battuta_34:
(1, 16286), (Start: 9 @16202 has 32 MA's), (14, 16169), (23, 16010),

Gene: Birchlyn_33 Start: 14083, Stop: 13877, Start Num: 9
Candidate Starts for Birchlyn_33:
(1, 14167), (Start: 9 @14083 has 32 MA's), (14, 14050), (23, 13891),

Gene: BlueOtter_33 Start: 14943, Stop: 14740, Start Num: 10
Candidate Starts for BlueOtter_33:
(Start: 10 @14943 has 31 MA's), (12, 14919), (19, 14847),

Gene: Bmoc_32 Start: 15380, Stop: 15177, Start Num: 10
Candidate Starts for Bmoc_32:
(Start: 10 @15380 has 31 MA's), (20, 15254),

Gene: BoomerJR_36 Start: 16035, Stop: 15829, Start Num: 9
Candidate Starts for BoomerJR_36:
(Start: 9 @16035 has 32 MA's), (14, 16002), (20, 15906), (23, 15843),

Gene: Bordeaux_34 Start: 16217, Stop: 16011, Start Num: 9
Candidate Starts for Bordeaux_34:
(1, 16301), (Start: 9 @16217 has 32 MA's), (14, 16184), (23, 16025),

Gene: Braelyn_33 Start: 15387, Stop: 15184, Start Num: 10
Candidate Starts for Braelyn_33:
(Start: 10 @15387 has 31 MA's), (11, 15369), (12, 15363), (16, 15342),

Gene: Brizzy_36 Start: 15876, Stop: 15670, Start Num: 9
Candidate Starts for Brizzy_36:
(1, 15960), (Start: 9 @15876 has 32 MA's), (14, 15843), (23, 15684),

Gene: Cadmus_32 Start: 14591, Stop: 14382, Start Num: 8
Candidate Starts for Cadmus_32:
(4, 14639), (Start: 8 @14591 has 9 MA's), (16, 14540), (19, 14489), (21, 14426),

Gene: CeilingFan_35 Start: 15977, Stop: 15771, Start Num: 9
Candidate Starts for CeilingFan_35:
(1, 16061), (Start: 9 @15977 has 32 MA's), (14, 15944), (23, 15785),

Gene: Coogler_33 Start: 14932, Stop: 14729, Start Num: 10
Candidate Starts for Coogler_33:
(Start: 10 @14932 has 31 MA's), (12, 14908), (19, 14836),

Gene: Cross_33 Start: 14944, Stop: 14741, Start Num: 10
Candidate Starts for Cross_33:
(Start: 10 @14944 has 31 MA's), (12, 14920), (19, 14848),

Gene: Cursive_31 Start: 13761, Stop: 13558, Start Num: 10
Candidate Starts for Cursive_31:
(Start: 10 @13761 has 31 MA's), (12, 13737), (19, 13665),

Gene: Daubenski_35 Start: 15355, Stop: 15146, Start Num: 8
Candidate Starts for Daubenski_35:
(4, 15403), (Start: 8 @15355 has 9 MA's), (16, 15304), (19, 15253), (21, 15190),

Gene: Davielle_30 Start: 14221, Stop: 14018, Start Num: 10
Candidate Starts for Davielle_30:
(Start: 10 @14221 has 31 MA's), (11, 14203), (12, 14197), (16, 14176),

Gene: EGole_33 Start: 15805, Stop: 15602, Start Num: 10
Candidate Starts for EGole_33:
(Start: 10 @15805 has 31 MA's), (13, 15778), (16, 15760), (20, 15679), (23, 15616),

Gene: Eliot67_33 Start: 14992, Stop: 14789, Start Num: 10
Candidate Starts for Eliot67_33:
(Start: 10 @14992 has 31 MA's), (11, 14974), (12, 14968), (16, 14947), (22, 14815),

Gene: Elmer_35 Start: 15504, Stop: 15298, Start Num: 9
Candidate Starts for Elmer_35:
(5, 15549), (6, 15540), (Start: 9 @15504 has 32 MA's), (14, 15471), (23, 15312),

Gene: Enygma_33 Start: 15348, Stop: 15142, Start Num: 9
Candidate Starts for Enygma_33:
(1, 15432), (Start: 9 @15348 has 32 MA's), (14, 15315), (23, 15156),

Gene: FreddyDRoo_33 Start: 14992, Stop: 14789, Start Num: 10
Candidate Starts for FreddyDRoo_33:
(Start: 10 @14992 has 31 MA's), (11, 14974), (12, 14968), (16, 14947), (22, 14815),

Gene: Genie2_36 Start: 16038, Stop: 15832, Start Num: 9
Candidate Starts for Genie2_36:
(Start: 9 @16038 has 32 MA's), (14, 16005), (20, 15909), (23, 15846),

Gene: Gibbi_38 Start: 15837, Stop: 15631, Start Num: 9
Candidate Starts for Gibbi_38:
(1, 15921), (Start: 9 @15837 has 32 MA's), (14, 15804), (23, 15645),

Gene: HangryHippo_33 Start: 14943, Stop: 14740, Start Num: 10
Candidate Starts for HangryHippo_33:
(Start: 10 @14943 has 31 MA's), (12, 14919), (19, 14847),

Gene: IchabodCrane_34 Start: 15929, Stop: 15723, Start Num: 9
Candidate Starts for IchabodCrane_34:
(1, 16013), (Start: 9 @15929 has 32 MA's), (14, 15896), (23, 15737),

Gene: JimJam_36 Start: 16165, Stop: 15959, Start Num: 9
Candidate Starts for JimJam_36:
(1, 16249), (Start: 9 @16165 has 32 MA's), (14, 16132), (23, 15973),

Gene: Jollison_35 Start: 16183, Stop: 15977, Start Num: 9
Candidate Starts for Jollison_35:
(1, 16267), (Start: 9 @16183 has 32 MA's), (14, 16150), (23, 15991),

Gene: Karimac_35 Start: 16332, Stop: 16126, Start Num: 9
Candidate Starts for Karimac_35:
(1, 16416), (Start: 9 @16332 has 32 MA's), (14, 16299), (23, 16140),

Gene: KentuckyRacer_36 Start: 15978, Stop: 15772, Start Num: 9
Candidate Starts for KentuckyRacer_36:
(1, 16062), (Start: 9 @15978 has 32 MA's), (14, 15945), (23, 15786),

Gene: Larnav_33 Start: 14891, Stop: 14688, Start Num: 10

Candidate Starts for Larnav_33:
(Start: 10 @14891 has 31 MA's), (12, 14867), (19, 14795),

Gene: Leo04_33 Start: 14942, Stop: 14739, Start Num: 10
Candidate Starts for Leo04_33:
(Start: 10 @14942 has 31 MA's), (12, 14918), (19, 14846),

Gene: Liandry_33 Start: 14991, Stop: 14788, Start Num: 10
Candidate Starts for Liandry_33:
(Start: 10 @14991 has 31 MA's), (11, 14973), (12, 14967), (16, 14946), (22, 14814),

Gene: LilMartin_33 Start: 15194, Stop: 14985, Start Num: 8
Candidate Starts for LilMartin_33:
(Start: 8 @15194 has 9 MA's), (16, 15143), (17, 15131), (18, 15119), (22, 15011),

Gene: LilSaint_35 Start: 15430, Stop: 15221, Start Num: 8
Candidate Starts for LilSaint_35:
(2, 15496), (7, 15448), (Start: 8 @15430 has 9 MA's), (16, 15379), (17, 15367),

Gene: LukeCage_35 Start: 15915, Stop: 15709, Start Num: 9
Candidate Starts for LukeCage_35:
(1, 15999), (Start: 9 @15915 has 32 MA's), (14, 15882), (23, 15723),

Gene: Lululemon_32 Start: 14323, Stop: 14120, Start Num: 10
Candidate Starts for Lululemon_32:
(Start: 10 @14323 has 31 MA's), (12, 14299), (19, 14227),

Gene: Marsus_33 Start: 15071, Stop: 14862, Start Num: 8
Candidate Starts for Marsus_33:
(Start: 8 @15071 has 9 MA's), (16, 15020), (18, 14996),

Gene: Mildred21_34 Start: 15301, Stop: 15098, Start Num: 10
Candidate Starts for Mildred21_34:
(Start: 10 @15301 has 31 MA's), (14, 15271),

Gene: MindFlayer_34 Start: 15836, Stop: 15630, Start Num: 9
Candidate Starts for MindFlayer_34:
(1, 15920), (Start: 9 @15836 has 32 MA's), (14, 15803), (23, 15644),

Gene: Mugiwara_36 Start: 15831, Stop: 15625, Start Num: 9
Candidate Starts for Mugiwara_36:
(1, 15915), (3, 15888), (Start: 9 @15831 has 32 MA's), (14, 15798), (23, 15639),

Gene: MulchMansion_33 Start: 15195, Stop: 14986, Start Num: 8
Candidate Starts for MulchMansion_33:
(Start: 8 @15195 has 9 MA's), (16, 15144), (17, 15132), (18, 15120), (22, 15012),

Gene: Navo_32 Start: 15150, Stop: 14947, Start Num: 10
Candidate Starts for Navo_32:
(Start: 10 @15150 has 31 MA's), (11, 15132), (12, 15126), (16, 15105), (22, 14973),

Gene: NootNoot_30 Start: 14173, Stop: 13970, Start Num: 10
Candidate Starts for NootNoot_30:

(Start: 10 @14173 has 31 MA's), (11, 14155), (12, 14149), (16, 14128), (22, 13996),

Gene: PacManQ_32 Start: 14323, Stop: 14120, Start Num: 10
Candidate Starts for PacManQ_32:
(Start: 10 @14323 has 31 MA's), (12, 14299), (19, 14227),

Gene: Paradiddles_30 Start: 14164, Stop: 13961, Start Num: 10
Candidate Starts for Paradiddles_30:
(Start: 10 @14164 has 31 MA's), (11, 14146), (12, 14140), (16, 14119),

Gene: Peebs_32 Start: 14642, Stop: 14439, Start Num: 10
Candidate Starts for Peebs_32:
(Start: 10 @14642 has 31 MA's), (12, 14618), (19, 14546),

Gene: Pepperwood_33 Start: 14815, Stop: 14612, Start Num: 10
Candidate Starts for Pepperwood_33:
(Start: 10 @14815 has 31 MA's), (12, 14791),

Gene: Persimmon_30 Start: 14221, Stop: 14018, Start Num: 10
Candidate Starts for Persimmon_30:
(Start: 10 @14221 has 31 MA's), (11, 14203), (12, 14197), (16, 14176),

Gene: PinkiePie_33 Start: 14992, Stop: 14789, Start Num: 10
Candidate Starts for PinkiePie_33:
(Start: 10 @14992 has 31 MA's), (11, 14974), (12, 14968), (16, 14947), (22, 14815),

Gene: PumpkinSpice_35 Start: 16226, Stop: 16020, Start Num: 9
Candidate Starts for PumpkinSpice_35:
(1, 16310), (Start: 9 @16226 has 32 MA's), (14, 16193), (23, 16034),

Gene: Quaran19_36 Start: 16217, Stop: 16011, Start Num: 9
Candidate Starts for Quaran19_36:
(1, 16301), (Start: 9 @16217 has 32 MA's), (14, 16184), (23, 16025),

Gene: Rikishi_36 Start: 16132, Stop: 15926, Start Num: 9
Candidate Starts for Rikishi_36:
(1, 16216), (Start: 9 @16132 has 32 MA's), (14, 16099), (23, 15940),

Gene: Riptide_32 Start: 14938, Stop: 14729, Start Num: 8
Candidate Starts for Riptide_32:
(Start: 8 @14938 has 9 MA's), (15, 14899), (16, 14887), (17, 14875),

Gene: SaltySpitoon_36 Start: 16226, Stop: 16020, Start Num: 9
Candidate Starts for SaltySpitoon_36:
(1, 16310), (Start: 9 @16226 has 32 MA's), (14, 16193), (23, 16034),

Gene: Samisti12_32 Start: 15412, Stop: 15209, Start Num: 10
Candidate Starts for Samisti12_32:
(Start: 10 @15412 has 31 MA's), (12, 15388),

Gene: Scheme_33 Start: 14826, Stop: 14623, Start Num: 10
Candidate Starts for Scheme_33:
(Start: 10 @14826 has 31 MA's), (12, 14802),

Gene: Shuckle_31 Start: 15095, Stop: 14892, Start Num: 10
Candidate Starts for Shuckle_31:
(Start: 10 @15095 has 31 MA's), (12, 15071), (19, 14999),

Gene: Sollertia_36 Start: 16038, Stop: 15832, Start Num: 9
Candidate Starts for Sollertia_36:
(Start: 9 @16038 has 32 MA's), (14, 16005), (20, 15909), (23, 15846),

Gene: Spelly_36 Start: 16181, Stop: 15975, Start Num: 9
Candidate Starts for Spelly_36:
(1, 16265), (Start: 9 @16181 has 32 MA's), (14, 16148), (23, 15989),

Gene: Spilled_36 Start: 15935, Stop: 15729, Start Num: 9
Candidate Starts for Spilled_36:
(1, 16019), (Start: 9 @15935 has 32 MA's), (14, 15902), (23, 15743),

Gene: Squillium_33 Start: 14991, Stop: 14788, Start Num: 10
Candidate Starts for Squillium_33:
(Start: 10 @14991 has 31 MA's), (11, 14973), (12, 14967), (16, 14946), (22, 14814),

Gene: Stanimal_36 Start: 16038, Stop: 15832, Start Num: 9
Candidate Starts for Stanimal_36:
(Start: 9 @16038 has 32 MA's), (14, 16005), (20, 15909), (23, 15846),

Gene: Starbow_34 Start: 16202, Stop: 15996, Start Num: 9
Candidate Starts for Starbow_34:
(1, 16286), (Start: 9 @16202 has 32 MA's), (14, 16169), (23, 16010),

Gene: Sushi23_33 Start: 15038, Stop: 14835, Start Num: 10
Candidate Starts for Sushi23_33:
(Start: 10 @15038 has 31 MA's), (12, 15014),

Gene: Teutsch_32 Start: 14731, Stop: 14528, Start Num: 10
Candidate Starts for Teutsch_32:
(Start: 10 @14731 has 31 MA's), (12, 14707),

Gene: TomSawyer_34 Start: 15820, Stop: 15614, Start Num: 9
Candidate Starts for TomSawyer_34:
(1, 15904), (Start: 9 @15820 has 32 MA's), (14, 15787), (23, 15628),

Gene: Watermoore_33 Start: 14944, Stop: 14741, Start Num: 10
Candidate Starts for Watermoore_33:
(Start: 10 @14944 has 31 MA's), (12, 14920), (19, 14848),

Gene: WhereRU_30 Start: 14221, Stop: 14018, Start Num: 10
Candidate Starts for WhereRU_30:
(Start: 10 @14221 has 31 MA's), (11, 14203), (12, 14197), (16, 14176),

Gene: Wipeout_34 Start: 15842, Stop: 15636, Start Num: 9
Candidate Starts for Wipeout_34:
(1, 15926), (Start: 9 @15842 has 32 MA's), (14, 15809), (23, 15650),

Gene: Wofford_33 Start: 14982, Stop: 14776, Start Num: 9
Candidate Starts for Wofford_33:
(5, 15027), (6, 15018), (Start: 9 @14982 has 32 MA's), (14, 14949), (23, 14790),

Gene: Yaboi_37 Start: 16014, Stop: 15808, Start Num: 9
Candidate Starts for Yaboi_37:
(Start: 9 @16014 has 32 MA's), (14, 15981), (20, 15885), (23, 15822),