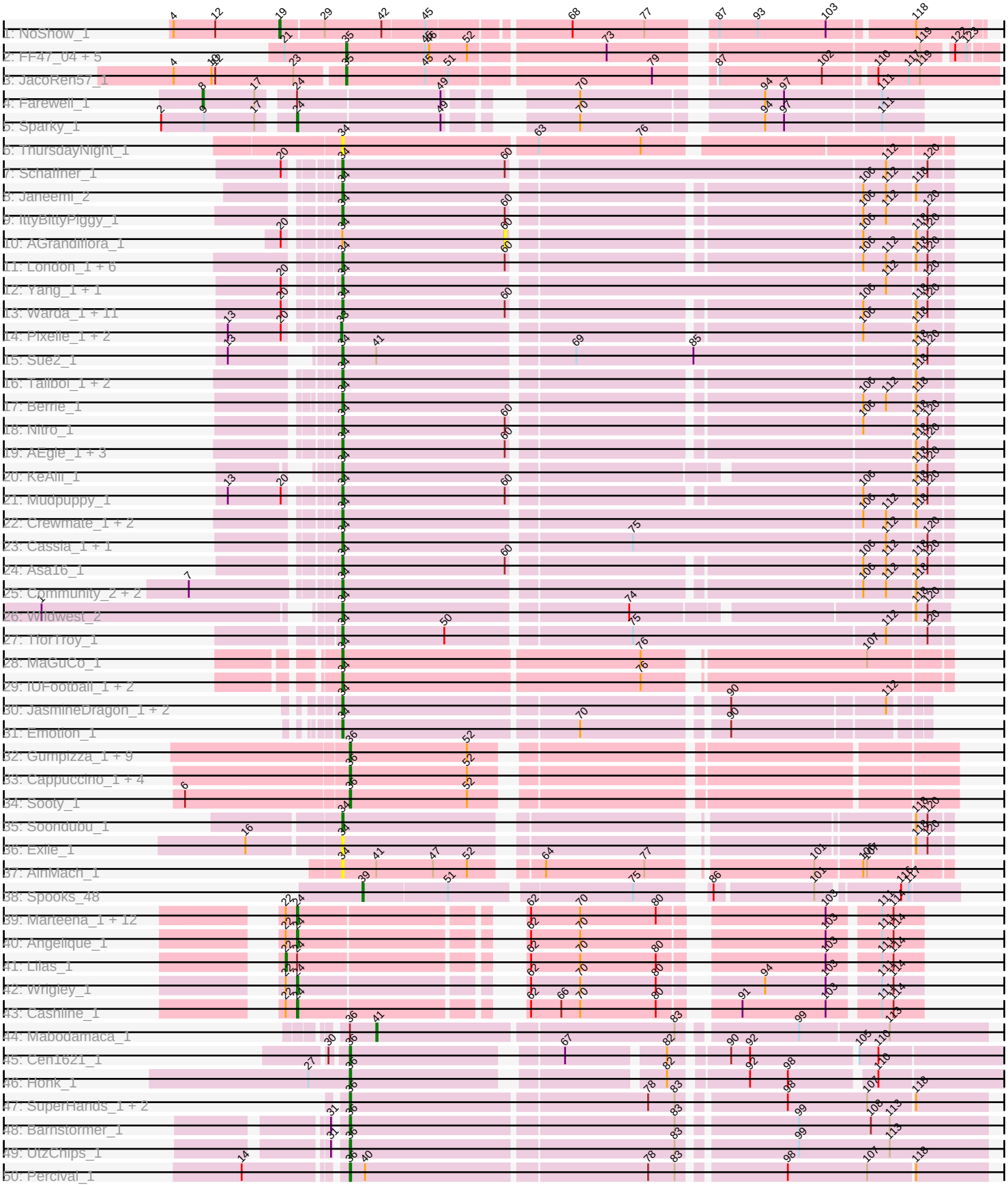
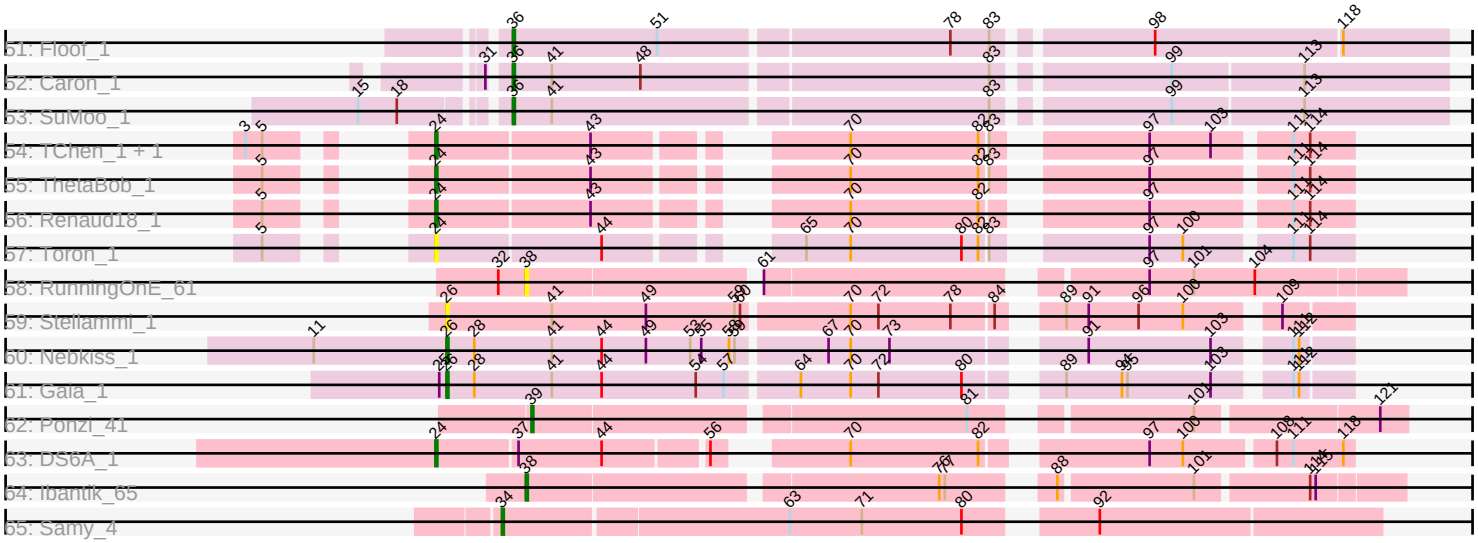
Pham 294529


1: NoShow_1
2: FF47_04 + 5
3: JacoRen57_1
4: Farewell_1
5: Sparky_1
6: ThursdayNight_1
7: Schaffner_1
8: Janeemi_2
9: IttyBittyPiggy_1
10: AGrandiflora_1
11: London_1 + 6
12: Yang_1 + 1
13: Warda_1 + 11
14: Pixelle_1 + 2
15: Sue2_1
16: Talbot_1 + 2
17: Bernie_1
18: Nitro_1
19: AEgle_1 + 3
20: KeAlli_1
21: Mudpuppy_1
22: Crewmate_1 + 2
23: Cassia_1 + 1
24: Asa16_1
25: Community_2 + 2
26: Windwest_2
27: ThorTroy_1
28: MaGuCo_1
29: IUFootball_1 + 2
30: JasmineDragon_1 + 2
31: Emotion_1
32: Gumpizza_1 + 9
33: Cappuccino_1 + 4
34: Sooty_1
35: Soondubu_1
36: Exile_1
37: AimMach_1
38: Spooks_48
39: Marteena_1 + 12
40: Angelique_1
41: Lilas_1
42: Wrigley_1
43: Cashline_1
44: Mabodamaca_1
45: Cen1621_1
46: Honk_1
47: SuperHands_1 + 2
48: Barnstormer_1
49: UtzChips_1
50: Percival_1

Pham 294529


51: Floof_1
52: Caron_1
53: SuMoo_1
54: TChen_1 + 1
55: MetaBob_1
56: Renaud18_1
57: Toron_1
58: RunningOnE_61
59: Stellamml_1
60: Nebkiss_1
61: Gaia_1
62: Ponzi_41
63: DS6A_1
64: Ibantik_65
65: Samy_4

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 294529 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294529 has 132 members, 24 are drafts.

Phages represented in each track:
- Track 1 : NoShow_1
- Track 2 : FF47_04, Muddy_4, LongHai_5, Maco6_2, 8UZL_4, Salvus_5
- Track 3 : JacoRen57_1
- Track 4 : Farewell_1
- Track 5 : Sparky_1
- Track 6 : ThursdayNight_1
- Track 7 : Schaffner_1
- Track 8 : Janeemi_2
- Track 9 : IttyBittyPiggy_1
- Track 10 : AGrandiflora_1
- Track 11 : London_1, Eraser_1, Subaru_1, Elezi_1, Skelbel_1, Niobe_1, Jstan_1
- Track 12 : Yang_1, JuneStar_1
- Track 13 : Warda_1, Cyan_1, YesChef_1, Flutur_1, Tbone_1, JohnDoe_1, Kaylissa_1, Tutumahutu_1, Simpson_1, Lego_1, Powerpuff_1, Joemato_1
- Track 14 : Pixelle_1, Amyev_1, Tian_1
- Track 15 : Sue2_1
- Track 16 : Tallboi_1, ObiToo_1, DrSierra_1
- Track 17 : Berrie_1
- Track 18 : Nitro_1
- Track 19 : AEgle_1, Amploria_1, Turab_1, Adumb2043_1
- Track 20 : KeAlii_1
- Track 21 : Mudpuppy_1
- Track 22 : Crewmate_1, Iter_1, Ascela_1
- Track 23 : Cassia_1, Pumpkins_1
- Track 24 : Asa16_1
- Track 25 : Community_2, Phives_2, Tuck_2
- Track 26 : Wildwest_2
- Track 27 : TforTroy_1
- Track 28 : MaGuCo_1
- Track 29 : IUFootball_1, Liebe_1, Maureen_1
- Track 30 : JasmineDragon_1, ShakeItOph_1, MiniMommy_1
- Track 31 : Emotion_1
- Track 32 : Gumpizza_1, Giorgio_1, Moss_1, Mysterium_1, Halsey_1, Beaupre_1, Stuu_1, Ashes_1, RockScotty_1, SpecialK_1
- Track 33 : Cappuccino_1, Sabourin_1, Gambol_1, Donkey_1, Kalimba_1
- Track 34 : Sooty_1
- Track 35 : Soondubu_1

• Track 36 : Exile_1
• Track 37 : AinMach_1
• Track 38 : Spooks_48
• Track 39 : Marteena_1, EnalisNailo_1, Jablanski_1, Posh_1, BeeGee_1, Confidence_1, EMsquaredA_1, LonelyBoi_1, Floral_1, Pytheas_1, BritBrat_1, Pollux_1, Bradissa_1
• Track 40 : Angelique_1
• Track 41 : Lilas_1
• Track 42 : Wrigley_1
• Track 43 : Cashline_1
• Track 44 : Mabodamaca_1
• Track 45 : Cen1621_1
• Track 46 : Honk_1
• Track 47 : SuperHands_1, Forester_2, Gretchen_1
• Track 48 : Barnstormer_1
• Track 49 : UtzChips_1
• Track 50 : Percival_1
• Track 51 : Floof_1
• Track 52 : Caron_1
• Track 53 : SuMoo_1
• Track 54 : TChen_1, LunaStella_1
• Track 55 : ThetaBob_1
• Track 56 : Renaud18_1
• Track 57 : Toron_1
• Track 58 : RunningOnE_61
• Track 59 : Stellammi_1
• Track 60 : Nebkiss_1
• Track 61 : Gaia_1
• Track 62 : Ponzi_41
• Track 63 : DS6A_1
• Track 64 : Ibantik_65
• Track 65 : Samy_4

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

The start number called the most often in the published annotations is 34, it was called in 47 of the 108 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AEgle_1, Adumb2043_1, AinMach_1, Amploria_1, Asa16_1, Ascela_1, Berrie_1, Cassia_1, Community_2, Crewmate_1, Cyan_1, DrSierra_1, Elezi_1, Emotion_1, Eraser_1, Exile_1, Flutur_1, IUFootball_1, Iter_1, IttyBittyPiggy_1, Janeemi_2, JasmineDragon_1, Joemato_1, JohnDoe_1, Jstan_1, JuneStar_1, Kaylissa_1, KeAlii_1, Lego_1, Liebe_1, London_1, MaGuCo_1, Maureen_1, MiniMommy_1, Mudpuppy_1, Niobe_1, Nitro_1, ObiToo_1, Phives_2, Powerpuff_1, Pumpkins_1, Samy_4, Schaffner_1, ShakeItOph_1, Simpson_1, Skelbel_1, Soondubu_1, Subaru_1, Sue2_1, Tallboi_1, Tbone_1, TforTroy_1, ThursdayNight_1, Tuck_2, Turab_1, Tutumahutu_1, Warda_1, Wildwest_2, Yang_1, YesChef_1,

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

• AGrandiflora_1,

Genes that do not have the "Most Annotated" start:
• 8UZL_4, Amyev_1, Angelique_1, Ashes_1, Barnstormer_1, Beaupre_1, BeeGee_1, Bradissa_1, BritBrat_1, Cappuccino_1, Caron_1, Cashline_1, Cen1621_1, Confidence_1, DS6A_1, Donkey_1, EMsquaredA_1, EnalisNailo_1, FF47_04, Farewell_1, Floof_1, Floral_1, Forester_2, Gaia_1, Gambol_1, Giorgio_1, Gretchen_1, Gumpizza_1, Halsey_1, Honk_1, Ibantik_65, Jablanski_1, JacoRen57_1, Kalimba_1, Lilas_1, LonelyBoi_1, LongHai_5, LunaStella_1, Mabodamaca_1, Maco6_2, Marteena_1, Moss_1, Muddy_4, Mysterium_1, Nebkiss_1, NoShow_1, Percival_1, Pixelle_1, Pollux_1, Ponzi_41, Posh_1, Pytheas_1, Renaud18_1, RockScotty_1, RunningOnE_61, Sabourin_1, Salvus_5, Sooty_1, Sparky_1, SpecialK_1, Spooks_48, Stellammi_1, Stuu_1, SuMoo_1, SuperHands_1, TChen_1, ThetaBob_1, Tian_1, Toron_1, UtzChips_1, Wrigley_1,

Summary by start number:

Start 8:
• Found in 1 of 132 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 108
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Farewell_1 (AF),

Start 19:
• Found in 1 of 132 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 108
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NoShow_1 (AB),

Start 22:
• Found in 17 of 132 (12.9%) of genes in pham
• Manual Annotations of this start: 1 of 108
• Called 5.9% of time when present
• Phage (with cluster) where this start called: Lilas_1 (CY1),

Start 24:
• Found in 25 of 132 (18.9%) of genes in pham
• Manual Annotations of this start: 22 of 108
• Called 92.0% of time when present
• Phage (with cluster) where this start called: Angelique_1 (CY1), BeeGee_1 (CY5), Bradissa_1 (CY1), BritBrat_1 (CY2), Cashline_1 (CY6), Confidence_1 (CY1), DS6A_1 (singleton), EMsquaredA_1 (CY1), EnalisNailo_1 (CY1), Floral_1 (CY1), Jablanski_1 (CY3), LonelyBoi_1 (CY7), LunaStella_1 (F4), Marteena_1 (CY1), Pollux_1 (CY1), Posh_1 (CY4), Pytheas_1 (CY3), Renaud18_1 (F4), Sparky_1 (AF), TChen_1 (F4), ThetaBob_1 (F4), Toron_1 (F6), Wrigley_1 (CY4),

Start 26:
• Found in 3 of 132 (2.3%) of genes in pham
• Manual Annotations of this start: 2 of 108
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gaia_1 (X), Nebkiss_1 (X), Stellammi_1 (UNK),

Start 33:
• Found in 3 of 132 (2.3%) of genes in pham
• Manual Annotations of this start: 2 of 108
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amyev_1 (AZ1), Pixelle_1 (AZ1), Tian_1 (AZ1),

Start 34:
• Found in 61 of 132 (46.2%) of genes in pham
• Manual Annotations of this start: 47 of 108
• Called 98.4% of time when present
• Phage (with cluster) where this start called: AEgle_1 (AZ1), Adumb2043_1 (AZ1), AinMach_1 (AZ7), Amploria_1 (AZ1), Asa16_1 (AZ1), Ascela_1 (AZ1), Berrie_1 (AZ1), Cassia_1 (AZ1), Community_2 (AZ1), Crewmate_1 (AZ1), Cyan_1 (AZ1), DrSierra_1 (AZ1), Elezi_1 (AZ1), Emotion_1 (AZ4), Eraser_1 (AZ1), Exile_1 (AZ6), Flutur_1 (AZ), IUFootball_1 (AZ2), Iter_1 (AZ1), IttyBittyPiggy_1 (AZ1), Janeemi_2 (AZ1), JasmineDragon_1 (AZ4), Joemato_1 (AZ1), JohnDoe_1 (AZ1), Jstan_1 (AZ1), JuneStar_1 (AZ1), Kaylissa_1 (AZ1), KeAlii_1 (AZ1), Lego_1 (AZ1), Liebe_1 (AZ2), London_1 (AZ1), MaGuCo_1 (AZ2), Maureen_1 (AZ2), MiniMommy_1 (AZ4), Mudpuppy_1 (AZ1), Niobe_1 (AZ1), Nitro_1 (AZ1), ObiToo_1 (AZ1), Phives_2 (AZ1), Powerpuff_1 (AZ1), Pumpkins_1 (AZ1), Samy_4 (singleton), Schaffner_1 (AZ1), ShakeItOph_1 (AZ4), Simpson_1 (AZ1), Skelbel_1 (AZ1), Soondubu_1 (AZ6), Subaru_1 (AZ1), Sue2_1 (AZ1), Tallboi_1 (AZ1), Tbone_1 (AZ1), TforTroy_1 (AZ1), ThursdayNight_1 (AZ), Tuck_2 (AZ1), Turab_1 (AZ1), Tutumahutu_1 (AZ1), Warda_1 (AZ1), Wildwest_2 (AZ1), Yang_1 (AZ1), YesChef_1 (AZ1),

Start 35:
• Found in 7 of 132 (5.3%) of genes in pham
• Manual Annotations of this start: 3 of 108
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 8UZL_4 (AB), FF47_04 (AB), JacoRen57_1 (AB), LongHai_5 (AB), Maco6_2 (AB), Muddy_4 (AB), Salvus_5 (AB),

Start 36:
• Found in 28 of 132 (21.2%) of genes in pham
• Manual Annotations of this start: 25 of 108
• Called 96.4% of time when present
• Phage (with cluster) where this start called: Ashes_1 (AZ5), Barnstormer_1 (EH), Beaupre_1 (AZ5), Cappuccino_1 (AZ5), Caron_1 (EH), Cen1621_1 (EH), Donkey_1 (AZ5), Floof_1 (EH), Forester_2 (EH), Gambol_1 (AZ5), Giorgio_1 (AZ5), Gretchen_1 (EH), Gumpizza_1 (AZ5), Halsey_1 (AZ5), Honk_1 (EH), Kalimba_1 (AZ5), Moss_1 (AZ5), Mysterium_1 (AZ5), Percival_1 (EH), RockScotty_1 (AZ5), Sabourin_1 (AZ5), Sooty_1 (AZ5), SpecialK_1 (AZ5), Stuu_1 (AZ5), SuMoo_1 (EH), SuperHands_1 (EH), UtzChips_1 (EH),

Start 38:
• Found in 2 of 132 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 108
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ibantik_65 (singleton), RunningOnE_61 (UNK),

Start 39:

• Found in 2 of 132 (1.5%) of genes in pham
• Manual Annotations of this start: 2 of 108
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ponzi_41 (singleton), Spooks_48 (BT),

Start 41:
• Found in 8 of 132 (6.1%) of genes in pham
• Manual Annotations of this start: 1 of 108
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Mabodamaca_1 (EH),

Start 60:
• Found in 30 of 132 (22.7%) of genes in pham
• No Manual Annotations of this start.
• Called 3.3% of time when present
• Phage (with cluster) where this start called: AGrandiflora_1 (AZ1),

Summary by clusters:

There are 23 clusters represented in this pham: singleton, BT, CY6, UNK, CY4, CY3, CY2, CY1, AB, CY7, EH, CY5, AF, X, AZ, F4, F6, AZ1, AZ2, AZ4, AZ5, AZ6, AZ7,

Info for manual annotations of cluster AB:
•Start number 19 was manually annotated 1 time for cluster AB.
•Start number 35 was manually annotated 3 times for cluster AB.

Info for manual annotations of cluster AF:
•Start number 8 was manually annotated 1 time for cluster AF.
•Start number 24 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster AZ1:
•Start number 33 was manually annotated 2 times for cluster AZ1.
•Start number 34 was manually annotated 38 times for cluster AZ1.

Info for manual annotations of cluster AZ2:
•Start number 34 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ4:
•Start number 34 was manually annotated 4 times for cluster AZ4.

Info for manual annotations of cluster AZ5:
•Start number 36 was manually annotated 16 times for cluster AZ5.

Info for manual annotations of cluster AZ6:
•Start number 34 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BT:
•Start number 39 was manually annotated 1 time for cluster BT.

Info for manual annotations of cluster CY1:
•Start number 22 was manually annotated 1 time for cluster CY1.

•Start number 24 was manually annotated 8 times for cluster CY1.

Info for manual annotations of cluster CY2:
•Start number 24 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:
•Start number 24 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:
•Start number 24 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 24 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:
•Start number 24 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:
•Start number 24 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster EH:
•Start number 36 was manually annotated 9 times for cluster EH.
•Start number 41 was manually annotated 1 time for cluster EH.

Info for manual annotations of cluster F4:
•Start number 24 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster X:
•Start number 26 was manually annotated 2 times for cluster X.

Gene Information:

Gene: 8UZL_4 Start: 1322, Stop: 1795, Start Num: 35
Candidate Starts for 8UZL_4:
(21, 1274), (Start: 35 @1322 has 3 MA's), (45, 1385), (46, 1388), (52, 1418), (73, 1520), (119, 1745), (122, 1766), (123, 1775),

Gene: AEgle_1 Start: 85, Stop: 540, Start Num: 34
Candidate Starts for AEgle_1:
(Start: 34 @85 has 47 MA's), (60, 214), (118, 511), (120, 520),

Gene: AGrandiflora_1 Start: 213, Stop: 536, Start Num: 60
Candidate Starts for AGrandiflora_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: Adumb2043_1 Start: 85, Stop: 540, Start Num: 34
Candidate Starts for Adumb2043_1:
(Start: 34 @85 has 47 MA's), (60, 214), (118, 511), (120, 520),

Gene: AinMach_1 Start: 140, Stop: 574, Start Num: 34
Candidate Starts for AinMach_1:
(Start: 34 @140 has 47 MA's), (Start: 41 @167 has 1 MA's), (47, 212), (52, 239), (64, 281), (77, 359), (101, 473), (106, 509), (107, 512),

Gene: Amploria_1 Start: 85, Stop: 540, Start Num: 34
Candidate Starts for Amploria_1:
(Start: 34 @85 has 47 MA's), (60, 214), (118, 511), (120, 520),

Gene: Amyev_1 Start: 84, Stop: 536, Start Num: 33
Candidate Starts for Amyev_1:
(13, 12), (20, 54), (Start: 33 @84 has 2 MA's), (106, 471), (118, 510),

Gene: Angelique_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Angelique_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (103, 436), (111, 472), (114, 481),

Gene: Asa16_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Asa16_1:
(Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (112, 489), (118, 510), (120, 519),

Gene: Ascela_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for Ascela_1:
(Start: 34 @85 has 47 MA's), (106, 472), (112, 490), (118, 511),

Gene: Ashes_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for Ashes_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: Barnstormer_1 Start: 114, Stop: 596, Start Num: 36
Candidate Starts for Barnstormer_1:
(31, 108), (Start: 36 @114 has 25 MA's), (83, 363), (99, 447), (108, 504), (113, 519),

Gene: Beaupre_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for Beaupre_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: BeeGee_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for BeeGee_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Berrie_1 Start: 83, Stop: 535, Start Num: 34
Candidate Starts for Berrie_1:
(Start: 34 @83 has 47 MA's), (106, 470), (112, 488), (118, 509),

Gene: Bradissa_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Bradissa_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: BritBrat_1 Start: 82, Stop: 504, Start Num: 24

Candidate Starts for BritBrat_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Cappuccino_1 Start: 138, Stop: 578, Start Num: 36
Candidate Starts for Cappuccino_1:
(Start: 36 @138 has 25 MA's), (52, 231),

Gene: Caron_1 Start: 114, Stop: 593, Start Num: 36
Candidate Starts for Caron_1:
(31, 108), (Start: 36 @114 has 25 MA's), (Start: 41 @135 has 1 MA's), (48, 183), (83, 363), (99, 447), (113, 516),

Gene: Cashline_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Cashline_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (66, 250), (70, 265), (80, 325), (91, 370), (103, 436), (111, 472), (114, 481),

Gene: Cassia_1 Start: 86, Stop: 550, Start Num: 34
Candidate Starts for Cassia_1:
(Start: 34 @86 has 47 MA's), (75, 305), (112, 503), (120, 533),

Gene: Cen1621_1 Start: 100, Stop: 576, Start Num: 36
Candidate Starts for Cen1621_1:
(30, 88), (Start: 36 @100 has 25 MA's), (67, 250), (82, 322), (90, 361), (92, 376), (105, 457), (110, 472),

Gene: Community_2 Start: 1157, Stop: 1609, Start Num: 34
Candidate Starts for Community_2:
(7, 1052), (Start: 34 @1157 has 47 MA's), (106, 1544), (112, 1562), (118, 1583),

Gene: Confidence_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Confidence_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Crewmate_1 Start: 85, Stop: 549, Start Num: 34
Candidate Starts for Crewmate_1:
(Start: 34 @85 has 47 MA's), (106, 484), (112, 502), (118, 523),

Gene: Cyan_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Cyan_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: DS6A_1 Start: 246, Stop: 680, Start Num: 24
Candidate Starts for DS6A_1:
(Start: 24 @246 has 22 MA's), (37, 288), (44, 333), (56, 384), (70, 435), (82, 504), (97, 576), (100, 594), (108, 639), (111, 648), (118, 675),

Gene: Donkey_1 Start: 138, Stop: 578, Start Num: 36
Candidate Starts for Donkey_1:
(Start: 36 @138 has 25 MA's), (52, 231),

Gene: DrSierra_1 Start: 87, Stop: 551, Start Num: 34
Candidate Starts for DrSierra_1:
(Start: 34 @87 has 47 MA's), (118, 525),

Gene: EMsquaredA_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for EMsquaredA_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Elezi_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for Elezi_1:
(Start: 34 @85 has 47 MA's), (60, 214), (106, 472), (112, 490), (118, 511), (120, 520),

Gene: Emotion_1 Start: 130, Stop: 558, Start Num: 34
Candidate Starts for Emotion_1:
(Start: 34 @130 has 47 MA's), (70, 310), (90, 415),

Gene: EnalisNailo_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for EnalisNailo_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Eraser_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for Eraser_1:
(Start: 34 @85 has 47 MA's), (60, 214), (106, 472), (112, 490), (118, 511), (120, 520),

Gene: Exile_1 Start: 140, Stop: 571, Start Num: 34
Candidate Starts for Exile_1:
(16, 71), (Start: 34 @140 has 47 MA's), (118, 545), (120, 554),

Gene: FF47_04 Start: 1302, Stop: 1775, Start Num: 35
Candidate Starts for FF47_04:
(21, 1254), (Start: 35 @1302 has 3 MA's), (45, 1365), (46, 1368), (52, 1398), (73, 1500), (119, 1725), (122, 1746), (123, 1755),

Gene: Farewell_1 Start: 34, Stop: 528, Start Num: 8
Candidate Starts for Farewell_1:
(Start: 8 @34 has 1 MA's), (17, 73), (Start: 24 @97 has 22 MA's), (49, 208), (70, 280), (94, 406), (97, 421), (111, 496),

Gene: Floof_1 Start: 122, Stop: 601, Start Num: 36
Candidate Starts for Floof_1:
(Start: 36 @122 has 25 MA's), (51, 200), (78, 350), (83, 371), (98, 446), (118, 545),

Gene: Floral_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Floral_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Flutur_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Flutur_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: Forester_2 Start: 128, Stop: 607, Start Num: 36
Candidate Starts for Forester_2:
(Start: 36 @128 has 25 MA's), (78, 356), (83, 377), (98, 452), (107, 515), (118, 551),

Gene: Gaia_1 Start: 129, Stop: 578, Start Num: 26
Candidate Starts for Gaia_1:
(25, 126), (Start: 26 @129 has 2 MA's), (28, 144), (Start: 41 @186 has 1 MA's), (44, 213), (54, 264), (57, 279), (64, 315), (70, 342), (72, 357), (80, 402), (89, 438), (94, 468), (95, 471), (103, 516), (111, 549), (112, 552),

Gene: Gambol_1 Start: 138, Stop: 578, Start Num: 36
Candidate Starts for Gambol_1:
(Start: 36 @138 has 25 MA's), (52, 231),

Gene: Giorgio_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for Giorgio_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: Gretchen_1 Start: 128, Stop: 607, Start Num: 36
Candidate Starts for Gretchen_1:
(Start: 36 @128 has 25 MA's), (78, 356), (83, 377), (98, 452), (107, 515), (118, 551),

Gene: Gumpizza_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for Gumpizza_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: Halsey_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for Halsey_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: Honk_1 Start: 161, Stop: 634, Start Num: 36
Candidate Starts for Honk_1:
(27, 128), (Start: 36 @161 has 25 MA's), (82, 383), (92, 437), (98, 467), (110, 530),

Gene: IUFootball_1 Start: 80, Stop: 535, Start Num: 34
Candidate Starts for IUFootball_1:
(Start: 34 @80 has 47 MA's), (76, 311),

Gene: Ibantik_65 Start: 27614, Stop: 28042, Start Num: 38
Candidate Starts for Ibantik_65:
(Start: 38 @27614 has 1 MA's), (76, 27824), (77, 27827), (88, 27869), (101, 27938), (114, 27995), (115, 27998),

Gene: Iter_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for Iter_1:
(Start: 34 @85 has 47 MA's), (106, 472), (112, 490), (118, 511),

Gene: IttyBittyPiggy_1 Start: 86, Stop: 538, Start Num: 34
Candidate Starts for IttyBittyPiggy_1:
(Start: 34 @86 has 47 MA's), (60, 215), (106, 473), (112, 491), (120, 521),

Gene: Jablanski_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Jablanski_1:

(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: JacoRen57_1 Start: 190, Stop: 669, Start Num: 35
Candidate Starts for JacoRen57_1:
(4, 61), (10, 91), (12, 94), (23, 154), (Start: 35 @190 has 3 MA's), (45, 253), (51, 271), (79, 424), (87, 457), (102, 538), (110, 574), (117, 598), (119, 607),

Gene: Janeemi_2 Start: 1168, Stop: 1620, Start Num: 34
Candidate Starts for Janeemi_2:
(Start: 34 @1168 has 47 MA's), (106, 1555), (112, 1573), (118, 1594),

Gene: JasmineDragon_1 Start: 132, Stop: 560, Start Num: 34
Candidate Starts for JasmineDragon_1:
(Start: 34 @132 has 47 MA's), (90, 417), (112, 534),

Gene: Joemato_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Joemato_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: JohnDoe_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for JohnDoe_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: Jstan_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for Jstan_1:
(Start: 34 @85 has 47 MA's), (60, 214), (106, 472), (112, 490), (118, 511), (120, 520),

Gene: JuneStar_1 Start: 84, Stop: 548, Start Num: 34
Candidate Starts for JuneStar_1:
(20, 54), (Start: 34 @84 has 47 MA's), (112, 501), (120, 531),

Gene: Kalimba_1 Start: 138, Stop: 578, Start Num: 36
Candidate Starts for Kalimba_1:
(Start: 36 @138 has 25 MA's), (52, 231),

Gene: Kaylissa_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Kaylissa_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: KeAlii_1 Start: 69, Stop: 521, Start Num: 34
Candidate Starts for KeAlii_1:
(Start: 34 @69 has 47 MA's), (118, 492), (120, 501),

Gene: Lego_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Lego_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: Liebe_1 Start: 80, Stop: 535, Start Num: 34
Candidate Starts for Liebe_1:
(Start: 34 @80 has 47 MA's), (76, 311),

Gene: Lilas_1 Start: 73, Stop: 504, Start Num: 22

Candidate Starts for Lilas_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: London_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for London_1:
(Start: 34 @85 has 47 MA's), (60, 214), (106, 472), (112, 490), (118, 511), (120, 520),

Gene: LonelyBoi_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for LonelyBoi_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: LongHai_5 Start: 1624, Stop: 2100, Start Num: 35
Candidate Starts for LongHai_5:
(21, 1576), (Start: 35 @1624 has 3 MA's), (45, 1687), (46, 1690), (52, 1720), (73, 1822), (119, 2047), (122, 2068), (123, 2077),

Gene: LunaStella_1 Start: 55, Stop: 477, Start Num: 24
Candidate Starts for LunaStella_1:
(3, 7), (5, 16), (Start: 24 @55 has 22 MA's), (43, 136), (70, 238), (82, 307), (83, 310), (97, 376), (103, 409), (111, 445), (114, 454),

Gene: MaGuCo_1 Start: 80, Stop: 535, Start Num: 34
Candidate Starts for MaGuCo_1:
(Start: 34 @80 has 47 MA's), (76, 311), (107, 473),

Gene: Mabodamaca_1 Start: 146, Stop: 604, Start Num: 41
Candidate Starts for Mabodamaca_1:
(Start: 36 @125 has 25 MA's), (Start: 41 @146 has 1 MA's), (83, 374), (99, 458), (113, 527),

Gene: Maco6_2 Start: 581, Stop: 1054, Start Num: 35
Candidate Starts for Maco6_2:
(21, 533), (Start: 35 @581 has 3 MA's), (45, 644), (46, 647), (52, 677), (73, 779), (119, 1004), (122, 1025), (123, 1034),

Gene: Marteena_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Marteena_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Maureen_1 Start: 80, Stop: 535, Start Num: 34
Candidate Starts for Maureen_1:
(Start: 34 @80 has 47 MA's), (76, 311),

Gene: MiniMommy_1 Start: 132, Stop: 560, Start Num: 34
Candidate Starts for MiniMommy_1:
(Start: 34 @132 has 47 MA's), (90, 417), (112, 534),

Gene: Moss_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for Moss_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: Muddy_4 Start: 1535, Stop: 2008, Start Num: 35
Candidate Starts for Muddy_4:
(21, 1487), (Start: 35 @1535 has 3 MA's), (45, 1598), (46, 1601), (52, 1631), (73, 1733), (119, 1958), (122, 1979), (123, 1988),

Gene: Mudpuppy_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Mudpuppy_1:
(13, 12), (20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: Mysterium_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for Mysterium_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: Nebkiss_1 Start: 130, Stop: 579, Start Num: 26
Candidate Starts for Nebkiss_1:
(11, 58), (Start: 26 @130 has 2 MA's), (28, 145), (Start: 41 @187 has 1 MA's), (44, 214), (49, 238), (53, 262), (55, 268), (58, 283), (59, 286), (67, 331), (70, 343), (73, 364), (91, 451), (103, 517), (111, 550), (112, 553),

Gene: Niobe_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for Niobe_1:
(Start: 34 @85 has 47 MA's), (60, 214), (106, 472), (112, 490), (118, 511), (120, 520),

Gene: Nitro_1 Start: 86, Stop: 538, Start Num: 34
Candidate Starts for Nitro_1:
(Start: 34 @86 has 47 MA's), (60, 215), (106, 473), (118, 512), (120, 521),

Gene: NoShow_1 Start: 166, Stop: 675, Start Num: 19
Candidate Starts for NoShow_1:
(4, 82), (12, 115), (Start: 19 @166 has 1 MA's), (29, 199), (42, 244), (45, 277), (68, 379), (77, 436), (87, 478), (93, 508), (103, 562), (118, 625),

Gene: ObiToo_1 Start: 85, Stop: 549, Start Num: 34
Candidate Starts for ObiToo_1:
(Start: 34 @85 has 47 MA's), (118, 523),

Gene: Percival_1 Start: 128, Stop: 607, Start Num: 36
Candidate Starts for Percival_1:
(14, 56), (Start: 36 @128 has 25 MA's), (40, 140), (78, 356), (83, 377), (98, 452), (107, 515), (118, 551),

Gene: Phives_2 Start: 1157, Stop: 1609, Start Num: 34
Candidate Starts for Phives_2:
(7, 1052), (Start: 34 @1157 has 47 MA's), (106, 1544), (112, 1562), (118, 1583),

Gene: Pixelle_1 Start: 84, Stop: 536, Start Num: 33
Candidate Starts for Pixelle_1:
(13, 12), (20, 54), (Start: 33 @84 has 2 MA's), (106, 471), (118, 510),

Gene: Pollux_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Pollux_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Ponzi_41 Start: 22312, Stop: 22740, Start Num: 39
Candidate Starts for Ponzi_41:
(Start: 39 @22312 has 2 MA's), (81, 22534), (101, 22633), (121, 22726),

Gene: Posh_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Posh_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Powerpuff_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Powerpuff_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: Pumpkins_1 Start: 86, Stop: 550, Start Num: 34
Candidate Starts for Pumpkins_1:
(Start: 34 @86 has 47 MA's), (75, 305), (112, 503), (120, 533),

Gene: Pytheas_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Pytheas_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (103, 436), (111, 472), (114, 481),

Gene: Renaud18_1 Start: 55, Stop: 477, Start Num: 24
Candidate Starts for Renaud18_1:
(5, 16), (Start: 24 @55 has 22 MA's), (43, 136), (70, 238), (82, 307), (97, 376), (111, 445), (114, 454),

Gene: RockScotty_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for RockScotty_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: RunningOnE_61 Start: 26921, Stop: 27355, Start Num: 38
Candidate Starts for RunningOnE_61:
(32, 26906), (Start: 38 @26921 has 1 MA's), (61, 27038), (97, 27221), (101, 27245), (104, 27278),

Gene: Sabourin_1 Start: 138, Stop: 578, Start Num: 36
Candidate Starts for Sabourin_1:
(Start: 36 @138 has 25 MA's), (52, 231),

Gene: Salvus_5 Start: 1624, Stop: 2100, Start Num: 35
Candidate Starts for Salvus_5:
(21, 1576), (Start: 35 @1624 has 3 MA's), (45, 1687), (46, 1690), (52, 1720), (73, 1822), (119, 2047), (122, 2068), (123, 2077),

Gene: Samy_4 Start: 1334, Stop: 1780, Start Num: 34
Candidate Starts for Samy_4:
(Start: 34 @1334 has 47 MA's), (63, 1484), (71, 1523), (80, 1577), (92, 1631),

Gene: Schaffner_1 Start: 84, Stop: 548, Start Num: 34
Candidate Starts for Schaffner_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (112, 501), (120, 531),

Gene: ShakeItOph_1 Start: 132, Stop: 560, Start Num: 34

Candidate Starts for ShakeItOph_1:
(Start: 34 @132 has 47 MA's), (90, 417), (112, 534),

Gene: Simpson_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Simpson_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: Skelbel_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for Skelbel_1:
(Start: 34 @85 has 47 MA's), (60, 214), (106, 472), (112, 490), (118, 511), (120, 520),

Gene: Soondubu_1 Start: 140, Stop: 571, Start Num: 34
Candidate Starts for Soondubu_1:
(Start: 34 @140 has 47 MA's), (118, 545), (120, 554),

Gene: Sooty_1 Start: 138, Stop: 578, Start Num: 36
Candidate Starts for Sooty_1:
(6, 12), (Start: 36 @138 has 25 MA's), (52, 231),

Gene: Sparky_1 Start: 98, Stop: 529, Start Num: 24
Candidate Starts for Sparky_1:
(2, 2), (9, 35), (17, 74), (Start: 24 @98 has 22 MA's), (49, 209), (70, 281), (94, 407), (97, 422), (111, 497),

Gene: SpecialK_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for SpecialK_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: Spooks_48 Start: 26248, Stop: 26673, Start Num: 39
Candidate Starts for Spooks_48:
(Start: 39 @26248 has 2 MA's), (51, 26314), (75, 26449), (86, 26494), (101, 26569), (116, 26629), (117, 26635),

Gene: Stellammi_1 Start: 109, Stop: 558, Start Num: 26
Candidate Starts for Stellammi_1:
(Start: 26 @109 has 2 MA's), (Start: 41 @166 has 1 MA's), (49, 217), (59, 265), (60, 268), (70, 322), (72, 337), (78, 376), (84, 397), (89, 418), (91, 430), (96, 457), (100, 481), (109, 523),

Gene: Stuu_1 Start: 139, Stop: 579, Start Num: 36
Candidate Starts for Stuu_1:
(Start: 36 @139 has 25 MA's), (52, 232),

Gene: SuMoo_1 Start: 124, Stop: 603, Start Num: 36
Candidate Starts for SuMoo_1:
(15, 58), (18, 79), (Start: 36 @124 has 25 MA's), (Start: 41 @145 has 1 MA's), (83, 373), (99, 457), (113, 526),

Gene: Subaru_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for Subaru_1:
(Start: 34 @85 has 47 MA's), (60, 214), (106, 472), (112, 490), (118, 511), (120, 520),

Gene: Sue2_1 Start: 75, Stop: 542, Start Num: 34
Candidate Starts for Sue2_1:

(13, 12), (Start: 34 @75 has 47 MA's), (Start: 41 @102 has 1 MA's), (69, 249), (85, 342), (118, 513), (120, 522),

Gene: SuperHands_1 Start: 128, Stop: 607, Start Num: 36
Candidate Starts for SuperHands_1:
(Start: 36 @128 has 25 MA's), (78, 356), (83, 377), (98, 452), (107, 515), (118, 551),

Gene: TChen_1 Start: 55, Stop: 477, Start Num: 24
Candidate Starts for TChen_1:
(3, 7), (5, 16), (Start: 24 @55 has 22 MA's), (43, 136), (70, 238), (82, 307), (83, 310), (97, 376), (103, 409), (111, 445), (114, 454),

Gene: Tallboi_1 Start: 85, Stop: 537, Start Num: 34
Candidate Starts for Tallboi_1:
(Start: 34 @85 has 47 MA's), (118, 511),

Gene: Tbone_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Tbone_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: TforTroy_1 Start: 86, Stop: 550, Start Num: 34
Candidate Starts for TforTroy_1:
(Start: 34 @86 has 47 MA's), (50, 167), (75, 305), (112, 503), (120, 533),

Gene: ThetaBob_1 Start: 55, Stop: 477, Start Num: 24
Candidate Starts for ThetaBob_1:
(5, 16), (Start: 24 @55 has 22 MA's), (43, 136), (70, 238), (82, 307), (83, 310), (97, 376), (111, 445), (114, 454),

Gene: ThursdayNight_1 Start: 97, Stop: 549, Start Num: 34
Candidate Starts for ThursdayNight_1:
(Start: 34 @97 has 47 MA's), (63, 247), (76, 328),

Gene: Tian_1 Start: 84, Stop: 536, Start Num: 33
Candidate Starts for Tian_1:
(13, 12), (20, 54), (Start: 33 @84 has 2 MA's), (106, 471), (118, 510),

Gene: Toron_1 Start: 55, Stop: 477, Start Num: 24
Candidate Starts for Toron_1:
(5, 16), (Start: 24 @55 has 22 MA's), (44, 142), (65, 214), (70, 238), (80, 298), (82, 307), (83, 310), (97, 376), (100, 394), (111, 445), (114, 454),

Gene: Tuck_2 Start: 1145, Stop: 1597, Start Num: 34
Candidate Starts for Tuck_2:
(7, 1040), (Start: 34 @1145 has 47 MA's), (106, 1532), (112, 1550), (118, 1571),

Gene: Turab_1 Start: 85, Stop: 540, Start Num: 34
Candidate Starts for Turab_1:
(Start: 34 @85 has 47 MA's), (60, 214), (118, 511), (120, 520),

Gene: Tutumahutu_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Tutumahutu_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: UtzChips_1 Start: 114, Stop: 596, Start Num: 36
Candidate Starts for UtzChips_1:
(31, 108), (Start: 36 @114 has 25 MA's), (83, 363), (99, 447), (113, 519),

Gene: Warda_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for Warda_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),

Gene: Wildwest_2 Start: 1032, Stop: 1481, Start Num: 34
Candidate Starts for Wildwest_2:
(1, 825), (Start: 34 @1032 has 47 MA's), (74, 1248), (118, 1455), (120, 1464),

Gene: Wrigley_1 Start: 82, Stop: 504, Start Num: 24
Candidate Starts for Wrigley_1:
(Start: 22 @73 has 1 MA's), (Start: 24 @82 has 22 MA's), (62, 226), (70, 265), (80, 325), (94, 388), (103, 436), (111, 472), (114, 481),

Gene: Yang_1 Start: 84, Stop: 548, Start Num: 34
Candidate Starts for Yang_1:
(20, 54), (Start: 34 @84 has 47 MA's), (112, 501), (120, 531),

Gene: YesChef_1 Start: 84, Stop: 536, Start Num: 34
Candidate Starts for YesChef_1:
(20, 54), (Start: 34 @84 has 47 MA's), (60, 213), (106, 471), (118, 510), (120, 519),