

Pham 216063



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 216063 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216063 has 90 members, 20 are drafts.

Phages represented in each track:

- Track 1 : AinMach_1
- Track 2 : Soondubu_1
- Track 3 : Exile_1
- Track 4 : Janeemi_2
- Track 5 : IttyBittyPiggy_1
- Track 6 : Reedo_1
- Track 7 : AGrandiflora_1
- Track 8 : Yang_1, JuneStar_1
- Track 9 : Eraser_1, Subaru_1, Elezi_1, Lizalica_1, Niobe_1, Jstan_1, London_1
- Track 10 : Warda_1, Cyan_1, YesChef_1, Tbone_1, Powerpuff_1, JohnDoe_1, Kaylissa_1, Tutumahutu_1, Simpson_1, Lego_1, Joemato_1
- Track 11 : Pixelle_1, Amyev_1, Tian_1
- Track 12 : Sue2_1
- Track 13 : Tallboi_1, ObiToo_1, DrSierra_1
- Track 14 : VResidence_1
- Track 15 : Berrie_1
- Track 16 : Nitro_1
- Track 17 : AEgle_1, DrManhattan_1, Turab_1, Adolin_1, Adumb2043_1
- Track 18 : KeAlii_1
- Track 19 : Wildwest_2
- Track 20 : Mudpuppy_1
- Track 21 : Phives_2, Community_2, Tuck_2
- Track 22 : Cassia_1, Pumpkins_1
- Track 23 : MissSwiss_1
- Track 24 : Iter_1, Ascela_1, Crewmate_1
- Track 25 : Asa16_1
- Track 26 : Shaffner_1
- Track 27 : TforTroy_1
- Track 28 : MaGuCo_1
- Track 29 : Liebe_1, Maureen_1
- Track 30 : Tweety19_2, Snek_2
- Track 31 : JasmineDragon_1, ShakeltOph_1, MiniMommy_1
- Track 32 : Emotion_1
- Track 33 : VroomVroom_1
- Track 34 : LadyAstra_1
- Track 35 : Gumpizza_1, Giorgio_1, SpecialK_1, Moss_1, Mysterium_1, Halsey_1, Stuu_1, Ashes_1, RockScotty_1, Beaupre_1

- Track 36 : Sabourin_1, Cappuccino_1, Gambol_1, Donkey_1, Kalimba_1
- Track 37 : Sooty_1
- Track 38 : Cen1621_1
- Track 39 : Honk_1
- Track 40 : Barnstormer_1
- Track 41 : UtzChips_1
- Track 42 : Caron_1
- Track 43 : SuMoo_1

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

The start number called the most often in the published annotations is 11, it was called in 52 of the 70 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AEgle_1, Adolin_1, Adumb2043_1, AinMach_1, Asa16_1, Ascela_1, Berrie_1, Cassia_1, Community_2, Crewmate_1, Cyan_1, DrManhattan_1, DrSierra_1, Elezi_1, Emotion_1, Eraser_1, Exile_1, Iter_1, IttyBittyPiggy_1, Janeemi_2, JasmineDragon_1, Joemato_1, JohnDoe_1, Jstan_1, JuneStar_1, Kaylissa_1, KeAlii_1, LadyAstra_1, Lego_1, Liebe_1, Lizalica_1, London_1, MaGuCo_1, Maureen_1, MiniMommy_1, MissSwiss_1, Mudpuppy_1, Niobe_1, Nitro_1, ObiToo_1, Phives_2, Powerpuff_1, Pumpkins_1, Reedo_1, Shaffner_1, ShakeltOph_1, Simpson_1, Snek_2, Soondubu_1, Subaru_1, Sue2_1, Tallboi_1, Tbone_1, TforTroy_1, Tuck_2, Turab_1, Tutumahutu_1, Tweety19_2, VResidence_1, VroomVroom_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:

- Amyev_1, Ashes_1, Barnstormer_1, Beaupre_1, Cappuccino_1, Caron_1, Cen1621_1, Donkey_1, Gambol_1, Giorgio_1, Gumpizza_1, Halsey_1, Honk_1, Kalimba_1, Moss_1, Mysterium_1, Pixelle_1, RockScotty_1, Sabourin_1, Sooty_1, SpecialK_1, Stuu_1, SuMoo_1, Tian_1, UtzChips_1,

Summary by start number:

Start 10:

- Found in 3 of 90 (3.3%) of genes in pham
- Manual Annotations of this start: 2 of 70
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amyev_1 (AZ1), Pixelle_1 (AZ1), Tian_1 (AZ1),

Start 11:

- Found in 65 of 90 (72.2%) of genes in pham
- Manual Annotations of this start: 52 of 70
- Called 98.5% of time when present
- Phage (with cluster) where this start called: AEgle_1 (AZ1), Adolin_1 (AZ1), Adumb2043_1 (AZ1), AinMach_1 (AZ), Asa16_1 (AZ1), Ascela_1 (AZ1), Berrie_1

(AZ1), Cassia_1 (AZ1), Community_2 (AZ1), Crewmate_1 (AZ1), Cyan_1 (AZ1), DrManhattan_1 (AZ1), DrSierra_1 (AZ1), Elezi_1 (AZ1), Emotion_1 (AZ4), Eraser_1 (AZ1), Exile_1 (AZ), 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), LadyAstra_1 (AZ4), Lego_1 (AZ1), Liebe_1 (AZ2), Lizalica_1 (AZ1), London_1 (AZ1), MaGuCo_1 (AZ2), Maureen_1 (AZ2), MiniMommy_1 (AZ4), MissSwiss_1 (AZ1), Mudpuppy_1 (AZ1), Niobe_1 (AZ1), Nitro_1 (AZ1), ObiToo_1 (AZ1), Phives_2 (AZ1), Powerpuff_1 (AZ1), Pumpkins_1 (AZ1), Reedo_1 (AZ1), Shaffner_1 (AZ1), ShakeltOph_1 (AZ4), Simpson_1 (AZ1), Snek_2 (AZ3), Soondubu_1 (AZ), Subaru_1 (AZ), Sue2_1 (AZ1), Tallboi_1 (AZ1), Tbone_1 (AZ1), TforTroy_1 (AZ1), Tuck_2 (AZ1), Turab_1 (AZ1), Tutumahutu_1 (AZ1), Tweety19_2 (AZ3), VResidence_1 (AZ1), VroomVroom_1 (AZ4), Warda_1 (AZ1), Wildwest_2 (AZ1), Yang_1 (AZ1), YesChef_1 (AZ1),

Start 13:

- Found in 22 of 90 (24.4%) of genes in pham
- Manual Annotations of this start: 16 of 70
- Called 100.0% 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), Gambol_1 (AZ5), Giorgio_1 (AZ5), Gumpizza_1 (AZ5), Halsey_1 (AZ5), Honk_1 (EH), Kalimba_1 (AZ5), Moss_1 (AZ5), Mysterium_1 (AZ5), RockScotty_1 (AZ5), Sabourin_1 (AZ5), Sooty_1 (AZ5), SpecialK_1 (AZ5), Stuu_1 (AZ5), SuMoo_1 (EH), UtzChips_1 (EH),

Start 20:

- Found in 31 of 90 (34.4%) of genes in pham
- No Manual Annotations of this start.
- Called 3.2% of time when present
- Phage (with cluster) where this start called: AGrandiflora_1 (AZ1),

Summary by clusters:

There are 7 clusters represented in this pham: AZ3, EH, AZ1, AZ2, AZ, AZ4, AZ5,

Info for manual annotations of cluster AZ:

- Start number 11 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:

- Start number 10 was manually annotated 2 times for cluster AZ1.
- Start number 11 was manually annotated 43 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 11 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 11 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 11 was manually annotated 3 times for cluster AZ4.

Info for manual annotations of cluster AZ5:

- Start number 13 was manually annotated 10 times for cluster AZ5.

Info for manual annotations of cluster EH:

•Start number 13 was manually annotated 6 times for cluster EH.

Gene Information:

Gene: AEgle_1 Start: 85, Stop: 540, Start Num: 11

Candidate Starts for AEgle_1:

(Start: 11 @85 has 52 MA's), (20, 214), (48, 511), (49, 520),

Gene: AGrandiflora_1 Start: 213, Stop: 536, Start Num: 20

Candidate Starts for AGrandiflora_1:

(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: Adolin_1 Start: 85, Stop: 537, Start Num: 11

Candidate Starts for Adolin_1:

(Start: 11 @85 has 52 MA's), (20, 214), (48, 508), (49, 517),

Gene: Adumb2043_1 Start: 85, Stop: 540, Start Num: 11

Candidate Starts for Adumb2043_1:

(Start: 11 @85 has 52 MA's), (20, 214), (48, 511), (49, 520),

Gene: AinMach_1 Start: 140, Stop: 574, Start Num: 11

Candidate Starts for AinMach_1:

(Start: 11 @140 has 52 MA's), (14, 167), (15, 212), (19, 239), (21, 281), (28, 359), (38, 473), (41, 509), (42, 512),

Gene: Amyev_1 Start: 84, Stop: 536, Start Num: 10

Candidate Starts for Amyev_1:

(4, 12), (7, 54), (Start: 10 @84 has 2 MA's), (41, 471), (48, 510),

Gene: Asa16_1 Start: 84, Stop: 536, Start Num: 11

Candidate Starts for Asa16_1:

(Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (46, 489), (48, 510), (49, 519),

Gene: Ascela_1 Start: 85, Stop: 537, Start Num: 11

Candidate Starts for Ascela_1:

(Start: 11 @85 has 52 MA's), (41, 472), (46, 490), (48, 511),

Gene: Ashes_1 Start: 139, Stop: 579, Start Num: 13

Candidate Starts for Ashes_1:

(Start: 13 @139 has 16 MA's), (19, 232),

Gene: Barnstormer_1 Start: 114, Stop: 596, Start Num: 13

Candidate Starts for Barnstormer_1:

(12, 108), (Start: 13 @114 has 16 MA's), (31, 363), (37, 447), (43, 504), (47, 519),

Gene: Beaupre_1 Start: 139, Stop: 579, Start Num: 13

Candidate Starts for Beaupre_1:

(Start: 13 @139 has 16 MA's), (19, 232),

Gene: Berrie_1 Start: 83, Stop: 535, Start Num: 11
Candidate Starts for Berrie_1:
(Start: 11 @83 has 52 MA's), (41, 470), (46, 488), (48, 509),

Gene: Cappuccino_1 Start: 138, Stop: 578, Start Num: 13
Candidate Starts for Cappuccino_1:
(Start: 13 @138 has 16 MA's), (19, 231),

Gene: Caron_1 Start: 114, Stop: 593, Start Num: 13
Candidate Starts for Caron_1:
(12, 108), (Start: 13 @114 has 16 MA's), (14, 135), (16, 183), (31, 363), (37, 447), (47, 516),

Gene: Cassia_1 Start: 86, Stop: 550, Start Num: 11
Candidate Starts for Cassia_1:
(Start: 11 @86 has 52 MA's), (26, 305), (46, 503), (49, 533),

Gene: Cen1621_1 Start: 100, Stop: 576, Start Num: 13
Candidate Starts for Cen1621_1:
(9, 88), (Start: 13 @100 has 16 MA's), (22, 250), (29, 322), (34, 361), (35, 376), (40, 457), (44, 472),

Gene: Community_2 Start: 1157, Stop: 1609, Start Num: 11
Candidate Starts for Community_2:
(2, 1052), (Start: 11 @1157 has 52 MA's), (41, 1544), (46, 1562), (48, 1583),

Gene: Crewmate_1 Start: 85, Stop: 549, Start Num: 11
Candidate Starts for Crewmate_1:
(Start: 11 @85 has 52 MA's), (41, 484), (46, 502), (48, 523),

Gene: Cyan_1 Start: 84, Stop: 536, Start Num: 11
Candidate Starts for Cyan_1:
(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: Donkey_1 Start: 138, Stop: 578, Start Num: 13
Candidate Starts for Donkey_1:
(Start: 13 @138 has 16 MA's), (19, 231),

Gene: DrManhattan_1 Start: 85, Stop: 537, Start Num: 11
Candidate Starts for DrManhattan_1:
(Start: 11 @85 has 52 MA's), (20, 214), (48, 508), (49, 517),

Gene: DrSierra_1 Start: 87, Stop: 551, Start Num: 11
Candidate Starts for DrSierra_1:
(Start: 11 @87 has 52 MA's), (48, 525),

Gene: Elezi_1 Start: 85, Stop: 537, Start Num: 11
Candidate Starts for Elezi_1:
(Start: 11 @85 has 52 MA's), (20, 214), (41, 472), (46, 490), (48, 511), (49, 520),

Gene: Emotion_1 Start: 130, Stop: 558, Start Num: 11
Candidate Starts for Emotion_1:
(Start: 11 @130 has 52 MA's), (24, 310), (34, 415),

Gene: Eraser_1 Start: 85, Stop: 537, Start Num: 11

Candidate Starts for Eraser_1:
(Start: 11 @85 has 52 MA's), (20, 214), (41, 472), (46, 490), (48, 511), (49, 520),

Gene: Exile_1 Start: 140, Stop: 571, Start Num: 11
Candidate Starts for Exile_1:
(5, 71), (Start: 11 @140 has 52 MA's), (48, 545), (49, 554),

Gene: Gambol_1 Start: 138, Stop: 578, Start Num: 13
Candidate Starts for Gambol_1:
(Start: 13 @138 has 16 MA's), (19, 231),

Gene: Giorgio_1 Start: 139, Stop: 579, Start Num: 13
Candidate Starts for Giorgio_1:
(Start: 13 @139 has 16 MA's), (19, 232),

Gene: Gumpizza_1 Start: 139, Stop: 579, Start Num: 13
Candidate Starts for Gumpizza_1:
(Start: 13 @139 has 16 MA's), (19, 232),

Gene: Halsey_1 Start: 139, Stop: 579, Start Num: 13
Candidate Starts for Halsey_1:
(Start: 13 @139 has 16 MA's), (19, 232),

Gene: Honk_1 Start: 161, Stop: 634, Start Num: 13
Candidate Starts for Honk_1:
(8, 128), (Start: 13 @161 has 16 MA's), (29, 383), (35, 437), (36, 467), (44, 530),

Gene: Iter_1 Start: 85, Stop: 537, Start Num: 11
Candidate Starts for Iter_1:
(Start: 11 @85 has 52 MA's), (41, 472), (46, 490), (48, 511),

Gene: IttyBittyPiggy_1 Start: 86, Stop: 538, Start Num: 11
Candidate Starts for IttyBittyPiggy_1:
(Start: 11 @86 has 52 MA's), (20, 215), (41, 473), (46, 491), (49, 521),

Gene: Janeemi_2 Start: 1168, Stop: 1620, Start Num: 11
Candidate Starts for Janeemi_2:
(Start: 11 @1168 has 52 MA's), (41, 1555), (46, 1573), (48, 1594),

Gene: JasmineDragon_1 Start: 132, Stop: 560, Start Num: 11
Candidate Starts for JasmineDragon_1:
(Start: 11 @132 has 52 MA's), (34, 417), (45, 534),

Gene: Joemato_1 Start: 84, Stop: 536, Start Num: 11
Candidate Starts for Joemato_1:
(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: JohnDoe_1 Start: 84, Stop: 536, Start Num: 11
Candidate Starts for JohnDoe_1:
(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: Jstan_1 Start: 85, Stop: 537, Start Num: 11
Candidate Starts for Jstan_1:

(Start: 11 @85 has 52 MA's), (20, 214), (41, 472), (46, 490), (48, 511), (49, 520),

Gene: JuneStar_1 Start: 84, Stop: 548, Start Num: 11

Candidate Starts for JuneStar_1:

(7, 54), (Start: 11 @84 has 52 MA's), (46, 501), (49, 531),

Gene: Kalimba_1 Start: 138, Stop: 578, Start Num: 13

Candidate Starts for Kalimba_1:

(Start: 13 @138 has 16 MA's), (19, 231),

Gene: Kaylissa_1 Start: 84, Stop: 536, Start Num: 11

Candidate Starts for Kaylissa_1:

(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: KeAlii_1 Start: 69, Stop: 521, Start Num: 11

Candidate Starts for KeAlii_1:

(Start: 11 @69 has 52 MA's), (48, 492), (49, 501),

Gene: LadyAstra_1 Start: 132, Stop: 563, Start Num: 11

Candidate Starts for LadyAstra_1:

(Start: 11 @132 has 52 MA's), (18, 228), (41, 519),

Gene: Lego_1 Start: 84, Stop: 536, Start Num: 11

Candidate Starts for Lego_1:

(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: Liebe_1 Start: 80, Stop: 535, Start Num: 11

Candidate Starts for Liebe_1:

(Start: 11 @80 has 52 MA's), (27, 311),

Gene: Lizalica_1 Start: 85, Stop: 534, Start Num: 11

Candidate Starts for Lizalica_1:

(Start: 11 @85 has 52 MA's), (20, 214), (41, 469), (46, 487), (48, 508), (49, 517),

Gene: London_1 Start: 85, Stop: 537, Start Num: 11

Candidate Starts for London_1:

(Start: 11 @85 has 52 MA's), (20, 214), (41, 472), (46, 490), (48, 511), (49, 520),

Gene: MaGuCo_1 Start: 80, Stop: 535, Start Num: 11

Candidate Starts for MaGuCo_1:

(Start: 11 @80 has 52 MA's), (27, 311), (42, 473),

Gene: Maureen_1 Start: 80, Stop: 535, Start Num: 11

Candidate Starts for Maureen_1:

(Start: 11 @80 has 52 MA's), (27, 311),

Gene: MiniMommy_1 Start: 132, Stop: 560, Start Num: 11

Candidate Starts for MiniMommy_1:

(Start: 11 @132 has 52 MA's), (34, 417), (45, 534),

Gene: MissSwiss_1 Start: 87, Stop: 554, Start Num: 11

Candidate Starts for MissSwiss_1:

(Start: 11 @87 has 52 MA's), (20, 216), (39, 453), (46, 504), (48, 525), (49, 534),

Gene: Moss_1 Start: 139, Stop: 579, Start Num: 13

Candidate Starts for Moss_1:

(Start: 13 @139 has 16 MA's), (19, 232),

Gene: Mudpuppy_1 Start: 84, Stop: 536, Start Num: 11

Candidate Starts for Mudpuppy_1:

(4, 12), (7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: Mysterium_1 Start: 139, Stop: 579, Start Num: 13

Candidate Starts for Mysterium_1:

(Start: 13 @139 has 16 MA's), (19, 232),

Gene: Niobe_1 Start: 85, Stop: 537, Start Num: 11

Candidate Starts for Niobe_1:

(Start: 11 @85 has 52 MA's), (20, 214), (41, 472), (46, 490), (48, 511), (49, 520),

Gene: Nitro_1 Start: 86, Stop: 538, Start Num: 11

Candidate Starts for Nitro_1:

(Start: 11 @86 has 52 MA's), (20, 215), (41, 473), (48, 512), (49, 521),

Gene: ObiToo_1 Start: 85, Stop: 549, Start Num: 11

Candidate Starts for ObiToo_1:

(Start: 11 @85 has 52 MA's), (48, 523),

Gene: Phives_2 Start: 1157, Stop: 1609, Start Num: 11

Candidate Starts for Phives_2:

(2, 1052), (Start: 11 @1157 has 52 MA's), (41, 1544), (46, 1562), (48, 1583),

Gene: Pixelle_1 Start: 84, Stop: 536, Start Num: 10

Candidate Starts for Pixelle_1:

(4, 12), (7, 54), (Start: 10 @84 has 2 MA's), (41, 471), (48, 510),

Gene: Powerpuff_1 Start: 84, Stop: 536, Start Num: 11

Candidate Starts for Powerpuff_1:

(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: Pumpkins_1 Start: 86, Stop: 550, Start Num: 11

Candidate Starts for Pumpkins_1:

(Start: 11 @86 has 52 MA's), (26, 305), (46, 503), (49, 533),

Gene: Reedo_1 Start: 95, Stop: 547, Start Num: 11

Candidate Starts for Reedo_1:

(Start: 11 @95 has 52 MA's), (14, 122), (20, 224), (46, 497), (48, 518), (49, 527),

Gene: RockScotty_1 Start: 139, Stop: 579, Start Num: 13

Candidate Starts for RockScotty_1:

(Start: 13 @139 has 16 MA's), (19, 232),

Gene: Sabourin_1 Start: 138, Stop: 578, Start Num: 13

Candidate Starts for Sabourin_1:

(Start: 13 @138 has 16 MA's), (19, 231),

Gene: Shaffner_1 Start: 84, Stop: 548, Start Num: 11
Candidate Starts for Shaffner_1:
(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (46, 501), (49, 531),

Gene: ShakeltOph_1 Start: 132, Stop: 560, Start Num: 11
Candidate Starts for ShakeltOph_1:
(Start: 11 @132 has 52 MA's), (34, 417), (45, 534),

Gene: Simpson_1 Start: 84, Stop: 536, Start Num: 11
Candidate Starts for Simpson_1:
(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: Snek_2 Start: 958, Stop: 1422, Start Num: 11
Candidate Starts for Snek_2:
(Start: 11 @958 has 52 MA's), (30, 1207), (48, 1396), (49, 1405),

Gene: Soondubu_1 Start: 140, Stop: 571, Start Num: 11
Candidate Starts for Soondubu_1:
(Start: 11 @140 has 52 MA's), (48, 545), (49, 554),

Gene: Sooty_1 Start: 138, Stop: 578, Start Num: 13
Candidate Starts for Sooty_1:
(3, 12), (Start: 13 @138 has 16 MA's), (19, 231),

Gene: SpecialK_1 Start: 139, Stop: 579, Start Num: 13
Candidate Starts for SpecialK_1:
(Start: 13 @139 has 16 MA's), (19, 232),

Gene: Stuu_1 Start: 139, Stop: 579, Start Num: 13
Candidate Starts for Stuu_1:
(Start: 13 @139 has 16 MA's), (19, 232),

Gene: SuMoo_1 Start: 124, Stop: 603, Start Num: 13
Candidate Starts for SuMoo_1:
(6, 58), (7, 79), (Start: 13 @124 has 16 MA's), (14, 145), (31, 373), (37, 457), (47, 526),

Gene: Subaru_1 Start: 85, Stop: 537, Start Num: 11
Candidate Starts for Subaru_1:
(Start: 11 @85 has 52 MA's), (20, 214), (41, 472), (46, 490), (48, 511), (49, 520),

Gene: Sue2_1 Start: 75, Stop: 542, Start Num: 11
Candidate Starts for Sue2_1:
(4, 12), (Start: 11 @75 has 52 MA's), (14, 102), (23, 249), (32, 342), (48, 513), (49, 522),

Gene: Tallboi_1 Start: 85, Stop: 537, Start Num: 11
Candidate Starts for Tallboi_1:
(Start: 11 @85 has 52 MA's), (48, 511),

Gene: Tbone_1 Start: 84, Stop: 536, Start Num: 11
Candidate Starts for Tbone_1:
(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: TforTroy_1 Start: 86, Stop: 550, Start Num: 11

Candidate Starts for TforTroy_1:
(Start: 11 @86 has 52 MA's), (17, 167), (26, 305), (46, 503), (49, 533),

Gene: Tian_1 Start: 84, Stop: 536, Start Num: 10
Candidate Starts for Tian_1:
(4, 12), (7, 54), (Start: 10 @84 has 2 MA's), (41, 471), (48, 510),

Gene: Tuck_2 Start: 1145, Stop: 1597, Start Num: 11
Candidate Starts for Tuck_2:
(2, 1040), (Start: 11 @1145 has 52 MA's), (41, 1532), (46, 1550), (48, 1571),

Gene: Turab_1 Start: 85, Stop: 540, Start Num: 11
Candidate Starts for Turab_1:
(Start: 11 @85 has 52 MA's), (20, 214), (48, 511), (49, 520),

Gene: Tutumahutu_1 Start: 84, Stop: 536, Start Num: 11
Candidate Starts for Tutumahutu_1:
(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: Tweety19_2 Start: 958, Stop: 1422, Start Num: 11
Candidate Starts for Tweety19_2:
(Start: 11 @958 has 52 MA's), (30, 1207), (48, 1396), (49, 1405),

Gene: UtzChips_1 Start: 114, Stop: 596, Start Num: 13
Candidate Starts for UtzChips_1:
(12, 108), (Start: 13 @114 has 16 MA's), (31, 363), (37, 447), (47, 519),

Gene: VResidence_1 Start: 140, Stop: 604, Start Num: 11
Candidate Starts for VResidence_1:
(Start: 11 @140 has 52 MA's), (14, 167), (23, 314), (38, 503), (46, 557), (48, 578), (49, 587),

Gene: VroomVroom_1 Start: 132, Stop: 563, Start Num: 11
Candidate Starts for VroomVroom_1:
(Start: 11 @132 has 52 MA's), (18, 228), (33, 393), (41, 519),

Gene: Warda_1 Start: 84, Stop: 536, Start Num: 11
Candidate Starts for Warda_1:
(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),

Gene: Wildwest_2 Start: 1032, Stop: 1481, Start Num: 11
Candidate Starts for Wildwest_2:
(1, 825), (Start: 11 @1032 has 52 MA's), (25, 1248), (48, 1455), (49, 1464),

Gene: Yang_1 Start: 84, Stop: 548, Start Num: 11
Candidate Starts for Yang_1:
(7, 54), (Start: 11 @84 has 52 MA's), (46, 501), (49, 531),

Gene: YesChef_1 Start: 84, Stop: 536, Start Num: 11
Candidate Starts for YesChef_1:
(7, 54), (Start: 11 @84 has 52 MA's), (20, 213), (41, 471), (48, 510), (49, 519),