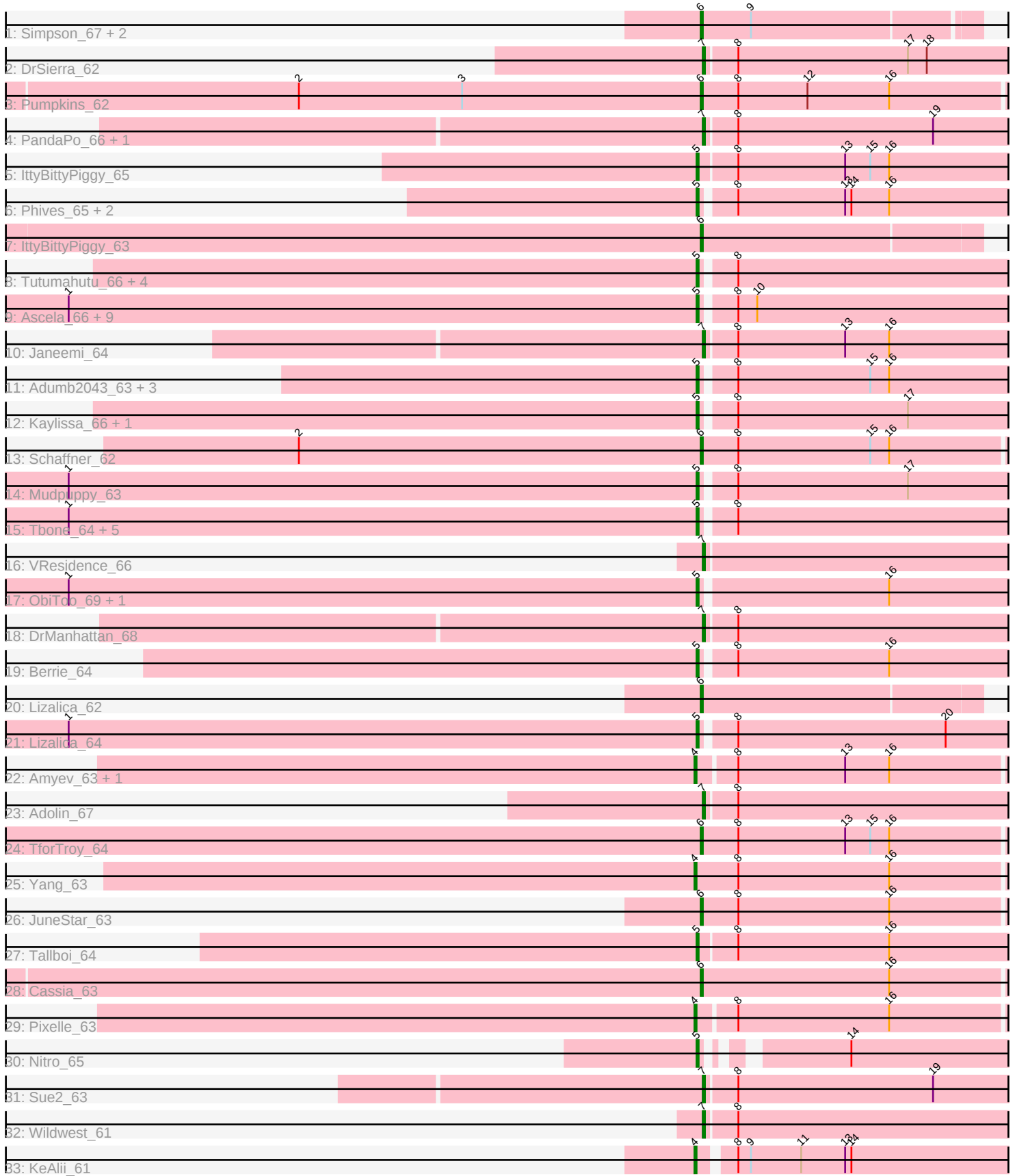




Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 330866 Report

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

Pham number 330866 has 62 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Simpson_67, Mudpuppy_61, Joemato_64
- Track 2 : DrSierra_62
- Track 3 : Pumpkins_62
- Track 4 : PandaPo_66, MissSwiss_66
- Track 5 : IttyBittyPiggy_65
- Track 6 : Phives_65, Tuck_64, Community_64
- Track 7 : IttyBittyPiggy_63
- Track 8 : Tutumahutu_66, Lego_64, Flutur_64, Cyan_65, JohnDoe_65
- Track 9 : Ascela_66, Skelbel_65, Eraser_64, Asa16_64, London_64, Subaru_63, Elezi_63, Niobe_64, Iter_65, Jstan_65
- Track 10 : Janeemi_64
- Track 11 : Adumb2043_63, Turab_62, Amploria_65, AEgle_62
- Track 12 : Kaylissa_66, Warda_65
- Track 13 : Schaffner_62
- Track 14 : Mudpuppy_63
- Track 15 : Tbone_64, Powerpuff_66, Joemato_66, YesChef_64, Simpson_70, AGrandiflora_66
- Track 16 : VResidence_66
- Track 17 : ObiToo_69, Crewmate_69
- Track 18 : DrManhattan_68
- Track 19 : Berrie_64
- Track 20 : Lizalica_62
- Track 21 : Lizalica_64
- Track 22 : Amyev_63, Tian_62
- Track 23 : Adolin_67
- Track 24 : TforTroy_64
- Track 25 : Yang_63
- Track 26 : JuneStar_63
- Track 27 : Tallboi_64
- Track 28 : Cassia_63
- Track 29 : Pixelle_63
- Track 30 : Nitro_65
- Track 31 : Sue2_63
- Track 32 : Wildwest_61
- Track 33 : KeAlii_61

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

The start number called the most often in the published annotations is 5, it was called in 31 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AEgle_62, AGrandiflora_66, Adumb2043_63, Amploria_65, Asa16_64, Ascela_66, Berrie_64, Community_64, Crewmate_69, Cyan_65, Elezi_63, Eraser_64, Flutur_64, Iter_65, IttyBittyPiggy_65, Joemato_66, JohnDoe_65, Jstan_65, Kaylissa_66, Lego_64, Lizalica_64, London_64, Mudpuppy_63, Niobe_64, Nitro_65, ObiToo_69, Phives_65, Powerpuff_66, Simpson_70, Skelbel_65, Subaru_63, Tallboi_64, Tbone_64, Tuck_64, Turab_62, Tutumahutu_66, Warda_65, YesChef_64,

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

•

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

• Adolin_67, Amyev_63, Cassia_63, DrManhattan_68, DrSierra_62, IttyBittyPiggy_63, Janeemi_64, Joemato_64, JuneStar_63, KeAlii_61, Lizalica_62, MissSwiss_66, Mudpuppy_61, PandaPo_66, Pixelle_63, Pumpkins_62, Schaffner_62, Simpson_67, Sue2_63, TforTroy_64, Tian_62, VResidence_66, Wildwest_61, Yang_63,

Summary by start number:

Start 4:

- Found in 5 of 62 (8.1%) of genes in pham
- Manual Annotations of this start: 4 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amyev_63 (AZ1), KeAlii_61 (AZ1), Pixelle_63 (AZ1), Tian_62 (AZ1), Yang_63 (AZ1),

Start 5:

- Found in 38 of 62 (61.3%) of genes in pham
- Manual Annotations of this start: 31 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle_62 (AZ1), AGrandiflora_66 (AZ1), Adumb2043_63 (AZ1), Amploria_65 (AZ1), Asa16_64 (AZ1), Ascela_66 (AZ1), Berrie_64 (AZ1), Community_64 (AZ1), Crewmate_69 (AZ1), Cyan_65 (AZ1), Elezi_63 (AZ1), Eraser_64 (AZ1), Flutur_64 (AZ), Iter_65 (AZ1), IttyBittyPiggy_65 (AZ1), Joemato_66 (AZ1), JohnDoe_65 (AZ1), Jstan_65 (AZ1), Kaylissa_66 (AZ1), Lego_64 (AZ1), Lizalica_64 (AZ1), London_64 (AZ1), Mudpuppy_63 (AZ1), Niobe_64 (AZ1), Nitro_65 (AZ1), ObiToo_69 (AZ1), Phives_65 (AZ1), Powerpuff_66 (AZ1), Simpson_70 (AZ1), Skelbel_65 (AZ1), Subaru_63 (AZ1), Tallboi_64 (AZ1), Tbone_64 (AZ1), Tuck_64 (AZ1), Turab_62 (AZ1), Tutumahutu_66 (AZ1), Warda_65 (AZ1), YesChef_64 (AZ1),

Start 6:

- Found in 10 of 62 (16.1%) of genes in pham
- Manual Annotations of this start: 9 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cassia_63 (AZ1), IttyBittyPiggy_63 (AZ1), Joemato_64 (AZ1), JuneStar_63 (AZ1), Lizalica_62 (AZ1), Mudpuppy_61

(AZ1), Pumpkins_62 (AZ1), Schaffner_62 (AZ1), Simpson_67 (AZ1), TforTroy_64 (AZ1),

Start 7:

- Found in 9 of 62 (14.5%) of genes in pham
- Manual Annotations of this start: 8 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adolin_67 (AZ1), DrManhattan_68 (AZ1), DrSierra_62 (AZ1), Janeemi_64 (AZ1), MissSwiss_66 (AZ1), PandaPo_66 (AZ1), Sue2_63 (AZ1), VResidence_66 (AZ1), Wildwest_61 (AZ1),

Summary by clusters:

There are 2 clusters represented in this pham: AZ1, AZ,

Info for manual annotations of cluster AZ1:

- Start number 4 was manually annotated 4 times for cluster AZ1.
- Start number 5 was manually annotated 31 times for cluster AZ1.
- Start number 6 was manually annotated 9 times for cluster AZ1.
- Start number 7 was manually annotated 8 times for cluster AZ1.

Gene Information:

Gene: AEgle_62 Start: 41494, Stop: 41667, Start Num: 5

Candidate Starts for AEgle_62:

(Start: 5 @41494 has 31 MA's), (8, 41509), (15, 41572), (16, 41581),

Gene: AGrandiflora_66 Start: 42390, Stop: 42566, Start Num: 5

Candidate Starts for AGrandiflora_66:

(1, 42090), (Start: 5 @42390 has 31 MA's), (8, 42405),

Gene: Adolin_67 Start: 41553, Stop: 41723, Start Num: 7

Candidate Starts for Adolin_67:

(Start: 7 @41553 has 8 MA's), (8, 41568),

Gene: Adumb2043_63 Start: 41518, Stop: 41691, Start Num: 5

Candidate Starts for Adumb2043_63:

(Start: 5 @41518 has 31 MA's), (8, 41533), (15, 41596), (16, 41605),

Gene: Amploria_65 Start: 41698, Stop: 41871, Start Num: 5

Candidate Starts for Amploria_65:

(Start: 5 @41698 has 31 MA's), (8, 41713), (15, 41776), (16, 41785),

Gene: Amyev_63 Start: 42719, Stop: 42895, Start Num: 4

Candidate Starts for Amyev_63:

(Start: 4 @42719 has 4 MA's), (8, 42737), (13, 42788), (16, 42809),

Gene: Asa16_64 Start: 42079, Stop: 42252, Start Num: 5

Candidate Starts for Asa16_64:

(1, 41779), (Start: 5 @42079 has 31 MA's), (8, 42094), (10, 42103),

Gene: Ascela_66 Start: 42570, Stop: 42743, Start Num: 5

Candidate Starts for Ascela_66:

(1, 42270), (Start: 5 @42570 has 31 MA's), (8, 42585), (10, 42594),

Gene: Berrie_64 Start: 42174, Stop: 42350, Start Num: 5

Candidate Starts for Berrie_64:

(Start: 5 @42174 has 31 MA's), (8, 42189), (16, 42261),

Gene: Cassia_63 Start: 41839, Stop: 42015, Start Num: 6

Candidate Starts for Cassia_63:

(Start: 6 @41839 has 9 MA's), (16, 41929),

Gene: Community_64 Start: 42450, Stop: 42623, Start Num: 5

Candidate Starts for Community_64:

(Start: 5 @42450 has 31 MA's), (8, 42465), (13, 42516), (14, 42519), (16, 42537),

Gene: Crewmate_69 Start: 42801, Stop: 42974, Start Num: 5

Candidate Starts for Crewmate_69:

(1, 42501), (Start: 5 @42801 has 31 MA's), (16, 42888),

Gene: Cyan_65 Start: 42134, Stop: 42310, Start Num: 5

Candidate Starts for Cyan_65:

(Start: 5 @42134 has 31 MA's), (8, 42149),

Gene: DrManhattan_68 Start: 41107, Stop: 41277, Start Num: 7

Candidate Starts for DrManhattan_68:

(Start: 7 @41107 has 8 MA's), (8, 41122),

Gene: DrSierra_62 Start: 41236, Stop: 41409, Start Num: 7

Candidate Starts for DrSierra_62:

(Start: 7 @41236 has 8 MA's), (8, 41251), (17, 41332), (18, 41341),

Gene: Elezi_63 Start: 41836, Stop: 42009, Start Num: 5

Candidate Starts for Elezi_63:

(1, 41536), (Start: 5 @41836 has 31 MA's), (8, 41851), (10, 41860),

Gene: Eraser_64 Start: 42086, Stop: 42259, Start Num: 5

Candidate Starts for Eraser_64:

(1, 41786), (Start: 5 @42086 has 31 MA's), (8, 42101), (10, 42110),

Gene: Flutur_64 Start: 42415, Stop: 42591, Start Num: 5

Candidate Starts for Flutur_64:

(Start: 5 @42415 has 31 MA's), (8, 42430),

Gene: Iter_65 Start: 42341, Stop: 42514, Start Num: 5

Candidate Starts for Iter_65:

(1, 42041), (Start: 5 @42341 has 31 MA's), (8, 42356), (10, 42365),

Gene: IttyBittyPiggy_65 Start: 40560, Stop: 40736, Start Num: 5

Candidate Starts for IttyBittyPiggy_65:

(Start: 5 @40560 has 31 MA's), (8, 40578), (13, 40629), (15, 40641), (16, 40650),

Gene: IttyBittyPiggy_63 Start: 40083, Stop: 40214, Start Num: 6
Candidate Starts for IttyBittyPiggy_63:
(Start: 6 @40083 has 9 MA's),

Gene: Janeemi_64 Start: 42220, Stop: 42393, Start Num: 7
Candidate Starts for Janeemi_64:
(Start: 7 @42220 has 8 MA's), (8, 42235), (13, 42286), (16, 42307),

Gene: Joemato_64 Start: 41834, Stop: 41962, Start Num: 6
Candidate Starts for Joemato_64:
(Start: 6 @41834 has 9 MA's), (9, 41858),

Gene: Joemato_66 Start: 42311, Stop: 42487, Start Num: 5
Candidate Starts for Joemato_66:
(1, 42011), (Start: 5 @42311 has 31 MA's), (8, 42326),

Gene: JohnDoe_65 Start: 42228, Stop: 42404, Start Num: 5
Candidate Starts for JohnDoe_65:
(Start: 5 @42228 has 31 MA's), (8, 42243),

Gene: Jstan_65 Start: 41840, Stop: 42013, Start Num: 5
Candidate Starts for Jstan_65:
(1, 41540), (Start: 5 @41840 has 31 MA's), (8, 41855), (10, 41864),

Gene: JuneStar_63 Start: 42934, Stop: 43110, Start Num: 6
Candidate Starts for JuneStar_63:
(Start: 6 @42934 has 9 MA's), (8, 42952), (16, 43024),

Gene: Kaylissa_66 Start: 42590, Stop: 42763, Start Num: 5
Candidate Starts for Kaylissa_66:
(Start: 5 @42590 has 31 MA's), (8, 42605), (17, 42686),

Gene: KeAlii_61 Start: 40177, Stop: 40347, Start Num: 4
Candidate Starts for KeAlii_61:
(Start: 4 @40177 has 4 MA's), (8, 40192), (9, 40198), (11, 40222), (13, 40243), (14, 40246),

Gene: Lego_64 Start: 41909, Stop: 42085, Start Num: 5
Candidate Starts for Lego_64:
(Start: 5 @41909 has 31 MA's), (8, 41924),

Gene: Lizalica_62 Start: 41025, Stop: 41156, Start Num: 6
Candidate Starts for Lizalica_62:
(Start: 6 @41025 has 9 MA's),

Gene: Lizalica_64 Start: 41505, Stop: 41687, Start Num: 5
Candidate Starts for Lizalica_64:
(1, 41205), (Start: 5 @41505 has 31 MA's), (8, 41520), (20, 41619),

Gene: London_64 Start: 42077, Stop: 42250, Start Num: 5
Candidate Starts for London_64:
(1, 41777), (Start: 5 @42077 has 31 MA's), (8, 42092), (10, 42101),

Gene: MissSwiss_66 Start: 41111, Stop: 41281, Start Num: 7

Candidate Starts for MissSwiss_66:

(Start: 7 @41111 has 8 MA's), (8, 41126), (19, 41219),

Gene: Mudpuppy_61 Start: 41800, Stop: 41928, Start Num: 6

Candidate Starts for Mudpuppy_61:

(Start: 6 @41800 has 9 MA's), (9, 41824),

Gene: Mudpuppy_63 Start: 42277, Stop: 42450, Start Num: 5

Candidate Starts for Mudpuppy_63:

(1, 41977), (Start: 5 @42277 has 31 MA's), (8, 42292), (17, 42373),

Gene: Niobe_64 Start: 42080, Stop: 42253, Start Num: 5

Candidate Starts for Niobe_64:

(1, 41780), (Start: 5 @42080 has 31 MA's), (8, 42095), (10, 42104),

Gene: Nitro_65 Start: 42777, Stop: 42935, Start Num: 5

Candidate Starts for Nitro_65:

(Start: 5 @42777 has 31 MA's), (14, 42831),

Gene: ObiToo_69 Start: 42417, Stop: 42590, Start Num: 5

Candidate Starts for ObiToo_69:

(1, 42117), (Start: 5 @42417 has 31 MA's), (16, 42504),

Gene: PandaPo_66 Start: 41118, Stop: 41288, Start Num: 7

Candidate Starts for PandaPo_66:

(Start: 7 @41118 has 8 MA's), (8, 41133), (19, 41226),

Gene: Phives_65 Start: 42565, Stop: 42738, Start Num: 5

Candidate Starts for Phives_65:

(Start: 5 @42565 has 31 MA's), (8, 42580), (13, 42631), (14, 42634), (16, 42652),

Gene: Pixelle_63 Start: 42820, Stop: 42996, Start Num: 4

Candidate Starts for Pixelle_63:

(Start: 4 @42820 has 4 MA's), (8, 42838), (16, 42910),

Gene: Powerpuff_66 Start: 43113, Stop: 43289, Start Num: 5

Candidate Starts for Powerpuff_66:

(1, 42813), (Start: 5 @43113 has 31 MA's), (8, 43128),

Gene: Pumpkins_62 Start: 42357, Stop: 42533, Start Num: 6

Candidate Starts for Pumpkins_62:

(2, 42165), (3, 42243), (Start: 6 @42357 has 9 MA's), (8, 42375), (12, 42408), (16, 42447),

Gene: Schaffner_62 Start: 42040, Stop: 42216, Start Num: 6

Candidate Starts for Schaffner_62:

(2, 41848), (Start: 6 @42040 has 9 MA's), (8, 42058), (15, 42121), (16, 42130),

Gene: Simpson_67 Start: 41838, Stop: 41966, Start Num: 6

Candidate Starts for Simpson_67:

(Start: 6 @41838 has 9 MA's), (9, 41862),

Gene: Simpson_70 Start: 42315, Stop: 42491, Start Num: 5

Candidate Starts for Simpson_70:

(1, 42015), (Start: 5 @42315 has 31 MA's), (8, 42330),

Gene: Skelbel_65 Start: 42080, Stop: 42253, Start Num: 5

Candidate Starts for Skelbel_65:

(1, 41780), (Start: 5 @42080 has 31 MA's), (8, 42095), (10, 42104),

Gene: Subaru_63 Start: 41836, Stop: 42009, Start Num: 5

Candidate Starts for Subaru_63:

(1, 41536), (Start: 5 @41836 has 31 MA's), (8, 41851), (10, 41860),

Gene: Sue2_63 Start: 40808, Stop: 40984, Start Num: 7

Candidate Starts for Sue2_63:

(Start: 7 @40808 has 8 MA's), (8, 40823), (19, 40916),

Gene: Tallboi_64 Start: 42082, Stop: 42258, Start Num: 5

Candidate Starts for Tallboi_64:

(Start: 5 @42082 has 31 MA's), (8, 42100), (16, 42172),

Gene: Tbone_64 Start: 42564, Stop: 42737, Start Num: 5

Candidate Starts for Tbone_64:

(1, 42264), (Start: 5 @42564 has 31 MA's), (8, 42579),

Gene: TforTroy_64 Start: 42011, Stop: 42187, Start Num: 6

Candidate Starts for TforTroy_64:

(Start: 6 @42011 has 9 MA's), (8, 42029), (13, 42080), (15, 42092), (16, 42101),

Gene: Tian_62 Start: 42718, Stop: 42894, Start Num: 4

Candidate Starts for Tian_62:

(Start: 4 @42718 has 4 MA's), (8, 42736), (13, 42787), (16, 42808),

Gene: Tuck_64 Start: 42353, Stop: 42526, Start Num: 5

Candidate Starts for Tuck_64:

(Start: 5 @42353 has 31 MA's), (8, 42368), (13, 42419), (14, 42422), (16, 42440),

Gene: Turab_62 Start: 41538, Stop: 41711, Start Num: 5

Candidate Starts for Turab_62:

(Start: 5 @41538 has 31 MA's), (8, 41553), (15, 41616), (16, 41625),

Gene: Tutumahutu_66 Start: 42156, Stop: 42332, Start Num: 5

Candidate Starts for Tutumahutu_66:

(Start: 5 @42156 has 31 MA's), (8, 42171),

Gene: VResidence_66 Start: 40516, Stop: 40692, Start Num: 7

Candidate Starts for VResidence_66:

(Start: 7 @40516 has 8 MA's),

Gene: Warda_65 Start: 42290, Stop: 42463, Start Num: 5

Candidate Starts for Warda_65:

(Start: 5 @42290 has 31 MA's), (8, 42305), (17, 42386),

Gene: Wildwest_61 Start: 42225, Stop: 42398, Start Num: 7

Candidate Starts for Wildwest_61:

(Start: 7 @42225 has 8 MA's), (8, 42240),

Gene: Yang_63 Start: 41651, Stop: 41830, Start Num: 4
Candidate Starts for Yang_63:
(Start: 4 @41651 has 4 MA's), (8, 41672), (16, 41744),

Gene: YesChef_64 Start: 41972, Stop: 42148, Start Num: 5
Candidate Starts for YesChef_64:
(1, 41672), (Start: 5 @41972 has 31 MA's), (8, 41987),