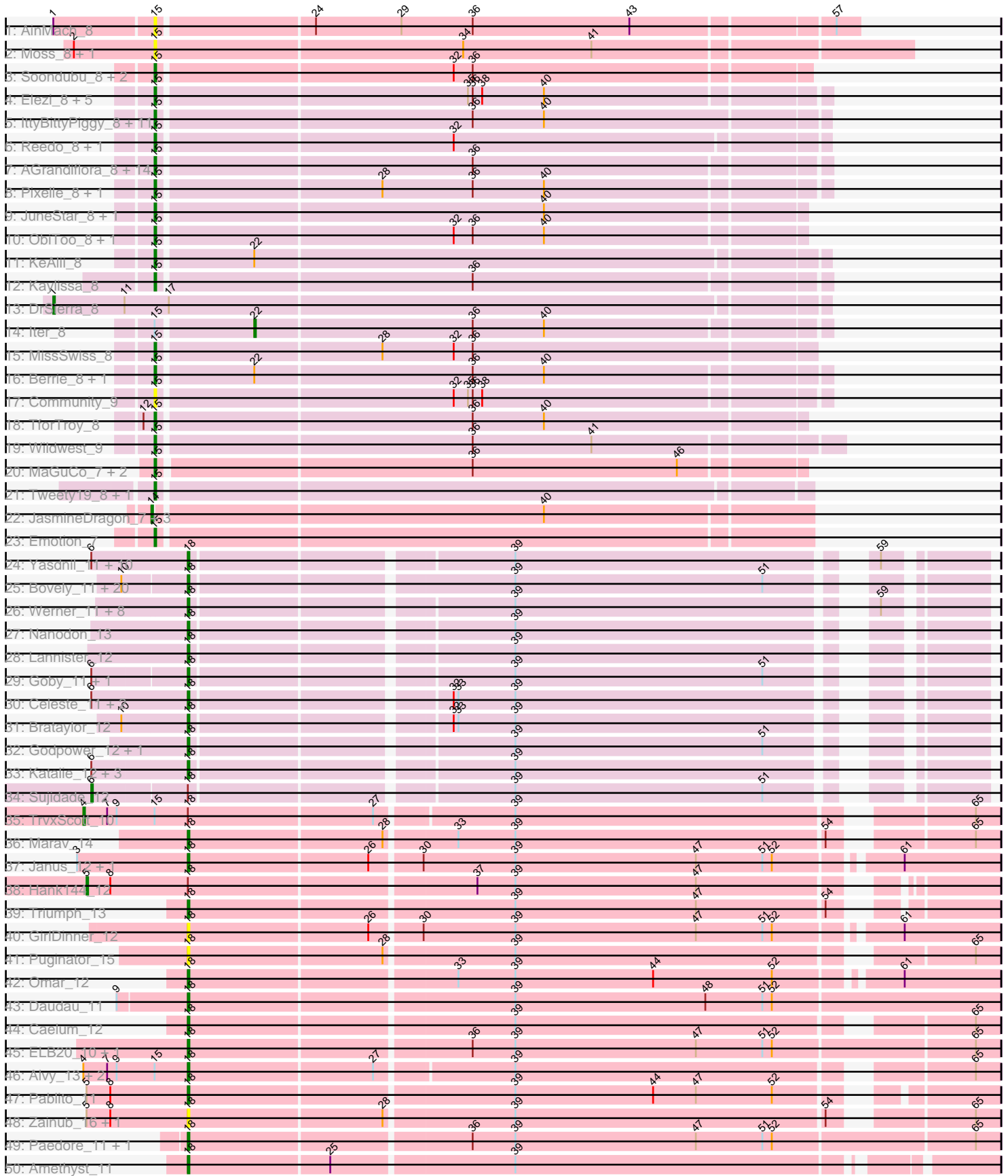
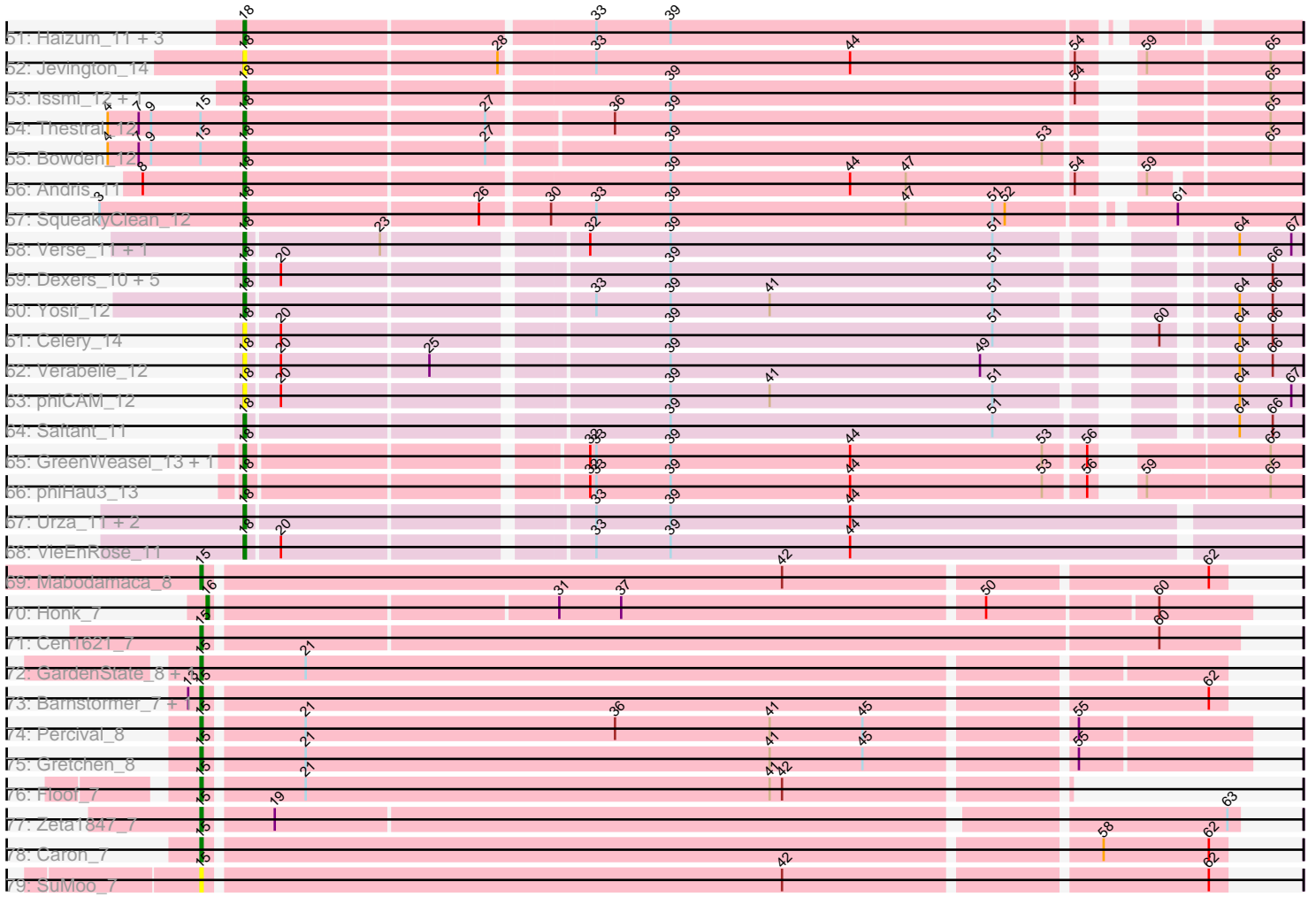


Pham 171222



Pham 171222



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 171222 Report

This analysis was run 07/10/24 on database version 566.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 171222 has 189 members, 34 are drafts.

Phages represented in each track:

- Track 1 : AinMach_8
- Track 2 : Moss_8, Halsey_8
- Track 3 : Soondubu_8, DrManhattan_8, Exile_8
- Track 4 : Elezi_8, London_8, Eraser_8, Niobe_8, Asa16_8, Jstan_8
- Track 5 : IttyBittyPiggy_8, Janeemi_9, Yang_8, Amyev_8, Tian_8, AEgle_8, Nitro_8, Turab_8, Cassia_8, Lizalica_8, Adumb2043_8, Pumpkins_8
- Track 6 : Reedo_8, Adolin_8
- Track 7 : AGrandiflora_8, Simpson_8, Cyan_8, YesChef_8, Tallboi_8, Tbone_8, VResidence_8, JohnDoe_8, Tutumahutu_8, Mudpuppy_8, Warda_8, Lego_8, Tuck_9, Powerpuff_8, Joemato_8
- Track 8 : Pixelle_8, Phives_9
- Track 9 : JuneStar_8, Sue2_8
- Track 10 : ObiToo_8, Crewmate_9
- Track 11 : KeAlii_8
- Track 12 : Kaylissa_8
- Track 13 : DrSierra_8
- Track 14 : lter_8
- Track 15 : MissSwiss_8
- Track 16 : Berrie_8, Ascela_8
- Track 17 : Community_9
- Track 18 : TforTroy_8
- Track 19 : Wildwest_9
- Track 20 : MaGuCo_7, Liebe_7, Maureen_7
- Track 21 : Tweety19_8, Snek_8
- Track 22 : JasmineDragon_7, ShakeltOph_7, MiniMommy_7, VroomVroom_7
- Track 23 : Emotion_7
- Track 24 : Yasdnil_11, Nabi_11, OzzyJ_12, Lorelei_11, Rana_11, TuanPN_11, Asten_11, Dwayne_11, Maneekul_11, Triste_11, Ejemplo_11
- Track 25 : Bovely_11, Esperer_11, Indigo_11, BryanRecycles_12, Oliynyk_12, Rusticus_12, Eddasa_12, Ozzie_11, Caliburn_11, Nerdos_11, SunsetPointe_11, Hydra_13, Aaronocolus_11, Leviticus_11, Unstoppable_11, EnochSoames_12, BeardedLady_12, Legacy_11, Phettuccine_11, Izzy_12, Jash_12

- Track 26 : Werner_11, Chucky_11, Emaanora_13, Hippo_11, Snorlax_11, SarahRose_11, TagePhighter_12, BarryBee_13, Whatever_11
- Track 27 : Nanodon_13
- Track 28 : Lannister_12
- Track 29 : Goby_11, Toma_11
- Track 30 : Celeste_11, Dattran_12, Zemlya_12
- Track 31 : Brataylor_12
- Track 32 : Godpower_12, Lika_11
- Track 33 : Katalie_12, RedBear_13, South40_12, Danzina_12
- Track 34 : Sujidade_12
- Track 35 : TrvxScott_10
- Track 36 : Marav_14
- Track 37 : Janus_12, Animus_12
- Track 38 : Hank144_12
- Track 39 : Triumph_13
- Track 40 : GirlDinner_12
- Track 41 : Puginator_15
- Track 42 : Omar_12
- Track 43 : Daudau_11
- Track 44 : Caelum_12
- Track 45 : ELB20_10, R4_11
- Track 46 : Alvy_13, BartholomewSD_13, TinaBelcher_11
- Track 47 : Pablito_11
- Track 48 : Zainub_16, Paolo_14
- Track 49 : Paedore_11, Loofah_12
- Track 50 : Amethyst_11
- Track 51 : Haizum_11, Tefunt_11, Nishikigoi_11, Diane_11
- Track 52 : Jevington_14
- Track 53 : Issmi_12, Superstar_13
- Track 54 : Thestral_12
- Track 55 : Bowden_12
- Track 56 : Andris_11
- Track 57 : SqueakyClean_12
- Track 58 : Verse_11, Amela_11
- Track 59 : Dexters_10, Conan_14, ElGato_13, Alsaber_12, Vanseggelen_14, Provolone_12
- Track 60 : Yosif_12
- Track 61 : Celery_14
- Track 62 : Verabelle_12
- Track 63 : phiCAM_12
- Track 64 : Saftant_11
- Track 65 : GreenWeasel_13, BroPlease_12
- Track 66 : phiHau3_13
- Track 67 : Urza_11, Itza_11, Celia_11
- Track 68 : VieEnRose_11
- Track 69 : Mabodamaca_8
- Track 70 : Honk_7
- Track 71 : Cen1621_7
- Track 72 : GardenState_8, IAmGroot_8
- Track 73 : Barnstormer_7, UtzChips_7
- Track 74 : Percival_8
- Track 75 : Gretchen_8
- Track 76 : Floof_7

- Track 77 : Zeta1847_7
- Track 78 : Caron_7
- Track 79 : SuMoo_7

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

The start number called the most often in the published annotations is 18, it was called in 92 of the 155 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aaronocolus_11, Alsaber_12, Alvy_13, Amela_11, Amethyst_11, Andris_11, Animus_12, Asten_11, BarryBee_13, BartholomewSD_13, BeardedLady_12, Bovely_11, Bowden_12, Brataylor_12, BroPlease_12, BryanRecycles_12, Caelum_12, Caliburn_11, Celery_14, Celeste_11, Celia_11, Chucky_11, Conan_14, Danzina_12, Dattran_12, Daudau_11, Dexers_10, Diane_11, Dwayne_11, ELB20_10, Eddasa_12, Ejemplo_11, ElGato_13, Emaanora_13, EnochSoames_12, Esperer_11, GirlDinner_12, Goby_11, Godpower_12, GreenWeasel_13, Haizum_11, Hippo_11, Hydra_13, Indigo_11, Issmi_12, Itza_11, Izzy_12, Janus_12, Jash_12, Jevington_14, Katalie_12, Lannister_12, Legacy_11, Leviticus_11, Lika_11, Loofah_12, Lorelei_11, Maneekul_11, Marav_14, Nabi_11, Nanodon_13, Nerdos_11, Nishikigoi_11, Oliynyk_12, Omar_12, Ozzie_11, OzzyJ_12, Pablito_11, Paedore_11, Paolo_14, Phettuccine_11, Provolone_12, Puginator_15, R4_11, Rana_11, RedBear_13, Rusticus_12, Saftant_11, SarahRose_11, Snorlax_11, South40_12, SqueakyClean_12, SunsetPointe_11, Superstar_13, TagePhighter_12, Tefunt_11, Thestral_12, TinaBelcher_11, Toma_11, Triste_11, Triumph_13, TuanPN_11, Unstoppable_11, Urza_11, Vanseggelen_14, Verabelle_12, Verse_11, VieEnRose_11, Werner_11, Whatever_11, Yasdnil_11, Yosif_12, Zainub_16, Zemlya_12, phiCAM_12, phiHau3_13,

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

- Hank144_12, Sujidade_12, TrvxScott_10,

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

- AEgle_8, AGrandiflora_8, Adolin_8, Adumb2043_8, AinMach_8, Amyev_8, Asa16_8, Ascela_8, Barnstormer_7, Berrie_8, Caron_7, Cassia_8, Cen1621_7, Community_9, Crewmate_9, Cyan_8, DrManhattan_8, DrSierra_8, Elezi_8, Emotion_7, Eraser_8, Exile_8, Floof_7, GardenState_8, Gretchen_8, Halsey_8, Honk_7, IAmGroot_8, Iter_8, IttyBittyPiggy_8, Janeemi_9, JasmineDragon_7, Joemato_8, JohnDoe_8, Jstan_8, JuneStar_8, Kaylissa_8, KeAlii_8, Lego_8, Liebe_7, Lizalica_8, London_8, MaGuCo_7, Mabodamaca_8, Maureen_7, MiniMommy_7, MissSwiss_8, Moss_8, Mudpuppy_8, Niobe_8, Nitro_8, ObiToo_8, Percival_8, Phives_9, Pixelle_8, Powerpuff_8, Pumpkins_8, Reedo_8, ShakeltOph_7, Simpson_8, Snek_8, Soondubu_8, SuMoo_7, Sue2_8, Tallboi_8, Tbone_8, TforTroy_8, Tian_8, Tuck_9, Turab_8, Tutumahutu_8, Tweety19_8, UtzChips_7, VResidence_8, VroomVroom_7, Warda_8, Wildwest_9, Yang_8, YesChef_8, Zeta1847_7,

Summary by start number:

Start 1:

- Found in 2 of 189 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 50.0% of time when present
- Phage (with cluster) where this start called: DrSierra_8 (AZ1),

Start 4:

- Found in 6 of 189 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 16.7% of time when present
- Phage (with cluster) where this start called: TrvxScott_10 (BD2),

Start 5:

- Found in 4 of 189 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Hank144_12 (BD2),

Start 6:

- Found in 21 of 189 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Sujidade_12 (BD1),

Start 14:

- Found in 4 of 189 (2.1%) of genes in pham
- Manual Annotations of this start: 2 of 155
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JasmineDragon_7 (AZ4), MiniMommy_7 (AZ4), ShakeltOph_7 (AZ4), VroomVroom_7 (AZ4),

Start 15:

- Found in 80 of 189 (42.3%) of genes in pham
- Manual Annotations of this start: 55 of 155
- Called 91.2% of time when present
- Phage (with cluster) where this start called: AEgle_8 (AZ1), AGrandiflora_8 (AZ1), Adolin_8 (AZ1), Adumb2043_8 (AZ1), AinMach_8 (AZ), Amyev_8 (AZ1), Asa16_8 (AZ1), Ascela_8 (AZ1), Barnstormer_7 (EH), Berrie_8 (AZ1), Caron_7 (EH), Cassia_8 (AZ1), Cen1621_7 (EH), Community_9 (AZ1), Crewmate_9 (AZ1), Cyan_8 (AZ1), DrManhattan_8 (AZ1), Elezi_8 (AZ1), Emotion_7 (AZ4), Eraser_8 (AZ1), Exile_8 (AZ), Floof_7 (EH), GardenState_8 (EH), Gretchen_8 (EH), Halsey_8 (AZ), IAmGroot_8 (EH), IttyBittyPiggy_8 (AZ1), Janeemi_9 (AZ1), Joemato_8 (AZ1), JohnDoe_8 (AZ1), Jstan_8 (AZ1), JuneStar_8 (AZ1), Kaylissa_8 (AZ1), KeAlii_8 (AZ1), Lego_8 (AZ1), Liebe_7 (AZ2), Lizalica_8 (AZ1), London_8 (AZ1), MaGuCo_7 (AZ2), Mabodamaca_8 (EH), Maureen_7 (AZ2), MissSwiss_8 (AZ1), Moss_8 (AZ), Mudpuppy_8 (AZ1), Niobe_8 (AZ1), Nitro_8 (AZ1), ObiToo_8 (AZ1), Percival_8 (EH), Phives_9 (AZ1), Pixelle_8 (AZ1), Powerpuff_8 (AZ1), Pumpkins_8 (AZ1), Reedo_8 (AZ1), Simpson_8 (AZ1), Snek_8 (AZ3), Soondubu_8 (AZ), SuMoo_7 (EH), Sue2_8 (AZ1), Tallboi_8 (AZ1), Tbone_8 (AZ1), TforTroy_8 (AZ1), Tian_8 (AZ1), Tuck_9 (AZ1), Turab_8 (AZ1), Tutumahutu_8 (AZ1), Tweety19_8 (AZ3), UtzChips_7 (EH), VResidence_8 (AZ1), Warda_8 (AZ1), Wildwest_9 (AZ1), Yang_8 (AZ1), YesChef_8 (AZ1), Zeta1847_7 (EH),

Start 16:

- Found in 1 of 189 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Honk_7 (EH),

Start 18:

- Found in 109 of 189 (57.7%) of genes in pham
- Manual Annotations of this start: 92 of 155
- Called 97.2% of time when present
- Phage (with cluster) where this start called: Aaronocolus_11 (BD1), Alsaber_12 (BD3), Alvy_13 (BD2), Amela_11 (BD3), Amethyst_11 (BD2), Andris_11 (BD2), Animus_12 (BD2), Asten_11 (BD1), BarryBee_13 (BD1), BartholomewSD_13 (BD2), BeardedLady_12 (BD1), Bovely_11 (BD1), Bowden_12 (BD2), Brataylor_12 (BD1), BroPlease_12 (BD4), BryanRecycles_12 (BD1), Caelum_12 (BD2), Caliburn_11 (BD1), Celery_14 (BD3), Celeste_11 (BD1), Celia_11 (BD6), Chucky_11 (BD1), Conan_14 (BD3), Danzina_12 (BD1), Dattran_12 (BD1), Daudau_11 (BD2), Dexters_10 (BD3), Diane_11 (BD2), Dwayne_11 (BD1), ELB20_10 (BD2), Eddasa_12 (BD1), Ejemplo_11 (BD1), ElGato_13 (BD3), Emaanora_13 (BD1), EnochSoames_12 (BD1), Esperer_11 (BD1), GirlDinner_12 (BD2), Goby_11 (BD1), Godpower_12 (BD1), GreenWeasel_13 (BD4), Haizum_11 (BD2), Hippo_11 (BD1), Hydra_13 (BD1), Indigo_11 (BD1), Issmi_12 (BD2), Itza_11 (BD6), Izzy_12 (BD1), Janus_12 (BD2), Jash_12 (BD1), Jevington_14 (BD2), Katalie_12 (BD1), Lannister_12 (BD1), Legacy_11 (BD1), Leviticus_11 (BD1), Lika_11 (BD1), Loofah_12 (BD2), Lorelei_11 (BD1), Maneekul_11 (BD1), Marav_14 (BD2), Nabi_11 (BD1), Nanodon_13 (BD1), Nerdos_11 (BD1), Nishikigoi_11 (BD2), Oliynyk_12 (BD1), Omar_12 (BD2), Ozzie_11 (BD1), OzzyJ_12 (BD1), Pablito_11 (BD2), Paedore_11 (BD2), Paolo_14 (BD2), Phettuccine_11 (BD1), Provolone_12 (BD3), Puginator_15 (BD2), R4_11 (BD2), Rana_11 (BD1), RedBear_13 (BD1), Rusticus_12 (BD1), Saftant_11 (BD3), SarahRose_11 (BD1), Snorlax_11 (BD1), South40_12 (BD1), SqueakyClean_12 (BD2), SunsetPointe_11 (BD1), Superstar_13 (BD2), TagePhighter_12 (BD1), Tefunt_11 (BD2), Thestral_12 (BD2), TinaBelcher_11 (BD2), Toma_11 (BD1), Triste_11 (BD1), Triumph_13 (BD2), TuanPN_11 (BD1), Unstoppable_11 (BD1), Urza_11 (BD6), Vanseggelen_14 (BD3), Verabelle_12 (BD3), Verse_11 (BD3), VieEnRose_11 (BD6), Werner_11 (BD1), Whatever_11 (BD1), Yasdnil_11 (BD1), Yosif_12 (BD3), Zainub_16 (BD2), Zemlya_12 (BD1), phiCAM_12 (BD3), phiHau3_13 (BD4),

Start 22:

- Found in 4 of 189 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Iter_8 (AZ1),

Summary by clusters:

There are 11 clusters represented in this pham: AZ3, EH, BD4, BD6, BD1, BD3, BD2, AZ1, AZ2, AZ, AZ4,

Info for manual annotations of cluster AZ:

- Start number 15 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:

- Start number 1 was manually annotated 1 time for cluster AZ1.

- Start number 15 was manually annotated 37 times for cluster AZ1.
- Start number 22 was manually annotated 1 time for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 15 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 15 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 14 was manually annotated 2 times for cluster AZ4.
- Start number 15 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster BD1:

- Start number 6 was manually annotated 1 time for cluster BD1.
- Start number 18 was manually annotated 54 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 4 was manually annotated 1 time for cluster BD2.
- Start number 5 was manually annotated 1 time for cluster BD2.
- Start number 18 was manually annotated 24 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 18 was manually annotated 7 times for cluster BD3.

Info for manual annotations of cluster BD4:

- Start number 18 was manually annotated 3 times for cluster BD4.

Info for manual annotations of cluster BD6:

- Start number 18 was manually annotated 4 times for cluster BD6.

Info for manual annotations of cluster EH:

- Start number 15 was manually annotated 11 times for cluster EH.
- Start number 16 was manually annotated 1 time for cluster EH.

Gene Information:

Gene: AEgle_8 Start: 7858, Stop: 8265, Start Num: 15

Candidate Starts for AEgle_8:

(Start: 15 @7858 has 55 MA's), (36, 8050), (40, 8095),

Gene: AGrandiflora_8 Start: 7839, Stop: 8246, Start Num: 15

Candidate Starts for AGrandiflora_8:

(Start: 15 @7839 has 55 MA's), (36, 8031),

Gene: Aaronocolus_11 Start: 8395, Stop: 8847, Start Num: 18

Candidate Starts for Aaronocolus_11:

(10, 8356), (Start: 18 @8395 has 92 MA's), (39, 8587), (51, 8743),

Gene: Adolin_8 Start: 7854, Stop: 8258, Start Num: 15

Candidate Starts for Adolin_8:

(Start: 15 @7854 has 55 MA's), (32, 8034),

Gene: Adumb2043_8 Start: 7857, Stop: 8264, Start Num: 15

Candidate Starts for Adumb2043_8:

(Start: 15 @7857 has 55 MA's), (36, 8049), (40, 8094),

Gene: AinMach_8 Start: 7070, Stop: 7495, Start Num: 15

Candidate Starts for AinMach_8:

(Start: 1 @7010 has 1 MA's), (Start: 15 @7070 has 55 MA's), (24, 7163), (29, 7217), (36, 7262), (43, 7361), (57, 7481),

Gene: Alsaber_12 Start: 8454, Stop: 8915, Start Num: 18

Candidate Starts for Alsaber_12:

(Start: 18 @8454 has 92 MA's), (20, 8469), (39, 8643), (51, 8799), (66, 8901),

Gene: Alvy_13 Start: 8321, Stop: 8794, Start Num: 18

Candidate Starts for Alvy_13:

(Start: 4 @8255 has 1 MA's), (7, 8270), (9, 8276), (Start: 15 @8300 has 55 MA's), (Start: 18 @8321 has 92 MA's), (27, 8435), (39, 8516), (65, 8780),

Gene: Amela_11 Start: 8566, Stop: 9024, Start Num: 18

Candidate Starts for Amela_11:

(Start: 18 @8566 has 92 MA's), (23, 8629), (32, 8716), (39, 8755), (51, 8911), (64, 8995), (67, 9019),

Gene: Amethyst_11 Start: 8131, Stop: 8607, Start Num: 18

Candidate Starts for Amethyst_11:

(Start: 18 @8131 has 92 MA's), (25, 8218), (39, 8329),

Gene: Amyev_8 Start: 7873, Stop: 8280, Start Num: 15

Candidate Starts for Amyev_8:

(Start: 15 @7873 has 55 MA's), (36, 8065), (40, 8110),

Gene: Andris_11 Start: 8194, Stop: 8664, Start Num: 18

Candidate Starts for Andris_11:

(8, 8146), (Start: 18 @8194 has 92 MA's), (39, 8392), (44, 8479), (47, 8506), (54, 8584), (59, 8599),

Gene: Animus_12 Start: 8547, Stop: 9035, Start Num: 18

Candidate Starts for Animus_12:

(3, 8478), (Start: 18 @8547 has 92 MA's), (26, 8658), (30, 8688), (39, 8745), (47, 8859), (51, 8901), (52, 8907), (61, 8976),

Gene: Asa16_8 Start: 7826, Stop: 8233, Start Num: 15

Candidate Starts for Asa16_8:

(Start: 15 @7826 has 55 MA's), (35, 8015), (36, 8018), (38, 8024), (40, 8063),

Gene: Ascela_8 Start: 7852, Stop: 8259, Start Num: 15

Candidate Starts for Ascela_8:

(Start: 15 @7852 has 55 MA's), (Start: 22 @7909 has 1 MA's), (36, 8044), (40, 8089),

Gene: Asten_11 Start: 8357, Stop: 8806, Start Num: 18

Candidate Starts for Asten_11:

(Start: 6 @8300 has 1 MA's), (Start: 18 @8357 has 92 MA's), (39, 8546), (59, 8750),

Gene: Barnstormer_7 Start: 7106, Stop: 7585, Start Num: 15
Candidate Starts for Barnstormer_7:
(13, 7100), (Start: 15 @7106 has 55 MA's), (62, 7577),

Gene: BarryBee_13 Start: 8364, Stop: 8813, Start Num: 18
Candidate Starts for BarryBee_13:
(Start: 18 @8364 has 92 MA's), (39, 8553), (59, 8757),

Gene: BartholomewSD_13 Start: 8321, Stop: 8794, Start Num: 18
Candidate Starts for BartholomewSD_13:
(Start: 4 @8255 has 1 MA's), (7, 8270), (9, 8276), (Start: 15 @8300 has 55 MA's), (Start: 18 @8321 has 92 MA's), (27, 8435), (39, 8516), (65, 8780),

Gene: BeardedLady_12 Start: 8642, Stop: 9094, Start Num: 18
Candidate Starts for BeardedLady_12:
(10, 8603), (Start: 18 @8642 has 92 MA's), (39, 8834), (51, 8990),

Gene: Berrie_8 Start: 7831, Stop: 8238, Start Num: 15
Candidate Starts for Berrie_8:
(Start: 15 @7831 has 55 MA's), (Start: 22 @7888 has 1 MA's), (36, 8023), (40, 8068),

Gene: Bovely_11 Start: 8401, Stop: 8853, Start Num: 18
Candidate Starts for Bovely_11:
(10, 8362), (Start: 18 @8401 has 92 MA's), (39, 8593), (51, 8749),

Gene: Bowden_12 Start: 8235, Stop: 8708, Start Num: 18
Candidate Starts for Bowden_12:
(Start: 4 @8169 has 1 MA's), (7, 8184), (9, 8190), (Start: 15 @8214 has 55 MA's), (Start: 18 @8235 has 92 MA's), (27, 8349), (39, 8430), (53, 8610), (65, 8694),

Gene: Brataylor_12 Start: 8367, Stop: 8816, Start Num: 18
Candidate Starts for Brataylor_12:
(10, 8328), (Start: 18 @8367 has 92 MA's), (32, 8517), (33, 8520), (39, 8556),

Gene: BroPlease_12 Start: 8450, Stop: 8917, Start Num: 18
Candidate Starts for BroPlease_12:
(Start: 18 @8450 has 92 MA's), (32, 8600), (33, 8603), (39, 8639), (44, 8726), (53, 8819), (56, 8837), (65, 8903),

Gene: BryanRecycles_12 Start: 8558, Stop: 9010, Start Num: 18
Candidate Starts for BryanRecycles_12:
(10, 8519), (Start: 18 @8558 has 92 MA's), (39, 8750), (51, 8906),

Gene: Caelum_12 Start: 8087, Stop: 8563, Start Num: 18
Candidate Starts for Caelum_12:
(Start: 18 @8087 has 92 MA's), (39, 8285), (65, 8549),

Gene: Caliburn_11 Start: 8375, Stop: 8827, Start Num: 18
Candidate Starts for Caliburn_11:
(10, 8336), (Start: 18 @8375 has 92 MA's), (39, 8567), (51, 8723),

Gene: Caron_7 Start: 7134, Stop: 7613, Start Num: 15
Candidate Starts for Caron_7:

(Start: 15 @7134 has 55 MA's), (58, 7554), (62, 7605),

Gene: Cassia_8 Start: 7956, Stop: 8351, Start Num: 15

Candidate Starts for Cassia_8:

(Start: 15 @7956 has 55 MA's), (36, 8148), (40, 8193),

Gene: Celery_14 Start: 8413, Stop: 8874, Start Num: 18

Candidate Starts for Celery_14:

(Start: 18 @8413 has 92 MA's), (20, 8428), (39, 8602), (51, 8758), (60, 8818), (64, 8845), (66, 8860),

Gene: Celeste_11 Start: 8365, Stop: 8814, Start Num: 18

Candidate Starts for Celeste_11:

(Start: 6 @8308 has 1 MA's), (Start: 18 @8365 has 92 MA's), (32, 8515), (33, 8518), (39, 8554),

Gene: Celia_11 Start: 8664, Stop: 9149, Start Num: 18

Candidate Starts for Celia_11:

(Start: 18 @8664 has 92 MA's), (33, 8817), (39, 8853), (44, 8940),

Gene: Cen1621_7 Start: 6257, Stop: 6748, Start Num: 15

Candidate Starts for Cen1621_7:

(Start: 15 @6257 has 55 MA's), (60, 6710),

Gene: Chucky_11 Start: 8365, Stop: 8814, Start Num: 18

Candidate Starts for Chucky_11:

(Start: 18 @8365 has 92 MA's), (39, 8554), (59, 8758),

Gene: Community_9 Start: 8908, Stop: 9315, Start Num: 15

Candidate Starts for Community_9:

(Start: 15 @8908 has 55 MA's), (32, 9088), (35, 9097), (36, 9100), (38, 9106),

Gene: Conan_14 Start: 8164, Stop: 8625, Start Num: 18

Candidate Starts for Conan_14:

(Start: 18 @8164 has 92 MA's), (20, 8179), (39, 8353), (51, 8509), (66, 8611),

Gene: Crewmate_9 Start: 8291, Stop: 8698, Start Num: 15

Candidate Starts for Crewmate_9:

(Start: 15 @8291 has 55 MA's), (32, 8471), (36, 8483), (40, 8528),

Gene: Cyan_8 Start: 7843, Stop: 8250, Start Num: 15

Candidate Starts for Cyan_8:

(Start: 15 @7843 has 55 MA's), (36, 8035),

Gene: Danzina_12 Start: 8569, Stop: 9018, Start Num: 18

Candidate Starts for Danzina_12:

(Start: 6 @8512 has 1 MA's), (Start: 18 @8569 has 92 MA's), (39, 8758),

Gene: Dattran_12 Start: 8364, Stop: 8813, Start Num: 18

Candidate Starts for Dattran_12:

(Start: 6 @8307 has 1 MA's), (Start: 18 @8364 has 92 MA's), (32, 8514), (33, 8517), (39, 8553),

Gene: Daudau_11 Start: 8198, Stop: 8698, Start Num: 18

Candidate Starts for Daudau_11:

(9, 8156), (Start: 18 @8198 has 92 MA's), (39, 8396), (48, 8516), (51, 8552), (52, 8558),

Gene: Dexers_10 Start: 8157, Stop: 8618, Start Num: 18
Candidate Starts for Dexers_10:
(Start: 18 @8157 has 92 MA's), (20, 8172), (39, 8346), (51, 8502), (66, 8604),

Gene: Diane_11 Start: 8130, Stop: 8606, Start Num: 18
Candidate Starts for Diane_11:
(Start: 18 @8130 has 92 MA's), (33, 8292), (39, 8328),

Gene: DrManhattan_8 Start: 7844, Stop: 8248, Start Num: 15
Candidate Starts for DrManhattan_8:
(Start: 15 @7844 has 55 MA's), (32, 8024), (36, 8036),

Gene: DrSierra_8 Start: 7783, Stop: 8259, Start Num: 1
Candidate Starts for DrSierra_8:
(Start: 1 @7783 has 1 MA's), (11, 7828), (17, 7855),

Gene: Dwayne_11 Start: 8364, Stop: 8813, Start Num: 18
Candidate Starts for Dwayne_11:
(Start: 6 @8307 has 1 MA's), (Start: 18 @8364 has 92 MA's), (39, 8553), (59, 8757),

Gene: ELB20_10 Start: 8214, Stop: 8711, Start Num: 18
Candidate Starts for ELB20_10:
(Start: 18 @8214 has 92 MA's), (36, 8385), (39, 8412), (47, 8526), (51, 8568), (52, 8574), (65, 8697),

Gene: Eddasa_12 Start: 8558, Stop: 9010, Start Num: 18
Candidate Starts for Eddasa_12:
(10, 8519), (Start: 18 @8558 has 92 MA's), (39, 8750), (51, 8906),

Gene: Ejemplo_11 Start: 8367, Stop: 8816, Start Num: 18
Candidate Starts for Ejemplo_11:
(Start: 6 @8310 has 1 MA's), (Start: 18 @8367 has 92 MA's), (39, 8556), (59, 8760),

Gene: ElGato_13 Start: 8167, Stop: 8628, Start Num: 18
Candidate Starts for ElGato_13:
(Start: 18 @8167 has 92 MA's), (20, 8182), (39, 8356), (51, 8512), (66, 8614),

Gene: Elezi_8 Start: 7827, Stop: 8234, Start Num: 15
Candidate Starts for Elezi_8:
(Start: 15 @7827 has 55 MA's), (35, 8016), (36, 8019), (38, 8025), (40, 8064),

Gene: Emaanora_13 Start: 8364, Stop: 8813, Start Num: 18
Candidate Starts for Emaanora_13:
(Start: 18 @8364 has 92 MA's), (39, 8553), (59, 8757),

Gene: Emotion_7 Start: 6195, Stop: 6596, Start Num: 15
Candidate Starts for Emotion_7:
(Start: 15 @6195 has 55 MA's),

Gene: EnochSoames_12 Start: 8554, Stop: 9006, Start Num: 18
Candidate Starts for EnochSoames_12:
(10, 8515), (Start: 18 @8554 has 92 MA's), (39, 8746), (51, 8902),

Gene: Eraser_8 Start: 7827, Stop: 8234, Start Num: 15
Candidate Starts for Eraser_8:
(Start: 15 @7827 has 55 MA's), (35, 8016), (36, 8019), (38, 8025), (40, 8064),

Gene: Esperer_11 Start: 8395, Stop: 8847, Start Num: 18
Candidate Starts for Esperer_11:
(10, 8356), (Start: 18 @8395 has 92 MA's), (39, 8587), (51, 8743),

Gene: Exile_8 Start: 7864, Stop: 8262, Start Num: 15
Candidate Starts for Exile_8:
(Start: 15 @7864 has 55 MA's), (32, 8044), (36, 8056),

Gene: Floof_7 Start: 6625, Stop: 7029, Start Num: 15
Candidate Starts for Floof_7:
(Start: 15 @6625 has 55 MA's), (21, 6670), (41, 6895), (42, 6901),

Gene: GardenState_8 Start: 7336, Stop: 7818, Start Num: 15
Candidate Starts for GardenState_8:
(Start: 15 @7336 has 55 MA's), (21, 7387),

Gene: GirlDinner_12 Start: 8209, Stop: 8697, Start Num: 18
Candidate Starts for GirlDinner_12:
(Start: 18 @8209 has 92 MA's), (26, 8320), (30, 8350), (39, 8407), (47, 8521), (51, 8563), (52, 8569),
(61, 8638),

Gene: Goby_11 Start: 8367, Stop: 8816, Start Num: 18
Candidate Starts for Goby_11:
(Start: 6 @8310 has 1 MA's), (Start: 18 @8367 has 92 MA's), (39, 8556), (51, 8712),

Gene: Godpower_12 Start: 8382, Stop: 8831, Start Num: 18
Candidate Starts for Godpower_12:
(Start: 18 @8382 has 92 MA's), (39, 8571), (51, 8727),

Gene: GreenWeasel_13 Start: 8459, Stop: 8926, Start Num: 18
Candidate Starts for GreenWeasel_13:
(Start: 18 @8459 has 92 MA's), (32, 8609), (33, 8612), (39, 8648), (44, 8735), (53, 8828), (56, 8846),
(65, 8912),

Gene: Gretchen_8 Start: 8203, Stop: 8691, Start Num: 15
Candidate Starts for Gretchen_8:
(Start: 15 @8203 has 55 MA's), (21, 8248), (41, 8473), (45, 8518), (55, 8611),

Gene: Haizum_11 Start: 8160, Stop: 8636, Start Num: 18
Candidate Starts for Haizum_11:
(Start: 18 @8160 has 92 MA's), (33, 8322), (39, 8358),

Gene: Halsey_8 Start: 7343, Stop: 7810, Start Num: 15
Candidate Starts for Halsey_8:
(2, 7292), (Start: 15 @7343 has 55 MA's), (34, 7535), (41, 7616),

Gene: Hank144_12 Start: 8436, Stop: 8966, Start Num: 5
Candidate Starts for Hank144_12:

(Start: 5 @8436 has 1 MA's), (8, 8451), (Start: 18 @8499 has 92 MA's), (37, 8673), (39, 8697), (47, 8811),

Gene: Hippo_11 Start: 8364, Stop: 8813, Start Num: 18

Candidate Starts for Hippo_11:

(Start: 18 @8364 has 92 MA's), (39, 8553), (59, 8757),

Gene: Honk_7 Start: 6227, Stop: 6709, Start Num: 16

Candidate Starts for Honk_7:

(Start: 16 @6227 has 1 MA's), (31, 6386), (37, 6416), (50, 6587), (60, 6665),

Gene: Hydra_13 Start: 8923, Stop: 9375, Start Num: 18

Candidate Starts for Hydra_13:

(10, 8884), (Start: 18 @8923 has 92 MA's), (39, 9115), (51, 9271),

Gene: IAmGroot_8 Start: 7980, Stop: 8462, Start Num: 15

Candidate Starts for IAmGroot_8:

(Start: 15 @7980 has 55 MA's), (21, 8031),

Gene: Indigo_11 Start: 8395, Stop: 8847, Start Num: 18

Candidate Starts for Indigo_11:

(10, 8356), (Start: 18 @8395 has 92 MA's), (39, 8587), (51, 8743),

Gene: Issmi_12 Start: 8440, Stop: 8916, Start Num: 18

Candidate Starts for Issmi_12:

(Start: 18 @8440 has 92 MA's), (39, 8638), (54, 8830), (65, 8902),

Gene: Iter_8 Start: 7909, Stop: 8259, Start Num: 22

Candidate Starts for Iter_8:

(Start: 15 @7852 has 55 MA's), (Start: 22 @7909 has 1 MA's), (36, 8044), (40, 8089),

Gene: IttyBittyPiggy_8 Start: 7843, Stop: 8253, Start Num: 15

Candidate Starts for IttyBittyPiggy_8:

(Start: 15 @7843 has 55 MA's), (36, 8035), (40, 8080),

Gene: Itza_11 Start: 8587, Stop: 9072, Start Num: 18

Candidate Starts for Itza_11:

(Start: 18 @8587 has 92 MA's), (33, 8740), (39, 8776), (44, 8863),

Gene: Izzy_12 Start: 8605, Stop: 9057, Start Num: 18

Candidate Starts for Izzy_12:

(10, 8566), (Start: 18 @8605 has 92 MA's), (39, 8797), (51, 8953),

Gene: Janeemi_9 Start: 8938, Stop: 9369, Start Num: 15

Candidate Starts for Janeemi_9:

(Start: 15 @8938 has 55 MA's), (36, 9130), (40, 9175),

Gene: Janus_12 Start: 8547, Stop: 9035, Start Num: 18

Candidate Starts for Janus_12:

(3, 8478), (Start: 18 @8547 has 92 MA's), (26, 8658), (30, 8688), (39, 8745), (47, 8859), (51, 8901), (52, 8907), (61, 8976),

Gene: Jash_12 Start: 8558, Stop: 9010, Start Num: 18

Candidate Starts for Jash_12:

(10, 8519), (Start: 18 @8558 has 92 MA's), (39, 8750), (51, 8906),

Gene: JasmineDragon_7 Start: 6172, Stop: 6573, Start Num: 14

Candidate Starts for JasmineDragon_7:

(Start: 14 @6172 has 2 MA's), (40, 6409),

Gene: Jevington_14 Start: 8742, Stop: 9218, Start Num: 18

Candidate Starts for Jevington_14:

(Start: 18 @8742 has 92 MA's), (28, 8862), (33, 8904), (44, 9027), (54, 9132), (59, 9147), (65, 9204),

Gene: Joemato_8 Start: 7843, Stop: 8250, Start Num: 15

Candidate Starts for Joemato_8:

(Start: 15 @7843 has 55 MA's), (36, 8035),

Gene: JohnDoe_8 Start: 7841, Stop: 8248, Start Num: 15

Candidate Starts for JohnDoe_8:

(Start: 15 @7841 has 55 MA's), (36, 8033),

Gene: Jstan_8 Start: 7827, Stop: 8234, Start Num: 15

Candidate Starts for Jstan_8:

(Start: 15 @7827 has 55 MA's), (35, 8016), (36, 8019), (38, 8025), (40, 8064),

Gene: JuneStar_8 Start: 7957, Stop: 8352, Start Num: 15

Candidate Starts for JuneStar_8:

(Start: 15 @7957 has 55 MA's), (40, 8194),

Gene: Katalie_12 Start: 8637, Stop: 9086, Start Num: 18

Candidate Starts for Katalie_12:

(Start: 6 @8580 has 1 MA's), (Start: 18 @8637 has 92 MA's), (39, 8826),

Gene: Kaylissa_8 Start: 7844, Stop: 8251, Start Num: 15

Candidate Starts for Kaylissa_8:

(Start: 15 @7844 has 55 MA's), (36, 8036),

Gene: KeAlii_8 Start: 7870, Stop: 8277, Start Num: 15

Candidate Starts for KeAlii_8:

(Start: 15 @7870 has 55 MA's), (Start: 22 @7927 has 1 MA's),

Gene: Lannister_12 Start: 8385, Stop: 8834, Start Num: 18

Candidate Starts for Lannister_12:

(Start: 18 @8385 has 92 MA's), (39, 8574),

Gene: Legacy_11 Start: 8366, Stop: 8818, Start Num: 18

Candidate Starts for Legacy_11:

(10, 8327), (Start: 18 @8366 has 92 MA's), (39, 8558), (51, 8714),

Gene: Lego_8 Start: 7842, Stop: 8249, Start Num: 15

Candidate Starts for Lego_8:

(Start: 15 @7842 has 55 MA's), (36, 8034),

Gene: Leviticus_11 Start: 8395, Stop: 8847, Start Num: 18

Candidate Starts for Leviticus_11:

(10, 8356), (Start: 18 @8395 has 92 MA's), (39, 8587), (51, 8743),

Gene: Liebe_7 Start: 6336, Stop: 6731, Start Num: 15
Candidate Starts for Liebe_7:
(Start: 15 @6336 has 55 MA's), (36, 6528), (46, 6657),

Gene: Lika_11 Start: 8383, Stop: 8832, Start Num: 18
Candidate Starts for Lika_11:
(Start: 18 @8383 has 92 MA's), (39, 8572), (51, 8728),

Gene: Lizalica_8 Start: 7834, Stop: 8241, Start Num: 15
Candidate Starts for Lizalica_8:
(Start: 15 @7834 has 55 MA's), (36, 8026), (40, 8071),

Gene: London_8 Start: 7827, Stop: 8234, Start Num: 15
Candidate Starts for London_8:
(Start: 15 @7827 has 55 MA's), (35, 8016), (36, 8019), (38, 8025), (40, 8064),

Gene: Loofah_12 Start: 8254, Stop: 8751, Start Num: 18
Candidate Starts for Loofah_12:
(Start: 18 @8254 has 92 MA's), (36, 8425), (39, 8452), (47, 8566), (51, 8608), (52, 8614), (65, 8737),

Gene: Lorelei_11 Start: 8361, Stop: 8804, Start Num: 18
Candidate Starts for Lorelei_11:
(Start: 6 @8304 has 1 MA's), (Start: 18 @8361 has 92 MA's), (39, 8544), (59, 8748),

Gene: MaGuCo_7 Start: 6195, Stop: 6590, Start Num: 15
Candidate Starts for MaGuCo_7:
(Start: 15 @6195 has 55 MA's), (36, 6387), (46, 6516),

Gene: Mabodamaca_8 Start: 7413, Stop: 7892, Start Num: 15
Candidate Starts for Mabodamaca_8:
(Start: 15 @7413 has 55 MA's), (42, 7689), (62, 7884),

Gene: Maneekul_11 Start: 8366, Stop: 8815, Start Num: 18
Candidate Starts for Maneekul_11:
(Start: 6 @8309 has 1 MA's), (Start: 18 @8366 has 92 MA's), (39, 8555), (59, 8759),

Gene: Marav_14 Start: 9092, Stop: 9568, Start Num: 18
Candidate Starts for Marav_14:
(Start: 18 @9092 has 92 MA's), (28, 9212), (33, 9254), (39, 9290), (54, 9482), (65, 9554),

Gene: Maureen_7 Start: 6336, Stop: 6731, Start Num: 15
Candidate Starts for Maureen_7:
(Start: 15 @6336 has 55 MA's), (36, 6528), (46, 6657),

Gene: MiniMommy_7 Start: 6172, Stop: 6573, Start Num: 14
Candidate Starts for MiniMommy_7:
(Start: 14 @6172 has 2 MA's), (40, 6409),

Gene: MissSwiss_8 Start: 7857, Stop: 8261, Start Num: 15
Candidate Starts for MissSwiss_8:
(Start: 15 @7857 has 55 MA's), (28, 7992), (32, 8037), (36, 8049),

Gene: Moss_8 Start: 7343, Stop: 7810, Start Num: 15
Candidate Starts for Moss_8:
(2, 7292), (Start: 15 @7343 has 55 MA's), (34, 7535), (41, 7616),

Gene: Mudpuppy_8 Start: 7842, Stop: 8249, Start Num: 15
Candidate Starts for Mudpuppy_8:
(Start: 15 @7842 has 55 MA's), (36, 8034),

Gene: Nabi_11 Start: 8361, Stop: 8804, Start Num: 18
Candidate Starts for Nabi_11:
(Start: 6 @8304 has 1 MA's), (Start: 18 @8361 has 92 MA's), (39, 8544), (59, 8748),

Gene: Nanodon_13 Start: 8557, Stop: 9006, Start Num: 18
Candidate Starts for Nanodon_13:
(Start: 18 @8557 has 92 MA's), (39, 8746),

Gene: Nerdos_11 Start: 8395, Stop: 8847, Start Num: 18
Candidate Starts for Nerdos_11:
(10, 8356), (Start: 18 @8395 has 92 MA's), (39, 8587), (51, 8743),

Gene: Niobe_8 Start: 7827, Stop: 8234, Start Num: 15
Candidate Starts for Niobe_8:
(Start: 15 @7827 has 55 MA's), (35, 8016), (36, 8019), (38, 8025), (40, 8064),

Gene: Nishikigoi_11 Start: 8160, Stop: 8636, Start Num: 18
Candidate Starts for Nishikigoi_11:
(Start: 18 @8160 has 92 MA's), (33, 8322), (39, 8358),

Gene: Nitro_8 Start: 7844, Stop: 8251, Start Num: 15
Candidate Starts for Nitro_8:
(Start: 15 @7844 has 55 MA's), (36, 8036), (40, 8081),

Gene: ObiToo_8 Start: 8041, Stop: 8436, Start Num: 15
Candidate Starts for ObiToo_8:
(Start: 15 @8041 has 55 MA's), (32, 8221), (36, 8233), (40, 8278),

Gene: Oliynyk_12 Start: 8558, Stop: 9010, Start Num: 18
Candidate Starts for Oliynyk_12:
(10, 8519), (Start: 18 @8558 has 92 MA's), (39, 8750), (51, 8906),

Gene: Omar_12 Start: 8382, Stop: 8870, Start Num: 18
Candidate Starts for Omar_12:
(Start: 18 @8382 has 92 MA's), (33, 8544), (39, 8580), (44, 8667), (52, 8742), (61, 8811),

Gene: Ozzie_11 Start: 8375, Stop: 8827, Start Num: 18
Candidate Starts for Ozzie_11:
(10, 8336), (Start: 18 @8375 has 92 MA's), (39, 8567), (51, 8723),

Gene: OzzyJ_12 Start: 8358, Stop: 8807, Start Num: 18
Candidate Starts for OzzyJ_12:
(Start: 6 @8301 has 1 MA's), (Start: 18 @8358 has 92 MA's), (39, 8547), (59, 8751),

Gene: Pablito_11 Start: 8226, Stop: 8696, Start Num: 18

Candidate Starts for Pablito_11:

(Start: 5 @8163 has 1 MA's), (8, 8178), (Start: 18 @8226 has 92 MA's), (39, 8424), (44, 8511), (47, 8538), (52, 8586),

Gene: Paedore_11 Start: 8254, Stop: 8751, Start Num: 18

Candidate Starts for Paedore_11:

(Start: 18 @8254 has 92 MA's), (36, 8425), (39, 8452), (47, 8566), (51, 8608), (52, 8614), (65, 8737),

Gene: Paolo_14 Start: 8769, Stop: 9245, Start Num: 18

Candidate Starts for Paolo_14:

(Start: 5 @8706 has 1 MA's), (8, 8721), (Start: 18 @8769 has 92 MA's), (28, 8889), (39, 8967), (54, 9159), (65, 9231),

Gene: Percival_8 Start: 8037, Stop: 8525, Start Num: 15

Candidate Starts for Percival_8:

(Start: 15 @8037 has 55 MA's), (21, 8082), (36, 8232), (41, 8307), (45, 8352), (55, 8445),

Gene: Phettuccine_11 Start: 8395, Stop: 8847, Start Num: 18

Candidate Starts for Phettuccine_11:

(10, 8356), (Start: 18 @8395 has 92 MA's), (39, 8587), (51, 8743),

Gene: Phives_9 Start: 8933, Stop: 9340, Start Num: 15

Candidate Starts for Phives_9:

(Start: 15 @8933 has 55 MA's), (28, 9068), (36, 9125), (40, 9170),

Gene: Pixelle_8 Start: 7876, Stop: 8283, Start Num: 15

Candidate Starts for Pixelle_8:

(Start: 15 @7876 has 55 MA's), (28, 8011), (36, 8068), (40, 8113),

Gene: Powerpuff_8 Start: 7893, Stop: 8300, Start Num: 15

Candidate Starts for Powerpuff_8:

(Start: 15 @7893 has 55 MA's), (36, 8085),

Gene: Provolone_12 Start: 8167, Stop: 8628, Start Num: 18

Candidate Starts for Provolone_12:

(Start: 18 @8167 has 92 MA's), (20, 8182), (39, 8356), (51, 8512), (66, 8614),

Gene: Puginator_15 Start: 8715, Stop: 9191, Start Num: 18

Candidate Starts for Puginator_15:

(Start: 18 @8715 has 92 MA's), (28, 8835), (39, 8913), (65, 9177),

Gene: Pumpkins_8 Start: 7958, Stop: 8353, Start Num: 15

Candidate Starts for Pumpkins_8:

(Start: 15 @7958 has 55 MA's), (36, 8150), (40, 8195),

Gene: R4_11 Start: 8225, Stop: 8722, Start Num: 18

Candidate Starts for R4_11:

(Start: 18 @8225 has 92 MA's), (36, 8396), (39, 8423), (47, 8537), (51, 8579), (52, 8585), (65, 8708),

Gene: Rana_11 Start: 8361, Stop: 8804, Start Num: 18

Candidate Starts for Rana_11:

(Start: 6 @8304 has 1 MA's), (Start: 18 @8361 has 92 MA's), (39, 8544), (59, 8748),

Gene: RedBear_13 Start: 8637, Stop: 9086, Start Num: 18
Candidate Starts for RedBear_13:
(Start: 6 @8580 has 1 MA's), (Start: 18 @8637 has 92 MA's), (39, 8826),

Gene: Reedo_8 Start: 7890, Stop: 8297, Start Num: 15
Candidate Starts for Reedo_8:
(Start: 15 @7890 has 55 MA's), (32, 8070),

Gene: Rusticus_12 Start: 8558, Stop: 9010, Start Num: 18
Candidate Starts for Rusticus_12:
(10, 8519), (Start: 18 @8558 has 92 MA's), (39, 8750), (51, 8906),

Gene: Saftant_11 Start: 8442, Stop: 8903, Start Num: 18
Candidate Starts for Saftant_11:
(Start: 18 @8442 has 92 MA's), (39, 8631), (51, 8787), (64, 8874), (66, 8889),

Gene: SarahRose_11 Start: 8364, Stop: 8813, Start Num: 18
Candidate Starts for SarahRose_11:
(Start: 18 @8364 has 92 MA's), (39, 8553), (59, 8757),

Gene: ShakeltOph_7 Start: 6172, Stop: 6573, Start Num: 14
Candidate Starts for ShakeltOph_7:
(Start: 14 @6172 has 2 MA's), (40, 6409),

Gene: Simpson_8 Start: 7843, Stop: 8250, Start Num: 15
Candidate Starts for Simpson_8:
(Start: 15 @7843 has 55 MA's), (36, 8035),

Gene: Snek_8 Start: 6968, Stop: 7366, Start Num: 15
Candidate Starts for Snek_8:
(Start: 15 @6968 has 55 MA's),

Gene: Snorlax_11 Start: 8364, Stop: 8813, Start Num: 18
Candidate Starts for Snorlax_11:
(Start: 18 @8364 has 92 MA's), (39, 8553), (59, 8757),

Gene: Soondubu_8 Start: 7865, Stop: 8263, Start Num: 15
Candidate Starts for Soondubu_8:
(Start: 15 @7865 has 55 MA's), (32, 8045), (36, 8057),

Gene: South40_12 Start: 8637, Stop: 9086, Start Num: 18
Candidate Starts for South40_12:
(Start: 6 @8580 has 1 MA's), (Start: 18 @8637 has 92 MA's), (39, 8826),

Gene: SqueakyClean_12 Start: 8473, Stop: 8961, Start Num: 18
Candidate Starts for SqueakyClean_12:
(3, 8404), (Start: 18 @8473 has 92 MA's), (26, 8584), (30, 8614), (33, 8635), (39, 8671), (47, 8785),
(51, 8827), (52, 8833), (61, 8902),

Gene: SuMoo_7 Start: 6373, Stop: 6852, Start Num: 15
Candidate Starts for SuMoo_7:
(Start: 15 @6373 has 55 MA's), (42, 6649), (62, 6844),

Gene: Sue2_8 Start: 7875, Stop: 8270, Start Num: 15

Candidate Starts for Sue2_8:

(Start: 15 @7875 has 55 MA's), (40, 8112),

Gene: Sujidade_12 Start: 8602, Stop: 9108, Start Num: 6

Candidate Starts for Sujidade_12:

(Start: 6 @8602 has 1 MA's), (Start: 18 @8659 has 92 MA's), (39, 8848), (51, 9004),

Gene: SunsetPointe_11 Start: 8385, Stop: 8837, Start Num: 18

Candidate Starts for SunsetPointe_11:

(10, 8346), (Start: 18 @8385 has 92 MA's), (39, 8577), (51, 8733),

Gene: Superstar_13 Start: 9291, Stop: 9767, Start Num: 18

Candidate Starts for Superstar_13:

(Start: 18 @9291 has 92 MA's), (39, 9489), (54, 9681), (65, 9753),

Gene: TagePhighter_12 Start: 8364, Stop: 8813, Start Num: 18

Candidate Starts for TagePhighter_12:

(Start: 18 @8364 has 92 MA's), (39, 8553), (59, 8757),

Gene: Tallboi_8 Start: 7862, Stop: 8269, Start Num: 15

Candidate Starts for Tallboi_8:

(Start: 15 @7862 has 55 MA's), (36, 8054),

Gene: Tbone_8 Start: 7839, Stop: 8246, Start Num: 15

Candidate Starts for Tbone_8:

(Start: 15 @7839 has 55 MA's), (36, 8031),

Gene: Tefunt_11 Start: 8160, Stop: 8636, Start Num: 18

Candidate Starts for Tefunt_11:

(Start: 18 @8160 has 92 MA's), (33, 8322), (39, 8358),

Gene: TforTroy_8 Start: 7981, Stop: 8379, Start Num: 15

Candidate Starts for TforTroy_8:

(12, 7975), (Start: 15 @7981 has 55 MA's), (36, 8173), (40, 8218),

Gene: Thestral_12 Start: 8238, Stop: 8711, Start Num: 18

Candidate Starts for Thestral_12:

(Start: 4 @8172 has 1 MA's), (7, 8187), (9, 8193), (Start: 15 @8217 has 55 MA's), (Start: 18 @8238 has 92 MA's), (27, 8352), (36, 8406), (39, 8433), (65, 8697),

Gene: Tian_8 Start: 7873, Stop: 8280, Start Num: 15

Candidate Starts for Tian_8:

(Start: 15 @7873 has 55 MA's), (36, 8065), (40, 8110),

Gene: TinaBelcher_11 Start: 8186, Stop: 8659, Start Num: 18

Candidate Starts for TinaBelcher_11:

(Start: 4 @8120 has 1 MA's), (7, 8135), (9, 8141), (Start: 15 @8165 has 55 MA's), (Start: 18 @8186 has 92 MA's), (27, 8300), (39, 8381), (65, 8645),

Gene: Toma_11 Start: 8367, Stop: 8816, Start Num: 18

Candidate Starts for Toma_11:

(Start: 6 @8310 has 1 MA's), (Start: 18 @8367 has 92 MA's), (39, 8556), (51, 8712),

Gene: Triste_11 Start: 8358, Stop: 8807, Start Num: 18

Candidate Starts for Triste_11:

(Start: 6 @8301 has 1 MA's), (Start: 18 @8358 has 92 MA's), (39, 8547), (59, 8751),

Gene: Triumph_13 Start: 8256, Stop: 8726, Start Num: 18

Candidate Starts for Triumph_13:

(Start: 18 @8256 has 92 MA's), (39, 8454), (47, 8568), (54, 8646),

Gene: TrvxScott_10 Start: 8121, Stop: 8660, Start Num: 4

Candidate Starts for TrvxScott_10:

(Start: 4 @8121 has 1 MA's), (7, 8136), (9, 8142), (Start: 15 @8166 has 55 MA's), (Start: 18 @8187 has 92 MA's), (27, 8301), (39, 8382), (65, 8646),

Gene: TuanPN_11 Start: 8367, Stop: 8816, Start Num: 18

Candidate Starts for TuanPN_11:

(Start: 6 @8310 has 1 MA's), (Start: 18 @8367 has 92 MA's), (39, 8556), (59, 8760),

Gene: Tuck_9 Start: 8887, Stop: 9315, Start Num: 15

Candidate Starts for Tuck_9:

(Start: 15 @8887 has 55 MA's), (36, 9079),

Gene: Turab_8 Start: 7857, Stop: 8264, Start Num: 15

Candidate Starts for Turab_8:

(Start: 15 @7857 has 55 MA's), (36, 8049), (40, 8094),

Gene: Tutumahutu_8 Start: 7893, Stop: 8300, Start Num: 15

Candidate Starts for Tutumahutu_8:

(Start: 15 @7893 has 55 MA's), (36, 8085),

Gene: Tweety19_8 Start: 6967, Stop: 7365, Start Num: 15

Candidate Starts for Tweety19_8:

(Start: 15 @6967 has 55 MA's),

Gene: Unstoppable_11 Start: 8386, Stop: 8838, Start Num: 18

Candidate Starts for Unstoppable_11:

(10, 8347), (Start: 18 @8386 has 92 MA's), (39, 8578), (51, 8734),

Gene: Urza_11 Start: 8599, Stop: 9084, Start Num: 18

Candidate Starts for Urza_11:

(Start: 18 @8599 has 92 MA's), (33, 8752), (39, 8788), (44, 8875),

Gene: UtzChips_7 Start: 7094, Stop: 7573, Start Num: 15

Candidate Starts for UtzChips_7:

(13, 7088), (Start: 15 @7094 has 55 MA's), (62, 7565),

Gene: VResidence_8 Start: 7916, Stop: 8323, Start Num: 15

Candidate Starts for VResidence_8:

(Start: 15 @7916 has 55 MA's), (36, 8108),

Gene: Vanseggelen_14 Start: 8092, Stop: 8553, Start Num: 18

Candidate Starts for Vanseggelen_14:

(Start: 18 @8092 has 92 MA's), (20, 8107), (39, 8281), (51, 8437), (66, 8539),

Gene: Verabelle_12 Start: 8442, Stop: 8903, Start Num: 18

Candidate Starts for Verabelle_12:

(Start: 18 @8442 has 92 MA's), (20, 8457), (25, 8526), (39, 8631), (49, 8781), (64, 8874), (66, 8889),

Gene: Verse_11 Start: 8560, Stop: 9018, Start Num: 18

Candidate Starts for Verse_11:

(Start: 18 @8560 has 92 MA's), (23, 8623), (32, 8710), (39, 8749), (51, 8905), (64, 8989), (67, 9013),

Gene: VieEnRose_11 Start: 8669, Stop: 9154, Start Num: 18

Candidate Starts for VieEnRose_11:

(Start: 18 @8669 has 92 MA's), (20, 8684), (33, 8822), (39, 8858), (44, 8945),

Gene: VroomVroom_7 Start: 6184, Stop: 6585, Start Num: 14

Candidate Starts for VroomVroom_7:

(Start: 14 @6184 has 2 MA's), (40, 6421),

Gene: Warda_8 Start: 7839, Stop: 8246, Start Num: 15

Candidate Starts for Warda_8:

(Start: 15 @7839 has 55 MA's), (36, 8031),

Gene: Werner_11 Start: 8365, Stop: 8814, Start Num: 18

Candidate Starts for Werner_11:

(Start: 18 @8365 has 92 MA's), (39, 8554), (59, 8758),

Gene: Whatever_11 Start: 8365, Stop: 8814, Start Num: 18

Candidate Starts for Whatever_11:

(Start: 18 @8365 has 92 MA's), (39, 8554), (59, 8758),

Gene: Wildwest_9 Start: 8762, Stop: 9178, Start Num: 15

Candidate Starts for Wildwest_9:

(Start: 15 @8762 has 55 MA's), (36, 8954), (41, 9029),

Gene: Yang_8 Start: 7957, Stop: 8352, Start Num: 15

Candidate Starts for Yang_8:

(Start: 15 @7957 has 55 MA's), (36, 8149), (40, 8194),

Gene: Yasdnil_11 Start: 8363, Stop: 8812, Start Num: 18

Candidate Starts for Yasdnil_11:

(Start: 6 @8306 has 1 MA's), (Start: 18 @8363 has 92 MA's), (39, 8552), (59, 8756),

Gene: YesChef_8 Start: 7893, Stop: 8300, Start Num: 15

Candidate Starts for YesChef_8:

(Start: 15 @7893 has 55 MA's), (36, 8085),

Gene: Yosif_12 Start: 8821, Stop: 9279, Start Num: 18

Candidate Starts for Yosif_12:

(Start: 18 @8821 has 92 MA's), (33, 8974), (39, 9010), (41, 9058), (51, 9166), (64, 9250), (66, 9265),

Gene: Zainub_16 Start: 8727, Stop: 9203, Start Num: 18

Candidate Starts for Zainub_16:

(Start: 5 @8664 has 1 MA's), (8, 8679), (Start: 18 @8727 has 92 MA's), (28, 8847), (39, 8925), (54, 9117), (65, 9189),

Gene: Zemlya_12 Start: 8375, Stop: 8824, Start Num: 18

Candidate Starts for Zemlya_12:

(Start: 6 @8318 has 1 MA's), (Start: 18 @8375 has 92 MA's), (32, 8525), (33, 8528), (39, 8564),

Gene: Zeta1847_7 Start: 6205, Stop: 6684, Start Num: 15

Candidate Starts for Zeta1847_7:

(Start: 15 @6205 has 55 MA's), (19, 6235), (63, 6679),

Gene: phiCAM_12 Start: 10223, Stop: 10681, Start Num: 18

Candidate Starts for phiCAM_12:

(Start: 18 @10223 has 92 MA's), (20, 10238), (39, 10412), (41, 10460), (51, 10568), (64, 10652), (67, 10676),

Gene: phiHau3_13 Start: 8427, Stop: 8894, Start Num: 18

Candidate Starts for phiHau3_13:

(Start: 18 @8427 has 92 MA's), (32, 8577), (33, 8580), (39, 8616), (44, 8703), (53, 8796), (56, 8814), (59, 8823), (65, 8880),