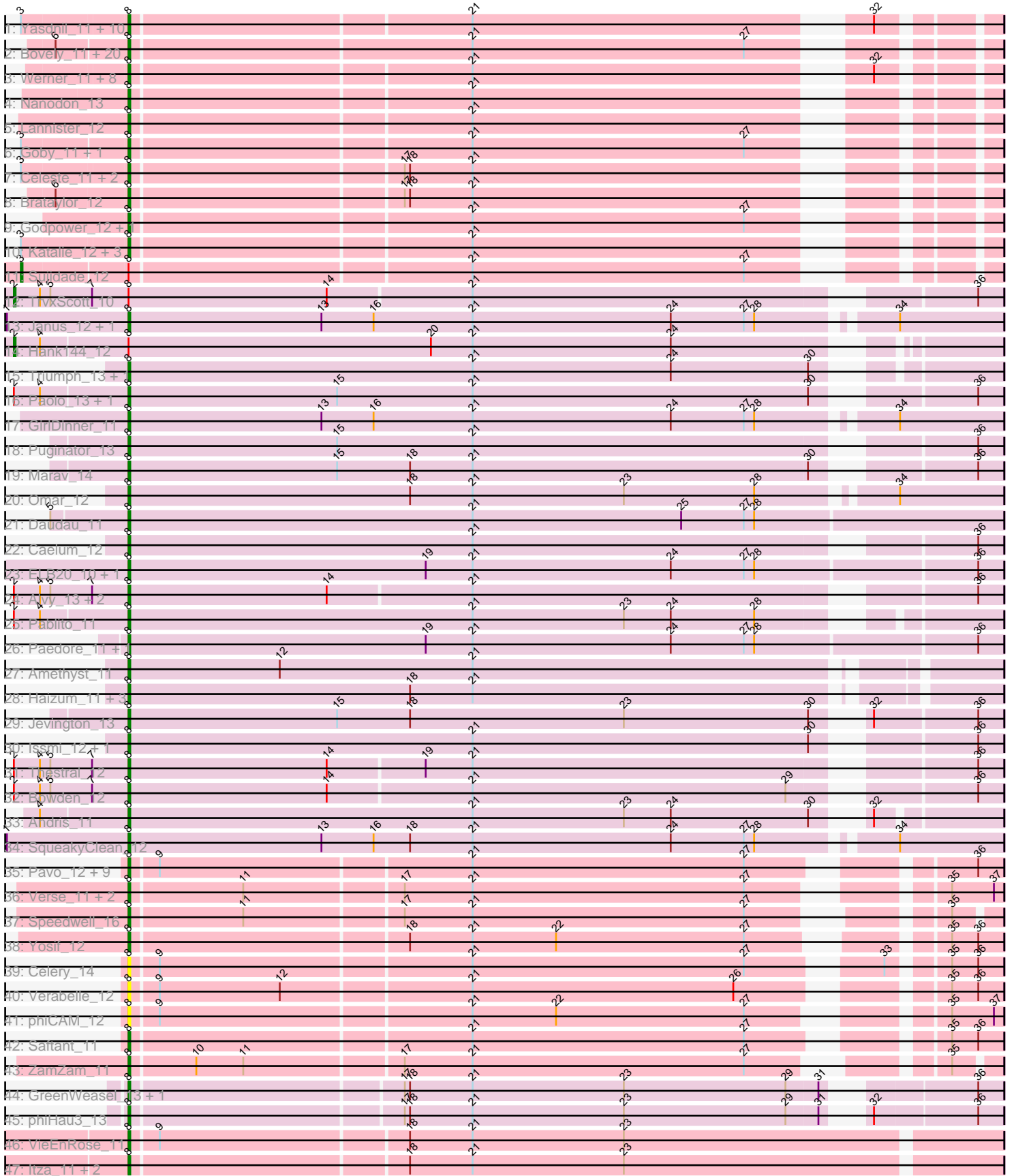


Pham 294558



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 294558 Report

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

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 294558 has 117 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Yasdni1_11, OzzyJ_12, Nabi_11, Lorelei_11, Rana_11, TuanPN_11, Dwayne_11, Maneekul_11, Triste_11, Ejemplo_11, Asten_11
- Track 2 : Bovely_11, Esperer_11, SunsetPointe_11, Indigo_11, BryanRecycles_12, Oliynyk_12, Rusticus_12, Nerdos_11, Eddasa_12, Ozzie_11, Caliburn_11, Hydra_13, Aaronocolus_11, Leviticus_11, Unstoppable_11, EnochSoames_12, BeardedLady_12, Legacy_11, Phettuccine_11, Izzy_12, Jash_12
- Track 3 : Werner_11, Whatever_11, Chucky_11, Hippo_11, Snorlax_11, SarahRose_11, TagePhighter_12, BarryBee_13, Emaanora_13
- Track 4 : Nanodon_13
- Track 5 : Lannister_12
- Track 6 : Goby_11, Toma_11
- Track 7 : Celeste_11, Dattran_12, Zemlya_12
- Track 8 : Brataylor_12
- Track 9 : Godpower_12, Lika_11
- Track 10 : Katalie_12, RedBear_13, South40_12, Danzina_12
- Track 11 : Sujidade_12
- Track 12 : TrvxScott_10
- Track 13 : Janus_12, Animus_12
- Track 14 : Hank144_12
- Track 15 : Triumph_13, Axiom_12
- Track 16 : Paolo_13, Zainub_13
- Track 17 : GirlDinner_11
- Track 18 : Puginator_13
- Track 19 : Marav_14
- Track 20 : Omar_12
- Track 21 : Daudau_11
- Track 22 : Caelum_12
- Track 23 : ELB20_10, R4_11
- Track 24 : Alvy_13, BartholomewSD_13, TinaBelcher_11
- Track 25 : Pablito_11
- Track 26 : Paedore_11, Loofah_12
- Track 27 : Amethyst_11
- Track 28 : Haizum_11, Tefunt_11, Nishikigoi_11, Diane_11

- Track 29 : Jevington_13
- Track 30 : Issmi_12, Superstar_13
- Track 31 : Thestral_12
- Track 32 : Bowden_12
- Track 33 : Andris_11
- Track 34 : SqueakyClean_12
- Track 35 : Pavo_12, Conan_12, Kaine_11, ElGato_12, Provolone_12, Alsaber_12, Sudan_11, Jhitchelle_10, Dexers_10, Vanseggelen_14
- Track 36 : Verse_11, SunkenRoot_13, Amela_11
- Track 37 : Speedwell_16
- Track 38 : Yosif_12
- Track 39 : Celery_14
- Track 40 : Verabelle_12
- Track 41 : phiCAM_12
- Track 42 : Saftant_11
- Track 43 : ZamZam_11
- Track 44 : GreenWeasel_13, BroPlease_12
- Track 45 : phiHau3_13
- Track 46 : VieEnRose_11
- Track 47 : Itza_11, Celia_11, Urza_11

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

The start number called the most often in the published annotations is 8, it was called in 107 of the 110 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, Axiom_12, 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_12, Danzina_12, Dattran_12, Daudau_11, Dexers_10, Diane_11, Dwayne_11, ELB20_10, Eddasa_12, Ejemplo_11, ElGato_12, Emaanora_13, EnochSoames_12, Esperer_11, GirlDinner_11, 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_13, Jhitchelle_10, Kaine_11, 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_13, Pavo_12, Phettuccine_11, Provolone_12, Puginator_13, R4_11, Rana_11, RedBear_13, Rusticus_12, Saftant_11, SarahRose_11, Snorlax_11, South40_12, Speedwell_16, SqueakyClean_12, Sudan_11, SunkenRoot_13, 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_13, ZamZam_11, 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:

-

Summary by start number:

Start 2:

- Found in 10 of 117 (8.5%) of genes in pham
- Manual Annotations of this start: 2 of 110
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Hank144_12 (BD2), TrvxScott_10 (BD2),

Start 3:

- Found in 21 of 117 (17.9%) of genes in pham
- Manual Annotations of this start: 1 of 110
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Sujidade_12 (BD1),

Start 8:

- Found in 117 of 117 (100.0%) of genes in pham
- Manual Annotations of this start: 107 of 110
- Called 97.4% 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), Axiom_12 (BD2), 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_12 (BD3), Danzina_12 (BD1), Dattran_12 (BD1), Daudau_11 (BD2), Dexers_10 (BD3), Diane_11 (BD2), Dwayne_11 (BD1), ELB20_10 (BD2), Eddasa_12 (BD1), Ejemplo_11 (BD1), ElGato_12 (BD3), Emaanora_13 (BD1), EnochSoames_12 (BD1), Esperer_11 (BD1), GirlDinner_11 (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_13 (BD2), Jhitchelle_10 (BD3), Kaine_11 (BD3), 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_13 (BD2), Pavo_12 (BD3), Phettuccine_11 (BD1), Provolone_12 (BD3), Puginator_13 (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), Speedwell_16 (BD3), SqueakyClean_12 (BD2), Sudan_11 (BD3), SunkenRoot_13 (BD3), 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), Yasdni1_11 (BD1), Yosif_12 (BD3), Zainub_13 (BD2), ZamZam_11 (BD3), Zemlya_12 (BD1), phiCAM_12 (BD3), phiHau3_13 (BD4),

Summary by clusters:

There are 5 clusters represented in this pham: BD4, BD6, BD1, BD3, BD2,

Info for manual annotations of cluster BD1:

- Start number 3 was manually annotated 1 time for cluster BD1.
- Start number 8 was manually annotated 54 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 2 was manually annotated 2 times for cluster BD2.
- Start number 8 was manually annotated 31 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 8 was manually annotated 15 times for cluster BD3.

Info for manual annotations of cluster BD4:

- Start number 8 was manually annotated 3 times for cluster BD4.

Info for manual annotations of cluster BD6:

- Start number 8 was manually annotated 4 times for cluster BD6.

Gene Information:

Gene: Aaronocolus_11 Start: 8395, Stop: 8847, Start Num: 8

Candidate Starts for Aaronocolus_11:

(6, 8356), (Start: 8 @8395 has 107 MA's), (21, 8587), (27, 8743),

Gene: Alsaber_12 Start: 8454, Stop: 8915, Start Num: 8

Candidate Starts for Alsaber_12:

(Start: 8 @8454 has 107 MA's), (9, 8469), (21, 8643), (27, 8799), (36, 8901),

Gene: Alvy_13 Start: 8321, Stop: 8794, Start Num: 8

Candidate Starts for Alvy_13:

(Start: 2 @8255 has 2 MA's), (4, 8270), (5, 8276), (7, 8300), (Start: 8 @8321 has 107 MA's), (14, 8435), (21, 8516), (36, 8780),

Gene: Amela_11 Start: 8566, Stop: 9024, Start Num: 8

Candidate Starts for Amela_11:

(Start: 8 @8566 has 107 MA's), (11, 8629), (17, 8716), (21, 8755), (27, 8911), (35, 8995), (37, 9019),

Gene: Amethyst_11 Start: 8131, Stop: 8607, Start Num: 8

Candidate Starts for Amethyst_11:

(Start: 8 @8131 has 107 MA's), (12, 8218), (21, 8329),

Gene: Andris_11 Start: 8194, Stop: 8664, Start Num: 8

Candidate Starts for Andris_11:

(4, 8146), (Start: 8 @8194 has 107 MA's), (21, 8392), (23, 8479), (24, 8506), (30, 8584), (32, 8599),

Gene: Animus_12 Start: 8547, Stop: 9035, Start Num: 8

Candidate Starts for Animus_12:

(1, 8478), (Start: 8 @8547 has 107 MA's), (13, 8658), (16, 8688), (21, 8745), (24, 8859), (27, 8901), (28, 8907), (34, 8976),

Gene: Asten_11 Start: 8357, Stop: 8806, Start Num: 8

Candidate Starts for Asten_11:

(Start: 3 @8300 has 1 MA's), (Start: 8 @8357 has 107 MA's), (21, 8546), (32, 8750),

Gene: Axiom_12 Start: 8226, Stop: 8696, Start Num: 8

Candidate Starts for Axiom_12:

(Start: 8 @8226 has 107 MA's), (21, 8424), (24, 8538), (30, 8616),

Gene: BarryBee_13 Start: 8364, Stop: 8813, Start Num: 8

Candidate Starts for BarryBee_13:

(Start: 8 @8364 has 107 MA's), (21, 8553), (32, 8757),

Gene: BartholomewSD_13 Start: 8321, Stop: 8794, Start Num: 8

Candidate Starts for BartholomewSD_13:

(Start: 2 @8255 has 2 MA's), (4, 8270), (5, 8276), (7, 8300), (Start: 8 @8321 has 107 MA's), (14, 8435), (21, 8516), (36, 8780),

Gene: BeardedLady_12 Start: 8642, Stop: 9094, Start Num: 8

Candidate Starts for BeardedLady_12:

(6, 8603), (Start: 8 @8642 has 107 MA's), (21, 8834), (27, 8990),

Gene: Bovely_11 Start: 8401, Stop: 8853, Start Num: 8

Candidate Starts for Bovely_11:

(6, 8362), (Start: 8 @8401 has 107 MA's), (21, 8593), (27, 8749),

Gene: Bowden_12 Start: 8235, Stop: 8708, Start Num: 8

Candidate Starts for Bowden_12:

(Start: 2 @8169 has 2 MA's), (4, 8184), (5, 8190), (7, 8214), (Start: 8 @8235 has 107 MA's), (14, 8349), (21, 8430), (29, 8610), (36, 8694),

Gene: Brataylor_12 Start: 8367, Stop: 8816, Start Num: 8

Candidate Starts for Brataylor_12:

(6, 8328), (Start: 8 @8367 has 107 MA's), (17, 8517), (18, 8520), (21, 8556),

Gene: BroPlease_12 Start: 8450, Stop: 8917, Start Num: 8

Candidate Starts for BroPlease_12:

(Start: 8 @8450 has 107 MA's), (17, 8600), (18, 8603), (21, 8639), (23, 8726), (29, 8819), (31, 8837), (36, 8903),

Gene: BryanRecycles_12 Start: 8558, Stop: 9010, Start Num: 8

Candidate Starts for BryanRecycles_12:

(6, 8519), (Start: 8 @8558 has 107 MA's), (21, 8750), (27, 8906),

Gene: Caelum_12 Start: 8087, Stop: 8563, Start Num: 8

Candidate Starts for Caelum_12:

(Start: 8 @8087 has 107 MA's), (21, 8285), (36, 8549),

Gene: Caliburn_11 Start: 8375, Stop: 8827, Start Num: 8

Candidate Starts for Caliburn_11:

(6, 8336), (Start: 8 @8375 has 107 MA's), (21, 8567), (27, 8723),

Gene: Celery_14 Start: 8413, Stop: 8874, Start Num: 8

Candidate Starts for Celery_14:

(Start: 8 @8413 has 107 MA's), (9, 8428), (21, 8602), (27, 8758), (33, 8818), (35, 8845), (36, 8860),

Gene: Celeste_11 Start: 8365, Stop: 8814, Start Num: 8
Candidate Starts for Celeste_11:
(Start: 3 @8308 has 1 MA's), (Start: 8 @8365 has 107 MA's), (17, 8515), (18, 8518), (21, 8554),

Gene: Celia_11 Start: 8664, Stop: 9149, Start Num: 8
Candidate Starts for Celia_11:
(Start: 8 @8664 has 107 MA's), (18, 8817), (21, 8853), (23, 8940),

Gene: Chucky_11 Start: 8365, Stop: 8814, Start Num: 8
Candidate Starts for Chucky_11:
(Start: 8 @8365 has 107 MA's), (21, 8554), (32, 8758),

Gene: Conan_12 Start: 8164, Stop: 8625, Start Num: 8
Candidate Starts for Conan_12:
(Start: 8 @8164 has 107 MA's), (9, 8179), (21, 8353), (27, 8509), (36, 8611),

Gene: Danzina_12 Start: 8569, Stop: 9018, Start Num: 8
Candidate Starts for Danzina_12:
(Start: 3 @8512 has 1 MA's), (Start: 8 @8569 has 107 MA's), (21, 8758),

Gene: Dattran_12 Start: 8364, Stop: 8813, Start Num: 8
Candidate Starts for Dattran_12:
(Start: 3 @8307 has 1 MA's), (Start: 8 @8364 has 107 MA's), (17, 8514), (18, 8517), (21, 8553),

Gene: Daudau_11 Start: 8198, Stop: 8698, Start Num: 8
Candidate Starts for Daudau_11:
(5, 8156), (Start: 8 @8198 has 107 MA's), (21, 8396), (25, 8516), (27, 8552), (28, 8558),

Gene: Dexers_10 Start: 8157, Stop: 8618, Start Num: 8
Candidate Starts for Dexers_10:
(Start: 8 @8157 has 107 MA's), (9, 8172), (21, 8346), (27, 8502), (36, 8604),

Gene: Diane_11 Start: 8130, Stop: 8606, Start Num: 8
Candidate Starts for Diane_11:
(Start: 8 @8130 has 107 MA's), (18, 8292), (21, 8328),

Gene: Dwayne_11 Start: 8364, Stop: 8813, Start Num: 8
Candidate Starts for Dwayne_11:
(Start: 3 @8307 has 1 MA's), (Start: 8 @8364 has 107 MA's), (21, 8553), (32, 8757),

Gene: ELB20_10 Start: 8214, Stop: 8711, Start Num: 8
Candidate Starts for ELB20_10:
(Start: 8 @8214 has 107 MA's), (19, 8385), (21, 8412), (24, 8526), (27, 8568), (28, 8574), (36, 8697),

Gene: Eddasa_12 Start: 8558, Stop: 9010, Start Num: 8
Candidate Starts for Eddasa_12:
(6, 8519), (Start: 8 @8558 has 107 MA's), (21, 8750), (27, 8906),

Gene: Ejemplo_11 Start: 8367, Stop: 8816, Start Num: 8
Candidate Starts for Ejemplo_11:
(Start: 3 @8310 has 1 MA's), (Start: 8 @8367 has 107 MA's), (21, 8556), (32, 8760),

Gene: ElGato_12 Start: 8167, Stop: 8628, Start Num: 8
Candidate Starts for ElGato_12:
(Start: 8 @8167 has 107 MA's), (9, 8182), (21, 8356), (27, 8512), (36, 8614),

Gene: Emaanora_13 Start: 8364, Stop: 8813, Start Num: 8
Candidate Starts for Emaanora_13:
(Start: 8 @8364 has 107 MA's), (21, 8553), (32, 8757),

Gene: EnochSoames_12 Start: 8554, Stop: 9006, Start Num: 8
Candidate Starts for EnochSoames_12:
(6, 8515), (Start: 8 @8554 has 107 MA's), (21, 8746), (27, 8902),

Gene: Esperer_11 Start: 8395, Stop: 8847, Start Num: 8
Candidate Starts for Esperer_11:
(6, 8356), (Start: 8 @8395 has 107 MA's), (21, 8587), (27, 8743),

Gene: GirlDinner_11 Start: 8209, Stop: 8697, Start Num: 8
Candidate Starts for GirlDinner_11:
(Start: 8 @8209 has 107 MA's), (13, 8320), (16, 8350), (21, 8407), (24, 8521), (27, 8563), (28, 8569),
(34, 8638),

Gene: Goby_11 Start: 8367, Stop: 8816, Start Num: 8
Candidate Starts for Goby_11:
(Start: 3 @8310 has 1 MA's), (Start: 8 @8367 has 107 MA's), (21, 8556), (27, 8712),

Gene: Godpower_12 Start: 8382, Stop: 8831, Start Num: 8
Candidate Starts for Godpower_12:
(Start: 8 @8382 has 107 MA's), (21, 8571), (27, 8727),

Gene: GreenWeasel_13 Start: 8459, Stop: 8926, Start Num: 8
Candidate Starts for GreenWeasel_13:
(Start: 8 @8459 has 107 MA's), (17, 8609), (18, 8612), (21, 8648), (23, 8735), (29, 8828), (31, 8846),
(36, 8912),

Gene: Haizum_11 Start: 8160, Stop: 8636, Start Num: 8
Candidate Starts for Haizum_11:
(Start: 8 @8160 has 107 MA's), (18, 8322), (21, 8358),

Gene: Hank144_12 Start: 8436, Stop: 8966, Start Num: 2
Candidate Starts for Hank144_12:
(Start: 2 @8436 has 2 MA's), (4, 8451), (Start: 8 @8499 has 107 MA's), (20, 8673), (21, 8697), (24,
8811),

Gene: Hippo_11 Start: 8364, Stop: 8813, Start Num: 8
Candidate Starts for Hippo_11:
(Start: 8 @8364 has 107 MA's), (21, 8553), (32, 8757),

Gene: Hydra_13 Start: 8923, Stop: 9375, Start Num: 8
Candidate Starts for Hydra_13:
(6, 8884), (Start: 8 @8923 has 107 MA's), (21, 9115), (27, 9271),

Gene: Indigo_11 Start: 8395, Stop: 8847, Start Num: 8
Candidate Starts for Indigo_11:

(6, 8356), (Start: 8 @8395 has 107 MA's), (21, 8587), (27, 8743),

Gene: Issmi_12 Start: 8440, Stop: 8916, Start Num: 8

Candidate Starts for Issmi_12:

(Start: 8 @8440 has 107 MA's), (21, 8638), (30, 8830), (36, 8902),

Gene: Itza_11 Start: 8587, Stop: 9072, Start Num: 8

Candidate Starts for Itza_11:

(Start: 8 @8587 has 107 MA's), (18, 8740), (21, 8776), (23, 8863),

Gene: Izzy_12 Start: 8605, Stop: 9057, Start Num: 8

Candidate Starts for Izzy_12:

(6, 8566), (Start: 8 @8605 has 107 MA's), (21, 8797), (27, 8953),

Gene: Janus_12 Start: 8547, Stop: 9035, Start Num: 8

Candidate Starts for Janus_12:

(1, 8478), (Start: 8 @8547 has 107 MA's), (13, 8658), (16, 8688), (21, 8745), (24, 8859), (27, 8901), (28, 8907), (34, 8976),

Gene: Jash_12 Start: 8558, Stop: 9010, Start Num: 8

Candidate Starts for Jash_12:

(6, 8519), (Start: 8 @8558 has 107 MA's), (21, 8750), (27, 8906),

Gene: Jevington_13 Start: 8742, Stop: 9218, Start Num: 8

Candidate Starts for Jevington_13:

(Start: 8 @8742 has 107 MA's), (15, 8862), (18, 8904), (23, 9027), (30, 9132), (32, 9147), (36, 9204),

Gene: Jhitchelle_10 Start: 8093, Stop: 8554, Start Num: 8

Candidate Starts for Jhitchelle_10:

(Start: 8 @8093 has 107 MA's), (9, 8108), (21, 8282), (27, 8438), (36, 8540),

Gene: Kaine_11 Start: 8157, Stop: 8618, Start Num: 8

Candidate Starts for Kaine_11:

(Start: 8 @8157 has 107 MA's), (9, 8172), (21, 8346), (27, 8502), (36, 8604),

Gene: Katalie_12 Start: 8637, Stop: 9086, Start Num: 8

Candidate Starts for Katalie_12:

(Start: 3 @8580 has 1 MA's), (Start: 8 @8637 has 107 MA's), (21, 8826),

Gene: Lannister_12 Start: 8385, Stop: 8834, Start Num: 8

Candidate Starts for Lannister_12:

(Start: 8 @8385 has 107 MA's), (21, 8574),

Gene: Legacy_11 Start: 8366, Stop: 8818, Start Num: 8

Candidate Starts for Legacy_11:

(6, 8327), (Start: 8 @8366 has 107 MA's), (21, 8558), (27, 8714),

Gene: Leviticus_11 Start: 8395, Stop: 8847, Start Num: 8

Candidate Starts for Leviticus_11:

(6, 8356), (Start: 8 @8395 has 107 MA's), (21, 8587), (27, 8743),

Gene: Lika_11 Start: 8383, Stop: 8832, Start Num: 8

Candidate Starts for Lika_11:

(Start: 8 @8383 has 107 MA's), (21, 8572), (27, 8728),

Gene: Loofah_12 Start: 8254, Stop: 8751, Start Num: 8

Candidate Starts for Loofah_12:

(Start: 8 @8254 has 107 MA's), (19, 8425), (21, 8452), (24, 8566), (27, 8608), (28, 8614), (36, 8737),

Gene: Lorelei_11 Start: 8361, Stop: 8804, Start Num: 8

Candidate Starts for Lorelei_11:

(Start: 3 @8304 has 1 MA's), (Start: 8 @8361 has 107 MA's), (21, 8544), (32, 8748),

Gene: Maneekul_11 Start: 8366, Stop: 8815, Start Num: 8

Candidate Starts for Maneekul_11:

(Start: 3 @8309 has 1 MA's), (Start: 8 @8366 has 107 MA's), (21, 8555), (32, 8759),

Gene: Marav_14 Start: 9092, Stop: 9568, Start Num: 8

Candidate Starts for Marav_14:

(Start: 8 @9092 has 107 MA's), (15, 9212), (18, 9254), (21, 9290), (30, 9482), (36, 9554),

Gene: Nabi_11 Start: 8361, Stop: 8804, Start Num: 8

Candidate Starts for Nabi_11:

(Start: 3 @8304 has 1 MA's), (Start: 8 @8361 has 107 MA's), (21, 8544), (32, 8748),

Gene: Nanodon_13 Start: 8557, Stop: 9006, Start Num: 8

Candidate Starts for Nanodon_13:

(Start: 8 @8557 has 107 MA's), (21, 8746),

Gene: Nerdos_11 Start: 8395, Stop: 8847, Start Num: 8

Candidate Starts for Nerdos_11:

(6, 8356), (Start: 8 @8395 has 107 MA's), (21, 8587), (27, 8743),

Gene: Nishikigoi_11 Start: 8160, Stop: 8636, Start Num: 8

Candidate Starts for Nishikigoi_11:

(Start: 8 @8160 has 107 MA's), (18, 8322), (21, 8358),

Gene: Oliynyk_12 Start: 8558, Stop: 9010, Start Num: 8

Candidate Starts for Oliynyk_12:

(6, 8519), (Start: 8 @8558 has 107 MA's), (21, 8750), (27, 8906),

Gene: Omar_12 Start: 8382, Stop: 8870, Start Num: 8

Candidate Starts for Omar_12:

(Start: 8 @8382 has 107 MA's), (18, 8544), (21, 8580), (23, 8667), (28, 8742), (34, 8811),

Gene: Ozzie_11 Start: 8375, Stop: 8827, Start Num: 8

Candidate Starts for Ozzie_11:

(6, 8336), (Start: 8 @8375 has 107 MA's), (21, 8567), (27, 8723),

Gene: OzzyJ_12 Start: 8358, Stop: 8807, Start Num: 8

Candidate Starts for OzzyJ_12:

(Start: 3 @8301 has 1 MA's), (Start: 8 @8358 has 107 MA's), (21, 8547), (32, 8751),

Gene: Pablito_11 Start: 8226, Stop: 8696, Start Num: 8

Candidate Starts for Pablito_11:

(Start: 2 @8163 has 2 MA's), (4, 8178), (Start: 8 @8226 has 107 MA's), (21, 8424), (23, 8511), (24, 8538), (28, 8586),

Gene: Paedore_11 Start: 8254, Stop: 8751, Start Num: 8

Candidate Starts for Paedore_11:

(Start: 8 @8254 has 107 MA's), (19, 8425), (21, 8452), (24, 8566), (27, 8608), (28, 8614), (36, 8737),

Gene: Paolo_13 Start: 8769, Stop: 9245, Start Num: 8

Candidate Starts for Paolo_13:

(Start: 2 @8706 has 2 MA's), (4, 8721), (Start: 8 @8769 has 107 MA's), (15, 8889), (21, 8967), (30, 9159), (36, 9231),

Gene: Pavo_12 Start: 8437, Stop: 8898, Start Num: 8

Candidate Starts for Pavo_12:

(Start: 8 @8437 has 107 MA's), (9, 8452), (21, 8626), (27, 8782), (36, 8884),

Gene: Phettuccine_11 Start: 8395, Stop: 8847, Start Num: 8

Candidate Starts for Phettuccine_11:

(6, 8356), (Start: 8 @8395 has 107 MA's), (21, 8587), (27, 8743),

Gene: Provolone_12 Start: 8167, Stop: 8628, Start Num: 8

Candidate Starts for Provolone_12:

(Start: 8 @8167 has 107 MA's), (9, 8182), (21, 8356), (27, 8512), (36, 8614),

Gene: Puginator_13 Start: 8715, Stop: 9191, Start Num: 8

Candidate Starts for Puginator_13:

(Start: 8 @8715 has 107 MA's), (15, 8835), (21, 8913), (36, 9177),

Gene: R4_11 Start: 8225, Stop: 8722, Start Num: 8

Candidate Starts for R4_11:

(Start: 8 @8225 has 107 MA's), (19, 8396), (21, 8423), (24, 8537), (27, 8579), (28, 8585), (36, 8708),

Gene: Rana_11 Start: 8361, Stop: 8804, Start Num: 8

Candidate Starts for Rana_11:

(Start: 3 @8304 has 1 MA's), (Start: 8 @8361 has 107 MA's), (21, 8544), (32, 8748),

Gene: RedBear_13 Start: 8637, Stop: 9086, Start Num: 8

Candidate Starts for RedBear_13:

(Start: 3 @8580 has 1 MA's), (Start: 8 @8637 has 107 MA's), (21, 8826),

Gene: Rusticus_12 Start: 8558, Stop: 9010, Start Num: 8

Candidate Starts for Rusticus_12:

(6, 8519), (Start: 8 @8558 has 107 MA's), (21, 8750), (27, 8906),

Gene: Saftant_11 Start: 8442, Stop: 8903, Start Num: 8

Candidate Starts for Saftant_11:

(Start: 8 @8442 has 107 MA's), (21, 8631), (27, 8787), (35, 8874), (36, 8889),

Gene: SarahRose_11 Start: 8364, Stop: 8813, Start Num: 8

Candidate Starts for SarahRose_11:

(Start: 8 @8364 has 107 MA's), (21, 8553), (32, 8757),

Gene: Snorlax_11 Start: 8364, Stop: 8813, Start Num: 8

Candidate Starts for Snorlax_11:
(Start: 8 @8364 has 107 MA's), (21, 8553), (32, 8757),

Gene: South40_12 Start: 8637, Stop: 9086, Start Num: 8
Candidate Starts for South40_12:
(Start: 3 @8580 has 1 MA's), (Start: 8 @8637 has 107 MA's), (21, 8826),

Gene: Speedwell_16 Start: 10184, Stop: 10633, Start Num: 8
Candidate Starts for Speedwell_16:
(Start: 8 @10184 has 107 MA's), (11, 10247), (17, 10334), (21, 10373), (27, 10529), (35, 10610),

Gene: SqueakyClean_12 Start: 8473, Stop: 8961, Start Num: 8
Candidate Starts for SqueakyClean_12:
(1, 8404), (Start: 8 @8473 has 107 MA's), (13, 8584), (16, 8614), (18, 8635), (21, 8671), (24, 8785),
(27, 8827), (28, 8833), (34, 8902),

Gene: Sudan_11 Start: 8444, Stop: 8905, Start Num: 8
Candidate Starts for Sudan_11:
(Start: 8 @8444 has 107 MA's), (9, 8459), (21, 8633), (27, 8789), (36, 8891),

Gene: Sujidade_12 Start: 8602, Stop: 9108, Start Num: 3
Candidate Starts for Sujidade_12:
(Start: 3 @8602 has 1 MA's), (Start: 8 @8659 has 107 MA's), (21, 8848), (27, 9004),

Gene: SunkenRoot_13 Start: 8559, Stop: 9017, Start Num: 8
Candidate Starts for SunkenRoot_13:
(Start: 8 @8559 has 107 MA's), (11, 8622), (17, 8709), (21, 8748), (27, 8904), (35, 8988), (37, 9012),

Gene: SunsetPointe_11 Start: 8385, Stop: 8837, Start Num: 8
Candidate Starts for SunsetPointe_11:
(6, 8346), (Start: 8 @8385 has 107 MA's), (21, 8577), (27, 8733),

Gene: Superstar_13 Start: 9291, Stop: 9767, Start Num: 8
Candidate Starts for Superstar_13:
(Start: 8 @9291 has 107 MA's), (21, 9489), (30, 9681), (36, 9753),

Gene: TagePhighter_12 Start: 8364, Stop: 8813, Start Num: 8
Candidate Starts for TagePhighter_12:
(Start: 8 @8364 has 107 MA's), (21, 8553), (32, 8757),

Gene: Tefunt_11 Start: 8160, Stop: 8636, Start Num: 8
Candidate Starts for Tefunt_11:
(Start: 8 @8160 has 107 MA's), (18, 8322), (21, 8358),

Gene: Thestral_12 Start: 8238, Stop: 8711, Start Num: 8
Candidate Starts for Thestral_12:
(Start: 2 @8172 has 2 MA's), (4, 8187), (5, 8193), (7, 8217), (Start: 8 @8238 has 107 MA's), (14, 8352), (19, 8406), (21, 8433), (36, 8697),

Gene: TinaBelcher_11 Start: 8186, Stop: 8659, Start Num: 8
Candidate Starts for TinaBelcher_11:
(Start: 2 @8120 has 2 MA's), (4, 8135), (5, 8141), (7, 8165), (Start: 8 @8186 has 107 MA's), (14, 8300), (21, 8381), (36, 8645),

Gene: Toma_11 Start: 8367, Stop: 8816, Start Num: 8
Candidate Starts for Toma_11:
(Start: 3 @8310 has 1 MA's), (Start: 8 @8367 has 107 MA's), (21, 8556), (27, 8712),

Gene: Triste_11 Start: 8358, Stop: 8807, Start Num: 8
Candidate Starts for Triste_11:
(Start: 3 @8301 has 1 MA's), (Start: 8 @8358 has 107 MA's), (21, 8547), (32, 8751),

Gene: Triumph_13 Start: 8256, Stop: 8726, Start Num: 8
Candidate Starts for Triumph_13:
(Start: 8 @8256 has 107 MA's), (21, 8454), (24, 8568), (30, 8646),

Gene: TrvxScott_10 Start: 8121, Stop: 8660, Start Num: 2
Candidate Starts for TrvxScott_10:
(Start: 2 @8121 has 2 MA's), (4, 8136), (5, 8142), (7, 8166), (Start: 8 @8187 has 107 MA's), (14, 8301), (21, 8382), (36, 8646),

Gene: TuanPN_11 Start: 8367, Stop: 8816, Start Num: 8
Candidate Starts for TuanPN_11:
(Start: 3 @8310 has 1 MA's), (Start: 8 @8367 has 107 MA's), (21, 8556), (32, 8760),

Gene: Unstoppable_11 Start: 8386, Stop: 8838, Start Num: 8
Candidate Starts for Unstoppable_11:
(6, 8347), (Start: 8 @8386 has 107 MA's), (21, 8578), (27, 8734),

Gene: Urza_11 Start: 8599, Stop: 9084, Start Num: 8
Candidate Starts for Urza_11:
(Start: 8 @8599 has 107 MA's), (18, 8752), (21, 8788), (23, 8875),

Gene: Vanseggelen_14 Start: 8092, Stop: 8553, Start Num: 8
Candidate Starts for Vanseggelen_14:
(Start: 8 @8092 has 107 MA's), (9, 8107), (21, 8281), (27, 8437), (36, 8539),

Gene: Verabelle_12 Start: 8442, Stop: 8903, Start Num: 8
Candidate Starts for Verabelle_12:
(Start: 8 @8442 has 107 MA's), (9, 8457), (12, 8526), (21, 8631), (26, 8781), (35, 8874), (36, 8889),

Gene: Verse_11 Start: 8560, Stop: 9018, Start Num: 8
Candidate Starts for Verse_11:
(Start: 8 @8560 has 107 MA's), (11, 8623), (17, 8710), (21, 8749), (27, 8905), (35, 8989), (37, 9013),

Gene: VieEnRose_11 Start: 8669, Stop: 9154, Start Num: 8
Candidate Starts for VieEnRose_11:
(Start: 8 @8669 has 107 MA's), (9, 8684), (18, 8822), (21, 8858), (23, 8945),

Gene: Werner_11 Start: 8365, Stop: 8814, Start Num: 8
Candidate Starts for Werner_11:
(Start: 8 @8365 has 107 MA's), (21, 8554), (32, 8758),

Gene: Whatever_11 Start: 8365, Stop: 8814, Start Num: 8
Candidate Starts for Whatever_11:
(Start: 8 @8365 has 107 MA's), (21, 8554), (32, 8758),

Gene: Yasdni1_11 Start: 8363, Stop: 8812, Start Num: 8

Candidate Starts for Yasdni1_11:

(Start: 3 @8306 has 1 MA's), (Start: 8 @8363 has 107 MA's), (21, 8552), (32, 8756),

Gene: Yosif_12 Start: 8821, Stop: 9279, Start Num: 8

Candidate Starts for Yosif_12:

(Start: 8 @8821 has 107 MA's), (18, 8974), (21, 9010), (22, 9058), (27, 9166), (35, 9250), (36, 9265),

Gene: Zainub_13 Start: 8727, Stop: 9203, Start Num: 8

Candidate Starts for Zainub_13:

(Start: 2 @8664 has 2 MA's), (4, 8679), (Start: 8 @8727 has 107 MA's), (15, 8847), (21, 8925), (30, 9117), (36, 9189),

Gene: ZamZam_11 Start: 8459, Stop: 8908, Start Num: 8

Candidate Starts for ZamZam_11:

(Start: 8 @8459 has 107 MA's), (10, 8495), (11, 8522), (17, 8609), (21, 8648), (27, 8804), (35, 8885),

Gene: Zemlya_12 Start: 8375, Stop: 8824, Start Num: 8

Candidate Starts for Zemlya_12:

(Start: 3 @8318 has 1 MA's), (Start: 8 @8375 has 107 MA's), (17, 8525), (18, 8528), (21, 8564),

Gene: phiCAM_12 Start: 10223, Stop: 10681, Start Num: 8

Candidate Starts for phiCAM_12:

(Start: 8 @10223 has 107 MA's), (9, 10238), (21, 10412), (22, 10460), (27, 10568), (35, 10652), (37, 10676),

Gene: phiHau3_13 Start: 8427, Stop: 8894, Start Num: 8

Candidate Starts for phiHau3_13:

(Start: 8 @8427 has 107 MA's), (17, 8577), (18, 8580), (21, 8616), (23, 8703), (29, 8796), (31, 8814), (32, 8823), (36, 8880),