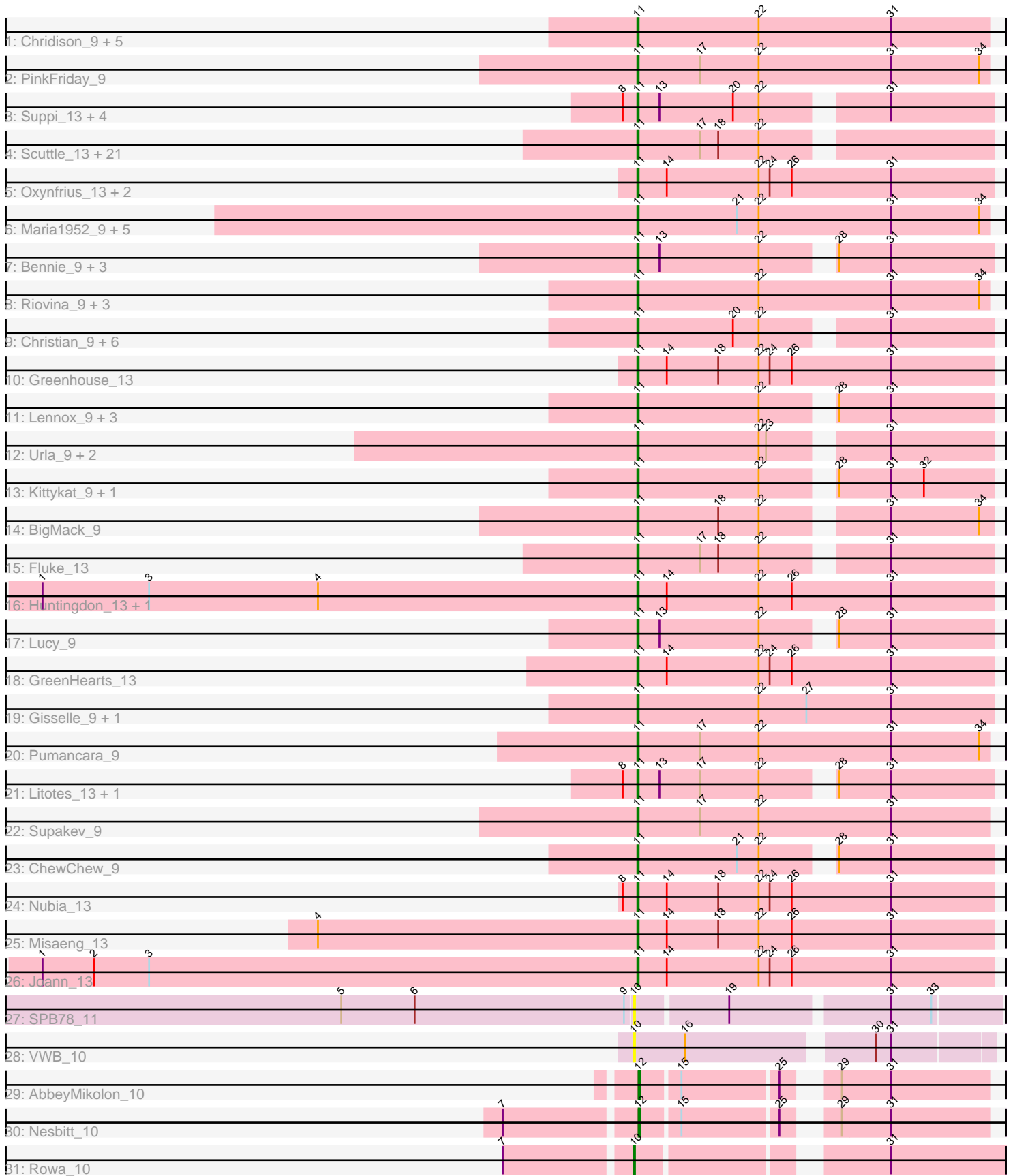


Pham 216062



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 216062 Report

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

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 216062 has 89 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Chridison_9, DrRobert_9, Vulture_9, HunterDalle_9, WonderBoy_9, AustinPowers_9
- Track 2 : PinkFriday_9
- Track 3 : Suppi_13, Canowicakte_13, Wayne_13, CallieOMalley_13, AppleCider_13
- Track 4 : Scuttle_13, Carpal_13, RAP15_13, Potatoes_13, Cholula_13, Korra_13, Dino_13, Glenn_13, Vallejo_13, Jumboset_13, Savage2526_13, Wawa_13, TattModd_13, Rozby_13, MrGloopy_13, Riverdale_13, Immaculata_13, MeganNoll_13, Beethoven_13, Kalizoi_13, BrotherBLo_13, Zorro_13
- Track 5 : Oxynfrius_13, Lakshmi_13, Albanese_13
- Track 6 : Maria1952_9, KingBob_9, Herb_9, Temper16_9, Sergei_9, Daiboju_9
- Track 7 : Bennie_9, HeadNerd_9, Moki_9, Huckleberry_9
- Track 8 : Riovina_9, Eunoia_9, OMalley_9, Aledel_9
- Track 9 : Christian_9, Nancia_9, Bodacious_9, CristinaYang_9, LilStuart_9, Lasagna_9, OurGirlNessie_9
- Track 10 : Greenhouse_13
- Track 11 : Lennox_9, Makoto_9, PitaDog_9, Pterodactyl_9
- Track 12 : Urla_9, MamaPearl_9, EstebanJulior_9
- Track 13 : Kittykat_9, Preamble_9
- Track 14 : BigMack_9
- Track 15 : Fluke_13
- Track 16 : Huntingdon_13, RcigaStruga_13
- Track 17 : Lucy_9
- Track 18 : GreenHearts_13
- Track 19 : Gisselle_9, DreamTeam_9
- Track 20 : Pumancara_9
- Track 21 : Litotes_13, PartyCup_13
- Track 22 : Supakev_9
- Track 23 : ChewChew_9
- Track 24 : Nubia_13
- Track 25 : Misaeng_13
- Track 26 : Joann_13
- Track 27 : SPB78_11
- Track 28 : VWB_10

- Track 29 : AbbeyMikolon_10
- Track 30 : Nesbitt_10
- Track 31 : Rowa_10

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 83 of the 86 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Albanese_13, Aledel_9, AppleCider_13, AustinPowers_9, Beethoven_13, Bennie_9, BigMack_9, Bodacious_9, BrotherBLo_13, CallieOMalley_13, Canowicakte_13, Carpal_13, ChewChew_9, Cholula_13, Chridison_9, Christian_9, CristinaYang_9, Daiboju_9, Dino_13, DrRobert_9, DreamTeam_9, EstebanJulior_9, Eunoia_9, Fluke_13, Gisselle_9, Glenn_13, GreenHearts_13, Greenhouse_13, HeadNerd_9, Herb_9, Huckleberry_9, HunterDalle_9, Huntingdon_13, Immaculata_13, Joann_13, Jumboset_13, Kalizoi_13, KingBob_9, Kittykat_9, Korra_13, Lakshmi_13, Lasagna_9, Lennox_9, LilStuart_9, Litotes_13, Lucy_9, Makoto_9, MamaPearl_9, Maria1952_9, MeganNoll_13, Misaeng_13, Moki_9, MrGloopy_13, Nancia_9, Nubia_13, OMalley_9, OurGirlNessie_9, Oxynfrius_13, PartyCup_13, PinkFriday_9, PitaDog_9, Potatoes_13, Preamble_9, Pterodactyl_9, Pumancara_9, RAP15_13, RcigaStruga_13, Riovina_9, Riverdale_13, Rozby_13, Savage2526_13, Scuttle_13, Sergei_9, Supakev_9, Suppi_13, TattModd_13, Temper16_9, Urla_9, Vallejo_13, Vulture_9, Wawa_13, Wayne_13, WonderBoy_9, Zorro_13,

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

-

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

- AbbeyMikolon_10, Nesbitt_10, Rowa_10, SPB78_11, VWB_10,

Summary by start number:

Start 10:

- Found in 3 of 89 (3.4%) of genes in pham
- Manual Annotations of this start: 1 of 86
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rowa_10 (BL), SPB78_11 (BA), VWB_10 (BA),

Start 11:

- Found in 84 of 89 (94.4%) of genes in pham
- Manual Annotations of this start: 83 of 86
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Albanese_13 (AK), Aledel_9 (AK), AppleCider_13 (AK), AustinPowers_9 (AK), Beethoven_13 (AK), Bennie_9 (AK), BigMack_9 (AK), Bodacious_9 (AK), BrotherBLo_13 (AK), CallieOMalley_13 (AK), Canowicakte_13 (AK), Carpal_13 (AK), ChewChew_9 (AK), Cholula_13 (AK), Chridison_9 (AK), Christian_9 (AK), CristinaYang_9 (AK), Daiboju_9 (AK), Dino_13 (AK), DrRobert_9 (AK), DreamTeam_9 (AK), EstebanJulior_9 (AK), Eunoia_9 (AK),

Fluke_13 (AK), Gisselle_9 (AK), Glenn_13 (AK), GreenHearts_13 (AK), Greenhouse_13 (AK), HeadNerd_9 (AK), Herb_9 (AK), Huckleberry_9 (AK), HunterDalle_9 (AK), Huntingdon_13 (AK), Immaculata_13 (AK), Joann_13 (AK), Jumboset_13 (AK), Kalizoi_13 (AK), KingBob_9 (AK), Kittykat_9 (AK), Korra_13 (AK), Lakshmi_13 (AK), Lasagna_9 (AK), Lennox_9 (AK), LilStuart_9 (AK), Litotes_13 (AK), Lucy_9 (AK), Makoto_9 (AK), MamaPearl_9 (AK), Maria1952_9 (AK), MeganNoll_13 (AK), Misaeng_13 (AK), Moki_9 (AK), MrGloopy_13 (AK), Nancia_9 (AK), Nubia_13 (AK), OMalley_9 (AK), OurGirlNessie_9 (AK), Oxynfrius_13 (AK), PartyCup_13 (AK), PinkFriday_9 (AK), PitaDog_9 (AK), Potatoes_13 (AK), Preamble_9 (AK), Pterodactyl_9 (AK), Pumancara_9 (AK), RAP15_13 (AK), RcigaStruga_13 (AK), Rivovina_9 (AK), Riverdale_13 (AK), Rozby_13 (AK), Savage2526_13 (AK), Scuttle_13 (AK), Sergei_9 (AK), Supakev_9 (AK), Suppi_13 (AK), TattModd_13 (AK), Temper16_9 (AK), Urla_9 (AK), Vallejo_13 (AK), Vulture_9 (AK), Wawa_13 (AK), Wayne_13 (AK), WonderBoy_9 (AK), Zorro_13 (AK),

Start 12:

- Found in 2 of 89 (2.2%) of genes in pham
- Manual Annotations of this start: 2 of 86
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon_10 (BL), Nesbitt_10 (BL),

Summary by clusters:

There are 3 clusters represented in this pham: BL, AK, BA,

Info for manual annotations of cluster AK:

- Start number 11 was manually annotated 83 times for cluster AK.

Info for manual annotations of cluster BL:

- Start number 10 was manually annotated 1 time for cluster BL.
- Start number 12 was manually annotated 2 times for cluster BL.

Gene Information:

Gene: AbbeyMikolon_10 Start: 7532, Stop: 7783, Start Num: 12

Candidate Starts for AbbeyMikolon_10:

(Start: 12 @7532 has 2 MA's), (15, 7562), (25, 7637), (29, 7664), (31, 7703),

Gene: Albanese_13 Start: 10184, Stop: 10474, Start Num: 11

Candidate Starts for Albanese_13:

(Start: 11 @10184 has 83 MA's), (14, 10208), (22, 10283), (24, 10292), (26, 10310), (31, 10391),

Gene: Aledel_9 Start: 7261, Stop: 7548, Start Num: 11

Candidate Starts for Aledel_9:

(Start: 11 @7261 has 83 MA's), (22, 7360), (31, 7468), (34, 7540),

Gene: AppleCider_13 Start: 10140, Stop: 10409, Start Num: 11

Candidate Starts for AppleCider_13:

(8, 10128), (Start: 11 @10140 has 83 MA's), (13, 10158), (20, 10218), (22, 10239), (31, 10326),

Gene: AustinPowers_9 Start: 7262, Stop: 7549, Start Num: 11

Candidate Starts for AustinPowers_9:

(Start: 11 @7262 has 83 MA's), (22, 7361), (31, 7469),

Gene: Beethoven_13 Start: 10100, Stop: 10369, Start Num: 11

Candidate Starts for Beethoven_13:

(Start: 11 @10100 has 83 MA's), (17, 10151), (18, 10166), (22, 10199),

Gene: Bennie_9 Start: 7245, Stop: 7514, Start Num: 11

Candidate Starts for Bennie_9:

(Start: 11 @7245 has 83 MA's), (13, 7263), (22, 7344), (28, 7389), (31, 7431),

Gene: BigMack_9 Start: 7245, Stop: 7514, Start Num: 11

Candidate Starts for BigMack_9:

(Start: 11 @7245 has 83 MA's), (18, 7311), (22, 7344), (31, 7431), (34, 7503),

Gene: Bodacious_9 Start: 7243, Stop: 7512, Start Num: 11

Candidate Starts for Bodacious_9:

(Start: 11 @7243 has 83 MA's), (20, 7321), (22, 7342), (31, 7429),

Gene: BrotherBLo_13 Start: 10107, Stop: 10376, Start Num: 11

Candidate Starts for BrotherBLo_13:

(Start: 11 @10107 has 83 MA's), (17, 10158), (18, 10173), (22, 10206),

Gene: CallieOMalley_13 Start: 10140, Stop: 10409, Start Num: 11

Candidate Starts for CallieOMalley_13:

(8, 10128), (Start: 11 @10140 has 83 MA's), (13, 10158), (20, 10218), (22, 10239), (31, 10326),

Gene: Canowicakte_13 Start: 10175, Stop: 10444, Start Num: 11

Candidate Starts for Canowicakte_13:

(8, 10163), (Start: 11 @10175 has 83 MA's), (13, 10193), (20, 10253), (22, 10274), (31, 10361),

Gene: Carpal_13 Start: 10107, Stop: 10376, Start Num: 11

Candidate Starts for Carpal_13:

(Start: 11 @10107 has 83 MA's), (17, 10158), (18, 10173), (22, 10206),

Gene: ChewChew_9 Start: 7242, Stop: 7511, Start Num: 11

Candidate Starts for ChewChew_9:

(Start: 11 @7242 has 83 MA's), (21, 7323), (22, 7341), (28, 7386), (31, 7428),

Gene: Cholula_13 Start: 10152, Stop: 10421, Start Num: 11

Candidate Starts for Cholula_13:

(Start: 11 @10152 has 83 MA's), (17, 10203), (18, 10218), (22, 10251),

Gene: Chridison_9 Start: 7262, Stop: 7549, Start Num: 11

Candidate Starts for Chridison_9:

(Start: 11 @7262 has 83 MA's), (22, 7361), (31, 7469),

Gene: Christian_9 Start: 7243, Stop: 7512, Start Num: 11

Candidate Starts for Christian_9:

(Start: 11 @7243 has 83 MA's), (20, 7321), (22, 7342), (31, 7429),

Gene: CristinaYang_9 Start: 7243, Stop: 7512, Start Num: 11

Candidate Starts for CristinaYang_9:

(Start: 11 @7243 has 83 MA's), (20, 7321), (22, 7342), (31, 7429),

Gene: Daiboju_9 Start: 7263, Stop: 7550, Start Num: 11

Candidate Starts for Daiboju_9:

(Start: 11 @7263 has 83 MA's), (21, 7344), (22, 7362), (31, 7470), (34, 7542),

Gene: Dino_13 Start: 10106, Stop: 10375, Start Num: 11

Candidate Starts for Dino_13:

(Start: 11 @10106 has 83 MA's), (17, 10157), (18, 10172), (22, 10205),

Gene: DrRobert_9 Start: 7243, Stop: 7512, Start Num: 11

Candidate Starts for DrRobert_9:

(Start: 11 @7243 has 83 MA's), (22, 7342), (31, 7429),

Gene: DreamTeam_9 Start: 7289, Stop: 7579, Start Num: 11

Candidate Starts for DreamTeam_9:

(Start: 11 @7289 has 83 MA's), (22, 7388), (27, 7427), (31, 7496),

Gene: EstebanJulior_9 Start: 7287, Stop: 7556, Start Num: 11

Candidate Starts for EstebanJulior_9:

(Start: 11 @7287 has 83 MA's), (22, 7386), (23, 7392), (31, 7473),

Gene: Eunoia_9 Start: 7261, Stop: 7548, Start Num: 11

Candidate Starts for Eunoia_9:

(Start: 11 @7261 has 83 MA's), (22, 7360), (31, 7468), (34, 7540),

Gene: Fluke_13 Start: 10148, Stop: 10417, Start Num: 11

Candidate Starts for Fluke_13:

(Start: 11 @10148 has 83 MA's), (17, 10199), (18, 10214), (22, 10247), (31, 10334),

Gene: Gisselle_9 Start: 7289, Stop: 7579, Start Num: 11

Candidate Starts for Gisselle_9:

(Start: 11 @7289 has 83 MA's), (22, 7388), (27, 7427), (31, 7496),

Gene: Glenn_13 Start: 10158, Stop: 10427, Start Num: 11

Candidate Starts for Glenn_13:

(Start: 11 @10158 has 83 MA's), (17, 10209), (18, 10224), (22, 10257),

Gene: GreenHearts_13 Start: 10230, Stop: 10520, Start Num: 11

Candidate Starts for GreenHearts_13:

(Start: 11 @10230 has 83 MA's), (14, 10254), (22, 10329), (24, 10338), (26, 10356), (31, 10437),

Gene: Greenhouse_13 Start: 10155, Stop: 10445, Start Num: 11

Candidate Starts for Greenhouse_13:

(Start: 11 @10155 has 83 MA's), (14, 10179), (18, 10221), (22, 10254), (24, 10263), (26, 10281), (31, 10362),

Gene: HeadNerd_9 Start: 7245, Stop: 7514, Start Num: 11

Candidate Starts for HeadNerd_9:

(Start: 11 @7245 has 83 MA's), (13, 7263), (22, 7344), (28, 7389), (31, 7431),

Gene: Herb_9 Start: 7263, Stop: 7550, Start Num: 11

Candidate Starts for Herb_9:

(Start: 11 @7263 has 83 MA's), (21, 7344), (22, 7362), (31, 7470), (34, 7542),

Gene: Huckleberry_9 Start: 7245, Stop: 7514, Start Num: 11

Candidate Starts for Huckleberry_9:

(Start: 11 @7245 has 83 MA's), (13, 7263), (22, 7344), (28, 7389), (31, 7431),

Gene: HunterDalle_9 Start: 7261, Stop: 7548, Start Num: 11

Candidate Starts for HunterDalle_9:

(Start: 11 @7261 has 83 MA's), (22, 7360), (31, 7468),

Gene: Huntingdon_13 Start: 10141, Stop: 10431, Start Num: 11

Candidate Starts for Huntingdon_13:

(1, 9655), (3, 9742), (4, 9880), (Start: 11 @10141 has 83 MA's), (14, 10165), (22, 10240), (26, 10267), (31, 10348),

Gene: Immaculata_13 Start: 10152, Stop: 10421, Start Num: 11

Candidate Starts for Immaculata_13:

(Start: 11 @10152 has 83 MA's), (17, 10203), (18, 10218), (22, 10251),

Gene: Joann_13 Start: 10133, Stop: 10423, Start Num: 11

Candidate Starts for Joann_13:

(1, 9647), (2, 9689), (3, 9734), (Start: 11 @10133 has 83 MA's), (14, 10157), (22, 10232), (24, 10241), (26, 10259), (31, 10340),

Gene: Jumboset_13 Start: 10101, Stop: 10370, Start Num: 11

Candidate Starts for Jumboset_13:

(Start: 11 @10101 has 83 MA's), (17, 10152), (18, 10167), (22, 10200),

Gene: Kalizoi_13 Start: 10100, Stop: 10369, Start Num: 11

Candidate Starts for Kalizoi_13:

(Start: 11 @10100 has 83 MA's), (17, 10151), (18, 10166), (22, 10199),

Gene: KingBob_9 Start: 7263, Stop: 7550, Start Num: 11

Candidate Starts for KingBob_9:

(Start: 11 @7263 has 83 MA's), (21, 7344), (22, 7362), (31, 7470), (34, 7542),

Gene: Kittykat_9 Start: 7286, Stop: 7555, Start Num: 11

Candidate Starts for Kittykat_9:

(Start: 11 @7286 has 83 MA's), (22, 7385), (28, 7430), (31, 7472), (32, 7499),

Gene: Korra_13 Start: 10106, Stop: 10375, Start Num: 11

Candidate Starts for Korra_13:

(Start: 11 @10106 has 83 MA's), (17, 10157), (18, 10172), (22, 10205),

Gene: Lakshmi_13 Start: 10160, Stop: 10450, Start Num: 11

Candidate Starts for Lakshmi_13:

(Start: 11 @10160 has 83 MA's), (14, 10184), (22, 10259), (24, 10268), (26, 10286), (31, 10367),

Gene: Lasagna_9 Start: 7243, Stop: 7512, Start Num: 11

Candidate Starts for Lasagna_9:

(Start: 11 @7243 has 83 MA's), (20, 7321), (22, 7342), (31, 7429),

Gene: Lennox_9 Start: 7243, Stop: 7512, Start Num: 11
Candidate Starts for Lennox_9:
(Start: 11 @7243 has 83 MA's), (22, 7342), (28, 7387), (31, 7429),

Gene: LilStuart_9 Start: 7243, Stop: 7512, Start Num: 11
Candidate Starts for LilStuart_9:
(Start: 11 @7243 has 83 MA's), (20, 7321), (22, 7342), (31, 7429),

Gene: Litotes_13 Start: 10128, Stop: 10397, Start Num: 11
Candidate Starts for Litotes_13:
(8, 10116), (Start: 11 @10128 has 83 MA's), (13, 10146), (17, 10179), (22, 10227), (28, 10272), (31, 10314),

Gene: Lucy_9 Start: 7234, Stop: 7503, Start Num: 11
Candidate Starts for Lucy_9:
(Start: 11 @7234 has 83 MA's), (13, 7252), (22, 7333), (28, 7378), (31, 7420),

Gene: Makoto_9 Start: 7243, Stop: 7512, Start Num: 11
Candidate Starts for Makoto_9:
(Start: 11 @7243 has 83 MA's), (22, 7342), (28, 7387), (31, 7429),

Gene: MamaPearl_9 Start: 7287, Stop: 7556, Start Num: 11
Candidate Starts for MamaPearl_9:
(Start: 11 @7287 has 83 MA's), (22, 7386), (23, 7392), (31, 7473),

Gene: Maria1952_9 Start: 7263, Stop: 7550, Start Num: 11
Candidate Starts for Maria1952_9:
(Start: 11 @7263 has 83 MA's), (21, 7344), (22, 7362), (31, 7470), (34, 7542),

Gene: MeganNoll_13 Start: 10158, Stop: 10427, Start Num: 11
Candidate Starts for MeganNoll_13:
(Start: 11 @10158 has 83 MA's), (17, 10209), (18, 10224), (22, 10257),

Gene: Misaeng_13 Start: 10206, Stop: 10496, Start Num: 11
Candidate Starts for Misaeng_13:
(4, 9945), (Start: 11 @10206 has 83 MA's), (14, 10230), (18, 10272), (22, 10305), (26, 10332), (31, 10413),

Gene: Moki_9 Start: 7245, Stop: 7514, Start Num: 11
Candidate Starts for Moki_9:
(Start: 11 @7245 has 83 MA's), (13, 7263), (22, 7344), (28, 7389), (31, 7431),

Gene: MrGloopy_13 Start: 10091, Stop: 10360, Start Num: 11
Candidate Starts for MrGloopy_13:
(Start: 11 @10091 has 83 MA's), (17, 10142), (18, 10157), (22, 10190),

Gene: Nancia_9 Start: 7243, Stop: 7512, Start Num: 11
Candidate Starts for Nancia_9:
(Start: 11 @7243 has 83 MA's), (20, 7321), (22, 7342), (31, 7429),

Gene: Nesbitt_10 Start: 7604, Stop: 7855, Start Num: 12
Candidate Starts for Nesbitt_10:
(7, 7502), (Start: 12 @7604 has 2 MA's), (15, 7634), (25, 7709), (29, 7736), (31, 7775),

Gene: Nubia_13 Start: 10120, Stop: 10410, Start Num: 11

Candidate Starts for Nubia_13:

(8, 10108), (Start: 11 @10120 has 83 MA's), (14, 10144), (18, 10186), (22, 10219), (24, 10228), (26, 10246), (31, 10327),

Gene: OMalley_9 Start: 7261, Stop: 7548, Start Num: 11

Candidate Starts for OMalley_9:

(Start: 11 @7261 has 83 MA's), (22, 7360), (31, 7468), (34, 7540),

Gene: OurGirlNessie_9 Start: 7234, Stop: 7503, Start Num: 11

Candidate Starts for OurGirlNessie_9:

(Start: 11 @7234 has 83 MA's), (20, 7312), (22, 7333), (31, 7420),

Gene: Oxynfrius_13 Start: 10133, Stop: 10423, Start Num: 11

Candidate Starts for Oxynfrius_13:

(Start: 11 @10133 has 83 MA's), (14, 10157), (22, 10232), (24, 10241), (26, 10259), (31, 10340),

Gene: PartyCup_13 Start: 10175, Stop: 10444, Start Num: 11

Candidate Starts for PartyCup_13:

(8, 10163), (Start: 11 @10175 has 83 MA's), (13, 10193), (17, 10226), (22, 10274), (28, 10319), (31, 10361),

Gene: PinkFriday_9 Start: 7264, Stop: 7551, Start Num: 11

Candidate Starts for PinkFriday_9:

(Start: 11 @7264 has 83 MA's), (17, 7315), (22, 7363), (31, 7471), (34, 7543),

Gene: PitaDog_9 Start: 7234, Stop: 7503, Start Num: 11

Candidate Starts for PitaDog_9:

(Start: 11 @7234 has 83 MA's), (22, 7333), (28, 7378), (31, 7420),

Gene: Potatoes_13 Start: 10152, Stop: 10421, Start Num: 11

Candidate Starts for Potatoes_13:

(Start: 11 @10152 has 83 MA's), (17, 10203), (18, 10218), (22, 10251),

Gene: Preamble_9 Start: 7244, Stop: 7513, Start Num: 11

Candidate Starts for Preamble_9:

(Start: 11 @7244 has 83 MA's), (22, 7343), (28, 7388), (31, 7430), (32, 7457),

Gene: Pterodactyl_9 Start: 7235, Stop: 7504, Start Num: 11

Candidate Starts for Pterodactyl_9:

(Start: 11 @7235 has 83 MA's), (22, 7334), (28, 7379), (31, 7421),

Gene: Pumancara_9 Start: 7263, Stop: 7550, Start Num: 11

Candidate Starts for Pumancara_9:

(Start: 11 @7263 has 83 MA's), (17, 7314), (22, 7362), (31, 7470), (34, 7542),

Gene: RAP15_13 Start: 10158, Stop: 10427, Start Num: 11

Candidate Starts for RAP15_13:

(Start: 11 @10158 has 83 MA's), (17, 10209), (18, 10224), (22, 10257),

Gene: RcigaStruga_13 Start: 10141, Stop: 10431, Start Num: 11

Candidate Starts for RcigaStruga_13:

(1, 9655), (3, 9742), (4, 9880), (Start: 11 @10141 has 83 MA's), (14, 10165), (22, 10240), (26, 10267), (31, 10348),

Gene: Riovina_9 Start: 7261, Stop: 7548, Start Num: 11
Candidate Starts for Riovina_9:
(Start: 11 @7261 has 83 MA's), (22, 7360), (31, 7468), (34, 7540),

Gene: Riverdale_13 Start: 10089, Stop: 10358, Start Num: 11
Candidate Starts for Riverdale_13:
(Start: 11 @10089 has 83 MA's), (17, 10140), (18, 10155), (22, 10188),

Gene: Rowa_10 Start: 7361, Stop: 7627, Start Num: 10
Candidate Starts for Rowa_10:
(7, 7262), (Start: 10 @7361 has 1 MA's), (31, 7535),

Gene: Rozby_13 Start: 10089, Stop: 10358, Start Num: 11
Candidate Starts for Rozby_13:
(Start: 11 @10089 has 83 MA's), (17, 10140), (18, 10155), (22, 10188),

Gene: SPB78_11 Start: 7748, Stop: 8026, Start Num: 10
Candidate Starts for SPB78_11:
(5, 7511), (6, 7571), (9, 7742), (Start: 10 @7748 has 1 MA's), (19, 7820), (31, 7940), (33, 7973),

Gene: Savage2526_13 Start: 10152, Stop: 10421, Start Num: 11
Candidate Starts for Savage2526_13:
(Start: 11 @10152 has 83 MA's), (17, 10203), (18, 10218), (22, 10251),

Gene: Scuttle_13 Start: 10158, Stop: 10427, Start Num: 11
Candidate Starts for Scuttle_13:
(Start: 11 @10158 has 83 MA's), (17, 10209), (18, 10224), (22, 10257),

Gene: Sergei_9 Start: 7263, Stop: 7550, Start Num: 11
Candidate Starts for Sergei_9:
(Start: 11 @7263 has 83 MA's), (21, 7344), (22, 7362), (31, 7470), (34, 7542),

Gene: Supakev_9 Start: 7263, Stop: 7550, Start Num: 11
Candidate Starts for Supakev_9:
(Start: 11 @7263 has 83 MA's), (17, 7314), (22, 7362), (31, 7470),

Gene: Suppi_13 Start: 10175, Stop: 10444, Start Num: 11
Candidate Starts for Suppi_13:
(8, 10163), (Start: 11 @10175 has 83 MA's), (13, 10193), (20, 10253), (22, 10274), (31, 10361),

Gene: TattModd_13 Start: 10152, Stop: 10421, Start Num: 11
Candidate Starts for TattModd_13:
(Start: 11 @10152 has 83 MA's), (17, 10203), (18, 10218), (22, 10251),

Gene: Temper16_9 Start: 7263, Stop: 7550, Start Num: 11
Candidate Starts for Temper16_9:
(Start: 11 @7263 has 83 MA's), (21, 7344), (22, 7362), (31, 7470), (34, 7542),

Gene: Urla_9 Start: 7290, Stop: 7559, Start Num: 11
Candidate Starts for Urla_9:

(Start: 11 @7290 has 83 MA's), (22, 7389), (23, 7395), (31, 7476),

Gene: VWB_10 Start: 7804, Stop: 8076, Start Num: 10

Candidate Starts for VWB_10:

(Start: 10 @7804 has 1 MA's), (16, 7846), (30, 7984), (31, 7996),

Gene: Vallejo_13 Start: 10090, Stop: 10359, Start Num: 11

Candidate Starts for Vallejo_13:

(Start: 11 @10090 has 83 MA's), (17, 10141), (18, 10156), (22, 10189),

Gene: Vulture_9 Start: 7261, Stop: 7548, Start Num: 11

Candidate Starts for Vulture_9:

(Start: 11 @7261 has 83 MA's), (22, 7360), (31, 7468),

Gene: Wawa_13 Start: 10127, Stop: 10396, Start Num: 11

Candidate Starts for Wawa_13:

(Start: 11 @10127 has 83 MA's), (17, 10178), (18, 10193), (22, 10226),

Gene: Wayne_13 Start: 10221, Stop: 10490, Start Num: 11

Candidate Starts for Wayne_13:

(8, 10209), (Start: 11 @10221 has 83 MA's), (13, 10239), (20, 10299), (22, 10320), (31, 10407),

Gene: WonderBoy_9 Start: 7243, Stop: 7512, Start Num: 11

Candidate Starts for WonderBoy_9:

(Start: 11 @7243 has 83 MA's), (22, 7342), (31, 7429),

Gene: Zorro_13 Start: 10106, Stop: 10375, Start Num: 11

Candidate Starts for Zorro_13:

(Start: 11 @10106 has 83 MA's), (17, 10157), (18, 10172), (22, 10205),