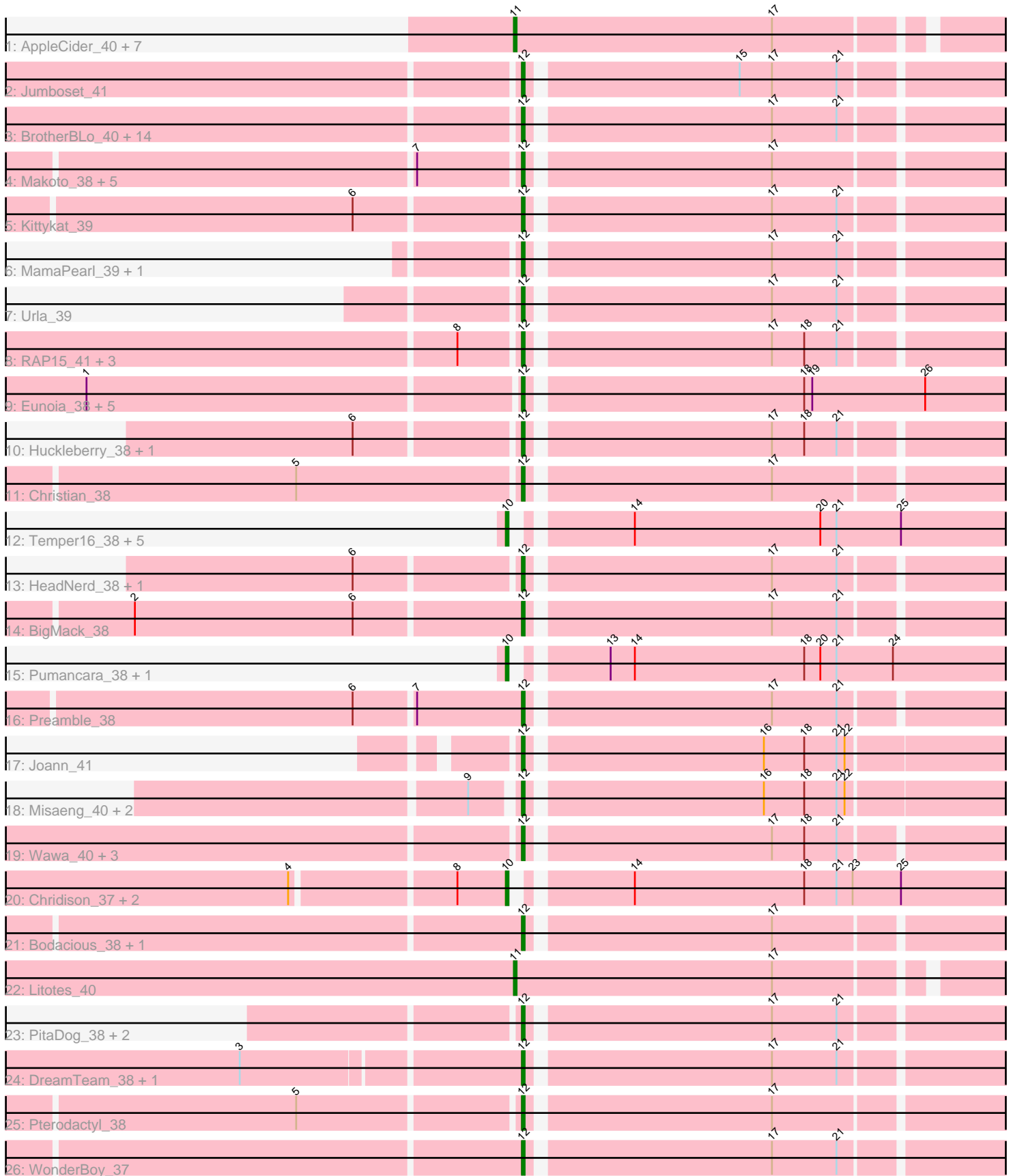


Pham 311508



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 311508 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311508 has 80 members, 2 are drafts.

Phages represented in each track:

- Track 1 : AppleCider_40, Graynor_43, MrBoss_42, Suppi_40, PartyCup_41, Wayne_40, CallieOMalley_40, Canowicakte_40
- Track 2 : Jumboset_41
- Track 3 : BrotherBLo_40, Kalizoi_40, Vallejo_41, Savage2526_41, MrGloopy_41, Immaculata_40, Rozby_40, Carpal_40, Riverdale_41, Cholula_40, Glenn_41, Lasagna_37, Beethoven_40, TattModd_39, Potatoes_40
- Track 4 : Makoto_38, ChewChew_38, DrRobert_37, Lennox_38, CristinaYang_38, LilStuart_38
- Track 5 : Kittykat_39
- Track 6 : MamaPearl_39, EstebanJulior_39
- Track 7 : Urla_39
- Track 8 : RAP15_41, Zorro_41, MeganNoll_40, Dino_41
- Track 9 : Eunoia_38, OMalley_38, AustinPowers_38, Riovina_38, Supakev_38, Aledel_38
- Track 10 : Huckleberry_38, Bennie_38
- Track 11 : Christian_38
- Track 12 : Temper16_38, Maria1952_37, Sergei_38, Daiboju_38, KingBob_38, Herb_38
- Track 13 : HeadNerd_38, Moki_38
- Track 14 : BigMack_38
- Track 15 : Pumancara_38, PinkFriday_38
- Track 16 : Preamble_38
- Track 17 : Joann_41
- Track 18 : Misaeng_40, RcigaStruga_40, Huntingdon_40
- Track 19 : Wawa_40, Korra_40, Scuttle_40, Fluke_41
- Track 20 : Chridison_37, Vulture_38, HunterDalle_38
- Track 21 : Bodacious_38, Nancia_38
- Track 22 : Litotes_40
- Track 23 : PitaDog_38, Lucy_38, OurGirlNessie_37
- Track 24 : DreamTeam_38, Gisselle_38
- Track 25 : Pterodactyl_38
- Track 26 : WonderBoy_37

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

The start number called the most often in the published annotations is 12, it was called in 60 of the 78 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aledel_38, AustinPowers_38, Beethoven_40, Bennie_38, BigMack_38, Bodacious_38, BrotherBLo_40, Carpal_40, ChewChew_38, Cholula_40, Christian_38, CristinaYang_38, Dino_41, DrRobert_37, DreamTeam_38, EstebanJulior_39, Eunoia_38, Fluke_41, Gisselle_38, Glenn_41, HeadNerd_38, Huckleberry_38, Huntingdon_40, Immaculata_40, Joann_41, Jumboset_41, Kalizoi_40, Kittykat_39, Korra_40, Lasagna_37, Lennox_38, LilStuart_38, Lucy_38, Makoto_38, MamaPearl_39, MeganNoll_40, Misaeng_40, Moki_38, MrGloopy_41, Nancia_38, OMalley_38, OurGirlNessie_37, PitaDog_38, Potatoes_40, Preamble_38, Pterodactyl_38, RAP15_41, RcigaStruga_40, Riovina_38, Riverdale_41, Rozby_40, Savage2526_41, Scuttle_40, Supakev_38, TattModd_39, Urla_39, Vallejo_41, Wawa_40, WonderBoy_37, Zorro_41,

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

-

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

- AppleCider_40, CallieOMalley_40, Canowicakte_40, Chridison_37, Daiboju_38, Graynor_43, Herb_38, HunterDalle_38, KingBob_38, Litotes_40, Maria1952_37, MrBoss_42, PartyCup_41, PinkFriday_38, Pumancara_38, Sergei_38, Suppi_40, Temper16_38, Vulture_38, Wayne_40,

Summary by start number:

Start 10:

- Found in 11 of 80 (13.8%) of genes in pham
- Manual Annotations of this start: 11 of 78
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chridison_37 (AK), Daiboju_38 (AK), Herb_38 (AK), HunterDalle_38 (AK), KingBob_38 (AK), Maria1952_37 (AK), PinkFriday_38 (AK), Pumancara_38 (AK), Sergei_38 (AK), Temper16_38 (AK), Vulture_38 (AK),

Start 11:

- Found in 9 of 80 (11.2%) of genes in pham
- Manual Annotations of this start: 7 of 78
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AppleCider_40 (AK), CallieOMalley_40 (AK), Canowicakte_40 (AK), Graynor_43 (AK), Litotes_40 (AK), MrBoss_42 (AK), PartyCup_41 (AK), Suppi_40 (AK), Wayne_40 (AK),

Start 12:

- Found in 60 of 80 (75.0%) of genes in pham
- Manual Annotations of this start: 60 of 78
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aledel_38 (AK), AustinPowers_38 (AK), Beethoven_40 (AK), Bennie_38 (AK), BigMack_38 (AK), Bodacious_38 (AK), BrotherBLo_40 (AK), Carpal_40 (AK), ChewChew_38 (AK), Cholula_40 (AK), Christian_38 (AK), CristinaYang_38 (AK), Dino_41 (AK), DrRobert_37 (AK),

DreamTeam_38 (AK), EstebanJulior_39 (AK), Eunoia_38 (AK), Fluke_41 (AK), Gisselle_38 (AK), Glenn_41 (AK), HeadNerd_38 (AK), Huckleberry_38 (AK), Huntingdon_40 (AK), Immaculata_40 (AK), Joann_41 (AK), Jumboset_41 (AK), Kalizoi_40 (AK), Kittykat_39 (AK), Korra_40 (AK), Lasagna_37 (AK), Lennox_38 (AK), LilStuart_38 (AK), Lucy_38 (AK), Makoto_38 (AK), MamaPearl_39 (AK), MeganNoll_40 (AK), Misaeng_40 (AK), Moki_38 (AK), MrGloopy_41 (AK), Nancia_38 (AK), OMalley_38 (AK), OurGirlNessie_37 (AK), PitaDog_38 (AK), Potatoes_40 (AK), Preamble_38 (AK), Pterodactyl_38 (AK), RAP15_41 (AK), RcigaStruga_40 (AK), Rivovina_38 (AK), Riverdale_41 (AK), Rozby_40 (AK), Savage2526_41 (AK), Scuttle_40 (AK), Supakev_38 (AK), TattModd_39 (AK), Urla_39 (AK), Vallejo_41 (AK), Wawa_40 (AK), WonderBoy_37 (AK), Zorro_41 (AK),

Summary by clusters:

There is one cluster represented in this pham: AK

Info for manual annotations of cluster AK:

- Start number 10 was manually annotated 11 times for cluster AK.
- Start number 11 was manually annotated 7 times for cluster AK.
- Start number 12 was manually annotated 60 times for cluster AK.

Gene Information:

Gene: Aledel_38 Start: 27323, Stop: 27526, Start Num: 12

Candidate Starts for Aledel_38:

(1, 27167), (Start: 12 @27323 has 60 MA's), (18, 27422), (19, 27425), (26, 27467),

Gene: AppleCider_40 Start: 27372, Stop: 27545, Start Num: 11

Candidate Starts for AppleCider_40:

(Start: 11 @27372 has 7 MA's), (17, 27468),

Gene: AustinPowers_38 Start: 27321, Stop: 27524, Start Num: 12

Candidate Starts for AustinPowers_38:

(1, 27165), (Start: 12 @27321 has 60 MA's), (18, 27420), (19, 27423), (26, 27465),

Gene: Beethoven_40 Start: 27306, Stop: 27476, Start Num: 12

Candidate Starts for Beethoven_40:

(Start: 12 @27306 has 60 MA's), (17, 27393), (21, 27417),

Gene: Bennie_38 Start: 26117, Stop: 26287, Start Num: 12

Candidate Starts for Bennie_38:

(6, 26060), (Start: 12 @26117 has 60 MA's), (17, 26204), (18, 26216), (21, 26228),

Gene: BigMack_38 Start: 26217, Stop: 26387, Start Num: 12

Candidate Starts for BigMack_38:

(2, 26076), (6, 26157), (Start: 12 @26217 has 60 MA's), (17, 26304), (21, 26328),

Gene: Bodacious_38 Start: 26173, Stop: 26343, Start Num: 12

Candidate Starts for Bodacious_38:

(Start: 12 @26173 has 60 MA's), (17, 26260),

Gene: BrotherBLo_40 Start: 27338, Stop: 27508, Start Num: 12
Candidate Starts for BrotherBLo_40:
(Start: 12 @27338 has 60 MA's), (17, 27425), (21, 27449),

Gene: CallieOMalley_40 Start: 27372, Stop: 27545, Start Num: 11
Candidate Starts for CallieOMalley_40:
(Start: 11 @27372 has 7 MA's), (17, 27468),

Gene: Canowicakte_40 Start: 27407, Stop: 27580, Start Num: 11
Candidate Starts for Canowicakte_40:
(Start: 11 @27407 has 7 MA's), (17, 27503),

Gene: Carpal_40 Start: 27318, Stop: 27488, Start Num: 12
Candidate Starts for Carpal_40:
(Start: 12 @27318 has 60 MA's), (17, 27405), (21, 27429),

Gene: ChewChew_38 Start: 26165, Stop: 26335, Start Num: 12
Candidate Starts for ChewChew_38:
(7, 26129), (Start: 12 @26165 has 60 MA's), (17, 26252),

Gene: Cholula_40 Start: 27364, Stop: 27534, Start Num: 12
Candidate Starts for Cholula_40:
(Start: 12 @27364 has 60 MA's), (17, 27451), (21, 27475),

Gene: Chridison_37 Start: 27255, Stop: 27455, Start Num: 10
Candidate Starts for Chridison_37:
(4, 27180), (8, 27237), (Start: 10 @27255 has 11 MA's), (14, 27291), (18, 27354), (21, 27366), (23, 27372), (25, 27390),

Gene: Christian_38 Start: 26161, Stop: 26331, Start Num: 12
Candidate Starts for Christian_38:
(5, 26080), (Start: 12 @26161 has 60 MA's), (17, 26248),

Gene: CristinaYang_38 Start: 26161, Stop: 26331, Start Num: 12
Candidate Starts for CristinaYang_38:
(7, 26125), (Start: 12 @26161 has 60 MA's), (17, 26248),

Gene: Daiboju_38 Start: 27333, Stop: 27533, Start Num: 10
Candidate Starts for Daiboju_38:
(Start: 10 @27333 has 11 MA's), (14, 27369), (20, 27438), (21, 27444), (25, 27468),

Gene: Dino_41 Start: 27465, Stop: 27635, Start Num: 12
Candidate Starts for Dino_41:
(8, 27444), (Start: 12 @27465 has 60 MA's), (17, 27552), (18, 27564), (21, 27576),

Gene: DrRobert_37 Start: 25941, Stop: 26111, Start Num: 12
Candidate Starts for DrRobert_37:
(7, 25905), (Start: 12 @25941 has 60 MA's), (17, 26028),

Gene: DreamTeam_38 Start: 26271, Stop: 26441, Start Num: 12
Candidate Starts for DreamTeam_38:
(3, 26172), (Start: 12 @26271 has 60 MA's), (17, 26358), (21, 26382),

Gene: EstebanJulior_39 Start: 27319, Stop: 27489, Start Num: 12
Candidate Starts for EstebanJulior_39:
(Start: 12 @27319 has 60 MA's), (17, 27406), (21, 27430),

Gene: Eunoia_38 Start: 27323, Stop: 27526, Start Num: 12
Candidate Starts for Eunoia_38:
(1, 27167), (Start: 12 @27323 has 60 MA's), (18, 27422), (19, 27425), (26, 27467),

Gene: Fluke_41 Start: 27581, Stop: 27751, Start Num: 12
Candidate Starts for Fluke_41:
(Start: 12 @27581 has 60 MA's), (17, 27668), (18, 27680), (21, 27692),

Gene: Gisselle_38 Start: 26271, Stop: 26441, Start Num: 12
Candidate Starts for Gisselle_38:
(3, 26172), (Start: 12 @26271 has 60 MA's), (17, 26358), (21, 26382),

Gene: Glenn_41 Start: 27572, Stop: 27742, Start Num: 12
Candidate Starts for Glenn_41:
(Start: 12 @27572 has 60 MA's), (17, 27659), (21, 27683),

Gene: Graynor_43 Start: 27393, Stop: 27566, Start Num: 11
Candidate Starts for Graynor_43:
(Start: 11 @27393 has 7 MA's), (17, 27489),

Gene: HeadNerd_38 Start: 26117, Stop: 26287, Start Num: 12
Candidate Starts for HeadNerd_38:
(6, 26060), (Start: 12 @26117 has 60 MA's), (17, 26204), (21, 26228),

Gene: Herb_38 Start: 27332, Stop: 27532, Start Num: 10
Candidate Starts for Herb_38:
(Start: 10 @27332 has 11 MA's), (14, 27368), (20, 27437), (21, 27443), (25, 27467),

Gene: Huckleberry_38 Start: 26100, Stop: 26270, Start Num: 12
Candidate Starts for Huckleberry_38:
(6, 26043), (Start: 12 @26100 has 60 MA's), (17, 26187), (18, 26199), (21, 26211),

Gene: HunterDalle_38 Start: 27254, Stop: 27454, Start Num: 10
Candidate Starts for HunterDalle_38:
(4, 27179), (8, 27236), (Start: 10 @27254 has 11 MA's), (14, 27290), (18, 27353), (21, 27365), (23, 27371), (25, 27389),

Gene: Huntingdon_40 Start: 27733, Stop: 27915, Start Num: 12
Candidate Starts for Huntingdon_40:
(9, 27718), (Start: 12 @27733 has 60 MA's), (16, 27817), (18, 27832), (21, 27844), (22, 27847),

Gene: Immaculata_40 Start: 27363, Stop: 27533, Start Num: 12
Candidate Starts for Immaculata_40:
(Start: 12 @27363 has 60 MA's), (17, 27450), (21, 27474),

Gene: Joann_41 Start: 27983, Stop: 28165, Start Num: 12
Candidate Starts for Joann_41:
(Start: 12 @27983 has 60 MA's), (16, 28067), (18, 28082), (21, 28094), (22, 28097),

Gene: Jumboset_41 Start: 27480, Stop: 27650, Start Num: 12
Candidate Starts for Jumboset_41:
(Start: 12 @27480 has 60 MA's), (15, 27555), (17, 27567), (21, 27591),

Gene: Kalizoi_40 Start: 27305, Stop: 27475, Start Num: 12
Candidate Starts for Kalizoi_40:
(Start: 12 @27305 has 60 MA's), (17, 27392), (21, 27416),

Gene: KingBob_38 Start: 27333, Stop: 27533, Start Num: 10
Candidate Starts for KingBob_38:
(Start: 10 @27333 has 11 MA's), (14, 27369), (20, 27438), (21, 27444), (25, 27468),

Gene: Kittykat_39 Start: 26362, Stop: 26532, Start Num: 12
Candidate Starts for Kittykat_39:
(6, 26302), (Start: 12 @26362 has 60 MA's), (17, 26449), (21, 26473),

Gene: Korra_40 Start: 27317, Stop: 27487, Start Num: 12
Candidate Starts for Korra_40:
(Start: 12 @27317 has 60 MA's), (17, 27404), (18, 27416), (21, 27428),

Gene: Lasagna_37 Start: 25938, Stop: 26108, Start Num: 12
Candidate Starts for Lasagna_37:
(Start: 12 @25938 has 60 MA's), (17, 26025), (21, 26049),

Gene: Lennox_38 Start: 26146, Stop: 26316, Start Num: 12
Candidate Starts for Lennox_38:
(7, 26110), (Start: 12 @26146 has 60 MA's), (17, 26233),

Gene: LilStuart_38 Start: 26149, Stop: 26319, Start Num: 12
Candidate Starts for LilStuart_38:
(7, 26113), (Start: 12 @26149 has 60 MA's), (17, 26236),

Gene: Litotes_40 Start: 27360, Stop: 27533, Start Num: 11
Candidate Starts for Litotes_40:
(Start: 11 @27360 has 7 MA's), (17, 27456),

Gene: Lucy_38 Start: 26146, Stop: 26316, Start Num: 12
Candidate Starts for Lucy_38:
(Start: 12 @26146 has 60 MA's), (17, 26233), (21, 26257),

Gene: Makoto_38 Start: 26157, Stop: 26327, Start Num: 12
Candidate Starts for Makoto_38:
(7, 26121), (Start: 12 @26157 has 60 MA's), (17, 26244),

Gene: MamaPearl_39 Start: 27319, Stop: 27489, Start Num: 12
Candidate Starts for MamaPearl_39:
(Start: 12 @27319 has 60 MA's), (17, 27406), (21, 27430),

Gene: Maria1952_37 Start: 27332, Stop: 27532, Start Num: 10
Candidate Starts for Maria1952_37:
(Start: 10 @27332 has 11 MA's), (14, 27368), (20, 27437), (21, 27443), (25, 27467),

Gene: MeganNoll_40 Start: 27537, Stop: 27707, Start Num: 12

Candidate Starts for MeganNoll_40:

(8, 27516), (Start: 12 @27537 has 60 MA's), (17, 27624), (18, 27636), (21, 27648),

Gene: Misaeng_40 Start: 27966, Stop: 28148, Start Num: 12

Candidate Starts for Misaeng_40:

(9, 27951), (Start: 12 @27966 has 60 MA's), (16, 28050), (18, 28065), (21, 28077), (22, 28080),

Gene: Moki_38 Start: 26262, Stop: 26432, Start Num: 12

Candidate Starts for Moki_38:

(6, 26205), (Start: 12 @26262 has 60 MA's), (17, 26349), (21, 26373),

Gene: MrBoss_42 Start: 27357, Stop: 27530, Start Num: 11

Candidate Starts for MrBoss_42:

(Start: 11 @27357 has 7 MA's), (17, 27453),

Gene: MrGloopy_41 Start: 27466, Stop: 27636, Start Num: 12

Candidate Starts for MrGloopy_41:

(Start: 12 @27466 has 60 MA's), (17, 27553), (21, 27577),

Gene: Nancia_38 Start: 26173, Stop: 26343, Start Num: 12

Candidate Starts for Nancia_38:

(Start: 12 @26173 has 60 MA's), (17, 26260),

Gene: OMalley_38 Start: 27323, Stop: 27526, Start Num: 12

Candidate Starts for OMalley_38:

(1, 27167), (Start: 12 @27323 has 60 MA's), (18, 27422), (19, 27425), (26, 27467),

Gene: OurGirlNessie_37 Start: 25901, Stop: 26071, Start Num: 12

Candidate Starts for OurGirlNessie_37:

(Start: 12 @25901 has 60 MA's), (17, 25988), (21, 26012),

Gene: PartyCup_41 Start: 27586, Stop: 27759, Start Num: 11

Candidate Starts for PartyCup_41:

(Start: 11 @27586 has 7 MA's), (17, 27682),

Gene: PinkFriday_38 Start: 26442, Stop: 26642, Start Num: 10

Candidate Starts for PinkFriday_38:

(Start: 10 @26442 has 11 MA's), (13, 26469), (14, 26478), (18, 26541), (20, 26547), (21, 26553), (24, 26574),

Gene: PitaDog_38 Start: 26158, Stop: 26328, Start Num: 12

Candidate Starts for PitaDog_38:

(Start: 12 @26158 has 60 MA's), (17, 26245), (21, 26269),

Gene: Potatoes_40 Start: 27364, Stop: 27534, Start Num: 12

Candidate Starts for Potatoes_40:

(Start: 12 @27364 has 60 MA's), (17, 27451), (21, 27475),

Gene: Preamble_38 Start: 26228, Stop: 26398, Start Num: 12

Candidate Starts for Preamble_38:

(6, 26168), (7, 26189), (Start: 12 @26228 has 60 MA's), (17, 26315), (21, 26339),

Gene: Pterodactyl_38 Start: 26138, Stop: 26308, Start Num: 12

Candidate Starts for Pterodactyl_38:
(5, 26060), (Start: 12 @26138 has 60 MA's), (17, 26225),

Gene: Pumancara_38 Start: 26354, Stop: 26554, Start Num: 10
Candidate Starts for Pumancara_38:
(Start: 10 @26354 has 11 MA's), (13, 26381), (14, 26390), (18, 26453), (20, 26459), (21, 26465), (24, 26486),

Gene: RAP15_41 Start: 27537, Stop: 27707, Start Num: 12
Candidate Starts for RAP15_41:
(8, 27516), (Start: 12 @27537 has 60 MA's), (17, 27624), (18, 27636), (21, 27648),

Gene: RcigaStruga_40 Start: 27733, Stop: 27915, Start Num: 12
Candidate Starts for RcigaStruga_40:
(9, 27718), (Start: 12 @27733 has 60 MA's), (16, 27817), (18, 27832), (21, 27844), (22, 27847),

Gene: Riovina_38 Start: 27323, Stop: 27526, Start Num: 12
Candidate Starts for Riovina_38:
(1, 27167), (Start: 12 @27323 has 60 MA's), (18, 27422), (19, 27425), (26, 27467),

Gene: Riverdale_41 Start: 27502, Stop: 27672, Start Num: 12
Candidate Starts for Riverdale_41:
(Start: 12 @27502 has 60 MA's), (17, 27589), (21, 27613),

Gene: Rozby_40 Start: 27294, Stop: 27464, Start Num: 12
Candidate Starts for Rozby_40:
(Start: 12 @27294 has 60 MA's), (17, 27381), (21, 27405),

Gene: Savage2526_41 Start: 27531, Stop: 27701, Start Num: 12
Candidate Starts for Savage2526_41:
(Start: 12 @27531 has 60 MA's), (17, 27618), (21, 27642),

Gene: Scuttle_40 Start: 27491, Stop: 27661, Start Num: 12
Candidate Starts for Scuttle_40:
(Start: 12 @27491 has 60 MA's), (17, 27578), (18, 27590), (21, 27602),

Gene: Sergei_38 Start: 27333, Stop: 27533, Start Num: 10
Candidate Starts for Sergei_38:
(Start: 10 @27333 has 11 MA's), (14, 27369), (20, 27438), (21, 27444), (25, 27468),

Gene: Supakev_38 Start: 27323, Stop: 27526, Start Num: 12
Candidate Starts for Supakev_38:
(1, 27167), (Start: 12 @27323 has 60 MA's), (18, 27422), (19, 27425), (26, 27467),

Gene: Suppi_40 Start: 27407, Stop: 27580, Start Num: 11
Candidate Starts for Suppi_40:
(Start: 11 @27407 has 7 MA's), (17, 27503),

Gene: TattModd_39 Start: 27151, Stop: 27321, Start Num: 12
Candidate Starts for TattModd_39:
(Start: 12 @27151 has 60 MA's), (17, 27238), (21, 27262),

Gene: Temper16_38 Start: 27333, Stop: 27533, Start Num: 10

Candidate Starts for Temper16_38:

(Start: 10 @27333 has 11 MA's), (14, 27369), (20, 27438), (21, 27444), (25, 27468),

Gene: Urla_39 Start: 27312, Stop: 27482, Start Num: 12

Candidate Starts for Urla_39:

(Start: 12 @27312 has 60 MA's), (17, 27399), (21, 27423),

Gene: Vallejo_41 Start: 27505, Stop: 27675, Start Num: 12

Candidate Starts for Vallejo_41:

(Start: 12 @27505 has 60 MA's), (17, 27592), (21, 27616),

Gene: Vulture_38 Start: 27254, Stop: 27454, Start Num: 10

Candidate Starts for Vulture_38:

(4, 27179), (8, 27236), (Start: 10 @27254 has 11 MA's), (14, 27290), (18, 27353), (21, 27365), (23, 27371), (25, 27389),

Gene: Wawa_40 Start: 27338, Stop: 27508, Start Num: 12

Candidate Starts for Wawa_40:

(Start: 12 @27338 has 60 MA's), (17, 27425), (18, 27437), (21, 27449),

Gene: Wayne_40 Start: 27453, Stop: 27626, Start Num: 11

Candidate Starts for Wayne_40:

(Start: 11 @27453 has 7 MA's), (17, 27549),

Gene: WonderBoy_37 Start: 26133, Stop: 26303, Start Num: 12

Candidate Starts for WonderBoy_37:

(Start: 12 @26133 has 60 MA's), (17, 26220), (21, 26244),

Gene: Zorro_41 Start: 27465, Stop: 27635, Start Num: 12

Candidate Starts for Zorro_41:

(8, 27444), (Start: 12 @27465 has 60 MA's), (17, 27552), (18, 27564), (21, 27576),