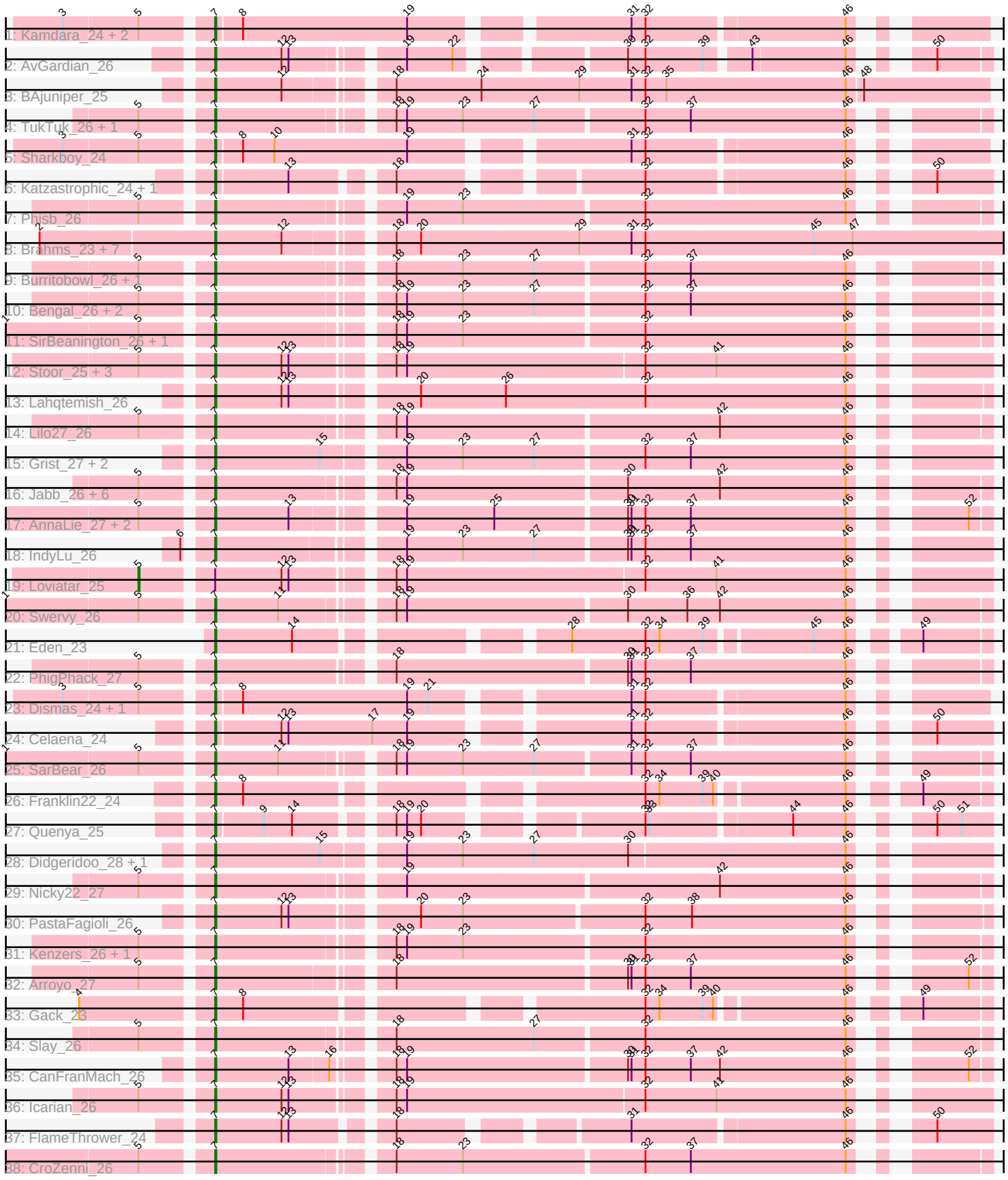
Pham 338246


1: Kamdara_24 + 2
2: AvGardian_26
3: BAjuniper_25
4: TukTuk_26 + 1
5: Sharkboy_24
6: Katzastrophic_24 + 1
7: Phsb_26
8: Brahms_23 + 7
9: Burritobowl_26 +
10: Bengal_26 + 2
11: SirBeanington_26 + 1
12: Stoor_25 + 3
13: Lahqtemish_26
14: Lilo27_26
15: Grist_27 + 2
16: Jabb_26 + 6
17: AnnaLie_27 + 2
18: IndyLu_26
19: Loviatar_25
20: Swervy_26
21: Eden_23
22: PhigPhack_27
23: Dismas_24 + 1
24: Celaena_24
25: SarBear_26
26: Franklin22_24
27: Quenya_25
28: Didgeridoo_28 + 1
29: Nicky22_27
30: PastaFagioli_26
31: Kenzers_26 + 1
32: Arroyo_27
33: Gack_23
34: Slay_26
35: CanFranMach_26
36: Icarian_26
37: FlameThrower_24
38: CroZenni_26

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 338246 Report

This analysis was run 11/14/26 on database version 672.

Pham number 338246 has 69 members, 3 are drafts.

Phages represented in each track:
- Track 1 : Kamdara_24, Rona_24, ChiliPepper_24
- Track 2 : AvGardian_26
- Track 3 : BAjuniper_25
- Track 4 : TukTuk_26, Jovita_26
- Track 5 : Sharkboy_24
- Track 6 : Katzastrophic_24, Bachaco_24
- Track 7 : Phisb_26
- Track 8 : Brahms_23, Bernstein_23, Clayda5_23, Rollins_23, Skylord_23, Armstrong_23, Coltrane_23, Vitas_23
- Track 9 : Burritobowl_26, DickRichards_26
- Track 10 : Bengal_26, BubbaBear_26, Softsoap_25
- Track 11 : SirBeanington_26, Albedo_26
- Track 12 : Stoor_25, Akino08_24, WalkingDead_25, SanaSana_26
- Track 13 : Lahqtemish_26
- Track 14 : Lilo27_26
- Track 15 : Grist_27, BabyDaisy_27, Kate33_26
- Track 16 : Jabb_26, CupcakePrincess_26, Pecas_26, MsUbiquitous_26, QMacho_27, Eula_26, AylexOG_27
- Track 17 : AnnaLie_27, BelmontSKP_27, SansAfet_26
- Track 18 : IndyLu_26
- Track 19 : Loviatar_25
- Track 20 : Swervy_26
- Track 21 : Eden_23
- Track 22 : PhigPhack_27
- Track 23 : Dismas_24, Kieran_24
- Track 24 : Celaena_24
- Track 25 : SarBear_26
- Track 26 : Franklin22_24
- Track 27 : Quenya_25
- Track 28 : Didgeridoo_28, Finalfrontier_27
- Track 29 : Nicky22_27
- Track 30 : PastaFagioli_26
- Track 31 : Kenzers_26, Lynlen_26
- Track 32 : Arroyo_27
- Track 33 : Gack_23
- Track 34 : Slay_26
- Track 35 : CanFranMach_26

• Track 36 : Icarian_26
• Track 37 : FlameThrower_24
• Track 38 : CroZenni_26

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

The start number called the most often in the published annotations is 7, it was called in 65 of the 66 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akino08_24, Albedo_26, AnnaLie_27, Armstrong_23, Arroyo_27, AvGardian_26, AylexOG_27, BAjuniper_25, BabyDaisy_27, Bachaco_24, BelmontSKP_27, Bengal_26, Bernstein_23, Brahms_23, BubbaBear_26, Burritobowl_26, CanFranMach_26, Celaena_24, ChiliPepper_24, Clayda5_23, Coltrane_23, CroZenni_26, CupcakePrincess_26, DickRichards_26, Didgeridoo_28, Dismas_24, Eden_23, Eula_26, Finalfrontier_27, FlameThrower_24, Franklin22_24, Gack_23, Grist_27, Icarian_26, IndyLu_26, Jabb_26, Jovita_26, Kamdara_24, Kate33_26, Katzastrophic_24, Kenzers_26, Kieran_24, Lahqtemish_26, Lilo27_26, Lynlen_26, MsUbiquitous_26, Nicky22_27, PastaFagioli_26, Pecas_26, PhigPhack_27, Phisb_26, QMacho_27, Quenya_25, Rollins_23, Rona_24, SanaSana_26, SansAfet_26, SarBear_26, Sharkboy_24, SirBeanington_26, Skylord_23, Slay_26, Softsoap_25, Stoor_25, Swervy_26, TukTuk_26, Vitas_23, WalkingDead_25,

Genes that have the "Most Annotated" start but do not call it:
• Loviatar_25,

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

Summary by start number:

Start 5:
• Found in 42 of 69 (60.9%) of genes in pham
• Manual Annotations of this start: 1 of 66
• Called 2.4% of time when present
• Phage (with cluster) where this start called: Loviatar_25 (EB),

Start 7:
• Found in 69 of 69 (100.0%) of genes in pham
• Manual Annotations of this start: 65 of 66
• Called 98.6% of time when present
• Phage (with cluster) where this start called: Akino08_24 (EB), Albedo_26 (EB), AnnaLie_27 (EB), Armstrong_23 (EB), Arroyo_27 (EB), AvGardian_26 (EB), AylexOG_27 (EB), BAjuniper_25 (EB), BabyDaisy_27 (EB), Bachaco_24 (EB), BelmontSKP_27 (EB), Bengal_26 (EB), Bernstein_23 (EB), Brahms_23 (EB), BubbaBear_26 (EB), Burritobowl_26 (EB), CanFranMach_26 (EB), Celaena_24 (EB), ChiliPepper_24 (EB), Clayda5_23 (EB), Coltrane_23 (EB), CroZenni_26 (EB), CupcakePrincess_26 (EB), DickRichards_26 (EB), Didgeridoo_28 (EB), Dismas_24 (EB), Eden_23 (EB), Eula_26 (EB), Finalfrontier_27 (EB), FlameThrower_24 (EB), Franklin22_24 (EB), Gack_23 (EB), Grist_27 (EB), Icarian_26 (EB), IndyLu_26 (EB),

Jabb_26 (EB), Jovita_26 (EB), Kamdara_24 (EB), Kate33_26 (EB), Katzastrophic_24 (EB), Kenzers_26 (EB), Kieran_24 (EB), Lahqtemish_26 (EB), Lilo27_26 (EB), Lynlen_26 (EB), MsUbiquitous_26 (EB), Nicky22_27 (EB), PastaFagioli_26 (EB), Pecas_26 (EB), PhigPhack_27 (EB), Phisb_26 (EB), QMacho_27 (EB), Quenya_25 (EB), Rollins_23 (EB), Rona_24 (EB), SanaSana_26 (EB), SansAfet_26 (EB), SarBear_26 (EB), Sharkboy_24 (EB), SirBeanington_26 (EB), Skylord_23 (EB), Slay_26 (EB), Softsoap_25 (EB), Stoor_25 (EB), Swervy_26 (EB), TukTuk_26 (EB), Vitas_23 (EB), WalkingDead_25 (EB),

Summary by clusters:

There is one cluster represented in this pham: EB

Info for manual annotations of cluster EB:
•Start number 5 was manually annotated 1 time for cluster EB.
•Start number 7 was manually annotated 65 times for cluster EB.

Gene Information:

Gene: Akino08_24 Start: 20708, Stop: 21310, Start Num: 7
Candidate Starts for Akino08_24:
(Start: 5 @20654 has 1 MA's), (Start: 7 @20708 has 65 MA's), (12, 20765), (13, 20771), (18, 20843), (19, 20852), (32, 21053), (41, 21113), (46, 21224),

Gene: Albedo_26 Start: 20059, Stop: 20655, Start Num: 7
Candidate Starts for Albedo_26:
(1, 19894), (Start: 5 @20005 has 1 MA's), (Start: 7 @20059 has 65 MA's), (18, 20194), (19, 20203), (23, 20251), (32, 20401), (46, 20572),

Gene: AnnaLie_27 Start: 20369, Stop: 20965, Start Num: 7
Candidate Starts for AnnaLie_27:
(Start: 5 @20315 has 1 MA's), (Start: 7 @20369 has 65 MA's), (13, 20432), (19, 20513), (25, 20588), (30, 20696), (31, 20699), (32, 20711), (37, 20750), (46, 20882), (52, 20948),

Gene: Armstrong_23 Start: 17654, Stop: 18307, Start Num: 7
Candidate Starts for Armstrong_23:
(2, 17507), (Start: 7 @17654 has 65 MA's), (12, 17711), (18, 17789), (20, 17810), (29, 17945), (31, 17990), (32, 18002), (45, 18146), (47, 18179),

Gene: Arroyo_27 Start: 20568, Stop: 21164, Start Num: 7
Candidate Starts for Arroyo_27:
(Start: 5 @20514 has 1 MA's), (Start: 7 @20568 has 65 MA's), (18, 20703), (30, 20895), (31, 20898), (32, 20910), (37, 20949), (46, 21081), (52, 21147),

Gene: AvGardian_26 Start: 20332, Stop: 20892, Start Num: 7
Candidate Starts for AvGardian_26:
(Start: 7 @20332 has 65 MA's), (12, 20389), (13, 20395), (19, 20476), (22, 20515), (30, 20635), (32, 20650), (39, 20698), (43, 20731), (46, 20809), (50, 20848),

Gene: AylexOG_27 Start: 20397, Stop: 20993, Start Num: 7
Candidate Starts for AylexOG_27:

(Start: 5 @20343 has 1 MA's), (Start: 7 @20397 has 65 MA's), (18, 20532), (19, 20541), (30, 20724), (42, 20802), (46, 20910),

Gene: BAjuniper_25 Start: 20868, Stop: 21506, Start Num: 7
Candidate Starts for BAjuniper_25:
(Start: 7 @20868 has 65 MA's), (12, 20925), (18, 21003), (24, 21075), (29, 21159), (31, 21204), (32, 21216), (35, 21234), (46, 21387), (48, 21399),

Gene: BabyDaisy_27 Start: 20190, Stop: 20795, Start Num: 7
Candidate Starts for BabyDaisy_27:
(Start: 7 @20190 has 65 MA's), (15, 20280), (19, 20340), (23, 20388), (27, 20448), (32, 20538), (37, 20577), (46, 20709),

Gene: Bachaco_24 Start: 20900, Stop: 21460, Start Num: 7
Candidate Starts for Bachaco_24:
(Start: 7 @20900 has 65 MA's), (13, 20960), (18, 21032), (32, 21212), (46, 21374), (50, 21413),

Gene: BelmontSKP_27 Start: 20369, Stop: 20965, Start Num: 7
Candidate Starts for BelmontSKP_27:
(Start: 5 @20315 has 1 MA's), (Start: 7 @20369 has 65 MA's), (13, 20432), (19, 20513), (25, 20588), (30, 20696), (31, 20699), (32, 20711), (37, 20750), (46, 20882), (52, 20948),

Gene: Bengal_26 Start: 19955, Stop: 20551, Start Num: 7
Candidate Starts for Bengal_26:
(Start: 5 @19901 has 1 MA's), (Start: 7 @19955 has 65 MA's), (18, 20090), (19, 20099), (23, 20147), (27, 20207), (32, 20297), (37, 20336), (46, 20468),

Gene: Bernstein_23 Start: 17709, Stop: 18362, Start Num: 7
Candidate Starts for Bernstein_23:
(2, 17562), (Start: 7 @17709 has 65 MA's), (12, 17766), (18, 17844), (20, 17865), (29, 18000), (31, 18045), (32, 18057), (45, 18201), (47, 18234),

Gene: Brahms_23 Start: 17656, Stop: 18309, Start Num: 7
Candidate Starts for Brahms_23:
(2, 17509), (Start: 7 @17656 has 65 MA's), (12, 17713), (18, 17791), (20, 17812), (29, 17947), (31, 17992), (32, 18004), (45, 18148), (47, 18181),

Gene: BubbaBear_26 Start: 20058, Stop: 20654, Start Num: 7
Candidate Starts for BubbaBear_26:
(Start: 5 @20004 has 1 MA's), (Start: 7 @20058 has 65 MA's), (18, 20193), (19, 20202), (23, 20250), (27, 20310), (32, 20400), (37, 20439), (46, 20571),

Gene: Burritobowl_26 Start: 20125, Stop: 20721, Start Num: 7
Candidate Starts for Burritobowl_26:
(Start: 5 @20071 has 1 MA's), (Start: 7 @20125 has 65 MA's), (18, 20260), (23, 20317), (27, 20377), (32, 20467), (37, 20506), (46, 20638),

Gene: CanFranMach_26 Start: 20069, Stop: 20665, Start Num: 7
Candidate Starts for CanFranMach_26:
(Start: 7 @20069 has 65 MA's), (13, 20132), (16, 20165), (18, 20204), (19, 20213), (30, 20396), (31, 20399), (32, 20411), (37, 20450), (42, 20474), (46, 20582), (52, 20648),

Gene: Celaena_24 Start: 20848, Stop: 21435, Start Num: 7

Candidate Starts for Celaena_24:
(Start: 7 @20848 has 65 MA's), (12, 20902), (13, 20908), (17, 20980), (19, 21010), (31, 21175), (32, 21187), (46, 21349), (50, 21388),

Gene: ChiliPepper_24 Start: 20353, Stop: 20937, Start Num: 7
Candidate Starts for ChiliPepper_24:
(3, 20236), (Start: 5 @20299 has 1 MA's), (Start: 7 @20353 has 65 MA's), (8, 20374), (19, 20515), (31, 20680), (32, 20692), (46, 20854),

Gene: Clayda5_23 Start: 17660, Stop: 18316, Start Num: 7
Candidate Starts for Clayda5_23:
(2, 17513), (Start: 7 @17660 has 65 MA's), (12, 17717), (18, 17795), (20, 17816), (29, 17951), (31, 17996), (32, 18008), (45, 18152), (47, 18185),

Gene: Coltrane_23 Start: 17656, Stop: 18309, Start Num: 7
Candidate Starts for Coltrane_23:
(2, 17509), (Start: 7 @17656 has 65 MA's), (12, 17713), (18, 17791), (20, 17812), (29, 17947), (31, 17992), (32, 18004), (45, 18148), (47, 18181),

Gene: CroZenni_26 Start: 19963, Stop: 20559, Start Num: 7
Candidate Starts for CroZenni_26:
(Start: 5 @19909 has 1 MA's), (Start: 7 @19963 has 65 MA's), (18, 20098), (23, 20155), (32, 20305), (37, 20344), (46, 20476),

Gene: CupcakePrincess_26 Start: 20084, Stop: 20680, Start Num: 7
Candidate Starts for CupcakePrincess_26:
(Start: 5 @20030 has 1 MA's), (Start: 7 @20084 has 65 MA's), (18, 20219), (19, 20228), (30, 20411), (42, 20489), (46, 20597),

Gene: DickRichards_26 Start: 20454, Stop: 21050, Start Num: 7
Candidate Starts for DickRichards_26:
(Start: 5 @20400 has 1 MA's), (Start: 7 @20454 has 65 MA's), (18, 20589), (23, 20646), (27, 20706), (32, 20796), (37, 20835), (46, 20967),

Gene: Didgeridoo_28 Start: 20192, Stop: 20800, Start Num: 7
Candidate Starts for Didgeridoo_28:
(Start: 7 @20192 has 65 MA's), (15, 20282), (19, 20342), (23, 20390), (27, 20450), (30, 20531), (46, 20714),

Gene: Dismas_24 Start: 20353, Stop: 20937, Start Num: 7
Candidate Starts for Dismas_24:
(3, 20236), (Start: 5 @20299 has 1 MA's), (Start: 7 @20353 has 65 MA's), (8, 20374), (19, 20515), (21, 20533), (31, 20680), (32, 20692), (46, 20854),

Gene: Eden_23 Start: 17898, Stop: 18476, Start Num: 7
Candidate Starts for Eden_23:
(Start: 7 @17898 has 65 MA's), (14, 17964), (28, 18156), (32, 18219), (34, 18231), (39, 18267), (45, 18351), (46, 18378), (49, 18420),

Gene: Eula_26 Start: 20045, Stop: 20641, Start Num: 7
Candidate Starts for Eula_26:
(Start: 5 @19991 has 1 MA's), (Start: 7 @20045 has 65 MA's), (18, 20180), (19, 20189), (30, 20372), (42, 20450), (46, 20558),

Gene: Finalfrontier_27 Start: 20556, Stop: 21164, Start Num: 7
Candidate Starts for Finalfrontier_27:
(Start: 7 @20556 has 65 MA's), (15, 20646), (19, 20706), (23, 20754), (27, 20814), (30, 20895), (46, 21078),

Gene: FlameThrower_24 Start: 20385, Stop: 20948, Start Num: 7
Candidate Starts for FlameThrower_24:
(Start: 7 @20385 has 65 MA's), (12, 20442), (13, 20448), (18, 20520), (31, 20688), (46, 20862), (50, 20901),

Gene: Franklin22_24 Start: 18085, Stop: 18663, Start Num: 7
Candidate Starts for Franklin22_24:
(Start: 7 @18085 has 65 MA's), (8, 18109), (32, 18406), (34, 18418), (39, 18454), (40, 18463), (46, 18565), (49, 18607),

Gene: Gack_23 Start: 17972, Stop: 18550, Start Num: 7
Candidate Starts for Gack_23:
(4, 17867), (Start: 7 @17972 has 65 MA's), (8, 17996), (32, 18293), (34, 18305), (39, 18341), (40, 18350), (46, 18452), (49, 18494),

Gene: Grist_27 Start: 20014, Stop: 20619, Start Num: 7
Candidate Starts for Grist_27:
(Start: 7 @20014 has 65 MA's), (15, 20104), (19, 20164), (23, 20212), (27, 20272), (32, 20362), (37, 20401), (46, 20533),

Gene: Icarian_26 Start: 20628, Stop: 21230, Start Num: 7
Candidate Starts for Icarian_26:
(Start: 5 @20574 has 1 MA's), (Start: 7 @20628 has 65 MA's), (12, 20685), (13, 20691), (18, 20763), (19, 20772), (32, 20973), (41, 21033), (46, 21144),

Gene: IndyLu_26 Start: 20011, Stop: 20610, Start Num: 7
Candidate Starts for IndyLu_26:
(6, 19993), (Start: 7 @20011 has 65 MA's), (19, 20155), (23, 20203), (27, 20263), (30, 20338), (31, 20341), (32, 20353), (37, 20392), (46, 20524),

Gene: Jabb_26 Start: 20084, Stop: 20680, Start Num: 7
Candidate Starts for Jabb_26:
(Start: 5 @20030 has 1 MA's), (Start: 7 @20084 has 65 MA's), (18, 20219), (19, 20228), (30, 20411), (42, 20489), (46, 20597),

Gene: Jovita_26 Start: 20149, Stop: 20745, Start Num: 7
Candidate Starts for Jovita_26:
(Start: 5 @20095 has 1 MA's), (Start: 7 @20149 has 65 MA's), (18, 20284), (19, 20293), (23, 20341), (27, 20401), (32, 20491), (37, 20530), (46, 20662),

Gene: Kamdara_24 Start: 20352, Stop: 20936, Start Num: 7
Candidate Starts for Kamdara_24:
(3, 20235), (Start: 5 @20298 has 1 MA's), (Start: 7 @20352 has 65 MA's), (8, 20373), (19, 20514), (31, 20679), (32, 20691), (46, 20853),

Gene: Kate33_26 Start: 20013, Stop: 20618, Start Num: 7
Candidate Starts for Kate33_26:

(Start: 7 @20013 has 65 MA's), (15, 20103), (19, 20163), (23, 20211), (27, 20271), (32, 20361), (37, 20400), (46, 20532),

Gene: Katzastrophic_24 Start: 20506, Stop: 21066, Start Num: 7
Candidate Starts for Katzastrophic_24:
(Start: 7 @20506 has 65 MA's), (13, 20566), (18, 20638), (32, 20818), (46, 20980), (50, 21019),

Gene: Kenzers_26 Start: 20033, Stop: 20629, Start Num: 7
Candidate Starts for Kenzers_26:
(Start: 5 @19979 has 1 MA's), (Start: 7 @20033 has 65 MA's), (18, 20168), (19, 20177), (23, 20225), (32, 20375), (46, 20546),

Gene: Kieran_24 Start: 20356, Stop: 20940, Start Num: 7
Candidate Starts for Kieran_24:
(3, 20239), (Start: 5 @20302 has 1 MA's), (Start: 7 @20356 has 65 MA's), (8, 20377), (19, 20518), (21, 20536), (31, 20683), (32, 20695), (46, 20857),

Gene: Lahqtemish_26 Start: 20059, Stop: 20661, Start Num: 7
Candidate Starts for Lahqtemish_26:
(Start: 7 @20059 has 65 MA's), (12, 20116), (13, 20122), (20, 20215), (26, 20287), (32, 20407), (46, 20578),

Gene: Lilo27_26 Start: 20019, Stop: 20615, Start Num: 7
Candidate Starts for Lilo27_26:
(Start: 5 @19965 has 1 MA's), (Start: 7 @20019 has 65 MA's), (18, 20154), (19, 20163), (42, 20424), (46, 20532),

Gene: Loviatar_25 Start: 20669, Stop: 21325, Start Num: 5
Candidate Starts for Loviatar_25:
(Start: 5 @20669 has 1 MA's), (Start: 7 @20723 has 65 MA's), (12, 20780), (13, 20786), (18, 20858), (19, 20867), (32, 21068), (41, 21128), (46, 21239),

Gene: Lynlen_26 Start: 20033, Stop: 20629, Start Num: 7
Candidate Starts for Lynlen_26:
(Start: 5 @19979 has 1 MA's), (Start: 7 @20033 has 65 MA's), (18, 20168), (19, 20177), (23, 20225), (32, 20375), (46, 20546),

Gene: MsUbiquitous_26 Start: 20084, Stop: 20680, Start Num: 7
Candidate Starts for MsUbiquitous_26:
(Start: 5 @20030 has 1 MA's), (Start: 7 @20084 has 65 MA's), (18, 20219), (19, 20228), (30, 20411), (42, 20489), (46, 20597),

Gene: Nicky22_27 Start: 20495, Stop: 21091, Start Num: 7
Candidate Starts for Nicky22_27:
(Start: 5 @20441 has 1 MA's), (Start: 7 @20495 has 65 MA's), (19, 20639), (42, 20900), (46, 21008),

Gene: PastaFagioli_26 Start: 20050, Stop: 20646, Start Num: 7
Candidate Starts for PastaFagioli_26:
(Start: 7 @20050 has 65 MA's), (12, 20107), (13, 20113), (20, 20206), (23, 20242), (32, 20392), (38, 20431), (46, 20563),

Gene: Pecas_26 Start: 20045, Stop: 20641, Start Num: 7
Candidate Starts for Pecas_26:

(Start: 5 @19991 has 1 MA's), (Start: 7 @20045 has 65 MA's), (18, 20180), (19, 20189), (30, 20372), (42, 20450), (46, 20558),

Gene: PhigPhack_27 Start: 20036, Stop: 20632, Start Num: 7
Candidate Starts for PhigPhack_27:
(Start: 5 @19982 has 1 MA's), (Start: 7 @20036 has 65 MA's), (18, 20171), (30, 20363), (31, 20366), (32, 20378), (37, 20417), (46, 20549),

Gene: Phisb_26 Start: 20059, Stop: 20655, Start Num: 7
Candidate Starts for Phisb_26:
(Start: 5 @20005 has 1 MA's), (Start: 7 @20059 has 65 MA's), (19, 20203), (23, 20251), (32, 20401), (46, 20572),

Gene: QMacho_27 Start: 20528, Stop: 21124, Start Num: 7
Candidate Starts for QMacho_27:
(Start: 5 @20474 has 1 MA's), (Start: 7 @20528 has 65 MA's), (18, 20663), (19, 20672), (30, 20855), (42, 20933), (46, 21041),

Gene: Quenya_25 Start: 20372, Stop: 20932, Start Num: 7
Candidate Starts for Quenya_25:
(Start: 7 @20372 has 65 MA's), (9, 20411), (14, 20435), (18, 20504), (19, 20513), (20, 20525), (32, 20684), (33, 20687), (44, 20801), (46, 20846), (50, 20885), (51, 20906),

Gene: Rollins_23 Start: 17709, Stop: 18362, Start Num: 7
Candidate Starts for Rollins_23:
(2, 17562), (Start: 7 @17709 has 65 MA's), (12, 17766), (18, 17844), (20, 17865), (29, 18000), (31, 18045), (32, 18057), (45, 18201), (47, 18234),

Gene: Rona_24 Start: 20353, Stop: 20937, Start Num: 7
Candidate Starts for Rona_24:
(3, 20236), (Start: 5 @20299 has 1 MA's), (Start: 7 @20353 has 65 MA's), (8, 20374), (19, 20515), (31, 20680), (32, 20692), (46, 20854),

Gene: SanaSana_26 Start: 20662, Stop: 21264, Start Num: 7
Candidate Starts for SanaSana_26:
(Start: 5 @20608 has 1 MA's), (Start: 7 @20662 has 65 MA's), (12, 20719), (13, 20725), (18, 20797), (19, 20806), (32, 21007), (41, 21067), (46, 21178),

Gene: SansAfet_26 Start: 19971, Stop: 20567, Start Num: 7
Candidate Starts for SansAfet_26:
(Start: 5 @19917 has 1 MA's), (Start: 7 @19971 has 65 MA's), (13, 20034), (19, 20115), (25, 20190), (30, 20298), (31, 20301), (32, 20313), (37, 20352), (46, 20484), (52, 20550),

Gene: SarBear_26 Start: 20025, Stop: 20621, Start Num: 7
Candidate Starts for SarBear_26:
(1, 19860), (Start: 5 @19971 has 1 MA's), (Start: 7 @20025 has 65 MA's), (11, 20079), (18, 20160), (19, 20169), (23, 20217), (27, 20277), (31, 20355), (32, 20367), (37, 20406), (46, 20538),

Gene: Sharkboy_24 Start: 20340, Stop: 20924, Start Num: 7
Candidate Starts for Sharkboy_24:
(3, 20223), (Start: 5 @20286 has 1 MA's), (Start: 7 @20340 has 65 MA's), (8, 20361), (10, 20388), (19, 20502), (31, 20667), (32, 20679), (46, 20841),

Gene: SirBeanington_26 Start: 20067, Stop: 20663, Start Num: 7
Candidate Starts for SirBeanington_26:
(1, 19902), (Start: 5 @20013 has 1 MA's), (Start: 7 @20067 has 65 MA's), (18, 20202), (19, 20211), (23, 20259), (32, 20409), (46, 20580),

Gene: Skylord_23 Start: 17657, Stop: 18313, Start Num: 7
Candidate Starts for Skylord_23:
(2, 17510), (Start: 7 @17657 has 65 MA's), (12, 17714), (18, 17792), (20, 17813), (29, 17948), (31, 17993), (32, 18005), (45, 18149), (47, 18182),

Gene: Slay_26 Start: 20568, Stop: 21164, Start Num: 7
Candidate Starts for Slay_26:
(Start: 5 @20514 has 1 MA's), (Start: 7 @20568 has 65 MA's), (18, 20703), (27, 20820), (32, 20910), (46, 21081),

Gene: Softsoap_25 Start: 19794, Stop: 20390, Start Num: 7
Candidate Starts for Softsoap_25:
(Start: 5 @19740 has 1 MA's), (Start: 7 @19794 has 65 MA's), (18, 19929), (19, 19938), (23, 19986), (27, 20046), (32, 20136), (37, 20175), (46, 20307),

Gene: Stoor_25 Start: 20659, Stop: 21261, Start Num: 7
Candidate Starts for Stoor_25:
(Start: 5 @20605 has 1 MA's), (Start: 7 @20659 has 65 MA's), (12, 20716), (13, 20722), (18, 20794), (19, 20803), (32, 21004), (41, 21064), (46, 21175),

Gene: Swervy_26 Start: 20025, Stop: 20621, Start Num: 7
Candidate Starts for Swervy_26:
(1, 19860), (Start: 5 @19971 has 1 MA's), (Start: 7 @20025 has 65 MA's), (11, 20079), (18, 20160), (19, 20169), (30, 20352), (36, 20403), (42, 20430), (46, 20538),

Gene: TukTuk_26 Start: 20084, Stop: 20680, Start Num: 7
Candidate Starts for TukTuk_26:
(Start: 5 @20030 has 1 MA's), (Start: 7 @20084 has 65 MA's), (18, 20219), (19, 20228), (23, 20276), (27, 20336), (32, 20426), (37, 20465), (46, 20597),

Gene: Vitas_23 Start: 17649, Stop: 18302, Start Num: 7
Candidate Starts for Vitas_23:
(2, 17502), (Start: 7 @17649 has 65 MA's), (12, 17706), (18, 17784), (20, 17805), (29, 17940), (31, 17985), (32, 17997), (45, 18141), (47, 18174),

Gene: WalkingDead_25 Start: 20783, Stop: 21385, Start Num: 7
Candidate Starts for WalkingDead_25:
(Start: 5 @20729 has 1 MA's), (Start: 7 @20783 has 65 MA's), (12, 20840), (13, 20846), (18, 20918), (19, 20927), (32, 21128), (41, 21188), (46, 21299),