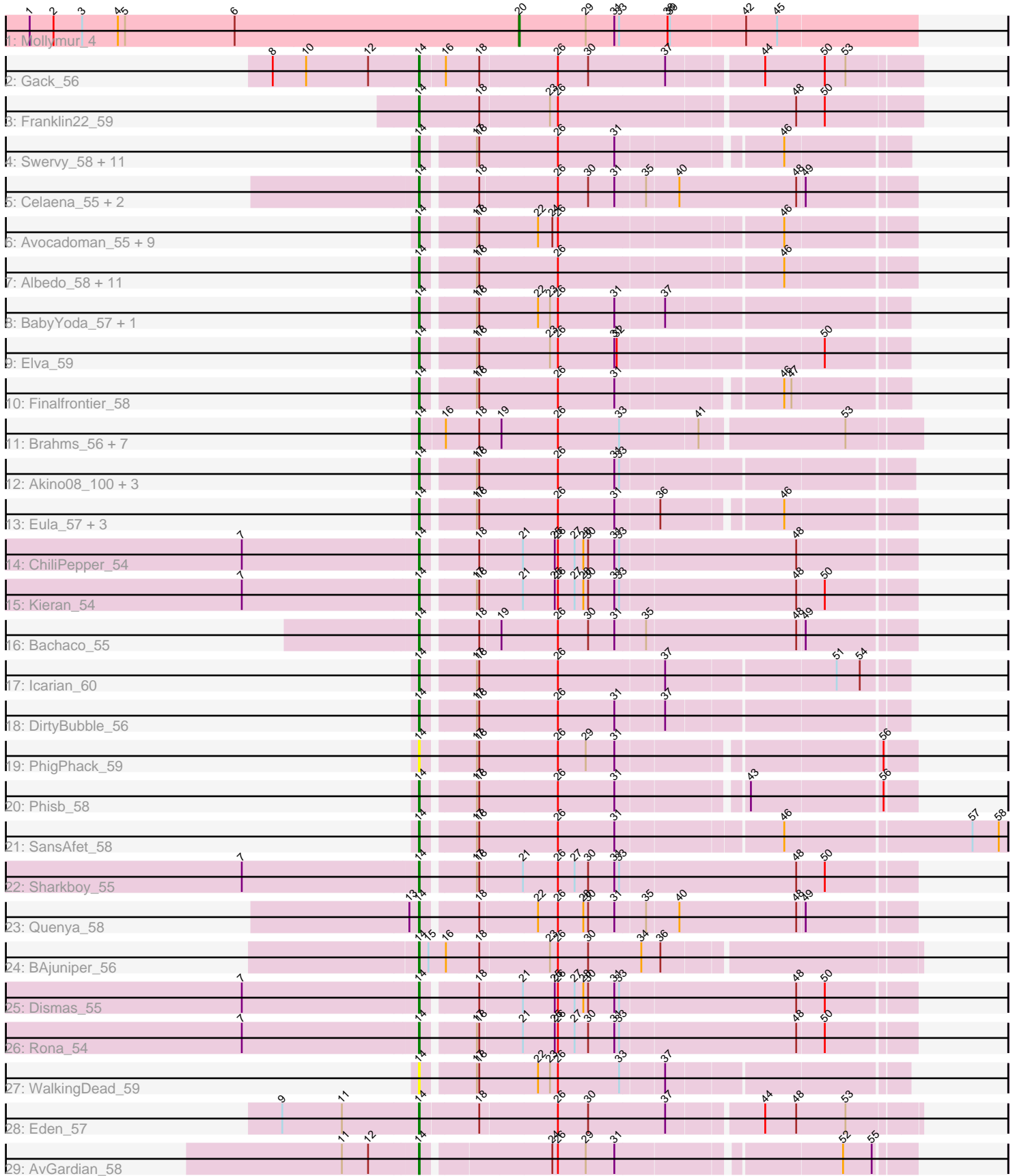


Pham 224532



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 224532 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224532 has 76 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Mollymur_4
- Track 2 : Gack_56
- Track 3 : Franklin22_59
- Track 4 : Swervy_58, CroZenni_57, Cashington_56, BubbaBear_56, Slay_57, Nicky22_58, Burritobowl_58, QMacho_59, TukTuk_58, Jovita_56, Doobus_55, SarBear_57
- Track 5 : Celaena_55, FlameThrower_54, Katzastrophic_56
- Track 6 : Avocadoman_55, Didgeridoo_61, Softsoap_58, Lahqtemish_56, Abigail_56, IndyLu_58, BabyDaisy_58, LimaBean_57, PastaFagioli_56, Kate33_58
- Track 7 : Albedo_58, BelmontSKP_57, Milomuff_59, Lynlen_58, Kenzers_57, DickRichards_55, AnnaLie_57, Bengal_59, Arroyo_57, Johnathan_56, Solea_59, Albright_54
- Track 8 : BabyYoda_57, Stromboli_57
- Track 9 : Elva_59
- Track 10 : Finalfrontier_58
- Track 11 : Brahms_56, Coltrane_56, Armstrong_56, Vitas_56, Clayda5_58, Bernstein_56, Skylord_56, Rollins_56
- Track 12 : Akino08_100, Stoor_57, SanaSana_59, Loviatar_100
- Track 13 : Eula_57, MsUbiquitous_57, Jabb_57, CupcakePrincess_57
- Track 14 : ChiliPepper_54
- Track 15 : Kieran_54
- Track 16 : Bachaco_55
- Track 17 : Icarian_60
- Track 18 : DirtyBubble_56
- Track 19 : PhigPhack_59
- Track 20 : Phisb_58
- Track 21 : SansAfet_58
- Track 22 : Sharkboy_55
- Track 23 : Quenya_58
- Track 24 : BAjuniper_56
- Track 25 : Dismas_55
- Track 26 : Rona_54
- Track 27 : WalkingDead_59
- Track 28 : Eden_57
- Track 29 : AvGuardian_58

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

The start number called the most often in the published annotations is 14, it was called in 62 of the 63 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail_56, Akino08_100, Albedo_58, Albright_54, AnnaLie_57, Armstrong_56, Arroyo_57, AvGardian_58, Avocadoman_55, BAjuniper_56, BabyDaisy_58, BabyYoda_57, Bachaco_55, BelmontSKP_57, Bengal_59, Bernstein_56, Brahms_56, BubbaBear_56, Burritobowl_58, Cashington_56, Celaena_55, ChiliPepper_54, Clayda5_58, Coltrane_56, CroZenni_57, CupcakePrincess_57, DickRichards_55, Didgeridoo_61, DirtyBubble_56, Dismas_55, Doobus_55, Eden_57, Elva_59, Eula_57, Finalfrontier_58, FlameThrower_54, Franklin22_59, Gack_56, Icarian_60, IndyLu_58, Jabb_57, Johnathan_56, Jovita_56, Kate33_58, Katzastrophic_56, Kenzers_57, Kieran_54, Lahqtemish_56, LimaBean_57, Loviatar_100, Lynlen_58, Milomuff_59, MsUbiquitous_57, Nicky22_58, PastaFagioli_56, PhigPhack_59, Phisb_58, QMacho_59, Quenya_58, Rollins_56, Rona_54, SanaSana_59, SansAfet_58, SarBear_57, Sharkboy_55, Skylord_56, Slay_57, Softsoap_58, Solea_59, Stoor_57, Stromboli_57, Swervy_58, TukTuk_58, Vitas_56, WalkingDead_59,

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

-

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

- Mollymur_4,

Summary by start number:

Start 14:

- Found in 75 of 76 (98.7%) of genes in pham
- Manual Annotations of this start: 62 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abigail_56 (EB), Akino08_100 (EB), Albedo_58 (EB), Albright_54 (EB), AnnaLie_57 (EB), Armstrong_56 (EB), Arroyo_57 (EB), AvGardian_58 (EB), Avocadoman_55 (EB), BAjuniper_56 (EB), BabyDaisy_58 (EB), BabyYoda_57 (EB), Bachaco_55 (EB), BelmontSKP_57 (EB), Bengal_59 (EB), Bernstein_56 (EB), Brahms_56 (EB), BubbaBear_56 (EB), Burritobowl_58 (EB), Cashington_56 (EB), Celaena_55 (EB), ChiliPepper_54 (EB), Clayda5_58 (EB), Coltrane_56 (EB), CroZenni_57 (EB), CupcakePrincess_57 (EB), DickRichards_55 (EB), Didgeridoo_61 (EB), DirtyBubble_56 (EB), Dismas_55 (EB), Doobus_55 (EB), Eden_57 (EB), Elva_59 (EB), Eula_57 (EB), Finalfrontier_58 (EB), FlameThrower_54 (EB), Franklin22_59 (EB), Gack_56 (EB), Icarian_60 (EB), IndyLu_58 (EB), Jabb_57 (EB), Johnathan_56 (EB), Jovita_56 (EB), Kate33_58 (EB), Katzastrophic_56 (EB), Kenzers_57 (EB), Kieran_54 (EB), Lahqtemish_56 (EB), LimaBean_57 (EB), Loviatar_100 (EB), Lynlen_58 (EB), Milomuff_59 (EB), MsUbiquitous_57 (EB), Nicky22_58 (EB), PastaFagioli_56 (EB), PhigPhack_59 (EB), Phisb_58 (EB), QMacho_59 (EB), Quenya_58 (EB), Rollins_56 (EB), Rona_54 (EB), SanaSana_59 (EB), SansAfet_58 (EB), SarBear_57 (EB), Sharkboy_55 (EB), Skylord_56 (EB), Slay_57 (EB), Softsoap_58 (EB), Solea_59 (EB), Stoor_57 (EB), Stromboli_57 (EB), Swervy_58 (EB), TukTuk_58 (EB), Vitas_56 (EB), WalkingDead_59 (EB),

Start 20:

- Found in 1 of 76 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mollymur_4 (DL),

Summary by clusters:

There are 2 clusters represented in this pham: DL, EB,

Info for manual annotations of cluster DL:

- Start number 20 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster EB:

- Start number 14 was manually annotated 62 times for cluster EB.

Gene Information:

Gene: Abigail_56 Start: 36201, Stop: 36776, Start Num: 14

Candidate Starts for Abigail_56:

(Start: 14 @36201 has 62 MA's), (17, 36261), (18, 36264), (22, 36336), (24, 36354), (26, 36360), (46, 36624),

Gene: Akino08_100 Start: 38574, Stop: 39149, Start Num: 14

Candidate Starts for Akino08_100:

(Start: 14 @38574 has 62 MA's), (17, 38634), (18, 38637), (26, 38733), (31, 38802), (33, 38808),

Gene: Albedo_58 Start: 36929, Stop: 37501, Start Num: 14

Candidate Starts for Albedo_58:

(Start: 14 @36929 has 62 MA's), (17, 36989), (18, 36992), (26, 37088), (46, 37352),

Gene: Albright_54 Start: 35632, Stop: 36207, Start Num: 14

Candidate Starts for Albright_54:

(Start: 14 @35632 has 62 MA's), (17, 35692), (18, 35695), (26, 35791), (46, 36055),

Gene: AnnaLie_57 Start: 36858, Stop: 37430, Start Num: 14

Candidate Starts for AnnaLie_57:

(Start: 14 @36858 has 62 MA's), (17, 36918), (18, 36921), (26, 37017), (46, 37281),

Gene: Armstrong_56 Start: 34973, Stop: 35572, Start Num: 14

Candidate Starts for Armstrong_56:

(Start: 14 @34973 has 62 MA's), (16, 35003), (18, 35045), (19, 35072), (26, 35141), (33, 35216), (41, 35312), (53, 35483),

Gene: Arroyo_57 Start: 36969, Stop: 37541, Start Num: 14

Candidate Starts for Arroyo_57:

(Start: 14 @36969 has 62 MA's), (17, 37029), (18, 37032), (26, 37128), (46, 37392),

Gene: AvGardian_58 Start: 37129, Stop: 37695, Start Num: 14

Candidate Starts for AvGardian_58:

(11, 37036), (12, 37069), (Start: 14 @37129 has 62 MA's), (24, 37279), (26, 37285), (29, 37318), (31, 37354), (52, 37612), (55, 37648),

Gene: Avocadoman_55 Start: 35833, Stop: 36408, Start Num: 14

Candidate Starts for Avocadoman_55:

(Start: 14 @35833 has 62 MA's), (17, 35893), (18, 35896), (22, 35968), (24, 35986), (26, 35992), (46, 36256),

Gene: BAjuniper_56 Start: 37510, Stop: 38103, Start Num: 14

Candidate Starts for BAjuniper_56:

(Start: 14 @37510 has 62 MA's), (15, 37522), (16, 37543), (18, 37582), (23, 37666), (26, 37675), (30, 37711), (34, 37777), (36, 37801),

Gene: BabyDaisy_58 Start: 37133, Stop: 37708, Start Num: 14

Candidate Starts for BabyDaisy_58:

(Start: 14 @37133 has 62 MA's), (17, 37193), (18, 37196), (22, 37268), (24, 37286), (26, 37292), (46, 37556),

Gene: BabyYoda_57 Start: 37507, Stop: 38073, Start Num: 14

Candidate Starts for BabyYoda_57:

(Start: 14 @37507 has 62 MA's), (17, 37567), (18, 37570), (22, 37642), (23, 37657), (26, 37666), (31, 37735), (37, 37792),

Gene: Bachaco_55 Start: 38194, Stop: 38778, Start Num: 14

Candidate Starts for Bachaco_55:

(Start: 14 @38194 has 62 MA's), (18, 38257), (19, 38281), (26, 38350), (30, 38386), (31, 38419), (35, 38455), (48, 38641), (49, 38650),

Gene: BelmontSKP_57 Start: 36858, Stop: 37430, Start Num: 14

Candidate Starts for BelmontSKP_57:

(Start: 14 @36858 has 62 MA's), (17, 36918), (18, 36921), (26, 37017), (46, 37281),

Gene: Bengal_59 Start: 36736, Stop: 37308, Start Num: 14

Candidate Starts for Bengal_59:

(Start: 14 @36736 has 62 MA's), (17, 36796), (18, 36799), (26, 36895), (46, 37159),

Gene: Bernstein_56 Start: 34971, Stop: 35570, Start Num: 14

Candidate Starts for Bernstein_56:

(Start: 14 @34971 has 62 MA's), (16, 35001), (18, 35043), (19, 35070), (26, 35139), (33, 35214), (41, 35310), (53, 35481),

Gene: Brahms_56 Start: 34873, Stop: 35472, Start Num: 14

Candidate Starts for Brahms_56:

(Start: 14 @34873 has 62 MA's), (16, 34903), (18, 34945), (19, 34972), (26, 35041), (33, 35116), (41, 35212), (53, 35383),

Gene: BubbaBear_56 Start: 36610, Stop: 37182, Start Num: 14

Candidate Starts for BubbaBear_56:

(Start: 14 @36610 has 62 MA's), (17, 36670), (18, 36673), (26, 36769), (31, 36838), (46, 37033),

Gene: Burritobowl_58 Start: 36705, Stop: 37277, Start Num: 14

Candidate Starts for Burritobowl_58:

(Start: 14 @36705 has 62 MA's), (17, 36765), (18, 36768), (26, 36864), (31, 36933), (46, 37128),

Gene: Cashington_56 Start: 36062, Stop: 36634, Start Num: 14

Candidate Starts for Cashington_56:

(Start: 14 @36062 has 62 MA's), (17, 36122), (18, 36125), (26, 36221), (31, 36290), (46, 36485),

Gene: Celaena_55 Start: 37956, Stop: 38540, Start Num: 14

Candidate Starts for Celaena_55:

(Start: 14 @37956 has 62 MA's), (18, 38019), (26, 38112), (30, 38148), (31, 38181), (35, 38217), (40, 38256), (48, 38403), (49, 38412),

Gene: ChiliPepper_54 Start: 37266, Stop: 37850, Start Num: 14

Candidate Starts for ChiliPepper_54:

(7, 37047), (Start: 14 @37266 has 62 MA's), (18, 37329), (21, 37380), (25, 37419), (26, 37422), (27, 37443), (28, 37452), (30, 37458), (31, 37491), (33, 37497), (48, 37713),

Gene: Clayda5_58 Start: 34938, Stop: 35537, Start Num: 14

Candidate Starts for Clayda5_58:

(Start: 14 @34938 has 62 MA's), (16, 34968), (18, 35010), (19, 35037), (26, 35106), (33, 35181), (41, 35277), (53, 35448),

Gene: Coltrane_56 Start: 34873, Stop: 35472, Start Num: 14

Candidate Starts for Coltrane_56:

(Start: 14 @34873 has 62 MA's), (16, 34903), (18, 34945), (19, 34972), (26, 35041), (33, 35116), (41, 35212), (53, 35383),

Gene: CroZenni_57 Start: 36477, Stop: 37049, Start Num: 14

Candidate Starts for CroZenni_57:

(Start: 14 @36477 has 62 MA's), (17, 36537), (18, 36540), (26, 36636), (31, 36705), (46, 36900),

Gene: CupcakePrincess_57 Start: 36335, Stop: 36898, Start Num: 14

Candidate Starts for CupcakePrincess_57:

(Start: 14 @36335 has 62 MA's), (17, 36395), (18, 36398), (26, 36494), (31, 36563), (36, 36614), (46, 36749),

Gene: DickRichards_55 Start: 36652, Stop: 37224, Start Num: 14

Candidate Starts for DickRichards_55:

(Start: 14 @36652 has 62 MA's), (17, 36712), (18, 36715), (26, 36811), (46, 37075),

Gene: Didgeridoo_61 Start: 37517, Stop: 38092, Start Num: 14

Candidate Starts for Didgeridoo_61:

(Start: 14 @37517 has 62 MA's), (17, 37577), (18, 37580), (22, 37652), (24, 37670), (26, 37676), (46, 37940),

Gene: DirtyBubble_56 Start: 37177, Stop: 37743, Start Num: 14

Candidate Starts for DirtyBubble_56:

(Start: 14 @37177 has 62 MA's), (17, 37237), (18, 37240), (26, 37336), (31, 37405), (37, 37462),

Gene: Dismas_55 Start: 37187, Stop: 37771, Start Num: 14

Candidate Starts for Dismas_55:

(7, 36968), (Start: 14 @37187 has 62 MA's), (18, 37250), (21, 37301), (25, 37340), (26, 37343), (27, 37364), (28, 37373), (30, 37379), (31, 37412), (33, 37418), (48, 37634), (50, 37667),

Gene: Doobus_55 Start: 36141, Stop: 36713, Start Num: 14

Candidate Starts for Doobus_55:

(Start: 14 @36141 has 62 MA's), (17, 36201), (18, 36204), (26, 36300), (31, 36369), (46, 36564),

Gene: Eden_57 Start: 36088, Stop: 36681, Start Num: 14

Candidate Starts for Eden_57:

(9, 35917), (11, 35992), (Start: 14 @36088 has 62 MA's), (18, 36160), (26, 36253), (30, 36289), (37, 36385), (44, 36496), (48, 36535), (53, 36595),

Gene: Elva_59 Start: 37571, Stop: 38137, Start Num: 14

Candidate Starts for Elva_59:

(Start: 14 @37571 has 62 MA's), (17, 37631), (18, 37634), (23, 37721), (26, 37730), (31, 37799), (32, 37802), (50, 38042),

Gene: Eula_57 Start: 36321, Stop: 36884, Start Num: 14

Candidate Starts for Eula_57:

(Start: 14 @36321 has 62 MA's), (17, 36381), (18, 36384), (26, 36480), (31, 36549), (36, 36600), (46, 36735),

Gene: Finalfrontier_58 Start: 37434, Stop: 37991, Start Num: 14

Candidate Starts for Finalfrontier_58:

(Start: 14 @37434 has 62 MA's), (17, 37494), (18, 37497), (26, 37593), (31, 37662), (46, 37848), (47, 37857),

Gene: FlameThrower_54 Start: 36993, Stop: 37577, Start Num: 14

Candidate Starts for FlameThrower_54:

(Start: 14 @36993 has 62 MA's), (18, 37056), (26, 37149), (30, 37185), (31, 37218), (35, 37254), (40, 37293), (48, 37440), (49, 37449),

Gene: Franklin22_59 Start: 35732, Stop: 36328, Start Num: 14

Candidate Starts for Franklin22_59:

(Start: 14 @35732 has 62 MA's), (18, 35804), (23, 35888), (26, 35897), (48, 36179), (50, 36215),

Gene: Gack_56 Start: 35679, Stop: 36275, Start Num: 14

Candidate Starts for Gack_56:

(8, 35496), (10, 35538), (12, 35616), (Start: 14 @35679 has 62 MA's), (16, 35709), (18, 35751), (26, 35844), (30, 35880), (37, 35976), (44, 36087), (50, 36162), (53, 36186),

Gene: Icarian_60 Start: 38175, Stop: 38744, Start Num: 14

Candidate Starts for Icarian_60:

(Start: 14 @38175 has 62 MA's), (17, 38235), (18, 38238), (26, 38334), (37, 38460), (51, 38664), (54, 38691),

Gene: IndyLu_58 Start: 37065, Stop: 37640, Start Num: 14

Candidate Starts for IndyLu_58:

(Start: 14 @37065 has 62 MA's), (17, 37125), (18, 37128), (22, 37200), (24, 37218), (26, 37224), (46, 37488),

Gene: Jabb_57 Start: 36335, Stop: 36898, Start Num: 14

Candidate Starts for Jabb_57:

(Start: 14 @36335 has 62 MA's), (17, 36395), (18, 36398), (26, 36494), (31, 36563), (36, 36614), (46, 36749),

Gene: Johnathan_56 Start: 35979, Stop: 36551, Start Num: 14

Candidate Starts for Johnathan_56:

(Start: 14 @35979 has 62 MA's), (17, 36039), (18, 36042), (26, 36138), (46, 36402),

Gene: Jovita_56 Start: 36190, Stop: 36747, Start Num: 14

Candidate Starts for Jovita_56:

(Start: 14 @36190 has 62 MA's), (17, 36250), (18, 36253), (26, 36349), (31, 36418), (46, 36604),

Gene: Kate33_58 Start: 36810, Stop: 37385, Start Num: 14

Candidate Starts for Kate33_58:

(Start: 14 @36810 has 62 MA's), (17, 36870), (18, 36873), (22, 36945), (24, 36963), (26, 36969), (46, 37233),

Gene: Katzastrophic_56 Start: 37503, Stop: 38087, Start Num: 14

Candidate Starts for Katzastrophic_56:

(Start: 14 @37503 has 62 MA's), (18, 37566), (26, 37659), (30, 37695), (31, 37728), (35, 37764), (40, 37803), (48, 37950), (49, 37959),

Gene: Kenzers_57 Start: 36458, Stop: 37030, Start Num: 14

Candidate Starts for Kenzers_57:

(Start: 14 @36458 has 62 MA's), (17, 36518), (18, 36521), (26, 36617), (46, 36881),

Gene: Kieran_54 Start: 37228, Stop: 37812, Start Num: 14

Candidate Starts for Kieran_54:

(7, 37009), (Start: 14 @37228 has 62 MA's), (17, 37288), (18, 37291), (21, 37342), (25, 37381), (26, 37384), (27, 37405), (28, 37414), (30, 37420), (31, 37453), (33, 37459), (48, 37675), (50, 37708),

Gene: Lahqtemish_56 Start: 36892, Stop: 37464, Start Num: 14

Candidate Starts for Lahqtemish_56:

(Start: 14 @36892 has 62 MA's), (17, 36952), (18, 36955), (22, 37027), (24, 37045), (26, 37051), (46, 37315),

Gene: LimaBean_57 Start: 36079, Stop: 36654, Start Num: 14

Candidate Starts for LimaBean_57:

(Start: 14 @36079 has 62 MA's), (17, 36139), (18, 36142), (22, 36214), (24, 36232), (26, 36238), (46, 36502),

Gene: Loviatar_100 Start: 38589, Stop: 39164, Start Num: 14

Candidate Starts for Loviatar_100:

(Start: 14 @38589 has 62 MA's), (17, 38649), (18, 38652), (26, 38748), (31, 38817), (33, 38823),

Gene: Lynlen_58 Start: 36638, Stop: 37210, Start Num: 14

Candidate Starts for Lynlen_58:

(Start: 14 @36638 has 62 MA's), (17, 36698), (18, 36701), (26, 36797), (46, 37061),

Gene: Milomuff_59 Start: 36590, Stop: 37162, Start Num: 14

Candidate Starts for Milomuff_59:

(Start: 14 @36590 has 62 MA's), (17, 36650), (18, 36653), (26, 36749), (46, 37013),

Gene: Mollymur_4 Start: 1661, Stop: 2152, Start Num: 20

Candidate Starts for Mollymur_4:

(1, 1046), (2, 1076), (3, 1112), (4, 1157), (5, 1166), (6, 1304), (Start: 20 @1661 has 1 MA's), (29, 1745), (31, 1781), (33, 1787), (38, 1847), (39, 1850), (42, 1940), (45, 1979),

Gene: MsUbiquitous_57 Start: 36335, Stop: 36898, Start Num: 14
Candidate Starts for MsUbiquitous_57:
(Start: 14 @36335 has 62 MA's), (17, 36395), (18, 36398), (26, 36494), (31, 36563), (36, 36614), (46, 36749),

Gene: Nicky22_58 Start: 37090, Stop: 37653, Start Num: 14
Candidate Starts for Nicky22_58:
(Start: 14 @37090 has 62 MA's), (17, 37150), (18, 37153), (26, 37249), (31, 37318), (46, 37504),

Gene: PastaFagioli_56 Start: 37034, Stop: 37609, Start Num: 14
Candidate Starts for PastaFagioli_56:
(Start: 14 @37034 has 62 MA's), (17, 37094), (18, 37097), (22, 37169), (24, 37187), (26, 37193), (46, 37457),

Gene: PhigPhack_59 Start: 36600, Stop: 37166, Start Num: 14
Candidate Starts for PhigPhack_59:
(Start: 14 @36600 has 62 MA's), (17, 36660), (18, 36663), (26, 36759), (29, 36792), (31, 36828), (56, 37128),

Gene: Phisb_58 Start: 36756, Stop: 37322, Start Num: 14
Candidate Starts for Phisb_58:
(Start: 14 @36756 has 62 MA's), (17, 36816), (18, 36819), (26, 36915), (31, 36984), (43, 37128), (56, 37284),

Gene: QMacho_59 Start: 36978, Stop: 37547, Start Num: 14
Candidate Starts for QMacho_59:
(Start: 14 @36978 has 62 MA's), (17, 37038), (18, 37041), (26, 37137), (31, 37206), (46, 37392),

Gene: Quenya_58 Start: 37635, Stop: 38219, Start Num: 14
Candidate Starts for Quenya_58:
(13, 37623), (Start: 14 @37635 has 62 MA's), (18, 37698), (22, 37767), (26, 37791), (28, 37821), (30, 37827), (31, 37860), (35, 37896), (40, 37935), (48, 38082), (49, 38091),

Gene: Rollins_56 Start: 34971, Stop: 35570, Start Num: 14
Candidate Starts for Rollins_56:
(Start: 14 @34971 has 62 MA's), (16, 35001), (18, 35043), (19, 35070), (26, 35139), (33, 35214), (41, 35310), (53, 35481),

Gene: Rona_54 Start: 37178, Stop: 37762, Start Num: 14
Candidate Starts for Rona_54:
(7, 36959), (Start: 14 @37178 has 62 MA's), (17, 37238), (18, 37241), (21, 37292), (25, 37331), (26, 37334), (27, 37355), (30, 37370), (31, 37403), (33, 37409), (48, 37625), (50, 37658),

Gene: SanaSana_59 Start: 37932, Stop: 38507, Start Num: 14
Candidate Starts for SanaSana_59:
(Start: 14 @37932 has 62 MA's), (17, 37992), (18, 37995), (26, 38091), (31, 38160), (33, 38166),

Gene: SansAfet_58 Start: 36387, Stop: 37073, Start Num: 14
Candidate Starts for SansAfet_58:
(Start: 14 @36387 has 62 MA's), (17, 36447), (18, 36450), (26, 36546), (31, 36615), (46, 36810), (57, 37029), (58, 37062),

Gene: SarBear_57 Start: 36282, Stop: 36845, Start Num: 14

Candidate Starts for SarBear_57:

(Start: 14 @36282 has 62 MA's), (17, 36342), (18, 36345), (26, 36441), (31, 36510), (46, 36696),

Gene: Sharkboy_55 Start: 37277, Stop: 37861, Start Num: 14

Candidate Starts for Sharkboy_55:

(7, 37058), (Start: 14 @37277 has 62 MA's), (17, 37337), (18, 37340), (21, 37391), (26, 37433), (27, 37454), (30, 37469), (31, 37502), (33, 37508), (48, 37724), (50, 37757),

Gene: Skylord_56 Start: 34912, Stop: 35511, Start Num: 14

Candidate Starts for Skylord_56:

(Start: 14 @34912 has 62 MA's), (16, 34942), (18, 34984), (19, 35011), (26, 35080), (33, 35155), (41, 35251), (53, 35422),

Gene: Slay_57 Start: 36874, Stop: 37437, Start Num: 14

Candidate Starts for Slay_57:

(Start: 14 @36874 has 62 MA's), (17, 36934), (18, 36937), (26, 37033), (31, 37102), (46, 37288),

Gene: Softsoap_58 Start: 36640, Stop: 37215, Start Num: 14

Candidate Starts for Softsoap_58:

(Start: 14 @36640 has 62 MA's), (17, 36700), (18, 36703), (22, 36775), (24, 36793), (26, 36799), (46, 37063),

Gene: Solea_59 Start: 36589, Stop: 37161, Start Num: 14

Candidate Starts for Solea_59:

(Start: 14 @36589 has 62 MA's), (17, 36649), (18, 36652), (26, 36748), (46, 37012),

Gene: Stoor_57 Start: 37719, Stop: 38294, Start Num: 14

Candidate Starts for Stoor_57:

(Start: 14 @37719 has 62 MA's), (17, 37779), (18, 37782), (26, 37878), (31, 37947), (33, 37953),

Gene: Stromboli_57 Start: 37544, Stop: 38110, Start Num: 14

Candidate Starts for Stromboli_57:

(Start: 14 @37544 has 62 MA's), (17, 37604), (18, 37607), (22, 37679), (23, 37694), (26, 37703), (31, 37772), (37, 37829),

Gene: Swervy_58 Start: 36554, Stop: 37111, Start Num: 14

Candidate Starts for Swervy_58:

(Start: 14 @36554 has 62 MA's), (17, 36614), (18, 36617), (26, 36713), (31, 36782), (46, 36968),

Gene: TukTuk_58 Start: 36619, Stop: 37176, Start Num: 14

Candidate Starts for TukTuk_58:

(Start: 14 @36619 has 62 MA's), (17, 36679), (18, 36682), (26, 36778), (31, 36847), (46, 37033),

Gene: Vitas_56 Start: 34944, Stop: 35543, Start Num: 14

Candidate Starts for Vitas_56:

(Start: 14 @34944 has 62 MA's), (16, 34974), (18, 35016), (19, 35043), (26, 35112), (33, 35187), (41, 35283), (53, 35454),

Gene: WalkingDead_59 Start: 38299, Stop: 38865, Start Num: 14

Candidate Starts for WalkingDead_59:

(Start: 14 @38299 has 62 MA's), (17, 38359), (18, 38362), (22, 38434), (23, 38449), (26, 38458), (33, 38533), (37, 38584),