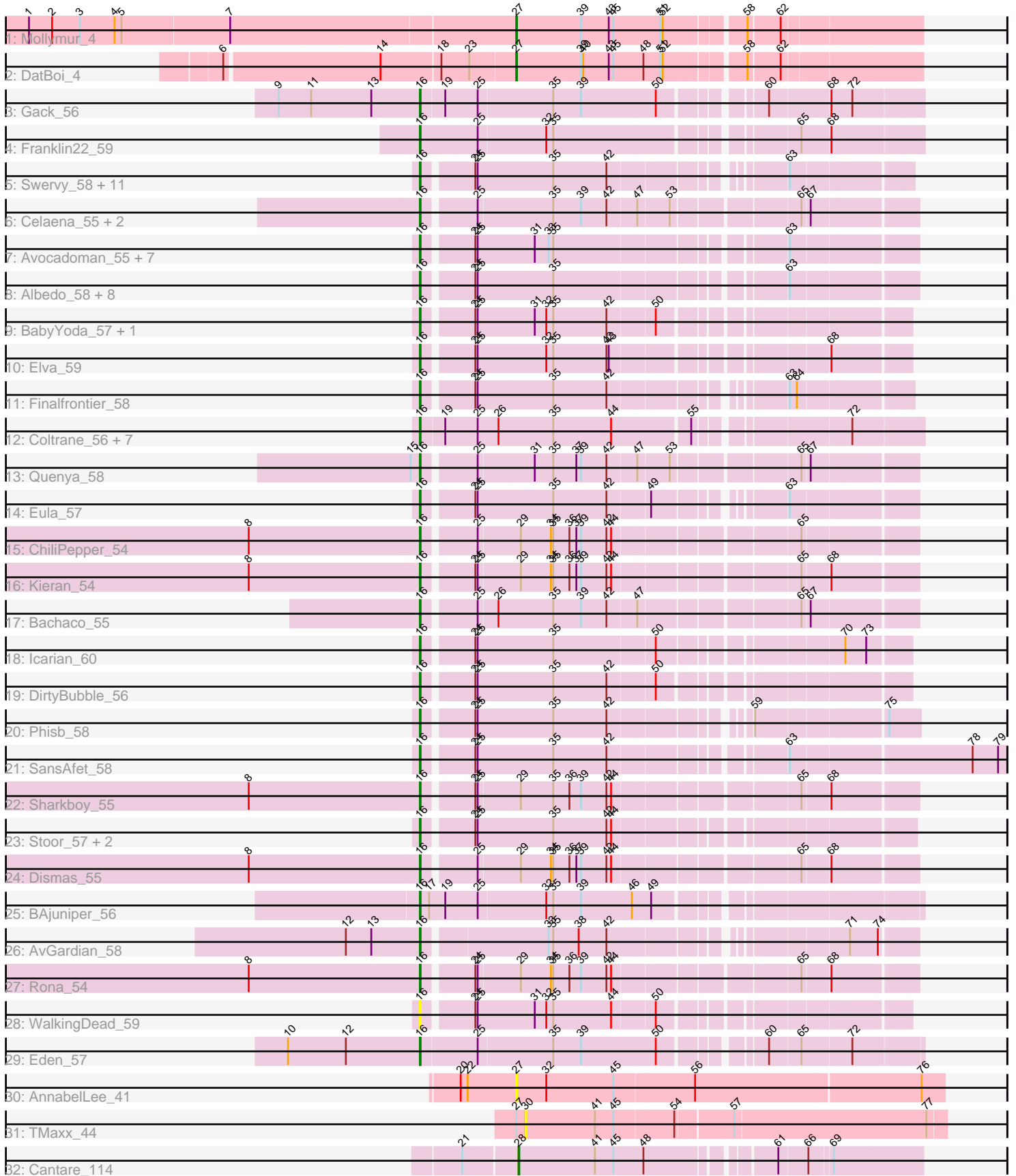


Pham 195590



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 195590 Report

This analysis was run 12/09/24 on database version 580.

Pham number 195590 has 70 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Mollymur_4
- Track 2 : DatBoi_4
- Track 3 : Gack_56
- Track 4 : Franklin22_59
- Track 5 : 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 6 : Celaena_55, FlameThrower_54, Katzastrophic_56
- Track 7 : Avocadoman_55, Didgeridoo_61, Lahqtemish_56, Abigail_56, IndyLu_58, Kate33_58, BabyDaisy_58, LimaBean_57
- Track 8 : Albedo_58, BelmontSKP_57, Lynlen_58, Kenzers_57, DickRichards_55, AnnaLie_57, Arroyo_57, Johnathan_56, Albright_54
- Track 9 : BabyYoda_57, Stromboli_57
- Track 10 : Elva_59
- Track 11 : Finalfrontier_58
- Track 12 : Coltrane_56, Armstrong_56, Brahms_56, Vitas_56, Clayda5_58, Bernstein_56, Skylord_56, Rollins_56
- Track 13 : Quenya_58
- Track 14 : Eula_57
- Track 15 : ChiliPepper_54
- Track 16 : Kieran_54
- Track 17 : Bachaco_55
- Track 18 : Icarian_60
- Track 19 : DirtyBubble_56
- Track 20 : Phisb_58
- Track 21 : SansAfet_58
- Track 22 : Sharkboy_55
- Track 23 : Stoor_57, SanaSana_59, Loviatar_100
- Track 24 : Dismas_55
- Track 25 : BAjuniper_56
- Track 26 : AvGardian_58
- Track 27 : Rona_54
- Track 28 : WalkingDead_59
- Track 29 : Eden_57
- Track 30 : AnnabelLee_41
- Track 31 : TMaxx_44
- Track 32 : Cantare_114

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

The start number called the most often in the published annotations is 16, it was called in 61 of the 64 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail_56, Albedo_58, Albright_54, AnnaLie_57, Armstrong_56, Arroyo_57, AvGardian_58, Avocadoman_55, BAjuniper_56, BabyDaisy_58, BabyYoda_57, Bachaco_55, BelmontSKP_57, Bernstein_56, Brahms_56, BubbaBear_56, Burritobowl_58, Cashington_56, Celaena_55, ChiliPepper_54, Clayda5_58, Coltrane_56, CroZenni_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, Johnathan_56, Jovita_56, Kate33_58, Katzastrophic_56, Kenzers_57, Kieran_54, Lahqtemish_56, LimaBean_57, Loviatar_100, Lynlen_58, Nicky22_58, Phisb_58, QMacho_59, Quenya_58, Rollins_56, Rona_54, SanaSana_59, SansAfet_58, SarBear_57, Sharkboy_55, Skylord_56, Slay_57, 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:

- AnnabelLee_41, Cantare_114, DatBoi_4, Mollymur_4, TMaxx_44,

Summary by start number:

Start 16:

- Found in 65 of 70 (92.9%) of genes in pham
- Manual Annotations of this start: 61 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abigail_56 (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), 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), 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), 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), Nicky22_58 (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), Stoor_57 (EB), Stromboli_57 (EB), Swervy_58 (EB), TukTuk_58 (EB), Vitas_56 (EB), WalkingDead_59 (EB),

Start 27:

- Found in 4 of 70 (5.7%) of genes in pham
- Manual Annotations of this start: 2 of 64
- Called 75.0% of time when present
- Phage (with cluster) where this start called: AnnabelLee_41 (FR), DatBoi_4 (DL), Mollymur_4 (DL),

Start 28:

- Found in 1 of 70 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare_114 (singleton),

Start 30:

- Found in 1 of 70 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TMaxx_44 (FR),

Summary by clusters:

There are 4 clusters represented in this pham: FR, singleton, DL, EB,

Info for manual annotations of cluster DL:

- Start number 27 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster EB:

- Start number 16 was manually annotated 61 times for cluster EB.

Gene Information:

Gene: Abigail_56 Start: 36201, Stop: 36776, Start Num: 16

Candidate Starts for Abigail_56:

(Start: 16 @36201 has 61 MA's), (24, 36261), (25, 36264), (31, 36336), (33, 36354), (35, 36360), (63, 36624),

Gene: Albedo_58 Start: 36929, Stop: 37501, Start Num: 16

Candidate Starts for Albedo_58:

(Start: 16 @36929 has 61 MA's), (24, 36989), (25, 36992), (35, 37088), (63, 37352),

Gene: Albright_54 Start: 35632, Stop: 36207, Start Num: 16

Candidate Starts for Albright_54:

(Start: 16 @35632 has 61 MA's), (24, 35692), (25, 35695), (35, 35791), (63, 36055),

Gene: AnnaLie_57 Start: 36858, Stop: 37430, Start Num: 16

Candidate Starts for AnnaLie_57:

(Start: 16 @36858 has 61 MA's), (24, 36918), (25, 36921), (35, 37017), (63, 37281),

Gene: AnnabelLee_41 Start: 29186, Stop: 28641, Start Num: 27

Candidate Starts for AnnabelLee_41:

(20, 29258), (22, 29249), (Start: 27 @29186 has 2 MA's), (32, 29147), (45, 29060), (56, 28958), (76, 28670),

Gene: Armstrong_56 Start: 34973, Stop: 35572, Start Num: 16

Candidate Starts for Armstrong_56:

(Start: 16 @34973 has 61 MA's), (19, 35003), (25, 35045), (26, 35072), (35, 35141), (44, 35216), (55, 35312), (72, 35483),

Gene: Arroyo_57 Start: 36969, Stop: 37541, Start Num: 16

Candidate Starts for Arroyo_57:

(Start: 16 @36969 has 61 MA's), (24, 37029), (25, 37032), (35, 37128), (63, 37392),

Gene: AvGardian_58 Start: 37129, Stop: 37695, Start Num: 16

Candidate Starts for AvGardian_58:

(12, 37036), (13, 37069), (Start: 16 @37129 has 61 MA's), (33, 37279), (35, 37285), (38, 37318), (42, 37354), (71, 37612), (74, 37648),

Gene: Avocadoman_55 Start: 35833, Stop: 36408, Start Num: 16

Candidate Starts for Avocadoman_55:

(Start: 16 @35833 has 61 MA's), (24, 35893), (25, 35896), (31, 35968), (33, 35986), (35, 35992), (63, 36256),

Gene: BAjuniper_56 Start: 37510, Stop: 38103, Start Num: 16

Candidate Starts for BAjuniper_56:

(Start: 16 @37510 has 61 MA's), (17, 37522), (19, 37543), (25, 37582), (32, 37666), (35, 37675), (39, 37711), (46, 37777), (49, 37801),

Gene: BabyDaisy_58 Start: 37133, Stop: 37708, Start Num: 16

Candidate Starts for BabyDaisy_58:

(Start: 16 @37133 has 61 MA's), (24, 37193), (25, 37196), (31, 37268), (33, 37286), (35, 37292), (63, 37556),

Gene: BabyYoda_57 Start: 37507, Stop: 38073, Start Num: 16

Candidate Starts for BabyYoda_57:

(Start: 16 @37507 has 61 MA's), (24, 37567), (25, 37570), (31, 37642), (32, 37657), (35, 37666), (42, 37735), (50, 37792),

Gene: Bachaco_55 Start: 38194, Stop: 38778, Start Num: 16

Candidate Starts for Bachaco_55:

(Start: 16 @38194 has 61 MA's), (25, 38257), (26, 38281), (35, 38350), (39, 38386), (42, 38419), (47, 38455), (65, 38641), (67, 38650),

Gene: BelmontSKP_57 Start: 36858, Stop: 37430, Start Num: 16

Candidate Starts for BelmontSKP_57:

(Start: 16 @36858 has 61 MA's), (24, 36918), (25, 36921), (35, 37017), (63, 37281),

Gene: Bernstein_56 Start: 34971, Stop: 35570, Start Num: 16

Candidate Starts for Bernstein_56:

(Start: 16 @34971 has 61 MA's), (19, 35001), (25, 35043), (26, 35070), (35, 35139), (44, 35214), (55, 35310), (72, 35481),

Gene: Brahms_56 Start: 34873, Stop: 35472, Start Num: 16

Candidate Starts for Brahms_56:

(Start: 16 @34873 has 61 MA's), (19, 34903), (25, 34945), (26, 34972), (35, 35041), (44, 35116), (55, 35212), (72, 35383),

Gene: BubbaBear_56 Start: 36610, Stop: 37182, Start Num: 16

Candidate Starts for BubbaBear_56:

(Start: 16 @36610 has 61 MA's), (24, 36670), (25, 36673), (35, 36769), (42, 36838), (63, 37033),

Gene: Burritobowl_58 Start: 36705, Stop: 37277, Start Num: 16

Candidate Starts for Burritobowl_58:

(Start: 16 @36705 has 61 MA's), (24, 36765), (25, 36768), (35, 36864), (42, 36933), (63, 37128),

Gene: Cantare_114 Start: 82997, Stop: 83470, Start Num: 28

Candidate Starts for Cantare_114:

(21, 82931), (Start: 28 @82997 has 1 MA's), (41, 83096), (45, 83120), (48, 83156), (61, 83297), (66, 83333), (69, 83360),

Gene: Cashington_56 Start: 36062, Stop: 36634, Start Num: 16

Candidate Starts for Cashington_56:

(Start: 16 @36062 has 61 MA's), (24, 36122), (25, 36125), (35, 36221), (42, 36290), (63, 36485),

Gene: Celaena_55 Start: 37956, Stop: 38540, Start Num: 16

Candidate Starts for Celaena_55:

(Start: 16 @37956 has 61 MA's), (25, 38019), (35, 38112), (39, 38148), (42, 38181), (47, 38217), (53, 38256), (65, 38403), (67, 38412),

Gene: ChiliPepper_54 Start: 37266, Stop: 37850, Start Num: 16

Candidate Starts for ChiliPepper_54:

(8, 37047), (Start: 16 @37266 has 61 MA's), (25, 37329), (29, 37380), (34, 37419), (35, 37422), (36, 37443), (37, 37452), (39, 37458), (42, 37491), (44, 37497), (65, 37713),

Gene: Clayda5_58 Start: 34938, Stop: 35537, Start Num: 16

Candidate Starts for Clayda5_58:

(Start: 16 @34938 has 61 MA's), (19, 34968), (25, 35010), (26, 35037), (35, 35106), (44, 35181), (55, 35277), (72, 35448),

Gene: Coltrane_56 Start: 34873, Stop: 35472, Start Num: 16

Candidate Starts for Coltrane_56:

(Start: 16 @34873 has 61 MA's), (19, 34903), (25, 34945), (26, 34972), (35, 35041), (44, 35116), (55, 35212), (72, 35383),

Gene: CroZenni_57 Start: 36477, Stop: 37049, Start Num: 16

Candidate Starts for CroZenni_57:

(Start: 16 @36477 has 61 MA's), (24, 36537), (25, 36540), (35, 36636), (42, 36705), (63, 36900),

Gene: DatBoi_4 Start: 1881, Stop: 2372, Start Num: 27

Candidate Starts for DatBoi_4:

(6, 1518), (14, 1713), (18, 1788), (23, 1824), (Start: 27 @1881 has 2 MA's), (39, 1965), (40, 1968), (43, 2001), (45, 2007), (48, 2046), (51, 2067), (52, 2070), (58, 2160), (62, 2199),

Gene: DickRichards_55 Start: 36652, Stop: 37224, Start Num: 16

Candidate Starts for DickRichards_55:

(Start: 16 @36652 has 61 MA's), (24, 36712), (25, 36715), (35, 36811), (63, 37075),

Gene: Didgeridoo_61 Start: 37517, Stop: 38092, Start Num: 16
Candidate Starts for Didgeridoo_61:
(Start: 16 @37517 has 61 MA's), (24, 37577), (25, 37580), (31, 37652), (33, 37670), (35, 37676), (63, 37940),

Gene: DirtyBubble_56 Start: 37177, Stop: 37743, Start Num: 16
Candidate Starts for DirtyBubble_56:
(Start: 16 @37177 has 61 MA's), (24, 37237), (25, 37240), (35, 37336), (42, 37405), (50, 37462),

Gene: Dismas_55 Start: 37187, Stop: 37771, Start Num: 16
Candidate Starts for Dismas_55:
(8, 36968), (Start: 16 @37187 has 61 MA's), (25, 37250), (29, 37301), (34, 37340), (35, 37343), (36, 37364), (37, 37373), (39, 37379), (42, 37412), (44, 37418), (65, 37634), (68, 37667),

Gene: Doobus_55 Start: 36141, Stop: 36713, Start Num: 16
Candidate Starts for Doobus_55:
(Start: 16 @36141 has 61 MA's), (24, 36201), (25, 36204), (35, 36300), (42, 36369), (63, 36564),

Gene: Eden_57 Start: 36088, Stop: 36681, Start Num: 16
Candidate Starts for Eden_57:
(10, 35917), (12, 35992), (Start: 16 @36088 has 61 MA's), (25, 36160), (35, 36253), (39, 36289), (50, 36385), (60, 36496), (65, 36535), (72, 36595),

Gene: Elva_59 Start: 37571, Stop: 38137, Start Num: 16
Candidate Starts for Elva_59:
(Start: 16 @37571 has 61 MA's), (24, 37631), (25, 37634), (32, 37721), (35, 37730), (42, 37799), (43, 37802), (68, 38042),

Gene: Eula_57 Start: 36321, Stop: 36884, Start Num: 16
Candidate Starts for Eula_57:
(Start: 16 @36321 has 61 MA's), (24, 36381), (25, 36384), (35, 36480), (42, 36549), (49, 36600), (63, 36735),

Gene: Finalfrontier_58 Start: 37434, Stop: 37991, Start Num: 16
Candidate Starts for Finalfrontier_58:
(Start: 16 @37434 has 61 MA's), (24, 37494), (25, 37497), (35, 37593), (42, 37662), (63, 37848), (64, 37857),

Gene: FlameThrower_54 Start: 36993, Stop: 37577, Start Num: 16
Candidate Starts for FlameThrower_54:
(Start: 16 @36993 has 61 MA's), (25, 37056), (35, 37149), (39, 37185), (42, 37218), (47, 37254), (53, 37293), (65, 37440), (67, 37449),

Gene: Franklin22_59 Start: 35732, Stop: 36328, Start Num: 16
Candidate Starts for Franklin22_59:
(Start: 16 @35732 has 61 MA's), (25, 35804), (32, 35888), (35, 35897), (65, 36179), (68, 36215),

Gene: Gack_56 Start: 35679, Stop: 36275, Start Num: 16
Candidate Starts for Gack_56:
(9, 35496), (11, 35538), (13, 35616), (Start: 16 @35679 has 61 MA's), (19, 35709), (25, 35751), (35, 35844), (39, 35880), (50, 35976), (60, 36087), (68, 36162), (72, 36186),

Gene: Icarian_60 Start: 38175, Stop: 38744, Start Num: 16

Candidate Starts for Icarian_60:

(Start: 16 @38175 has 61 MA's), (24, 38235), (25, 38238), (35, 38334), (50, 38460), (70, 38664), (73, 38691),

Gene: IndyLu_58 Start: 37065, Stop: 37640, Start Num: 16

Candidate Starts for IndyLu_58:

(Start: 16 @37065 has 61 MA's), (24, 37125), (25, 37128), (31, 37200), (33, 37218), (35, 37224), (63, 37488),

Gene: Johnathan_56 Start: 35979, Stop: 36551, Start Num: 16

Candidate Starts for Johnathan_56:

(Start: 16 @35979 has 61 MA's), (24, 36039), (25, 36042), (35, 36138), (63, 36402),

Gene: Jovita_56 Start: 36190, Stop: 36747, Start Num: 16

Candidate Starts for Jovita_56:

(Start: 16 @36190 has 61 MA's), (24, 36250), (25, 36253), (35, 36349), (42, 36418), (63, 36604),

Gene: Kate33_58 Start: 36810, Stop: 37385, Start Num: 16

Candidate Starts for Kate33_58:

(Start: 16 @36810 has 61 MA's), (24, 36870), (25, 36873), (31, 36945), (33, 36963), (35, 36969), (63, 37233),

Gene: Katzastrophic_56 Start: 37503, Stop: 38087, Start Num: 16

Candidate Starts for Katzastrophic_56:

(Start: 16 @37503 has 61 MA's), (25, 37566), (35, 37659), (39, 37695), (42, 37728), (47, 37764), (53, 37803), (65, 37950), (67, 37959),

Gene: Kenzers_57 Start: 36458, Stop: 37030, Start Num: 16

Candidate Starts for Kenzers_57:

(Start: 16 @36458 has 61 MA's), (24, 36518), (25, 36521), (35, 36617), (63, 36881),

Gene: Kieran_54 Start: 37228, Stop: 37812, Start Num: 16

Candidate Starts for Kieran_54:

(8, 37009), (Start: 16 @37228 has 61 MA's), (24, 37288), (25, 37291), (29, 37342), (34, 37381), (35, 37384), (36, 37405), (37, 37414), (39, 37420), (42, 37453), (44, 37459), (65, 37675), (68, 37708),

Gene: Lahqtemish_56 Start: 36892, Stop: 37464, Start Num: 16

Candidate Starts for Lahqtemish_56:

(Start: 16 @36892 has 61 MA's), (24, 36952), (25, 36955), (31, 37027), (33, 37045), (35, 37051), (63, 37315),

Gene: LimaBean_57 Start: 36079, Stop: 36654, Start Num: 16

Candidate Starts for LimaBean_57:

(Start: 16 @36079 has 61 MA's), (24, 36139), (25, 36142), (31, 36214), (33, 36232), (35, 36238), (63, 36502),

Gene: Loviatar_100 Start: 38589, Stop: 39164, Start Num: 16

Candidate Starts for Loviatar_100:

(Start: 16 @38589 has 61 MA's), (24, 38649), (25, 38652), (35, 38748), (42, 38817), (44, 38823),

Gene: Lynlen_58 Start: 36638, Stop: 37210, Start Num: 16

Candidate Starts for Lynlen_58:

(Start: 16 @36638 has 61 MA's), (24, 36698), (25, 36701), (35, 36797), (63, 37061),

Gene: Mollymur_4 Start: 1661, Stop: 2152, Start Num: 27

Candidate Starts for Mollymur_4:

(1, 1046), (2, 1076), (3, 1112), (4, 1157), (5, 1166), (7, 1304), (Start: 27 @1661 has 2 MA's), (39, 1745), (43, 1781), (45, 1787), (51, 1847), (52, 1850), (58, 1940), (62, 1979),

Gene: Nicky22_58 Start: 37090, Stop: 37653, Start Num: 16

Candidate Starts for Nicky22_58:

(Start: 16 @37090 has 61 MA's), (24, 37150), (25, 37153), (35, 37249), (42, 37318), (63, 37504),

Gene: Phisb_58 Start: 36756, Stop: 37322, Start Num: 16

Candidate Starts for Phisb_58:

(Start: 16 @36756 has 61 MA's), (24, 36816), (25, 36819), (35, 36915), (42, 36984), (59, 37128), (75, 37284),

Gene: QMacho_59 Start: 36978, Stop: 37547, Start Num: 16

Candidate Starts for QMacho_59:

(Start: 16 @36978 has 61 MA's), (24, 37038), (25, 37041), (35, 37137), (42, 37206), (63, 37392),

Gene: Quenya_58 Start: 37635, Stop: 38219, Start Num: 16

Candidate Starts for Quenya_58:

(15, 37623), (Start: 16 @37635 has 61 MA's), (25, 37698), (31, 37767), (35, 37791), (37, 37821), (39, 37827), (42, 37860), (47, 37896), (53, 37935), (65, 38082), (67, 38091),

Gene: Rollins_56 Start: 34971, Stop: 35570, Start Num: 16

Candidate Starts for Rollins_56:

(Start: 16 @34971 has 61 MA's), (19, 35001), (25, 35043), (26, 35070), (35, 35139), (44, 35214), (55, 35310), (72, 35481),

Gene: Rona_54 Start: 37178, Stop: 37762, Start Num: 16

Candidate Starts for Rona_54:

(8, 36959), (Start: 16 @37178 has 61 MA's), (24, 37238), (25, 37241), (29, 37292), (34, 37331), (35, 37334), (36, 37355), (39, 37370), (42, 37403), (44, 37409), (65, 37625), (68, 37658),

Gene: SanaSana_59 Start: 37932, Stop: 38507, Start Num: 16

Candidate Starts for SanaSana_59:

(Start: 16 @37932 has 61 MA's), (24, 37992), (25, 37995), (35, 38091), (42, 38160), (44, 38166),

Gene: SansAfet_58 Start: 36387, Stop: 37073, Start Num: 16

Candidate Starts for SansAfet_58:

(Start: 16 @36387 has 61 MA's), (24, 36447), (25, 36450), (35, 36546), (42, 36615), (63, 36810), (78, 37029), (79, 37062),

Gene: SarBear_57 Start: 36282, Stop: 36845, Start Num: 16

Candidate Starts for SarBear_57:

(Start: 16 @36282 has 61 MA's), (24, 36342), (25, 36345), (35, 36441), (42, 36510), (63, 36696),

Gene: Sharkboy_55 Start: 37277, Stop: 37861, Start Num: 16

Candidate Starts for Sharkboy_55:

(8, 37058), (Start: 16 @37277 has 61 MA's), (24, 37337), (25, 37340), (29, 37391), (35, 37433), (36, 37454), (39, 37469), (42, 37502), (44, 37508), (65, 37724), (68, 37757),

Gene: Skylord_56 Start: 34912, Stop: 35511, Start Num: 16

Candidate Starts for Skylord_56:

(Start: 16 @34912 has 61 MA's), (19, 34942), (25, 34984), (26, 35011), (35, 35080), (44, 35155), (55, 35251), (72, 35422),

Gene: Slay_57 Start: 36874, Stop: 37437, Start Num: 16

Candidate Starts for Slay_57:

(Start: 16 @36874 has 61 MA's), (24, 36934), (25, 36937), (35, 37033), (42, 37102), (63, 37288),

Gene: Stoor_57 Start: 37719, Stop: 38294, Start Num: 16

Candidate Starts for Stoor_57:

(Start: 16 @37719 has 61 MA's), (24, 37779), (25, 37782), (35, 37878), (42, 37947), (44, 37953),

Gene: Stromboli_57 Start: 37544, Stop: 38110, Start Num: 16

Candidate Starts for Stromboli_57:

(Start: 16 @37544 has 61 MA's), (24, 37604), (25, 37607), (31, 37679), (32, 37694), (35, 37703), (42, 37772), (50, 37829),

Gene: Swervy_58 Start: 36554, Stop: 37111, Start Num: 16

Candidate Starts for Swervy_58:

(Start: 16 @36554 has 61 MA's), (24, 36614), (25, 36617), (35, 36713), (42, 36782), (63, 36968),

Gene: TMaxx_44 Start: 30109, Stop: 29585, Start Num: 30

Candidate Starts for TMaxx_44:

(Start: 27 @30121 has 2 MA's), (30, 30109), (41, 30019), (45, 29995), (54, 29920), (57, 29854), (77, 29608),

Gene: TukTuk_58 Start: 36619, Stop: 37176, Start Num: 16

Candidate Starts for TukTuk_58:

(Start: 16 @36619 has 61 MA's), (24, 36679), (25, 36682), (35, 36778), (42, 36847), (63, 37033),

Gene: Vitas_56 Start: 34944, Stop: 35543, Start Num: 16

Candidate Starts for Vitas_56:

(Start: 16 @34944 has 61 MA's), (19, 34974), (25, 35016), (26, 35043), (35, 35112), (44, 35187), (55, 35283), (72, 35454),

Gene: WalkingDead_59 Start: 38299, Stop: 38865, Start Num: 16

Candidate Starts for WalkingDead_59:

(Start: 16 @38299 has 61 MA's), (24, 38359), (25, 38362), (31, 38434), (32, 38449), (35, 38458), (44, 38533), (50, 38584),