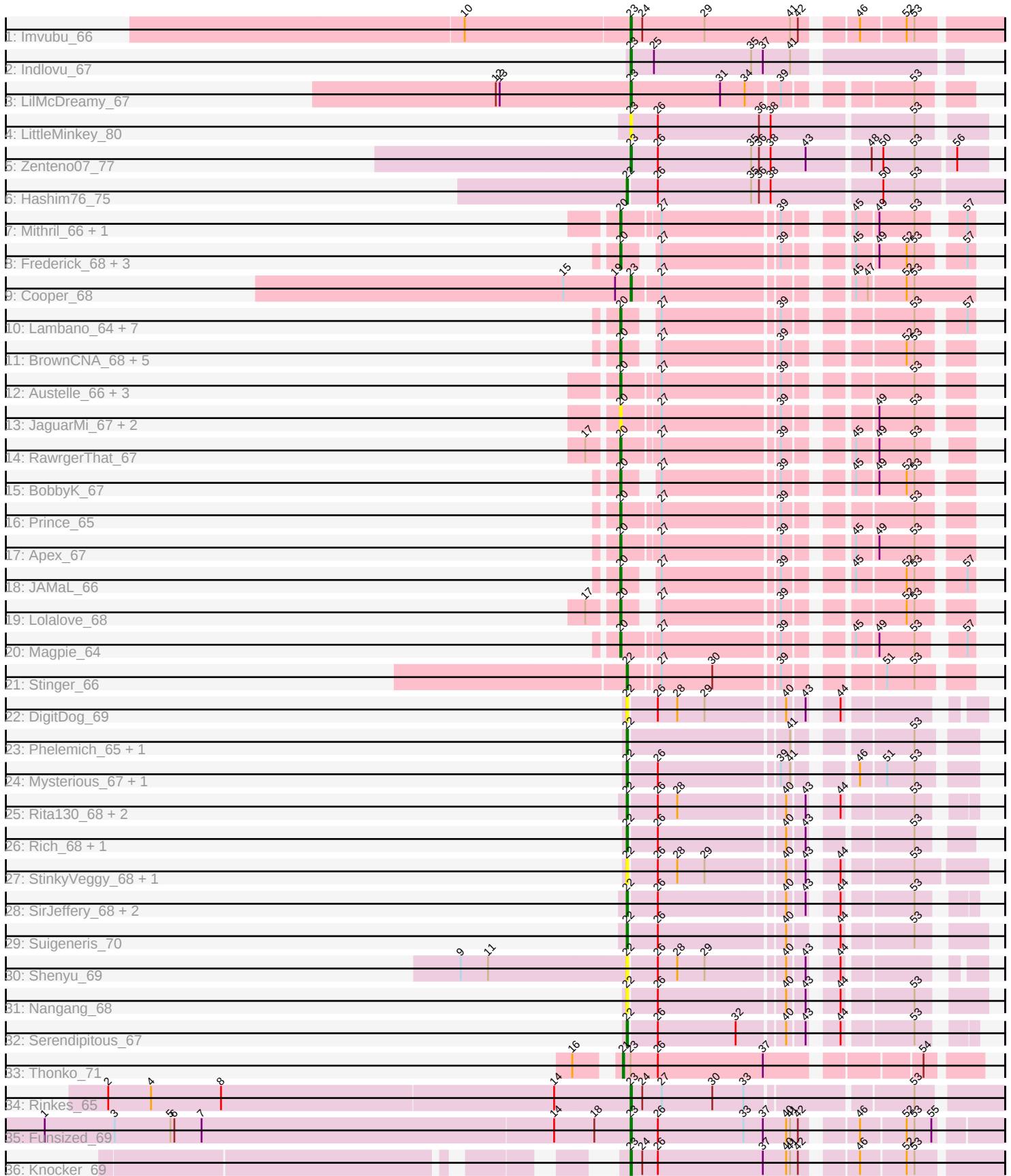


Pham 329038



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 329038 Report

This analysis was run 09/05/26 on database version 662.

Pham number 329038 has 65 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Imvubu_66
- Track 2 : Indlovu_67
- Track 3 : LilMcDreamy_67
- Track 4 : LittleMinkey_80
- Track 5 : Zenteno07_77
- Track 6 : Hashim76_75
- Track 7 : Mithril_66, Fortunato_67
- Track 8 : Frederick_68, LittleDigger_65, Renkei_65, ChrisnMich_66
- Track 9 : Cooper_68
- Track 10 : Lambano_64, Nanao_65, Epah_64, Hally898_64, Antihero_64, GinPorsche_66, Poster_64, Ahwei_64
- Track 11 : BrownCNA_68, Mudslide_66, Hydro_67, Waleliano_66, Heath_66, Hangman_67
- Track 12 : Austelle_66, Zemanar_66, JoyceMaria_67, VioletZ_68
- Track 13 : JaguarMi_67, Fanaw_63, Xincheng_66
- Track 14 : RawrgerThat_67
- Track 15 : BobbyK_67
- Track 16 : Prince_65
- Track 17 : Apex_67
- Track 18 : JAMaL_66
- Track 19 : Lolalove_68
- Track 20 : Magpie_64
- Track 21 : Stinger_66
- Track 22 : DigitDog_69
- Track 23 : Phelemich_65, Reprobate_67
- Track 24 : Mysterious_67, Nehemiah_67
- Track 25 : Rita130_68, Donny_70, Reccee_69
- Track 26 : Rich_68, Baee_69
- Track 27 : StinkyVeggy_68, KarasumaRum_68
- Track 28 : SirJeffery_68, EastView9101_68, Acadian_69
- Track 29 : Suigeneris_70
- Track 30 : Shenyu_69
- Track 31 : Nangang_68
- Track 32 : Serendipitous_67
- Track 33 : Thonko_71
- Track 34 : Rinkes_65
- Track 35 : Funsized_69

- Track 36 : Knocker_69

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

The start number called the most often in the published annotations is 20, it was called in 24 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ahwei_64, Antihero_64, Apex_67, Austelle_66, BobbyK_67, BrownCNA_68, ChrisnMich_66, Epah_64, Fanaw_63, Fortunato_67, Frederick_68, GinPorsche_66, Hally898_64, Hangman_67, Heath_66, Hydro_67, JAMaL_66, JaguarMi_67, JoyceMaria_67, Lambano_64, LittleDigger_65, Lolalove_68, Magpie_64, Mithril_66, Mudslide_66, Nanao_65, Poster_64, Prince_65, RawrgerThat_67, Renkei_65, VioletZ_68, Waleliano_66, Xincheng_66, Zemanar_66,

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

-

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

- Acadian_69, Baee_69, Cooper_68, DigitDog_69, Donny_70, EastView9101_68, Funsized_69, Hashim76_75, Imvubu_66, Indlovu_67, KarasumaRum_68, Knocker_69, LilMcDreamy_67, LittleMinkey_80, Mysterious_67, Nangang_68, Nehemiah_67, Phelemich_65, Reccee_69, Reprobate_67, Rich_68, Rinkes_65, Rita130_68, Serendipitous_67, Shenyu_69, SirJeffery_68, Stinger_66, StinkyVeggy_68, Suigeneris_70, Thonko_71, Zenteno07_77,

Summary by start number:

Start 20:

- Found in 34 of 65 (52.3%) of genes in pham
- Manual Annotations of this start: 24 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ahwei_64 (B4), Antihero_64 (B4), Apex_67 (B4), Austelle_66 (B4), BobbyK_67 (B4), BrownCNA_68 (B4), ChrisnMich_66 (B4), Epah_64 (B4), Fanaw_63 (B4), Fortunato_67 (B4), Frederick_68 (B4), GinPorsche_66 (B4), Hally898_64 (B4), Hangman_67 (B4), Heath_66 (B4), Hydro_67 (B4), JAMaL_66 (B4), JaguarMi_67 (B4), JoyceMaria_67 (B4), Lambano_64 (B4), LittleDigger_65 (B4), Lolalove_68 (B4), Magpie_64 (B4), Mithril_66 (B4), Mudslide_66 (B4), Nanao_65 (B4), Poster_64 (B4), Prince_65 (B4), RawrgerThat_67 (B4), Renkei_65 (B4), VioletZ_68 (B4), Waleliano_66 (B4), Xincheng_66 (B4), Zemanar_66 (B4),

Start 21:

- Found in 1 of 65 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thonko_71 (B8),

Start 22:

- Found in 21 of 65 (32.3%) of genes in pham

- Manual Annotations of this start: 13 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acadian_69 (B5), Baee_69 (B5), DigitDog_69 (B5), Donny_70 (B5), EastView9101_68 (B5), Hashim76_75 (B13), KarasumaRum_68 (B5), Mysterious_67 (B5), Nangang_68 (B5), Nehemiah_67 (B5), Phelemich_65 (B5), Reccee_69 (B5), Reprobate_67 (B5), Rich_68 (B5), Rita130_68 (B5), Serendipitous_67 (B5), Shenyu_69 (B5), SirJeffery_68 (B5), Stinger_66 (B4), StinkyVeggy_68 (B5), Suigeneris_70 (B5),

Start 23:

- Found in 10 of 65 (15.4%) of genes in pham
- Manual Annotations of this start: 8 of 46
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Cooper_68 (B4), Funsized_69 (B9), Imvubu_66 (B10), Indlovu_67 (B11), Knocker_69 (B9), LilMcDreamy_67 (B12), LittleMinkey_80 (B13), Rinkes_65 (B9), Zenteno07_77 (B13),

Summary by clusters:

There are 8 clusters represented in this pham: B4, B5, B12, B13, B10, B11, B8, B9,

Info for manual annotations of cluster B10:

- Start number 23 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 23 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 23 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 22 was manually annotated 1 time for cluster B13.
- Start number 23 was manually annotated 1 time for cluster B13.

Info for manual annotations of cluster B4:

- Start number 20 was manually annotated 24 times for cluster B4.
- Start number 22 was manually annotated 1 time for cluster B4.
- Start number 23 was manually annotated 1 time for cluster B4.

Info for manual annotations of cluster B5:

- Start number 22 was manually annotated 11 times for cluster B5.

Info for manual annotations of cluster B8:

- Start number 21 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 23 was manually annotated 3 times for cluster B9.

Gene Information:

Gene: Acadian_69 Start: 58697, Stop: 58915, Start Num: 22

Candidate Starts for Acadian_69:

(Start: 22 @58697 has 13 MA's), (26, 58718), (40, 58808), (43, 58820), (44, 58835), (53, 58883),

Gene: Ahwei_64 Start: 58264, Stop: 58479, Start Num: 20

Candidate Starts for Ahwei_64:

(Start: 20 @58264 has 24 MA's), (27, 58282), (39, 58366), (53, 58444), (57, 58474),

Gene: Antihero_64 Start: 58262, Stop: 58477, Start Num: 20

Candidate Starts for Antihero_64:

(Start: 20 @58262 has 24 MA's), (27, 58280), (39, 58364), (53, 58442), (57, 58472),

Gene: Apex_67 Start: 59358, Stop: 59582, Start Num: 20

Candidate Starts for Apex_67:

(Start: 20 @59358 has 24 MA's), (27, 59385), (39, 59469), (45, 59505), (49, 59520), (53, 59547),

Gene: Austelle_66 Start: 59875, Stop: 60099, Start Num: 20

Candidate Starts for Austelle_66:

(Start: 20 @59875 has 24 MA's), (27, 59902), (39, 59986), (53, 60064),

Gene: Baee_69 Start: 59746, Stop: 59964, Start Num: 22

Candidate Starts for Baee_69:

(Start: 22 @59746 has 13 MA's), (26, 59767), (40, 59857), (43, 59869), (53, 59932),

Gene: BobbyK_67 Start: 59144, Stop: 59359, Start Num: 20

Candidate Starts for BobbyK_67:

(Start: 20 @59144 has 24 MA's), (27, 59162), (39, 59246), (45, 59282), (49, 59297), (52, 59318), (53, 59324),

Gene: BrownCNA_68 Start: 59521, Stop: 59736, Start Num: 20

Candidate Starts for BrownCNA_68:

(Start: 20 @59521 has 24 MA's), (27, 59539), (39, 59623), (52, 59695), (53, 59701),

Gene: ChrisnMich_66 Start: 58246, Stop: 58461, Start Num: 20

Candidate Starts for ChrisnMich_66:

(Start: 20 @58246 has 24 MA's), (27, 58264), (39, 58348), (45, 58384), (49, 58399), (52, 58420), (53, 58426), (57, 58456),

Gene: Cooper_68 Start: 58925, Stop: 59152, Start Num: 23

Candidate Starts for Cooper_68:

(15, 58874), (19, 58913), (Start: 23 @58925 has 8 MA's), (27, 58946), (45, 59066), (47, 59075), (52, 59102), (53, 59108),

Gene: DigitDog_69 Start: 58831, Stop: 59052, Start Num: 22

Candidate Starts for DigitDog_69:

(Start: 22 @58831 has 13 MA's), (26, 58852), (28, 58867), (29, 58888), (40, 58942), (43, 58954), (44, 58969),

Gene: Donny_70 Start: 58738, Stop: 58956, Start Num: 22

Candidate Starts for Donny_70:

(Start: 22 @58738 has 13 MA's), (26, 58759), (28, 58774), (40, 58849), (43, 58861), (44, 58876), (53, 58924),

Gene: EastView9101_68 Start: 58441, Stop: 58659, Start Num: 22

Candidate Starts for EastView9101_68:

(Start: 22 @58441 has 13 MA's), (26, 58462), (40, 58552), (43, 58564), (44, 58579), (53, 58627),

Gene: Epah_64 Start: 58262, Stop: 58477, Start Num: 20

Candidate Starts for Epah_64:

(Start: 20 @58262 has 24 MA's), (27, 58280), (39, 58364), (53, 58442), (57, 58472),

Gene: Fanaw_63 Start: 59289, Stop: 59513, Start Num: 20

Candidate Starts for Fanaw_63:

(Start: 20 @59289 has 24 MA's), (27, 59316), (39, 59400), (49, 59451), (53, 59478),

Gene: Fortunato_67 Start: 59294, Stop: 59512, Start Num: 20

Candidate Starts for Fortunato_67:

(Start: 20 @59294 has 24 MA's), (27, 59321), (39, 59405), (45, 59441), (49, 59456), (53, 59483), (57, 59507),

Gene: Frederick_68 Start: 59244, Stop: 59459, Start Num: 20

Candidate Starts for Frederick_68:

(Start: 20 @59244 has 24 MA's), (27, 59262), (39, 59346), (45, 59382), (49, 59397), (52, 59418), (53, 59424), (57, 59454),

Gene: Funsized_69 Start: 60787, Stop: 61044, Start Num: 23

Candidate Starts for Funsized_69:

(1, 60340), (3, 60394), (5, 60436), (6, 60439), (7, 60460), (14, 60730), (18, 60760), (Start: 23 @60787 has 8 MA's), (26, 60808), (33, 60874), (37, 60889), (40, 60907), (41, 60910), (42, 60916), (46, 60949), (52, 60982), (53, 60988), (55, 61000),

Gene: GinPorsche_66 Start: 58262, Stop: 58477, Start Num: 20

Candidate Starts for GinPorsche_66:

(Start: 20 @58262 has 24 MA's), (27, 58280), (39, 58364), (53, 58442), (57, 58472),

Gene: Hally898_64 Start: 58277, Stop: 58492, Start Num: 20

Candidate Starts for Hally898_64:

(Start: 20 @58277 has 24 MA's), (27, 58295), (39, 58379), (53, 58457), (57, 58487),

Gene: Hangman_67 Start: 59443, Stop: 59658, Start Num: 20

Candidate Starts for Hangman_67:

(Start: 20 @59443 has 24 MA's), (27, 59461), (39, 59545), (52, 59617), (53, 59623),

Gene: Hashim76_75 Start: 59600, Stop: 59875, Start Num: 22

Candidate Starts for Hashim76_75:

(Start: 22 @59600 has 13 MA's), (26, 59621), (35, 59693), (36, 59699), (38, 59708), (50, 59789), (53, 59813),

Gene: Heath_66 Start: 59070, Stop: 59285, Start Num: 20

Candidate Starts for Heath_66:

(Start: 20 @59070 has 24 MA's), (27, 59088), (39, 59172), (52, 59244), (53, 59250),

Gene: Hydro_67 Start: 59381, Stop: 59596, Start Num: 20

Candidate Starts for Hydro_67:

(Start: 20 @59381 has 24 MA's), (27, 59399), (39, 59483), (52, 59555), (53, 59561),

Gene: Imvubu_66 Start: 57537, Stop: 57797, Start Num: 23

Candidate Starts for Imvubu_66:

(10, 57411), (Start: 23 @57537 has 8 MA's), (24, 57546), (29, 57594), (41, 57660), (42, 57666), (46, 57699), (52, 57732), (53, 57738),

Gene: Indlovu_67 Start: 58928, Stop: 59164, Start Num: 23

Candidate Starts for Indlovu_67:

(Start: 23 @58928 has 8 MA's), (25, 58946), (35, 59021), (37, 59030), (41, 59051),

Gene: JAMaL_66 Start: 59271, Stop: 59486, Start Num: 20

Candidate Starts for JAMaL_66:

(Start: 20 @59271 has 24 MA's), (27, 59289), (39, 59373), (45, 59409), (52, 59445), (53, 59451), (57, 59481),

Gene: JaguarMi_67 Start: 60525, Stop: 60749, Start Num: 20

Candidate Starts for JaguarMi_67:

(Start: 20 @60525 has 24 MA's), (27, 60552), (39, 60636), (49, 60687), (53, 60714),

Gene: JoyceMaria_67 Start: 59398, Stop: 59622, Start Num: 20

Candidate Starts for JoyceMaria_67:

(Start: 20 @59398 has 24 MA's), (27, 59425), (39, 59509), (53, 59587),

Gene: KarasumaRum_68 Start: 58631, Stop: 58867, Start Num: 22

Candidate Starts for KarasumaRum_68:

(Start: 22 @58631 has 13 MA's), (26, 58652), (28, 58667), (29, 58688), (40, 58742), (43, 58754), (44, 58769), (53, 58817),

Gene: Klocker_69 Start: 59957, Stop: 60217, Start Num: 23

Candidate Starts for Klocker_69:

(Start: 23 @59957 has 8 MA's), (24, 59966), (26, 59978), (37, 60059), (40, 60077), (41, 60080), (42, 60086), (46, 60119), (52, 60152), (53, 60158),

Gene: Lambano_64 Start: 58277, Stop: 58492, Start Num: 20

Candidate Starts for Lambano_64:

(Start: 20 @58277 has 24 MA's), (27, 58295), (39, 58379), (53, 58457), (57, 58487),

Gene: LilMcDreamy_67 Start: 58458, Stop: 58682, Start Num: 23

Candidate Starts for LilMcDreamy_67:

(12, 58356), (13, 58359), (Start: 23 @58458 has 8 MA's), (31, 58527), (34, 58545), (39, 58569), (53, 58647),

Gene: LittleDigger_65 Start: 58200, Stop: 58415, Start Num: 20

Candidate Starts for LittleDigger_65:

(Start: 20 @58200 has 24 MA's), (27, 58218), (39, 58302), (45, 58338), (49, 58353), (52, 58374), (53, 58380), (57, 58410),

Gene: LittleMinkey_80 Start: 59486, Stop: 59743, Start Num: 23

Candidate Starts for LittleMinkey_80:

(Start: 23 @59486 has 8 MA's), (26, 59507), (36, 59585), (38, 59594), (53, 59699),

Gene: Lolalove_68 Start: 59452, Stop: 59667, Start Num: 20

Candidate Starts for Lolalove_68:

(17, 59431), (Start: 20 @59452 has 24 MA's), (27, 59470), (39, 59554), (52, 59626), (53, 59632),

Gene: Magpie_64 Start: 59134, Stop: 59352, Start Num: 20

Candidate Starts for Magpie_64:

(Start: 20 @59134 has 24 MA's), (27, 59161), (39, 59245), (45, 59281), (49, 59296), (53, 59323), (57, 59347),

Gene: Mithril_66 Start: 59448, Stop: 59666, Start Num: 20

Candidate Starts for Mithril_66:

(Start: 20 @59448 has 24 MA's), (27, 59475), (39, 59559), (45, 59595), (49, 59610), (53, 59637), (57, 59661),

Gene: Mudslide_66 Start: 59472, Stop: 59687, Start Num: 20

Candidate Starts for Mudslide_66:

(Start: 20 @59472 has 24 MA's), (27, 59490), (39, 59574), (52, 59646), (53, 59652),

Gene: Mysterious_67 Start: 58757, Stop: 58981, Start Num: 22

Candidate Starts for Mysterious_67:

(Start: 22 @58757 has 13 MA's), (26, 58778), (39, 58865), (41, 58871), (46, 58904), (51, 58922), (53, 58943),

Gene: Nanao_65 Start: 58267, Stop: 58482, Start Num: 20

Candidate Starts for Nanao_65:

(Start: 20 @58267 has 24 MA's), (27, 58285), (39, 58369), (53, 58447), (57, 58477),

Gene: Nangang_68 Start: 58827, Stop: 59054, Start Num: 22

Candidate Starts for Nangang_68:

(Start: 22 @58827 has 13 MA's), (26, 58848), (40, 58938), (43, 58950), (44, 58965), (53, 59013),

Gene: Nehemiah_67 Start: 58595, Stop: 58819, Start Num: 22

Candidate Starts for Nehemiah_67:

(Start: 22 @58595 has 13 MA's), (26, 58616), (39, 58703), (41, 58709), (46, 58742), (51, 58760), (53, 58781),

Gene: Phelemich_65 Start: 58589, Stop: 58813, Start Num: 22

Candidate Starts for Phelemich_65:

(Start: 22 @58589 has 13 MA's), (41, 58703), (53, 58775),

Gene: Poster_64 Start: 58268, Stop: 58483, Start Num: 20

Candidate Starts for Poster_64:

(Start: 20 @58268 has 24 MA's), (27, 58286), (39, 58370), (53, 58448), (57, 58478),

Gene: Prince_65 Start: 59373, Stop: 59597, Start Num: 20

Candidate Starts for Prince_65:

(Start: 20 @59373 has 24 MA's), (27, 59400), (39, 59484), (53, 59562),

Gene: RawrgerThat_67 Start: 59272, Stop: 59490, Start Num: 20

Candidate Starts for RawrgerThat_67:

(17, 59251), (Start: 20 @59272 has 24 MA's), (27, 59299), (39, 59383), (45, 59419), (49, 59434), (53, 59461),

Gene: Reccee_69 Start: 58822, Stop: 59040, Start Num: 22

Candidate Starts for Reccee_69:

(Start: 22 @58822 has 13 MA's), (26, 58843), (28, 58858), (40, 58933), (43, 58945), (44, 58960), (53, 59008),

Gene: Renkei_65 Start: 58194, Stop: 58409, Start Num: 20

Candidate Starts for Renkei_65:

(Start: 20 @58194 has 24 MA's), (27, 58212), (39, 58296), (45, 58332), (49, 58347), (52, 58368), (53, 58374), (57, 58404),

Gene: Reprobate_67 Start: 58594, Stop: 58818, Start Num: 22

Candidate Starts for Reprobate_67:

(Start: 22 @58594 has 13 MA's), (41, 58708), (53, 58780),

Gene: Rich_68 Start: 59806, Stop: 60024, Start Num: 22

Candidate Starts for Rich_68:

(Start: 22 @59806 has 13 MA's), (26, 59827), (40, 59917), (43, 59929), (53, 59992),

Gene: Rinkes_65 Start: 58364, Stop: 58621, Start Num: 23

Candidate Starts for Rinkes_65:

(2, 57965), (4, 57998), (8, 58052), (14, 58307), (Start: 23 @58364 has 8 MA's), (24, 58373), (27, 58388), (30, 58427), (33, 58451), (53, 58565),

Gene: Rita130_68 Start: 58635, Stop: 58853, Start Num: 22

Candidate Starts for Rita130_68:

(Start: 22 @58635 has 13 MA's), (26, 58656), (28, 58671), (40, 58746), (43, 58758), (44, 58773), (53, 58821),

Gene: Serendipitous_67 Start: 58172, Stop: 58390, Start Num: 22

Candidate Starts for Serendipitous_67:

(Start: 22 @58172 has 13 MA's), (26, 58193), (32, 58253), (40, 58283), (43, 58295), (44, 58310), (53, 58358),

Gene: Shenyu_69 Start: 59196, Stop: 59417, Start Num: 22

Candidate Starts for Shenyu_69:

(9, 59070), (11, 59091), (Start: 22 @59196 has 13 MA's), (26, 59217), (28, 59232), (29, 59253), (40, 59307), (43, 59319), (44, 59334),

Gene: SirJeffery_68 Start: 58774, Stop: 58992, Start Num: 22

Candidate Starts for SirJeffery_68:

(Start: 22 @58774 has 13 MA's), (26, 58795), (40, 58885), (43, 58897), (44, 58912), (53, 58960),

Gene: Stinger_66 Start: 58207, Stop: 58425, Start Num: 22

Candidate Starts for Stinger_66:

(Start: 22 @58207 has 13 MA's), (27, 58228), (30, 58267), (39, 58312), (51, 58369), (53, 58390),

Gene: StinkyVeggy_68 Start: 58631, Stop: 58867, Start Num: 22

Candidate Starts for StinkyVeggy_68:

(Start: 22 @58631 has 13 MA's), (26, 58652), (28, 58667), (29, 58688), (40, 58742), (43, 58754), (44, 58769), (53, 58817),

Gene: Suigeneris_70 Start: 58913, Stop: 59140, Start Num: 22

Candidate Starts for Suigeneris_70:

(Start: 22 @58913 has 13 MA's), (26, 58934), (40, 59024), (44, 59051), (53, 59099),

Gene: Thonko_71 Start: 57012, Stop: 57260, Start Num: 21

Candidate Starts for Thonko_71:

(16, 56988), (Start: 21 @57012 has 1 MA's), (Start: 23 @57018 has 8 MA's), (26, 57039), (37, 57120), (54, 57222),

Gene: VioletZ_68 Start: 59376, Stop: 59600, Start Num: 20

Candidate Starts for VioletZ_68:

(Start: 20 @59376 has 24 MA's), (27, 59403), (39, 59487), (53, 59565),

Gene: Waleliano_66 Start: 59274, Stop: 59489, Start Num: 20

Candidate Starts for Waleliano_66:

(Start: 20 @59274 has 24 MA's), (27, 59292), (39, 59376), (52, 59448), (53, 59454),

Gene: Xincheng_66 Start: 60476, Stop: 60700, Start Num: 20

Candidate Starts for Xincheng_66:

(Start: 20 @60476 has 24 MA's), (27, 60503), (39, 60587), (49, 60638), (53, 60665),

Gene: Zemanar_66 Start: 59163, Stop: 59387, Start Num: 20

Candidate Starts for Zemanar_66:

(Start: 20 @59163 has 24 MA's), (27, 59190), (39, 59274), (53, 59352),

Gene: Zenteno07_77 Start: 59579, Stop: 59842, Start Num: 23

Candidate Starts for Zenteno07_77:

(Start: 23 @59579 has 8 MA's), (26, 59600), (35, 59672), (36, 59678), (38, 59687), (43, 59714), (48, 59759), (50, 59768), (53, 59792), (56, 59819),