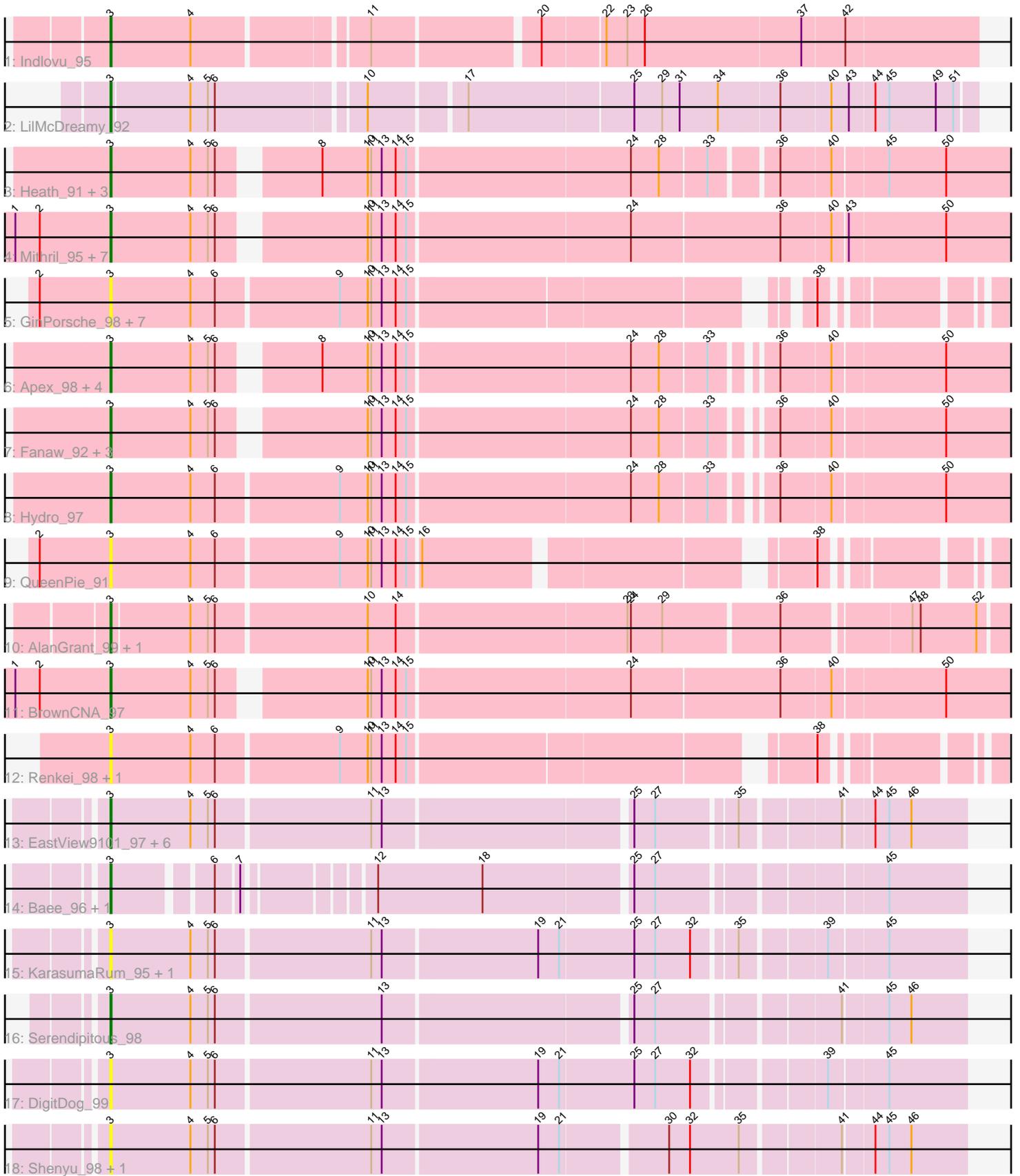


Pham 283881



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 283881 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283881 has 53 members, 23 are drafts.

Phages represented in each track:

- Track 1 : Indlovu_95
- Track 2 : LilMcDreamy_92
- Track 3 : Heath_91, Zemanar_95, Frederick_98, BobbyK_97
- Track 4 : Mithril_95, Waleliano_96, Lolalove_99, JoyceMaria_96, Austelle_97, Mudslide_98, Prince_97, Hangman_97
- Track 5 : GinPorsche_98, Nanao_98, Hally898_96, Ahwei_96, Antihero_98, Poster_97, Epah_98, Lambano_96
- Track 6 : Apex_98, Magpie_93, Xincheng_88, JAMaL_98, JaguarMi_90
- Track 7 : Fanaw_92, RawrgerThat_94, Fortunato_94, VioletZ_99
- Track 8 : Hydro_97
- Track 9 : QueenPie_91
- Track 10 : AlanGrant_99, Vincenzo_98
- Track 11 : BrownCNA_97
- Track 12 : Renkei_98, LittleDigger_98
- Track 13 : EastView9101_97, Acadian_97, SirJeffery_95, Donny_97, Suigeneris_98, Rita130_96, Reccee_98
- Track 14 : Bae_96, Rich_95
- Track 15 : KarasumaRum_95, StinkyVeggy_95
- Track 16 : Serendipitous_98
- Track 17 : DigitDog_99
- Track 18 : Shenyu_98, Nangang_98

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

The start number called the most often in the published annotations is 3, it was called in 30 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acadian_97, Ahwei_96, AlanGrant_99, Antihero_98, Apex_98, Austelle_97, Bae_96, BobbyK_97, BrownCNA_97, DigitDog_99, Donny_97, EastView9101_97, Epah_98, Fanaw_92, Fortunato_94, Frederick_98, GinPorsche_98, Hally898_96, Hangman_97, Heath_91, Hydro_97, Indlovu_95, JAMaL_98, JaguarMi_90, JoyceMaria_96, KarasumaRum_95, Lambano_96, LilMcDreamy_92, LittleDigger_98, Lolalove_99, Magpie_93, Mithril_95, Mudslide_98, Nanao_98, Nangang_98,

Poster_97, Prince_97, QueenPie_91, RawrgerThat_94, Reccee_98, Renkei_98, Rich_95, Rita130_96, Serendipitous_98, Shenyu_98, SirJeffery_95, StinkyVeggy_95, Suigeneris_98, Vincenzo_98, VioletZ_99, Waleliano_96, Xincheng_88, Zemanar_95,

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

-

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

-

Summary by start number:

Start 3:

- Found in 53 of 53 (100.0%) of genes in pham
- Manual Annotations of this start: 30 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acadian_97 (B5), Ahwei_96 (B4), AlanGrant_99 (B4), Antihero_98 (B4), Apex_98 (B4), Austelle_97 (B4), Bae_96 (B5), BobbyK_97 (B4), BrownCNA_97 (B4), DigitDog_99 (B5), Donny_97 (B5), EastView9101_97 (B5), Epah_98 (B4), Fanaw_92 (B4), Fortunato_94 (B4), Frederick_98 (B4), GinPorsche_98 (B4), Hally898_96 (B4), Hangman_97 (B4), Heath_91 (B4), Hydro_97 (B4), Indlovu_95 (B11), JAMaL_98 (B4), JaguarMi_90 (B4), JoyceMaria_96 (B4), KarasumaRum_95 (B5), Lambano_96 (B4), LilMcDreamy_92 (B12), LittleDigger_98 (B4), Lolalove_99 (B4), Magpie_93 (B4), Mithril_95 (B4), Mudslide_98 (B4), Nanao_98 (B4), Nangang_98 (B5), Poster_97 (B4), Prince_97 (B4), QueenPie_91 (B4), RawrgerThat_94 (B4), Reccee_98 (B5), Renkei_98 (B4), Rich_95 (B5), Rita130_96 (B5), Serendipitous_98 (B5), Shenyu_98 (B5), SirJeffery_95 (B5), StinkyVeggy_95 (B5), Suigeneris_98 (B5), Vincenzo_98 (B4), VioletZ_99 (B4), Waleliano_96 (B4), Xincheng_88 (B4), Zemanar_95 (B4),

Summary by clusters:

There are 4 clusters represented in this pham: B4, B5, B12, B11,

Info for manual annotations of cluster B11:

- Start number 3 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 3 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B4:

- Start number 3 was manually annotated 21 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 3 was manually annotated 7 times for cluster B5.

Gene Information:

Gene: Acadian_97 Start: 69755, Stop: 69066, Start Num: 3

Candidate Starts for Acadian_97:

(Start: 3 @69755 has 30 MA's), (4, 69686), (5, 69671), (6, 69665), (11, 69536), (13, 69527), (25, 69326), (27, 69308), (35, 69245), (41, 69167), (44, 69143), (45, 69131), (46, 69113),

Gene: Ahwei_96 Start: 70567, Stop: 69878, Start Num: 3

Candidate Starts for Ahwei_96:

(2, 70627), (Start: 3 @70567 has 30 MA's), (4, 70498), (6, 70477), (9, 70375), (10, 70351), (11, 70348), (13, 70339), (14, 70327), (15, 70318), (38, 70018),

Gene: AlanGrant_99 Start: 72005, Stop: 71247, Start Num: 3

Candidate Starts for AlanGrant_99:

(Start: 3 @72005 has 30 MA's), (4, 71939), (5, 71924), (6, 71918), (10, 71792), (14, 71768), (23, 71576), (24, 71573), (29, 71546), (36, 71450), (47, 71348), (48, 71342), (52, 71294),

Gene: Antihero_98 Start: 70492, Stop: 69803, Start Num: 3

Candidate Starts for Antihero_98:

(2, 70552), (Start: 3 @70492 has 30 MA's), (4, 70423), (6, 70402), (9, 70300), (10, 70276), (11, 70273), (13, 70264), (14, 70252), (15, 70243), (38, 69943),

Gene: Apex_98 Start: 71007, Stop: 70270, Start Num: 3

Candidate Starts for Apex_98:

(Start: 3 @71007 has 30 MA's), (4, 70938), (5, 70923), (6, 70917), (8, 70848), (10, 70809), (11, 70806), (13, 70797), (14, 70785), (15, 70776), (24, 70590), (28, 70566), (33, 70527), (36, 70485), (40, 70443), (50, 70350),

Gene: Austelle_97 Start: 71561, Stop: 70803, Start Num: 3

Candidate Starts for Austelle_97:

(1, 71642), (2, 71621), (Start: 3 @71561 has 30 MA's), (4, 71492), (5, 71477), (6, 71471), (10, 71363), (11, 71360), (13, 71351), (14, 71339), (15, 71330), (24, 71144), (36, 71018), (40, 70976), (43, 70964), (50, 70883),

Gene: Bae_96 Start: 70161, Stop: 69508, Start Num: 3

Candidate Starts for Bae_96:

(Start: 3 @70161 has 30 MA's), (6, 70086), (7, 70068), (12, 69978), (18, 69888), (25, 69768), (27, 69750), (45, 69573),

Gene: BobbyK_97 Start: 70650, Stop: 69904, Start Num: 3

Candidate Starts for BobbyK_97:

(Start: 3 @70650 has 30 MA's), (4, 70581), (5, 70566), (6, 70560), (8, 70491), (10, 70452), (11, 70449), (13, 70440), (14, 70428), (15, 70419), (24, 70233), (28, 70209), (33, 70170), (36, 70119), (40, 70077), (45, 70032), (50, 69984),

Gene: BrownCNA_97 Start: 70976, Stop: 70218, Start Num: 3

Candidate Starts for BrownCNA_97:

(1, 71057), (2, 71036), (Start: 3 @70976 has 30 MA's), (4, 70907), (5, 70892), (6, 70886), (10, 70778), (11, 70775), (13, 70766), (14, 70754), (15, 70745), (24, 70559), (36, 70433), (40, 70391), (50, 70298),

Gene: DigitDog_99 Start: 70278, Stop: 69580, Start Num: 3

Candidate Starts for DigitDog_99:

(Start: 3 @70278 has 30 MA's), (4, 70209), (5, 70194), (6, 70188), (11, 70059), (13, 70050), (19, 69921), (21, 69903), (25, 69840), (27, 69822), (32, 69792), (39, 69693), (45, 69645),

Gene: Donny_97 Start: 69582, Stop: 68893, Start Num: 3

Candidate Starts for Donny_97:

(Start: 3 @69582 has 30 MA's), (4, 69513), (5, 69498), (6, 69492), (11, 69363), (13, 69354), (25, 69153), (27, 69135), (35, 69072), (41, 68994), (44, 68970), (45, 68958), (46, 68940),

Gene: EastView9101_97 Start: 69774, Stop: 69085, Start Num: 3

Candidate Starts for EastView9101_97:

(Start: 3 @69774 has 30 MA's), (4, 69705), (5, 69690), (6, 69684), (11, 69555), (13, 69546), (25, 69345), (27, 69327), (35, 69264), (41, 69186), (44, 69162), (45, 69150), (46, 69132),

Gene: Epah_98 Start: 70492, Stop: 69803, Start Num: 3

Candidate Starts for Epah_98:

(2, 70552), (Start: 3 @70492 has 30 MA's), (4, 70423), (6, 70402), (9, 70300), (10, 70276), (11, 70273), (13, 70264), (14, 70252), (15, 70243), (38, 69943),

Gene: Fanaw_92 Start: 70565, Stop: 69828, Start Num: 3

Candidate Starts for Fanaw_92:

(Start: 3 @70565 has 30 MA's), (4, 70496), (5, 70481), (6, 70475), (10, 70367), (11, 70364), (13, 70355), (14, 70343), (15, 70334), (24, 70148), (28, 70124), (33, 70085), (36, 70043), (40, 70001), (50, 69908),

Gene: Fortunato_94 Start: 70442, Stop: 69705, Start Num: 3

Candidate Starts for Fortunato_94:

(Start: 3 @70442 has 30 MA's), (4, 70373), (5, 70358), (6, 70352), (10, 70244), (11, 70241), (13, 70232), (14, 70220), (15, 70211), (24, 70025), (28, 70001), (33, 69962), (36, 69920), (40, 69878), (50, 69785),

Gene: Frederick_98 Start: 70947, Stop: 70210, Start Num: 3

Candidate Starts for Frederick_98:

(Start: 3 @70947 has 30 MA's), (4, 70878), (5, 70863), (6, 70857), (8, 70788), (10, 70749), (11, 70746), (13, 70737), (14, 70725), (15, 70716), (24, 70530), (28, 70506), (33, 70467), (36, 70425), (40, 70383), (45, 70338), (50, 70290),

Gene: GinPorsche_98 Start: 70489, Stop: 69800, Start Num: 3

Candidate Starts for GinPorsche_98:

(2, 70549), (Start: 3 @70489 has 30 MA's), (4, 70420), (6, 70399), (9, 70297), (10, 70273), (11, 70270), (13, 70261), (14, 70249), (15, 70240), (38, 69940),

Gene: Hally898_96 Start: 70329, Stop: 69640, Start Num: 3

Candidate Starts for Hally898_96:

(2, 70389), (Start: 3 @70329 has 30 MA's), (4, 70260), (6, 70239), (9, 70137), (10, 70113), (11, 70110), (13, 70101), (14, 70089), (15, 70080), (38, 69780),

Gene: Hangman_97 Start: 71138, Stop: 70380, Start Num: 3

Candidate Starts for Hangman_97:

(1, 71219), (2, 71198), (Start: 3 @71138 has 30 MA's), (4, 71069), (5, 71054), (6, 71048), (10, 70940), (11, 70937), (13, 70928), (14, 70916), (15, 70907), (24, 70721), (36, 70595), (40, 70553), (43, 70541), (50, 70460),

Gene: Heath_91 Start: 69021, Stop: 68275, Start Num: 3

Candidate Starts for Heath_91:

(Start: 3 @69021 has 30 MA's), (4, 68952), (5, 68937), (6, 68931), (8, 68862), (10, 68823), (11, 68820), (13, 68811), (14, 68799), (15, 68790), (24, 68604), (28, 68580), (33, 68541), (36, 68490), (40, 68448), (45, 68403), (50, 68355),

Gene: Hydro_97 Start: 70922, Stop: 70167, Start Num: 3

Candidate Starts for Hydro_97:

(Start: 3 @70922 has 30 MA's), (4, 70853), (6, 70832), (9, 70730), (10, 70706), (11, 70703), (13, 70694), (14, 70682), (15, 70673), (24, 70487), (28, 70463), (33, 70424), (36, 70382), (40, 70340), (50, 70247),

Gene: Indlovu_95 Start: 70812, Stop: 70111, Start Num: 3

Candidate Starts for Indlovu_95:

(Start: 3 @70812 has 30 MA's), (4, 70743), (11, 70605), (20, 70473), (22, 70422), (23, 70404), (26, 70389), (37, 70257), (42, 70221),

Gene: JAMaL_98 Start: 70604, Stop: 69867, Start Num: 3

Candidate Starts for JAMaL_98:

(Start: 3 @70604 has 30 MA's), (4, 70535), (5, 70520), (6, 70514), (8, 70445), (10, 70406), (11, 70403), (13, 70394), (14, 70382), (15, 70373), (24, 70187), (28, 70163), (33, 70124), (36, 70082), (40, 70040), (50, 69947),

Gene: JaguarMi_90 Start: 70729, Stop: 69992, Start Num: 3

Candidate Starts for JaguarMi_90:

(Start: 3 @70729 has 30 MA's), (4, 70660), (5, 70645), (6, 70639), (8, 70570), (10, 70531), (11, 70528), (13, 70519), (14, 70507), (15, 70498), (24, 70312), (28, 70288), (33, 70249), (36, 70207), (40, 70165), (50, 70072),

Gene: JoyceMaria_96 Start: 70970, Stop: 70212, Start Num: 3

Candidate Starts for JoyceMaria_96:

(1, 71051), (2, 71030), (Start: 3 @70970 has 30 MA's), (4, 70901), (5, 70886), (6, 70880), (10, 70772), (11, 70769), (13, 70760), (14, 70748), (15, 70739), (24, 70553), (36, 70427), (40, 70385), (43, 70373), (50, 70292),

Gene: KarasumaRum_95 Start: 69551, Stop: 68853, Start Num: 3

Candidate Starts for KarasumaRum_95:

(Start: 3 @69551 has 30 MA's), (4, 69482), (5, 69467), (6, 69461), (11, 69332), (13, 69323), (19, 69194), (21, 69176), (25, 69113), (27, 69095), (32, 69065), (35, 69032), (39, 68966), (45, 68918),

Gene: Lambano_96 Start: 70329, Stop: 69640, Start Num: 3

Candidate Starts for Lambano_96:

(2, 70389), (Start: 3 @70329 has 30 MA's), (4, 70260), (6, 70239), (9, 70137), (10, 70113), (11, 70110), (13, 70101), (14, 70089), (15, 70080), (38, 69780),

Gene: LilMcDreamy_92 Start: 69414, Stop: 68710, Start Num: 3

Candidate Starts for LilMcDreamy_92:

(Start: 3 @69414 has 30 MA's), (4, 69348), (5, 69333), (6, 69327), (10, 69207), (17, 69132), (25, 68994), (29, 68970), (31, 68955), (34, 68922), (36, 68871), (40, 68829), (43, 68814), (44, 68793), (45, 68781), (49, 68742), (51, 68727),

Gene: LittleDigger_98 Start: 70515, Stop: 69814, Start Num: 3

Candidate Starts for LittleDigger_98:

(Start: 3 @70515 has 30 MA's), (4, 70446), (6, 70425), (9, 70323), (10, 70299), (11, 70296), (13, 70287), (14, 70275), (15, 70266), (38, 69954),

Gene: Lolalove_99 Start: 70873, Stop: 70115, Start Num: 3

Candidate Starts for Lolalove_99:

(1, 70954), (2, 70933), (Start: 3 @70873 has 30 MA's), (4, 70804), (5, 70789), (6, 70783), (10, 70675), (11, 70672), (13, 70663), (14, 70651), (15, 70642), (24, 70456), (36, 70330), (40, 70288), (43, 70276), (50, 70195),

Gene: Magpie_93 Start: 70777, Stop: 70040, Start Num: 3

Candidate Starts for Magpie_93:

(Start: 3 @70777 has 30 MA's), (4, 70708), (5, 70693), (6, 70687), (8, 70618), (10, 70579), (11, 70576), (13, 70567), (14, 70555), (15, 70546), (24, 70360), (28, 70336), (33, 70297), (36, 70255), (40, 70213), (50, 70120),

Gene: Mithril_95 Start: 70699, Stop: 69941, Start Num: 3

Candidate Starts for Mithril_95:

(1, 70780), (2, 70759), (Start: 3 @70699 has 30 MA's), (4, 70630), (5, 70615), (6, 70609), (10, 70501), (11, 70498), (13, 70489), (14, 70477), (15, 70468), (24, 70282), (36, 70156), (40, 70114), (43, 70102), (50, 70021),

Gene: Mudslide_98 Start: 71104, Stop: 70346, Start Num: 3

Candidate Starts for Mudslide_98:

(1, 71185), (2, 71164), (Start: 3 @71104 has 30 MA's), (4, 71035), (5, 71020), (6, 71014), (10, 70906), (11, 70903), (13, 70894), (14, 70882), (15, 70873), (24, 70687), (36, 70561), (40, 70519), (43, 70507), (50, 70426),

Gene: Nanao_98 Start: 70342, Stop: 69653, Start Num: 3

Candidate Starts for Nanao_98:

(2, 70402), (Start: 3 @70342 has 30 MA's), (4, 70273), (6, 70252), (9, 70150), (10, 70126), (11, 70123), (13, 70114), (14, 70102), (15, 70093), (38, 69793),

Gene: Nangang_98 Start: 70177, Stop: 69479, Start Num: 3

Candidate Starts for Nangang_98:

(Start: 3 @70177 has 30 MA's), (4, 70108), (5, 70093), (6, 70087), (11, 69958), (13, 69949), (19, 69820), (21, 69802), (30, 69718), (32, 69700), (35, 69658), (41, 69580), (44, 69556), (45, 69544), (46, 69526),

Gene: Poster_97 Start: 70343, Stop: 69654, Start Num: 3

Candidate Starts for Poster_97:

(2, 70403), (Start: 3 @70343 has 30 MA's), (4, 70274), (6, 70253), (9, 70151), (10, 70127), (11, 70124), (13, 70115), (14, 70103), (15, 70094), (38, 69794),

Gene: Prince_97 Start: 70971, Stop: 70213, Start Num: 3

Candidate Starts for Prince_97:

(1, 71052), (2, 71031), (Start: 3 @70971 has 30 MA's), (4, 70902), (5, 70887), (6, 70881), (10, 70773), (11, 70770), (13, 70761), (14, 70749), (15, 70740), (24, 70554), (36, 70428), (40, 70386), (43, 70374), (50, 70293),

Gene: QueenPie_91 Start: 70092, Stop: 69403, Start Num: 3

Candidate Starts for QueenPie_91:

(2, 70152), (Start: 3 @70092 has 30 MA's), (4, 70023), (6, 70002), (9, 69900), (10, 69876), (11, 69873), (13, 69864), (14, 69852), (15, 69843), (16, 69834), (38, 69543),

Gene: RawrgerThat_94 Start: 70604, Stop: 69867, Start Num: 3

Candidate Starts for RawrgerThat_94:

(Start: 3 @70604 has 30 MA's), (4, 70535), (5, 70520), (6, 70514), (10, 70406), (11, 70403), (13, 70394), (14, 70382), (15, 70373), (24, 70187), (28, 70163), (33, 70124), (36, 70082), (40, 70040), (50,

69947),

Gene: Reccee_98 Start: 70025, Stop: 69336, Start Num: 3

Candidate Starts for Reccee_98:

(Start: 3 @70025 has 30 MA's), (4, 69956), (5, 69941), (6, 69935), (11, 69806), (13, 69797), (25, 69596), (27, 69578), (35, 69515), (41, 69437), (44, 69413), (45, 69401), (46, 69383),

Gene: Renkei_98 Start: 70509, Stop: 69808, Start Num: 3

Candidate Starts for Renkei_98:

(Start: 3 @70509 has 30 MA's), (4, 70440), (6, 70419), (9, 70317), (10, 70293), (11, 70290), (13, 70281), (14, 70269), (15, 70260), (38, 69948),

Gene: Rich_95 Start: 69710, Stop: 69057, Start Num: 3

Candidate Starts for Rich_95:

(Start: 3 @69710 has 30 MA's), (6, 69635), (7, 69617), (12, 69527), (18, 69437), (25, 69317), (27, 69299), (45, 69122),

Gene: Rita130_96 Start: 69728, Stop: 69039, Start Num: 3

Candidate Starts for Rita130_96:

(Start: 3 @69728 has 30 MA's), (4, 69659), (5, 69644), (6, 69638), (11, 69509), (13, 69500), (25, 69299), (27, 69281), (35, 69218), (41, 69140), (44, 69116), (45, 69104), (46, 69086),

Gene: Serendipitous_98 Start: 69758, Stop: 69069, Start Num: 3

Candidate Starts for Serendipitous_98:

(Start: 3 @69758 has 30 MA's), (4, 69689), (5, 69674), (6, 69668), (13, 69530), (25, 69329), (27, 69311), (41, 69170), (45, 69134), (46, 69116),

Gene: Shenyu_98 Start: 70172, Stop: 69474, Start Num: 3

Candidate Starts for Shenyu_98:

(Start: 3 @70172 has 30 MA's), (4, 70103), (5, 70088), (6, 70082), (11, 69953), (13, 69944), (19, 69815), (21, 69797), (30, 69713), (32, 69695), (35, 69653), (41, 69575), (44, 69551), (45, 69539), (46, 69521),

Gene: SirJeffery_95 Start: 69743, Stop: 69054, Start Num: 3

Candidate Starts for SirJeffery_95:

(Start: 3 @69743 has 30 MA's), (4, 69674), (5, 69659), (6, 69653), (11, 69524), (13, 69515), (25, 69314), (27, 69296), (35, 69233), (41, 69155), (44, 69131), (45, 69119), (46, 69101),

Gene: StinkyVeggy_95 Start: 69551, Stop: 68853, Start Num: 3

Candidate Starts for StinkyVeggy_95:

(Start: 3 @69551 has 30 MA's), (4, 69482), (5, 69467), (6, 69461), (11, 69332), (13, 69323), (19, 69194), (21, 69176), (25, 69113), (27, 69095), (32, 69065), (35, 69032), (39, 68966), (45, 68918),

Gene: Suigeneris_98 Start: 69970, Stop: 69281, Start Num: 3

Candidate Starts for Suigeneris_98:

(Start: 3 @69970 has 30 MA's), (4, 69901), (5, 69886), (6, 69880), (11, 69751), (13, 69742), (25, 69541), (27, 69523), (35, 69460), (41, 69382), (44, 69358), (45, 69346), (46, 69328),

Gene: Vincenzo_98 Start: 72035, Stop: 71277, Start Num: 3

Candidate Starts for Vincenzo_98:

(Start: 3 @72035 has 30 MA's), (4, 71969), (5, 71954), (6, 71948), (10, 71822), (14, 71798), (23, 71606), (24, 71603), (29, 71576), (36, 71480), (47, 71378), (48, 71372), (52, 71324),

Gene: VioletZ_99 Start: 71057, Stop: 70320, Start Num: 3

Candidate Starts for VioletZ_99:

(Start: 3 @71057 has 30 MA's), (4, 70988), (5, 70973), (6, 70967), (10, 70859), (11, 70856), (13, 70847), (14, 70835), (15, 70826), (24, 70640), (28, 70616), (33, 70577), (36, 70535), (40, 70493), (50, 70400),

Gene: Waleliano_96 Start: 70725, Stop: 69967, Start Num: 3

Candidate Starts for Waleliano_96:

(1, 70806), (2, 70785), (Start: 3 @70725 has 30 MA's), (4, 70656), (5, 70641), (6, 70635), (10, 70527), (11, 70524), (13, 70515), (14, 70503), (15, 70494), (24, 70308), (36, 70182), (40, 70140), (43, 70128), (50, 70047),

Gene: Xincheng_88 Start: 70671, Stop: 69934, Start Num: 3

Candidate Starts for Xincheng_88:

(Start: 3 @70671 has 30 MA's), (4, 70602), (5, 70587), (6, 70581), (8, 70512), (10, 70473), (11, 70470), (13, 70461), (14, 70449), (15, 70440), (24, 70254), (28, 70230), (33, 70191), (36, 70149), (40, 70107), (50, 70014),

Gene: Zemanar_95 Start: 70855, Stop: 70109, Start Num: 3

Candidate Starts for Zemanar_95:

(Start: 3 @70855 has 30 MA's), (4, 70786), (5, 70771), (6, 70765), (8, 70696), (10, 70657), (11, 70654), (13, 70645), (14, 70633), (15, 70624), (24, 70438), (28, 70414), (33, 70375), (36, 70324), (40, 70282), (45, 70237), (50, 70189),