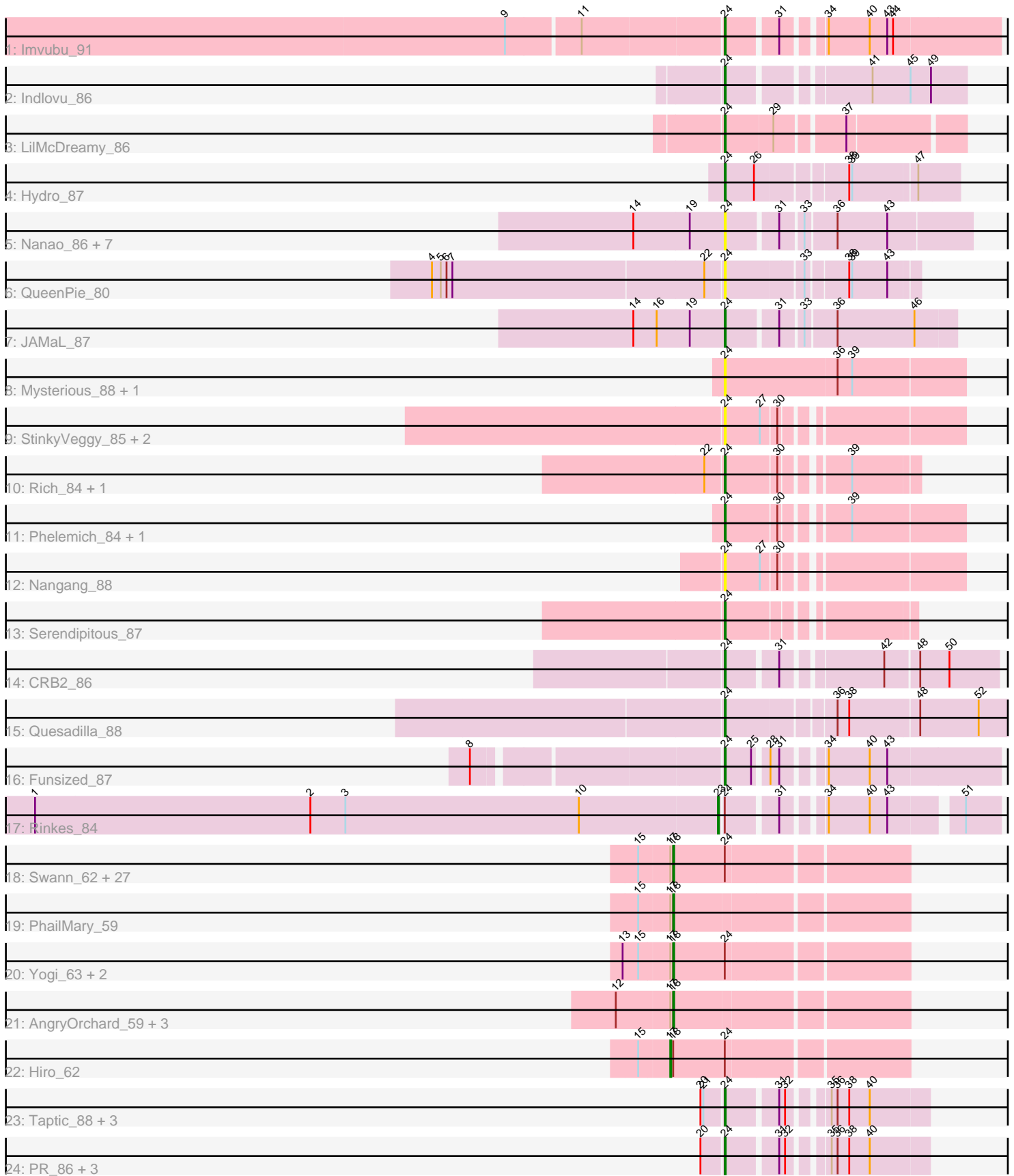


Pham 214236



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 214236 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214236 has 74 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Imvubu_91
- Track 2 : Indlovu_86
- Track 3 : LilMcDreamy_86
- Track 4 : Hydro_87
- Track 5 : Nanao_86, Poster_85, Epah_86, Lambano_84, GinPorsche_86, Hally898_84, Ahwei_85, Antihero_86
- Track 6 : QueenPie_80
- Track 7 : JAMaL_87
- Track 8 : Mysterious_88, Nehemiah_86
- Track 9 : StinkyVeggy_85, Shenyu_88, KarasumaRum_85
- Track 10 : Rich_84, Bae_85
- Track 11 : Phelemich_84, Reprobate_86
- Track 12 : Nangang_88
- Track 13 : Serendipitous_87
- Track 14 : CRB2_86
- Track 15 : Quesadilla_88
- Track 16 : Funsized_87
- Track 17 : Rinkes_84
- Track 18 : Swann_62, Krishelle_62, Espica_63, Phrankenstein_62, Lillie_62, Bryce_61, Nancinator_61, Rhodalysa_62, Natosaleda_61, Rasputin_62, BobbyDazzler_62, RexFury_61, Naiad_61, Shuman_63, Harlequin_62, Erik_62, Alatin_61, RER2_56, Gollum_62, Yoncess_61, UhSalsa_62, Belenaria_63, TWAMP_62, Bradshaw_62, AppleCloud_59, Jester_61, CosmicSans_62, StCroix_61
- Track 19 : PhailMary_59
- Track 20 : Yogi_63, Bonanza_63, Alpacados_61
- Track 21 : AngryOrchard_59, Partridge_61, Dinger_61, Takoda_62
- Track 22 : Hiro_62
- Track 23 : Taptic_88, GodPhather_87, Jeon_82, Cepens_87
- Track 24 : PR_86, Argie_88, D12_85, Megabear_85

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

The start number called the most often in the published annotations is 18, it was called in 35 of the 58 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alatin_61, Alpacados_61, AngryOrchard_59, AppleCloud_59, Belenaria_63, BobbyDazzler_62, Bonanza_63, Bradshaw_62, Bryce_61, CosmicSans_62, Dinger_61, Erik_62, Espica_63, Gollum_62, Harlequin_62, Jester_61, Krishelle_62, Lillie_62, Naiad_61, Nancinator_61, Natosaleda_61, Partridge_61, PhailMary_59, Phrankenstein_62, RER2_56, Rasputin_62, RexFury_61, Rhodalysa_62, Shuman_63, StCroix_61, Swann_62, TWAMP_62, Takoda_62, UhSalsa_62, Yogi_63, Yoncess_61,

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

- Hiro_62,

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

- Ahwei_85, Antihero_86, Argie_88, Baee_85, CRB2_86, Cepens_87, D12_85, Epah_86, Funsized_87, GinPorsche_86, GodPhather_87, Hally898_84, Hydro_87, Imvubu_91, Indlovu_86, JAMaL_87, Jeon_82, KarasumaRum_85, Lambano_84, LilMcDreamy_86, Megabear_85, Mysterious_88, Nanao_86, Nangang_88, Nehemiah_86, PR_86, Phelemich_84, Poster_85, QueenPie_80, Quesadilla_88, Reprobate_86, Rich_84, Rinkes_84, Serendipitous_87, Shenyu_88, StinkyVeggy_85, Taptic_88,

Summary by start number:

Start 17:

- Found in 37 of 74 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 58
- Called 2.7% of time when present
- Phage (with cluster) where this start called: Hiro_62 (CA),

Start 18:

- Found in 37 of 74 (50.0%) of genes in pham
- Manual Annotations of this start: 35 of 58
- Called 97.3% of time when present
- Phage (with cluster) where this start called: Alatin_61 (CA), Alpacados_61 (CA), AngryOrchard_59 (CA), AppleCloud_59 (CA), Belenaria_63 (CA), BobbyDazzler_62 (CA), Bonanza_63 (CA), Bradshaw_62 (CA), Bryce_61 (CA), CosmicSans_62 (CA), Dinger_61 (CA), Erik_62 (CA), Espica_63 (CA), Gollum_62 (CA), Harlequin_62 (CA), Jester_61 (CA), Krishelle_62 (CA), Lillie_62 (CA), Naiad_61 (CA), Nancinator_61 (CA), Natosaleda_61 (CA), Partridge_61 (CA), PhailMary_59 (CA), Phrankenstein_62 (CA), RER2_56 (CA), Rasputin_62 (CA), RexFury_61 (CA), Rhodalysa_62 (CA), Shuman_63 (CA), StCroix_61 (CA), Swann_62 (CA), TWAMP_62 (CA), Takoda_62 (CA), UhSalsa_62 (CA), Yogi_63 (CA), Yoncess_61 (CA),

Start 23:

- Found in 1 of 74 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 58
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rinkes_84 (B9),

Start 24:

- Found in 69 of 74 (93.2%) of genes in pham
- Manual Annotations of this start: 21 of 58

- Called 52.2% of time when present
- Phage (with cluster) where this start called: Ahwei_85 (B4), Antihero_86 (B4), Argie_88 (W), Bae_85 (B5), CRB2_86 (B9), Cepens_87 (W), D12_85 (W), Epah_86 (B4), Funsized_87 (B9), GinPorsche_86 (B4), GodPhather_87 (W), Hally898_84 (B4), Hydro_87 (B4), Imvubu_91 (B10), Indlovu_86 (B11), JAMaL_87 (B4), Jeon_82 (W), KarasumaRum_85 (B5), Lambano_84 (B4), LilMcDreamy_86 (B12), Megabear_85 (W), Mysterious_88 (B5), Nanao_86 (B4), Nangang_88 (B5), Nehemiah_86 (B5), PR_86 (W), Phelemich_84 (B5), Poster_85 (B4), QueenPie_80 (B4), Quesadilla_88 (B9), Reprobate_86 (B5), Rich_84 (B5), Serendipitous_87 (B5), Shenyu_88 (B5), StinkyVeggy_85 (B5), Taptic_88 (W),

Summary by clusters:

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

Info for manual annotations of cluster B10:

- Start number 24 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 24 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 24 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B4:

- Start number 24 was manually annotated 2 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 24 was manually annotated 5 times for cluster B5.

Info for manual annotations of cluster B9:

- Start number 23 was manually annotated 1 time for cluster B9.
- Start number 24 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster CA:

- Start number 17 was manually annotated 1 time for cluster CA.
- Start number 18 was manually annotated 35 times for cluster CA.

Info for manual annotations of cluster W:

- Start number 24 was manually annotated 8 times for cluster W.

Gene Information:

Gene: Ahwei_85 Start: 65422, Stop: 65189, Start Num: 24

Candidate Starts for Ahwei_85:

(14, 65515), (19, 65458), (Start: 24 @65422 has 21 MA's), (31, 65374), (33, 65353), (36, 65323), (43, 65272),

Gene: Alatin_61 Start: 42128, Stop: 41901, Start Num: 18

Candidate Starts for Alatin_61:

(15, 42161), (Start: 17 @42131 has 1 MA's), (Start: 18 @42128 has 35 MA's), (Start: 24 @42077 has 21 MA's),

Gene: Alpacados_61 Start: 41951, Stop: 41724, Start Num: 18

Candidate Starts for Alpacados_61:

(13, 41999), (15, 41984), (Start: 17 @41954 has 1 MA's), (Start: 18 @41951 has 35 MA's), (Start: 24 @41900 has 21 MA's),

Gene: AngryOrchard_59 Start: 42181, Stop: 41954, Start Num: 18

Candidate Starts for AngryOrchard_59:

(12, 42238), (Start: 17 @42184 has 1 MA's), (Start: 18 @42181 has 35 MA's),

Gene: Antihero_86 Start: 65345, Stop: 65112, Start Num: 24

Candidate Starts for Antihero_86:

(14, 65438), (19, 65381), (Start: 24 @65345 has 21 MA's), (31, 65297), (33, 65276), (36, 65246), (43, 65195),

Gene: AppleCloud_59 Start: 41845, Stop: 41618, Start Num: 18

Candidate Starts for AppleCloud_59:

(15, 41878), (Start: 17 @41848 has 1 MA's), (Start: 18 @41845 has 35 MA's), (Start: 24 @41794 has 21 MA's),

Gene: Argie_88 Start: 59134, Stop: 59316, Start Num: 24

Candidate Starts for Argie_88:

(20, 59113), (Start: 24 @59134 has 21 MA's), (31, 59182), (32, 59188), (35, 59218), (36, 59224), (38, 59236), (40, 59257),

Gene: Bae_85 Start: 65223, Stop: 65053, Start Num: 24

Candidate Starts for Bae_85:

(22, 65241), (Start: 24 @65223 has 21 MA's), (30, 65172), (39, 65118),

Gene: Belenaria_63 Start: 41993, Stop: 41766, Start Num: 18

Candidate Starts for Belenaria_63:

(15, 42026), (Start: 17 @41996 has 1 MA's), (Start: 18 @41993 has 35 MA's), (Start: 24 @41942 has 21 MA's),

Gene: BobbyDazzler_62 Start: 42099, Stop: 41872, Start Num: 18

Candidate Starts for BobbyDazzler_62:

(15, 42132), (Start: 17 @42102 has 1 MA's), (Start: 18 @42099 has 35 MA's), (Start: 24 @42048 has 21 MA's),

Gene: Bonanza_63 Start: 42403, Stop: 42176, Start Num: 18

Candidate Starts for Bonanza_63:

(13, 42451), (15, 42436), (Start: 17 @42406 has 1 MA's), (Start: 18 @42403 has 35 MA's), (Start: 24 @42352 has 21 MA's),

Gene: Bradshaw_62 Start: 42061, Stop: 41834, Start Num: 18

Candidate Starts for Bradshaw_62:

(15, 42094), (Start: 17 @42064 has 1 MA's), (Start: 18 @42061 has 35 MA's), (Start: 24 @42010 has 21 MA's),

Gene: Bryce_61 Start: 41807, Stop: 41580, Start Num: 18

Candidate Starts for Bryce_61:

(15, 41840), (Start: 17 @41810 has 1 MA's), (Start: 18 @41807 has 35 MA's), (Start: 24 @41756 has 21 MA's),

Gene: CRB2_86 Start: 67074, Stop: 66823, Start Num: 24

Candidate Starts for CRB2_86:

(Start: 24 @67074 has 21 MA's), (31, 67026), (42, 66936), (48, 66903), (50, 66873),

Gene: Cepens_87 Start: 58243, Stop: 58425, Start Num: 24

Candidate Starts for Cepens_87:

(20, 58222), (21, 58225), (Start: 24 @58243 has 21 MA's), (31, 58291), (32, 58297), (35, 58327), (36, 58333), (38, 58345), (40, 58366),

Gene: CosmicSans_62 Start: 42052, Stop: 41825, Start Num: 18

Candidate Starts for CosmicSans_62:

(15, 42085), (Start: 17 @42055 has 1 MA's), (Start: 18 @42052 has 35 MA's), (Start: 24 @42001 has 21 MA's),

Gene: D12_85 Start: 58877, Stop: 59059, Start Num: 24

Candidate Starts for D12_85:

(20, 58856), (Start: 24 @58877 has 21 MA's), (31, 58925), (32, 58931), (35, 58961), (36, 58967), (38, 58979), (40, 59000),

Gene: Dinger_61 Start: 42199, Stop: 41972, Start Num: 18

Candidate Starts for Dinger_61:

(12, 42256), (Start: 17 @42202 has 1 MA's), (Start: 18 @42199 has 35 MA's),

Gene: Epah_86 Start: 65345, Stop: 65112, Start Num: 24

Candidate Starts for Epah_86:

(14, 65438), (19, 65381), (Start: 24 @65345 has 21 MA's), (31, 65297), (33, 65276), (36, 65246), (43, 65195),

Gene: Erik_62 Start: 41883, Stop: 41656, Start Num: 18

Candidate Starts for Erik_62:

(15, 41916), (Start: 17 @41886 has 1 MA's), (Start: 18 @41883 has 35 MA's), (Start: 24 @41832 has 21 MA's),

Gene: Espica_63 Start: 41993, Stop: 41766, Start Num: 18

Candidate Starts for Espica_63:

(15, 42026), (Start: 17 @41996 has 1 MA's), (Start: 18 @41993 has 35 MA's), (Start: 24 @41942 has 21 MA's),

Gene: Funsized_87 Start: 67824, Stop: 67570, Start Num: 24

Candidate Starts for Funsized_87:

(8, 68058), (Start: 24 @67824 has 21 MA's), (25, 67797), (28, 67785), (31, 67776), (34, 67743), (40, 67701), (43, 67683),

Gene: GinPorsche_86 Start: 65342, Stop: 65109, Start Num: 24

Candidate Starts for GinPorsche_86:

(14, 65435), (19, 65378), (Start: 24 @65342 has 21 MA's), (31, 65294), (33, 65273), (36, 65243), (43, 65192),

Gene: GodPhather_87 Start: 59020, Stop: 59202, Start Num: 24

Candidate Starts for GodPhather_87:

(20, 58999), (21, 59002), (Start: 24 @59020 has 21 MA's), (31, 59068), (32, 59074), (35, 59104), (36, 59110), (38, 59122), (40, 59143),

Gene: Gollum_62 Start: 41994, Stop: 41767, Start Num: 18

Candidate Starts for Gollum_62:

(15, 42027), (Start: 17 @41997 has 1 MA's), (Start: 18 @41994 has 35 MA's), (Start: 24 @41943 has 21 MA's),

Gene: Hally898_84 Start: 65182, Stop: 64949, Start Num: 24

Candidate Starts for Hally898_84:

(14, 65275), (19, 65218), (Start: 24 @65182 has 21 MA's), (31, 65134), (33, 65113), (36, 65083), (43, 65032),

Gene: Harlequin_62 Start: 41842, Stop: 41615, Start Num: 18

Candidate Starts for Harlequin_62:

(15, 41875), (Start: 17 @41845 has 1 MA's), (Start: 18 @41842 has 35 MA's), (Start: 24 @41791 has 21 MA's),

Gene: Hiro_62 Start: 42316, Stop: 42086, Start Num: 17

Candidate Starts for Hiro_62:

(15, 42346), (Start: 17 @42316 has 1 MA's), (Start: 18 @42313 has 35 MA's), (Start: 24 @42262 has 21 MA's),

Gene: Hydro_87 Start: 66400, Stop: 66179, Start Num: 24

Candidate Starts for Hydro_87:

(Start: 24 @66400 has 21 MA's), (26, 66370), (38, 66286), (39, 66283), (47, 66220),

Gene: Imvubu_91 Start: 65831, Stop: 65577, Start Num: 24

Candidate Starts for Imvubu_91:

(9, 66041), (11, 65969), (Start: 24 @65831 has 21 MA's), (31, 65783), (34, 65750), (40, 65708), (43, 65690), (44, 65684),

Gene: Indlovu_86 Start: 66392, Stop: 66171, Start Num: 24

Candidate Starts for Indlovu_86:

(Start: 24 @66392 has 21 MA's), (41, 66266), (45, 66227), (49, 66206),

Gene: JAMaL_87 Start: 65869, Stop: 65651, Start Num: 24

Candidate Starts for JAMaL_87:

(14, 65962), (16, 65938), (19, 65905), (Start: 24 @65869 has 21 MA's), (31, 65821), (33, 65800), (36, 65770), (46, 65692),

Gene: Jeon_82 Start: 58513, Stop: 58695, Start Num: 24

Candidate Starts for Jeon_82:

(20, 58492), (21, 58495), (Start: 24 @58513 has 21 MA's), (31, 58561), (32, 58567), (35, 58597), (36, 58603), (38, 58615), (40, 58636),

Gene: Jester_61 Start: 41773, Stop: 41546, Start Num: 18

Candidate Starts for Jester_61:

(15, 41806), (Start: 17 @41776 has 1 MA's), (Start: 18 @41773 has 35 MA's), (Start: 24 @41722 has 21 MA's),

Gene: KarasumaRum_85 Start: 64809, Stop: 64591, Start Num: 24

Candidate Starts for KarasumaRum_85:

(Start: 24 @64809 has 21 MA's), (27, 64773), (30, 64758),

Gene: Krishelle_62 Start: 42421, Stop: 42194, Start Num: 18

Candidate Starts for Krishelle_62:

(15, 42454), (Start: 17 @42424 has 1 MA's), (Start: 18 @42421 has 35 MA's), (Start: 24 @42370 has 21 MA's),

Gene: Lambano_84 Start: 65182, Stop: 64949, Start Num: 24

Candidate Starts for Lambano_84:

(14, 65275), (19, 65218), (Start: 24 @65182 has 21 MA's), (31, 65134), (33, 65113), (36, 65083), (43, 65032),

Gene: LilMcDreamy_86 Start: 65203, Stop: 64979, Start Num: 24

Candidate Starts for LilMcDreamy_86:

(Start: 24 @65203 has 21 MA's), (29, 65155), (37, 65092),

Gene: Lillie_62 Start: 42052, Stop: 41825, Start Num: 18

Candidate Starts for Lillie_62:

(15, 42085), (Start: 17 @42055 has 1 MA's), (Start: 18 @42052 has 35 MA's), (Start: 24 @42001 has 21 MA's),

Gene: Megabear_85 Start: 58166, Stop: 58348, Start Num: 24

Candidate Starts for Megabear_85:

(20, 58145), (Start: 24 @58166 has 21 MA's), (31, 58214), (32, 58220), (35, 58250), (36, 58256), (38, 58268), (40, 58289),

Gene: Mysterious_88 Start: 64978, Stop: 64736, Start Num: 24

Candidate Starts for Mysterious_88:

(Start: 24 @64978 has 21 MA's), (36, 64864), (39, 64849),

Gene: Naiad_61 Start: 42074, Stop: 41847, Start Num: 18

Candidate Starts for Naiad_61:

(15, 42107), (Start: 17 @42077 has 1 MA's), (Start: 18 @42074 has 35 MA's), (Start: 24 @42023 has 21 MA's),

Gene: Nanao_86 Start: 65195, Stop: 64962, Start Num: 24

Candidate Starts for Nanao_86:

(14, 65288), (19, 65231), (Start: 24 @65195 has 21 MA's), (31, 65147), (33, 65126), (36, 65096), (43, 65045),

Gene: Nancinator_61 Start: 41391, Stop: 41164, Start Num: 18

Candidate Starts for Nancinator_61:

(15, 41424), (Start: 17 @41394 has 1 MA's), (Start: 18 @41391 has 35 MA's), (Start: 24 @41340 has 21 MA's),

Gene: Nangang_88 Start: 65412, Stop: 65194, Start Num: 24

Candidate Starts for Nangang_88:

(Start: 24 @65412 has 21 MA's), (27, 65376), (30, 65361),

Gene: Natosaleda_61 Start: 41992, Stop: 41765, Start Num: 18

Candidate Starts for Natosaleda_61:

(15, 42025), (Start: 17 @41995 has 1 MA's), (Start: 18 @41992 has 35 MA's), (Start: 24 @41941 has 21 MA's),

Gene: Nehemiah_86 Start: 64858, Stop: 64616, Start Num: 24

Candidate Starts for Nehemiah_86:

(Start: 24 @64858 has 21 MA's), (36, 64744), (39, 64729),

Gene: PR_86 Start: 58854, Stop: 59036, Start Num: 24

Candidate Starts for PR_86:

(20, 58833), (Start: 24 @58854 has 21 MA's), (31, 58902), (32, 58908), (35, 58938), (36, 58944), (38, 58956), (40, 58977),

Gene: Partridge_61 Start: 42353, Stop: 42126, Start Num: 18

Candidate Starts for Partridge_61:

(12, 42410), (Start: 17 @42356 has 1 MA's), (Start: 18 @42353 has 35 MA's),

Gene: PhailMary_59 Start: 41069, Stop: 40842, Start Num: 18

Candidate Starts for PhailMary_59:

(15, 41102), (Start: 17 @41072 has 1 MA's), (Start: 18 @41069 has 35 MA's),

Gene: Phelemich_84 Start: 64879, Stop: 64661, Start Num: 24

Candidate Starts for Phelemich_84:

(Start: 24 @64879 has 21 MA's), (30, 64828), (39, 64774),

Gene: Phrankenstein_62 Start: 41998, Stop: 41771, Start Num: 18

Candidate Starts for Phrankenstein_62:

(15, 42031), (Start: 17 @42001 has 1 MA's), (Start: 18 @41998 has 35 MA's), (Start: 24 @41947 has 21 MA's),

Gene: Poster_85 Start: 65196, Stop: 64963, Start Num: 24

Candidate Starts for Poster_85:

(14, 65289), (19, 65232), (Start: 24 @65196 has 21 MA's), (31, 65148), (33, 65127), (36, 65097), (43, 65046),

Gene: QueenPie_80 Start: 64873, Stop: 64691, Start Num: 24

Candidate Starts for QueenPie_80:

(4, 65167), (5, 65158), (6, 65152), (7, 65146), (22, 64891), (Start: 24 @64873 has 21 MA's), (33, 64798), (38, 64759), (39, 64756), (43, 64720),

Gene: Quesadilla_88 Start: 65998, Stop: 65714, Start Num: 24

Candidate Starts for Quesadilla_88:

(Start: 24 @65998 has 21 MA's), (36, 65896), (38, 65884), (48, 65815), (52, 65755),

Gene: RER2_56 Start: 38924, Stop: 38697, Start Num: 18

Candidate Starts for RER2_56:

(15, 38957), (Start: 17 @38927 has 1 MA's), (Start: 18 @38924 has 35 MA's), (Start: 24 @38873 has 21 MA's),

Gene: Rasputin_62 Start: 42022, Stop: 41795, Start Num: 18

Candidate Starts for Rasputin_62:

(15, 42055), (Start: 17 @42025 has 1 MA's), (Start: 18 @42022 has 35 MA's), (Start: 24 @41971 has 21 MA's),

Gene: Reprobate_86 Start: 64884, Stop: 64666, Start Num: 24

Candidate Starts for Reprobate_86:

(Start: 24 @64884 has 21 MA's), (30, 64833), (39, 64779),

Gene: RexFury_61 Start: 42082, Stop: 41855, Start Num: 18

Candidate Starts for RexFury_61:

(15, 42115), (Start: 17 @42085 has 1 MA's), (Start: 18 @42082 has 35 MA's), (Start: 24 @42031 has 21 MA's),

Gene: Rhodalysa_62 Start: 42052, Stop: 41825, Start Num: 18

Candidate Starts for Rhodalysa_62:

(15, 42085), (Start: 17 @42055 has 1 MA's), (Start: 18 @42052 has 35 MA's), (Start: 24 @42001 has 21 MA's),

Gene: Rich_84 Start: 65290, Stop: 65120, Start Num: 24

Candidate Starts for Rich_84:

(22, 65308), (Start: 24 @65290 has 21 MA's), (30, 65239), (39, 65185),

Gene: Rinkes_84 Start: 65665, Stop: 65420, Start Num: 23

Candidate Starts for Rinkes_84:

(1, 66364), (2, 66082), (3, 66046), (10, 65806), (Start: 23 @65665 has 1 MA's), (Start: 24 @65662 has 21 MA's), (31, 65614), (34, 65581), (40, 65539), (43, 65521), (51, 65455),

Gene: Serendipitous_87 Start: 64709, Stop: 64542, Start Num: 24

Candidate Starts for Serendipitous_87:

(Start: 24 @64709 has 21 MA's),

Gene: Shenyu_88 Start: 65410, Stop: 65192, Start Num: 24

Candidate Starts for Shenyu_88:

(Start: 24 @65410 has 21 MA's), (27, 65374), (30, 65359),

Gene: Shuman_63 Start: 42003, Stop: 41776, Start Num: 18

Candidate Starts for Shuman_63:

(15, 42036), (Start: 17 @42006 has 1 MA's), (Start: 18 @42003 has 35 MA's), (Start: 24 @41952 has 21 MA's),

Gene: StCroix_61 Start: 42074, Stop: 41847, Start Num: 18

Candidate Starts for StCroix_61:

(15, 42107), (Start: 17 @42077 has 1 MA's), (Start: 18 @42074 has 35 MA's), (Start: 24 @42023 has 21 MA's),

Gene: StinkyVeggy_85 Start: 64809, Stop: 64591, Start Num: 24

Candidate Starts for StinkyVeggy_85:

(Start: 24 @64809 has 21 MA's), (27, 64773), (30, 64758),

Gene: Swann_62 Start: 42050, Stop: 41823, Start Num: 18

Candidate Starts for Swann_62:

(15, 42083), (Start: 17 @42053 has 1 MA's), (Start: 18 @42050 has 35 MA's), (Start: 24 @41999 has 21 MA's),

Gene: TWAMP_62 Start: 42052, Stop: 41825, Start Num: 18

Candidate Starts for TWAMP_62:

(15, 42085), (Start: 17 @42055 has 1 MA's), (Start: 18 @42052 has 35 MA's), (Start: 24 @42001 has 21 MA's),

Gene: Takoda_62 Start: 42235, Stop: 42008, Start Num: 18

Candidate Starts for Takoda_62:

(12, 42292), (Start: 17 @42238 has 1 MA's), (Start: 18 @42235 has 35 MA's),

Gene: Taptic_88 Start: 58560, Stop: 58742, Start Num: 24

Candidate Starts for Taptic_88:

(20, 58539), (21, 58542), (Start: 24 @58560 has 21 MA's), (31, 58608), (32, 58614), (35, 58644), (36, 58650), (38, 58662), (40, 58683),

Gene: UhSalsa_62 Start: 41993, Stop: 41766, Start Num: 18

Candidate Starts for UhSalsa_62:

(15, 42026), (Start: 17 @41996 has 1 MA's), (Start: 18 @41993 has 35 MA's), (Start: 24 @41942 has 21 MA's),

Gene: Yogi_63 Start: 42403, Stop: 42176, Start Num: 18

Candidate Starts for Yogi_63:

(13, 42451), (15, 42436), (Start: 17 @42406 has 1 MA's), (Start: 18 @42403 has 35 MA's), (Start: 24 @42352 has 21 MA's),

Gene: Yoncess_61 Start: 41810, Stop: 41583, Start Num: 18

Candidate Starts for Yoncess_61:

(15, 41843), (Start: 17 @41813 has 1 MA's), (Start: 18 @41810 has 35 MA's), (Start: 24 @41759 has 21 MA's),