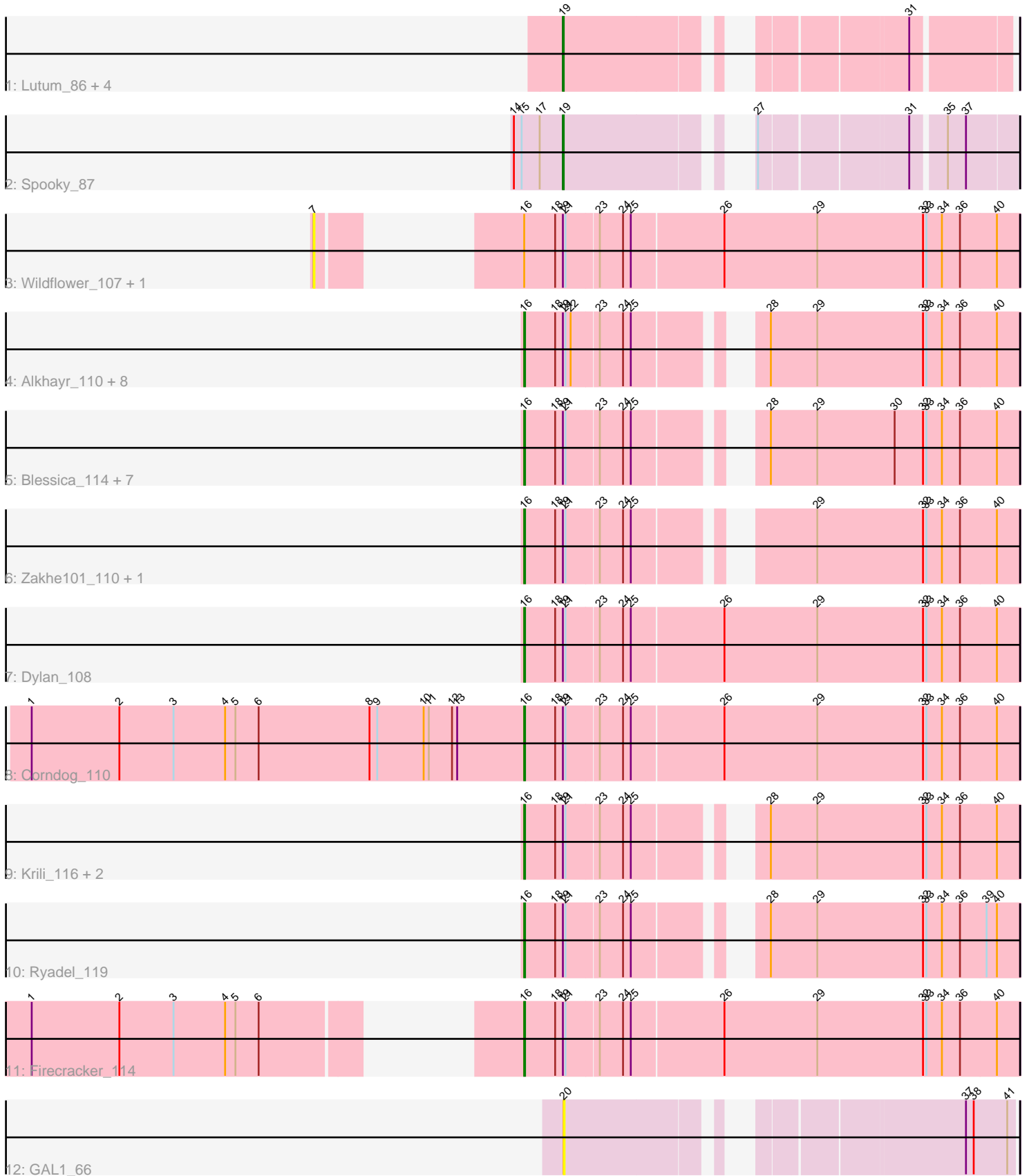


Pham 156538



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 156538 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156538 has 35 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Lutum_86, Getalong_88, Phabuloso_92, Kenna_80, BENtherdunthat_85
- Track 2 : Spooky_87
- Track 3 : Wildflower_107, Ashwin_109
- Track 4 : Alkhayr_110, FoulBall_110, Smooch_112, Catdawg_115, MadKillah_117, Murai_114, Winget_114, YungJamal_111, Schuy_111
- Track 5 : Blessica_114, SchoolBus_115, Idergollasper_118, NiebruSaylor_114, JangDynasty_112, Shida_114, TelAviv_111, Familton_116
- Track 6 : Zakhe101_110, Bora_111
- Track 7 : Dylan_108
- Track 8 : Corndog_110
- Track 9 : Krili_116, Mori_114, Vorrps_114
- Track 10 : Ryadel_119
- Track 11 : Firecracker_114
- Track 12 : GAL1_66

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 22 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alkhayr_110, Blessica_114, Bora_111, Catdawg_115, Corndog_110, Dylan_108, Familton_116, Firecracker_114, FoulBall_110, Idergollasper_118, JangDynasty_112, Krili_116, MadKillah_117, Mori_114, Murai_114, NiebruSaylor_114, Ryadel_119, SchoolBus_115, Schuy_111, Shida_114, Smooch_112, TelAviv_111, Vorrps_114, Winget_114, YungJamal_111, Zakhe101_110,

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

- Ashwin_109, Wildflower_107,

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

- BENtherdunthat_85, GAL1_66, Getalong_88, Kenna_80, Lutum_86, Phabuloso_92, Spooky_87,

Summary by start number:

Start 7:

- Found in 2 of 35 (5.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ashwin_109 (O), Wildflower_107 (O),

Start 16:

- Found in 28 of 35 (80.0%) of genes in pham
- Manual Annotations of this start: 22 of 28
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Alkhayr_110 (O), Blessica_114 (O), Bora_111 (O), Catdawg_115 (O), Corndog_110 (O), Dylan_108 (O), FAMILTON_116 (O), Firecracker_114 (O), FoulBall_110 (O), Idergollasper_118 (O), JangDynasty_112 (O), Krili_116 (O), MadKillah_117 (O), Mori_114 (O), Murai_114 (O), NiebruSaylor_114 (O), Ryadel_119 (O), SchoolBus_115 (O), Schuy_111 (O), Shida_114 (O), Smooch_112 (O), TelAviv_111 (O), Vorrps_114 (O), Winget_114 (O), YungJamal_111 (O), Zakhe101_110 (O),

Start 19:

- Found in 34 of 35 (97.1%) of genes in pham
- Manual Annotations of this start: 6 of 28
- Called 17.6% of time when present
- Phage (with cluster) where this start called: BENtherdunthat_85 (DN1), Getalong_88 (DN1), Kenna_80 (DN1), Lutum_86 (DN1), Phabuloso_92 (DN1), Spooky_87 (DN2),

Start 20:

- Found in 1 of 35 (2.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1_66 (singleton),

Summary by clusters:

There are 4 clusters represented in this pham: singleton, DN1, O, DN2,

Info for manual annotations of cluster DN1:

- Start number 19 was manually annotated 5 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 19 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster O:

- Start number 16 was manually annotated 22 times for cluster O.

Gene Information:

Gene: Alkhayr_110 Start: 66256, Stop: 65741, Start Num: 16

Candidate Starts for Alkhayr_110:

(Start: 16 @66256 has 22 MA's), (18, 66220), (Start: 19 @66211 has 6 MA's), (21, 66208), (22, 66202), (23, 66172), (24, 66145), (25, 66136), (28, 66028), (29, 65974), (32, 65851), (33, 65848), (34, 65830), (36, 65809), (40, 65767),

Gene: Ashwin_109 Start: 65410, Stop: 64736, Start Num: 7

Candidate Starts for Ashwin_109:

(7, 65410), (Start: 16 @65302 has 22 MA's), (18, 65266), (Start: 19 @65257 has 6 MA's), (21, 65254), (23, 65218), (24, 65191), (25, 65182), (26, 65077), (29, 64969), (32, 64846), (33, 64843), (34, 64825), (36, 64804), (40, 64762),

Gene: BENtherdunthat_85 Start: 47138, Stop: 47569, Start Num: 19

Candidate Starts for BENtherdunthat_85:

(Start: 19 @47138 has 6 MA's), (31, 47462),

Gene: Blessica_114 Start: 66987, Stop: 66472, Start Num: 16

Candidate Starts for Blessica_114:

(Start: 16 @66987 has 22 MA's), (18, 66951), (Start: 19 @66942 has 6 MA's), (21, 66939), (23, 66903), (24, 66876), (25, 66867), (28, 66759), (29, 66705), (30, 66615), (32, 66582), (33, 66579), (34, 66561), (36, 66540), (40, 66498),

Gene: Bora_111 Start: 66940, Stop: 66425, Start Num: 16

Candidate Starts for Bora_111:

(Start: 16 @66940 has 22 MA's), (18, 66904), (Start: 19 @66895 has 6 MA's), (21, 66892), (23, 66856), (24, 66829), (25, 66820), (29, 66658), (32, 66535), (33, 66532), (34, 66514), (36, 66493), (40, 66451),

Gene: Catdawg_115 Start: 67576, Stop: 67061, Start Num: 16

Candidate Starts for Catdawg_115:

(Start: 16 @67576 has 22 MA's), (18, 67540), (Start: 19 @67531 has 6 MA's), (21, 67528), (22, 67522), (23, 67492), (24, 67465), (25, 67456), (28, 67348), (29, 67294), (32, 67171), (33, 67168), (34, 67150), (36, 67129), (40, 67087),

Gene: Corndog_110 Start: 65213, Stop: 64647, Start Num: 16

Candidate Starts for Corndog_110:

(1, 65786), (2, 65684), (3, 65621), (4, 65561), (5, 65549), (6, 65522), (8, 65393), (9, 65384), (10, 65330), (11, 65324), (12, 65297), (13, 65291), (Start: 16 @65213 has 22 MA's), (18, 65177), (Start: 19 @65168 has 6 MA's), (21, 65165), (23, 65129), (24, 65102), (25, 65093), (26, 64988), (29, 64880), (32, 64757), (33, 64754), (34, 64736), (36, 64715), (40, 64673),

Gene: Dylan_108 Start: 65404, Stop: 64838, Start Num: 16

Candidate Starts for Dylan_108:

(Start: 16 @65404 has 22 MA's), (18, 65368), (Start: 19 @65359 has 6 MA's), (21, 65356), (23, 65320), (24, 65293), (25, 65284), (26, 65179), (29, 65071), (32, 64948), (33, 64945), (34, 64927), (36, 64906), (40, 64864),

Gene: Familton_116 Start: 67348, Stop: 66833, Start Num: 16

Candidate Starts for Familton_116:

(Start: 16 @67348 has 22 MA's), (18, 67312), (Start: 19 @67303 has 6 MA's), (21, 67300), (23, 67264), (24, 67237), (25, 67228), (28, 67120), (29, 67066), (30, 66976), (32, 66943), (33, 66940), (34, 66922), (36, 66901), (40, 66859),

Gene: Firecracker_114 Start: 66931, Stop: 66365, Start Num: 16

Candidate Starts for Firecracker_114:

(1, 67366), (2, 67264), (3, 67201), (4, 67141), (5, 67129), (6, 67102), (Start: 16 @66931 has 22 MA's), (18, 66895), (Start: 19 @66886 has 6 MA's), (21, 66883), (23, 66847), (24, 66820), (25, 66811), (26, 66706), (29, 66598), (32, 66475), (33, 66472), (34, 66454), (36, 66433), (40, 66391),

Gene: FoulBall_110 Start: 66539, Stop: 66024, Start Num: 16

Candidate Starts for FoulBall_110:

(Start: 16 @66539 has 22 MA's), (18, 66503), (Start: 19 @66494 has 6 MA's), (21, 66491), (22, 66485), (23, 66455), (24, 66428), (25, 66419), (28, 66311), (29, 66257), (32, 66134), (33, 66131), (34, 66113), (36, 66092), (40, 66050),

Gene: GAL1_66 Start: 42130, Stop: 42576, Start Num: 20

Candidate Starts for GAL1_66:

(20, 42130), (37, 42520), (38, 42529), (41, 42568),

Gene: Getalong_88 Start: 49593, Stop: 50024, Start Num: 19

Candidate Starts for Getalong_88:

(Start: 19 @49593 has 6 MA's), (31, 49917),

Gene: Idergollasper_118 Start: 68059, Stop: 67544, Start Num: 16

Candidate Starts for Idergollasper_118:

(Start: 16 @68059 has 22 MA's), (18, 68023), (Start: 19 @68014 has 6 MA's), (21, 68011), (23, 67975), (24, 67948), (25, 67939), (28, 67831), (29, 67777), (30, 67687), (32, 67654), (33, 67651), (34, 67633), (36, 67612), (40, 67570),

Gene: JangDynasty_112 Start: 66409, Stop: 65894, Start Num: 16

Candidate Starts for JangDynasty_112:

(Start: 16 @66409 has 22 MA's), (18, 66373), (Start: 19 @66364 has 6 MA's), (21, 66361), (23, 66325), (24, 66298), (25, 66289), (28, 66181), (29, 66127), (30, 66037), (32, 66004), (33, 66001), (34, 65983), (36, 65962), (40, 65920),

Gene: Kenna_80 Start: 46411, Stop: 46842, Start Num: 19

Candidate Starts for Kenna_80:

(Start: 19 @46411 has 6 MA's), (31, 46735),

Gene: Krili_116 Start: 67134, Stop: 66619, Start Num: 16

Candidate Starts for Krili_116:

(Start: 16 @67134 has 22 MA's), (18, 67098), (Start: 19 @67089 has 6 MA's), (21, 67086), (23, 67050), (24, 67023), (25, 67014), (28, 66906), (29, 66852), (32, 66729), (33, 66726), (34, 66708), (36, 66687), (40, 66645),

Gene: Lutum_86 Start: 47573, Stop: 48004, Start Num: 19

Candidate Starts for Lutum_86:

(Start: 19 @47573 has 6 MA's), (31, 47897),

Gene: MadKillah_117 Start: 66609, Stop: 66094, Start Num: 16

Candidate Starts for MadKillah_117:

(Start: 16 @66609 has 22 MA's), (18, 66573), (Start: 19 @66564 has 6 MA's), (21, 66561), (22, 66555), (23, 66525), (24, 66498), (25, 66489), (28, 66381), (29, 66327), (32, 66204), (33, 66201), (34, 66183), (36, 66162), (40, 66120),

Gene: Mori_114 Start: 67159, Stop: 66644, Start Num: 16

Candidate Starts for Mori_114:

(Start: 16 @67159 has 22 MA's), (18, 67123), (Start: 19 @67114 has 6 MA's), (21, 67111), (23, 67075), (24, 67048), (25, 67039), (28, 66931), (29, 66877), (32, 66754), (33, 66751), (34, 66733), (36, 66712), (40, 66670),

Gene: Murai_114 Start: 66977, Stop: 66462, Start Num: 16

Candidate Starts for Murai_114:

(Start: 16 @66977 has 22 MA's), (18, 66941), (Start: 19 @66932 has 6 MA's), (21, 66929), (22, 66923), (23, 66893), (24, 66866), (25, 66857), (28, 66749), (29, 66695), (32, 66572), (33, 66569), (34, 66551), (36, 66530), (40, 66488),

Gene: NiebruSaylor_114 Start: 66273, Stop: 65758, Start Num: 16

Candidate Starts for NiebruSaylor_114:

(Start: 16 @66273 has 22 MA's), (18, 66237), (Start: 19 @66228 has 6 MA's), (21, 66225), (23, 66189), (24, 66162), (25, 66153), (28, 66045), (29, 65991), (30, 65901), (32, 65868), (33, 65865), (34, 65847), (36, 65826), (40, 65784),

Gene: Phabuloso_92 Start: 49065, Stop: 49496, Start Num: 19

Candidate Starts for Phabuloso_92:

(Start: 19 @49065 has 6 MA's), (31, 49389),

Gene: Ryadel_119 Start: 68125, Stop: 67610, Start Num: 16

Candidate Starts for Ryadel_119:

(Start: 16 @68125 has 22 MA's), (18, 68089), (Start: 19 @68080 has 6 MA's), (21, 68077), (23, 68041), (24, 68014), (25, 68005), (28, 67897), (29, 67843), (32, 67720), (33, 67717), (34, 67699), (36, 67678), (39, 67648), (40, 67636),

Gene: SchoolBus_115 Start: 67224, Stop: 66709, Start Num: 16

Candidate Starts for SchoolBus_115:

(Start: 16 @67224 has 22 MA's), (18, 67188), (Start: 19 @67179 has 6 MA's), (21, 67176), (23, 67140), (24, 67113), (25, 67104), (28, 66996), (29, 66942), (30, 66852), (32, 66819), (33, 66816), (34, 66798), (36, 66777), (40, 66735),

Gene: Schuy_111 Start: 66324, Stop: 65809, Start Num: 16

Candidate Starts for Schuy_111:

(Start: 16 @66324 has 22 MA's), (18, 66288), (Start: 19 @66279 has 6 MA's), (21, 66276), (22, 66270), (23, 66240), (24, 66213), (25, 66204), (28, 66096), (29, 66042), (32, 65919), (33, 65916), (34, 65898), (36, 65877), (40, 65835),

Gene: Shida_114 Start: 66885, Stop: 66370, Start Num: 16

Candidate Starts for Shida_114:

(Start: 16 @66885 has 22 MA's), (18, 66849), (Start: 19 @66840 has 6 MA's), (21, 66837), (23, 66801), (24, 66774), (25, 66765), (28, 66657), (29, 66603), (30, 66513), (32, 66480), (33, 66477), (34, 66459), (36, 66438), (40, 66396),

Gene: Smooch_112 Start: 66857, Stop: 66342, Start Num: 16

Candidate Starts for Smooch_112:

(Start: 16 @66857 has 22 MA's), (18, 66821), (Start: 19 @66812 has 6 MA's), (21, 66809), (22, 66803), (23, 66773), (24, 66746), (25, 66737), (28, 66629), (29, 66575), (32, 66452), (33, 66449), (34, 66431), (36, 66410), (40, 66368),

Gene: Spooky_87 Start: 48761, Stop: 49198, Start Num: 19

Candidate Starts for Spooky_87:

(14, 48704), (15, 48713), (17, 48734), (Start: 19 @48761 has 6 MA's), (27, 48926), (31, 49085), (35, 49121), (37, 49142),

Gene: TelAviv_111 Start: 66957, Stop: 66442, Start Num: 16

Candidate Starts for TelAviv_111:

(Start: 16 @66957 has 22 MA's), (18, 66921), (Start: 19 @66912 has 6 MA's), (21, 66909), (23, 66873), (24, 66846), (25, 66837), (28, 66729), (29, 66675), (30, 66585), (32, 66552), (33, 66549), (34, 66531), (36, 66510), (40, 66468),

Gene: Vorrps_114 Start: 67160, Stop: 66645, Start Num: 16

Candidate Starts for Vorrps_114:

(Start: 16 @67160 has 22 MA's), (18, 67124), (Start: 19 @67115 has 6 MA's), (21, 67112), (23, 67076), (24, 67049), (25, 67040), (28, 66932), (29, 66878), (32, 66755), (33, 66752), (34, 66734), (36, 66713), (40, 66671),

Gene: Wildflower_107 Start: 65042, Stop: 64368, Start Num: 7

Candidate Starts for Wildflower_107:

(7, 65042), (Start: 16 @64934 has 22 MA's), (18, 64898), (Start: 19 @64889 has 6 MA's), (21, 64886), (23, 64850), (24, 64823), (25, 64814), (26, 64709), (29, 64601), (32, 64478), (33, 64475), (34, 64457), (36, 64436), (40, 64394),

Gene: Winget_114 Start: 67009, Stop: 66494, Start Num: 16

Candidate Starts for Winget_114:

(Start: 16 @67009 has 22 MA's), (18, 66973), (Start: 19 @66964 has 6 MA's), (21, 66961), (22, 66955), (23, 66925), (24, 66898), (25, 66889), (28, 66781), (29, 66727), (32, 66604), (33, 66601), (34, 66583), (36, 66562), (40, 66520),

Gene: YungJamal_111 Start: 65646, Stop: 65131, Start Num: 16

Candidate Starts for YungJamal_111:

(Start: 16 @65646 has 22 MA's), (18, 65610), (Start: 19 @65601 has 6 MA's), (21, 65598), (22, 65592), (23, 65562), (24, 65535), (25, 65526), (28, 65418), (29, 65364), (32, 65241), (33, 65238), (34, 65220), (36, 65199), (40, 65157),

Gene: Zakhe101_110 Start: 65243, Stop: 64728, Start Num: 16

Candidate Starts for Zakhe101_110:

(Start: 16 @65243 has 22 MA's), (18, 65207), (Start: 19 @65198 has 6 MA's), (21, 65195), (23, 65159), (24, 65132), (25, 65123), (29, 64961), (32, 64838), (33, 64835), (34, 64817), (36, 64796), (40, 64754),