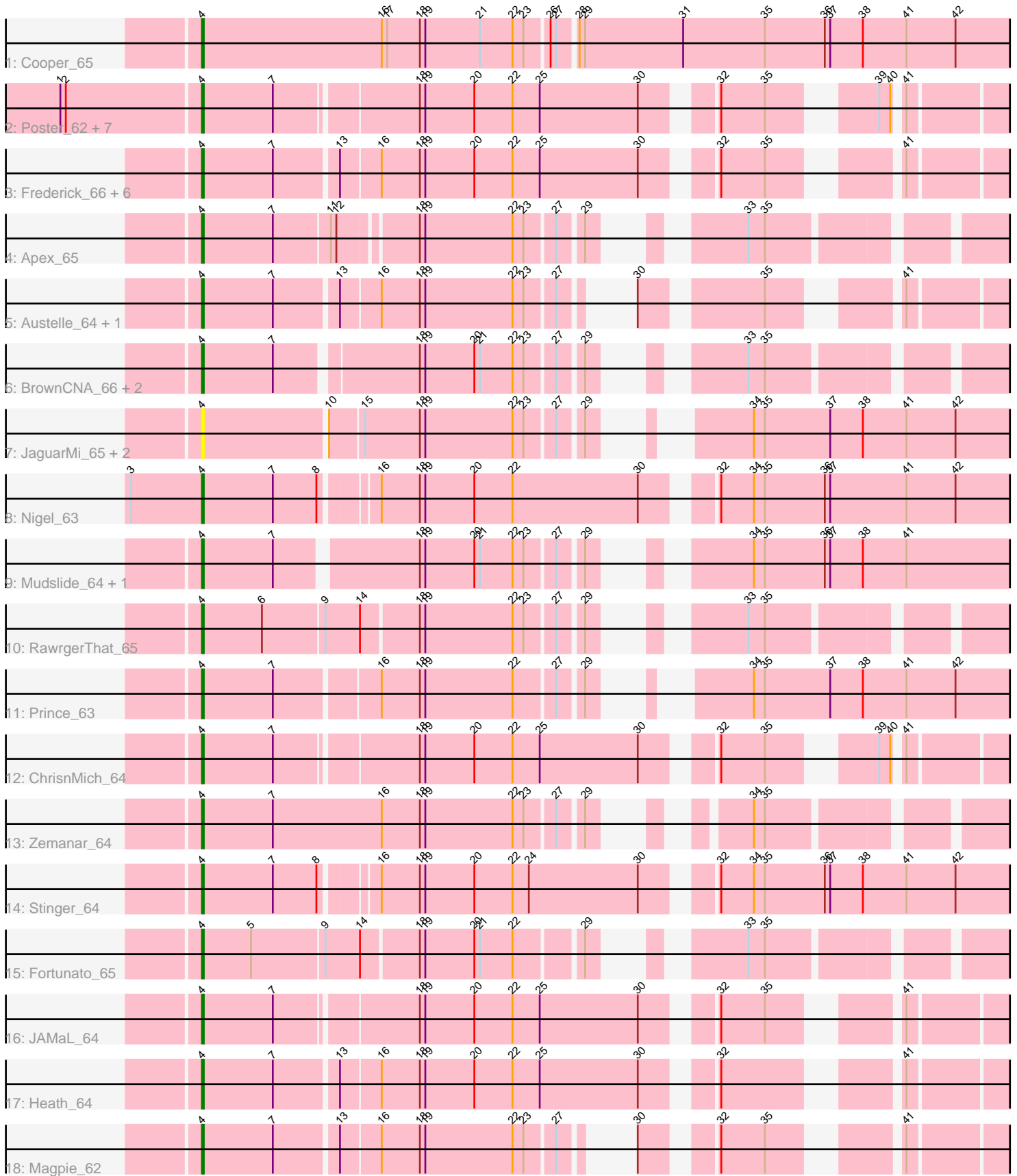


# Pham 292937



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 292937 Report

This analysis was run 04/18/26 on database version 643.

Pham number 292937 has 37 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Cooper\_65
- Track 2 : Poster\_62, Nanao\_63, Lambano\_62, Epah\_62, Hally898\_62, Antihero\_62, GinPorsche\_64, Ahwei\_62
- Track 3 : Frederick\_66, Renkei\_62, Hydro\_65, BobbyK\_65, LittleDigger\_62, Hangman\_65, JoyceMaria\_64
- Track 4 : Apex\_65
- Track 5 : Austelle\_64, VioletZ\_66
- Track 6 : BrownCNA\_66, Mithril\_64, Lolalove\_66
- Track 7 : JaguarMi\_65, Fanaw\_61, Xincheng\_64
- Track 8 : Nigel\_63
- Track 9 : Mudslide\_64, Waleliano\_64
- Track 10 : RawrgerThat\_65
- Track 11 : Prince\_63
- Track 12 : ChrisnMich\_64
- Track 13 : Zemanar\_64
- Track 14 : Stinger\_64
- Track 15 : Fortunato\_65
- Track 16 : JAMaL\_64
- Track 17 : Heath\_64
- Track 18 : Magpie\_62

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

The start number called the most often in the published annotations is 4, it was called in 24 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ahwei\_62, Antihero\_62, Apex\_65, Austelle\_64, BobbyK\_65, BrownCNA\_66, ChrisnMich\_64, Cooper\_65, Epah\_62, Fanaw\_61, Fortunato\_65, Frederick\_66, GinPorsche\_64, Hally898\_62, Hangman\_65, Heath\_64, Hydro\_65, JAMaL\_64, JaguarMi\_65, JoyceMaria\_64, Lambano\_62, LittleDigger\_62, Lolalove\_66, Magpie\_62, Mithril\_64, Mudslide\_64, Nanao\_63, Nigel\_63, Poster\_62, Prince\_63, RawrgerThat\_65, Renkei\_62, Stinger\_64, VioletZ\_66, Waleliano\_64, Xincheng\_64, Zemanar\_64,

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 4:

- Found in 37 of 37 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 24 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ahwei\_62 (B4), Antihero\_62 (B4), Apex\_65 (B4), Austelle\_64 (B4), BobbyK\_65 (B4), BrownCNA\_66 (B4), ChrisnMich\_64 (B4), Cooper\_65 (B4), Epah\_62 (B4), Fanaw\_61 (B4), Fortunato\_65 (B4), Frederick\_66 (B4), GinPorsche\_64 (B4), Hally898\_62 (B4), Hangman\_65 (B4), Heath\_64 (B4), Hydro\_65 (B4), JAMaL\_64 (B4), JaguarMi\_65 (B4), JoyceMaria\_64 (B4), Lambano\_62 (B4), LittleDigger\_62 (B4), Lolalove\_66 (B4), Magpie\_62 (B4), Mithril\_64 (B4), Mudslide\_64 (B4), Nanao\_63 (B4), Nigel\_63 (B4), Poster\_62 (B4), Prince\_63 (B4), RawrgerThat\_65 (B4), Renkei\_62 (B4), Stinger\_64 (B4), VioletZ\_66 (B4), Waleliano\_64 (B4), Xincheng\_64 (B4), Zemanar\_64 (B4),

### Summary by clusters:

There is one cluster represented in this pham: B4

Info for manual annotations of cluster B4:

- Start number 4 was manually annotated 24 times for cluster B4.

### Gene Information:

Gene: Ahwei\_62 Start: 57673, Stop: 58074, Start Num: 4

Candidate Starts for Ahwei\_62:

(1, 57598), (2, 57601), (Start: 4 @57673 has 24 MA's), (7, 57712), (18, 57784), (19, 57787), (20, 57814), (22, 57835), (25, 57850), (30, 57904), (32, 57934), (35, 57958), (39, 58000), (40, 58006), (41, 58009),

Gene: Antihero\_62 Start: 57671, Stop: 58072, Start Num: 4

Candidate Starts for Antihero\_62:

(1, 57596), (2, 57599), (Start: 4 @57671 has 24 MA's), (7, 57710), (18, 57782), (19, 57785), (20, 57812), (22, 57833), (25, 57848), (30, 57902), (32, 57932), (35, 57956), (39, 57998), (40, 58004), (41, 58007),

Gene: Apex\_65 Start: 58788, Stop: 59168, Start Num: 4

Candidate Starts for Apex\_65:

(Start: 4 @58788 has 24 MA's), (7, 58827), (11, 58857), (12, 58860), (18, 58899), (19, 58902), (22, 58950), (23, 58956), (27, 58971), (29, 58983), (33, 59031), (35, 59040),

Gene: Austelle\_64 Start: 59242, Stop: 59613, Start Num: 4

Candidate Starts for Austelle\_64:

(Start: 4 @59242 has 24 MA's), (7, 59281), (13, 59314), (16, 59335), (18, 59356), (19, 59359), (22, 59407), (23, 59413), (27, 59428), (30, 59440), (35, 59497), (41, 59548),

Gene: BobbyK\_65 Start: 58550, Stop: 58954, Start Num: 4

Candidate Starts for BobbyK\_65:

(Start: 4 @58550 has 24 MA's), (7, 58589), (13, 58622), (16, 58643), (18, 58664), (19, 58667), (20, 58694), (22, 58715), (25, 58730), (30, 58784), (32, 58814), (35, 58838), (41, 58889),

Gene: BrownCNA\_66 Start: 58951, Stop: 59331, Start Num: 4

Candidate Starts for BrownCNA\_66:

(Start: 4 @58951 has 24 MA's), (7, 58990), (18, 59062), (19, 59065), (20, 59092), (21, 59095), (22, 59113), (23, 59119), (27, 59134), (29, 59146), (33, 59194), (35, 59203),

Gene: ChrisnMich\_64 Start: 57655, Stop: 58056, Start Num: 4

Candidate Starts for ChrisnMich\_64:

(Start: 4 @57655 has 24 MA's), (7, 57694), (18, 57766), (19, 57769), (20, 57796), (22, 57817), (25, 57832), (30, 57886), (32, 57916), (35, 57940), (39, 57982), (40, 57988), (41, 57991),

Gene: Cooper\_65 Start: 58044, Stop: 58496, Start Num: 4

Candidate Starts for Cooper\_65:

(Start: 4 @58044 has 24 MA's), (16, 58143), (17, 58146), (18, 58164), (19, 58167), (21, 58197), (22, 58215), (23, 58221), (26, 58233), (27, 58236), (28, 58245), (29, 58248), (31, 58302), (35, 58347), (36, 58380), (37, 58383), (38, 58401), (41, 58425), (42, 58452),

Gene: Epah\_62 Start: 57671, Stop: 58072, Start Num: 4

Candidate Starts for Epah\_62:

(1, 57596), (2, 57599), (Start: 4 @57671 has 24 MA's), (7, 57710), (18, 57782), (19, 57785), (20, 57812), (22, 57833), (25, 57848), (30, 57902), (32, 57932), (35, 57956), (39, 57998), (40, 58004), (41, 58007),

Gene: Fanaw\_61 Start: 58629, Stop: 59027, Start Num: 4

Candidate Starts for Fanaw\_61:

(Start: 4 @58629 has 24 MA's), (10, 58695), (15, 58713), (18, 58743), (19, 58746), (22, 58794), (23, 58800), (27, 58815), (29, 58827), (34, 58872), (35, 58878), (37, 58914), (38, 58932), (41, 58956), (42, 58983),

Gene: Fortunato\_65 Start: 58649, Stop: 59032, Start Num: 4

Candidate Starts for Fortunato\_65:

(Start: 4 @58649 has 24 MA's), (5, 58676), (9, 58715), (14, 58733), (18, 58763), (19, 58766), (20, 58793), (21, 58796), (22, 58814), (29, 58847), (33, 58895), (35, 58904),

Gene: Frederick\_66 Start: 58650, Stop: 59054, Start Num: 4

Candidate Starts for Frederick\_66:

(Start: 4 @58650 has 24 MA's), (7, 58689), (13, 58722), (16, 58743), (18, 58764), (19, 58767), (20, 58794), (22, 58815), (25, 58830), (30, 58884), (32, 58914), (35, 58938), (41, 58989),

Gene: GinPorsche\_64 Start: 57671, Stop: 58072, Start Num: 4

Candidate Starts for GinPorsche\_64:

(1, 57596), (2, 57599), (Start: 4 @57671 has 24 MA's), (7, 57710), (18, 57782), (19, 57785), (20, 57812), (22, 57833), (25, 57848), (30, 57902), (32, 57932), (35, 57956), (39, 57998), (40, 58004), (41, 58007),

Gene: Hally898\_62 Start: 57686, Stop: 58087, Start Num: 4

Candidate Starts for Hally898\_62:

(1, 57611), (2, 57614), (Start: 4 @57686 has 24 MA's), (7, 57725), (18, 57797), (19, 57800), (20, 57827), (22, 57848), (25, 57863), (30, 57917), (32, 57947), (35, 57971), (39, 58013), (40, 58019), (41, 58022),

Gene: Hangman\_65 Start: 58849, Stop: 59253, Start Num: 4

Candidate Starts for Hangman\_65:

(Start: 4 @58849 has 24 MA's), (7, 58888), (13, 58921), (16, 58942), (18, 58963), (19, 58966), (20, 58993), (22, 59014), (25, 59029), (30, 59083), (32, 59113), (35, 59137), (41, 59188),

Gene: Heath\_64 Start: 58476, Stop: 58880, Start Num: 4

Candidate Starts for Heath\_64:

(Start: 4 @58476 has 24 MA's), (7, 58515), (13, 58548), (16, 58569), (18, 58590), (19, 58593), (20, 58620), (22, 58641), (25, 58656), (30, 58710), (32, 58740), (41, 58815),

Gene: Hydro\_65 Start: 58787, Stop: 59191, Start Num: 4

Candidate Starts for Hydro\_65:

(Start: 4 @58787 has 24 MA's), (7, 58826), (13, 58859), (16, 58880), (18, 58901), (19, 58904), (20, 58931), (22, 58952), (25, 58967), (30, 59021), (32, 59051), (35, 59075), (41, 59126),

Gene: JAMaL\_64 Start: 58680, Stop: 59081, Start Num: 4

Candidate Starts for JAMaL\_64:

(Start: 4 @58680 has 24 MA's), (7, 58719), (18, 58791), (19, 58794), (20, 58821), (22, 58842), (25, 58857), (30, 58911), (32, 58941), (35, 58965), (41, 59016),

Gene: JaguarMi\_65 Start: 59865, Stop: 60263, Start Num: 4

Candidate Starts for JaguarMi\_65:

(Start: 4 @59865 has 24 MA's), (10, 59931), (15, 59949), (18, 59979), (19, 59982), (22, 60030), (23, 60036), (27, 60051), (29, 60063), (34, 60108), (35, 60114), (37, 60150), (38, 60168), (41, 60192), (42, 60219),

Gene: JoyceMaria\_64 Start: 58732, Stop: 59136, Start Num: 4

Candidate Starts for JoyceMaria\_64:

(Start: 4 @58732 has 24 MA's), (7, 58771), (13, 58804), (16, 58825), (18, 58846), (19, 58849), (20, 58876), (22, 58897), (25, 58912), (30, 58966), (32, 58996), (35, 59020), (41, 59071),

Gene: Lambano\_62 Start: 57686, Stop: 58087, Start Num: 4

Candidate Starts for Lambano\_62:

(1, 57611), (2, 57614), (Start: 4 @57686 has 24 MA's), (7, 57725), (18, 57797), (19, 57800), (20, 57827), (22, 57848), (25, 57863), (30, 57917), (32, 57947), (35, 57971), (39, 58013), (40, 58019), (41, 58022),

Gene: LittleDigger\_62 Start: 57606, Stop: 58010, Start Num: 4

Candidate Starts for LittleDigger\_62:

(Start: 4 @57606 has 24 MA's), (7, 57645), (13, 57678), (16, 57699), (18, 57720), (19, 57723), (20, 57750), (22, 57771), (25, 57786), (30, 57840), (32, 57870), (35, 57894), (41, 57945),

Gene: Lolalove\_66 Start: 58810, Stop: 59190, Start Num: 4

Candidate Starts for Lolalove\_66:

(Start: 4 @58810 has 24 MA's), (7, 58849), (18, 58921), (19, 58924), (20, 58951), (21, 58954), (22, 58972), (23, 58978), (27, 58993), (29, 59005), (33, 59053), (35, 59062),

Gene: Magpie\_62 Start: 58576, Stop: 58944, Start Num: 4

Candidate Starts for Magpie\_62:

(Start: 4 @58576 has 24 MA's), (7, 58615), (13, 58648), (16, 58669), (18, 58690), (19, 58693), (22, 58741), (23, 58747), (27, 58762), (30, 58774), (32, 58804), (35, 58828), (41, 58879),

Gene: Mithril\_64 Start: 58806, Stop: 59186, Start Num: 4

Candidate Starts for Mithril\_64:

(Start: 4 @58806 has 24 MA's), (7, 58845), (18, 58917), (19, 58920), (20, 58947), (21, 58950), (22, 58968), (23, 58974), (27, 58989), (29, 59001), (33, 59049), (35, 59058),

Gene: Mudslide\_64 Start: 58881, Stop: 59282, Start Num: 4

Candidate Starts for Mudslide\_64:

(Start: 4 @58881 has 24 MA's), (7, 58920), (18, 58992), (19, 58995), (20, 59022), (21, 59025), (22, 59043), (23, 59049), (27, 59064), (29, 59076), (34, 59127), (35, 59133), (36, 59166), (37, 59169), (38, 59187), (41, 59211),

Gene: Nanao\_63 Start: 57676, Stop: 58077, Start Num: 4

Candidate Starts for Nanao\_63:

(1, 57601), (2, 57604), (Start: 4 @57676 has 24 MA's), (7, 57715), (18, 57787), (19, 57790), (20, 57817), (22, 57838), (25, 57853), (30, 57907), (32, 57937), (35, 57961), (39, 58003), (40, 58009), (41, 58012),

Gene: Nigel\_63 Start: 57675, Stop: 58109, Start Num: 4

Candidate Starts for Nigel\_63:

(3, 57636), (Start: 4 @57675 has 24 MA's), (7, 57714), (8, 57738), (16, 57765), (18, 57786), (19, 57789), (20, 57816), (22, 57837), (30, 57906), (32, 57936), (34, 57954), (35, 57960), (36, 57993), (37, 57996), (41, 58038), (42, 58065),

Gene: Poster\_62 Start: 57677, Stop: 58078, Start Num: 4

Candidate Starts for Poster\_62:

(1, 57602), (2, 57605), (Start: 4 @57677 has 24 MA's), (7, 57716), (18, 57788), (19, 57791), (20, 57818), (22, 57839), (25, 57854), (30, 57908), (32, 57938), (35, 57962), (39, 58004), (40, 58010), (41, 58013),

Gene: Prince\_63 Start: 58785, Stop: 59183, Start Num: 4

Candidate Starts for Prince\_63:

(Start: 4 @58785 has 24 MA's), (7, 58824), (16, 58878), (18, 58899), (19, 58902), (22, 58950), (27, 58971), (29, 58983), (34, 59028), (35, 59034), (37, 59070), (38, 59088), (41, 59112), (42, 59139),

Gene: RawrgerThat\_65 Start: 58627, Stop: 59010, Start Num: 4

Candidate Starts for RawrgerThat\_65:

(Start: 4 @58627 has 24 MA's), (6, 58660), (9, 58693), (14, 58711), (18, 58741), (19, 58744), (22, 58792), (23, 58798), (27, 58813), (29, 58825), (33, 58873), (35, 58882),

Gene: Renkei\_62 Start: 57600, Stop: 58004, Start Num: 4

Candidate Starts for Renkei\_62:

(Start: 4 @57600 has 24 MA's), (7, 57639), (13, 57672), (16, 57693), (18, 57714), (19, 57717), (20, 57744), (22, 57765), (25, 57780), (30, 57834), (32, 57864), (35, 57888), (41, 57939),

Gene: Stinger\_64 Start: 57598, Stop: 58032, Start Num: 4

Candidate Starts for Stinger\_64:

(Start: 4 @57598 has 24 MA's), (7, 57637), (8, 57661), (16, 57688), (18, 57709), (19, 57712), (20, 57739), (22, 57760), (24, 57769), (30, 57829), (32, 57859), (34, 57877), (35, 57883), (36, 57916), (37, 57919), (38, 57937), (41, 57961), (42, 57988),

Gene: VioletZ\_66 Start: 58743, Stop: 59114, Start Num: 4

Candidate Starts for VioletZ\_66:

(Start: 4 @58743 has 24 MA's), (7, 58782), (13, 58815), (16, 58836), (18, 58857), (19, 58860), (22, 58908), (23, 58914), (27, 58929), (30, 58941), (35, 58998), (41, 59049),

Gene: Waleliano\_64 Start: 58683, Stop: 59084, Start Num: 4

Candidate Starts for Waleliano\_64:

(Start: 4 @58683 has 24 MA's), (7, 58722), (18, 58794), (19, 58797), (20, 58824), (21, 58827), (22, 58845), (23, 58851), (27, 58866), (29, 58878), (34, 58929), (35, 58935), (36, 58968), (37, 58971), (38, 58989), (41, 59013),

Gene: Xincheng\_64 Start: 59816, Stop: 60214, Start Num: 4

Candidate Starts for Xincheng\_64:

(Start: 4 @59816 has 24 MA's), (10, 59882), (15, 59900), (18, 59930), (19, 59933), (22, 59981), (23, 59987), (27, 60002), (29, 60014), (34, 60059), (35, 60065), (37, 60101), (38, 60119), (41, 60143), (42, 60170),

Gene: Zemanar\_64 Start: 58518, Stop: 58901, Start Num: 4

Candidate Starts for Zemanar\_64:

(Start: 4 @58518 has 24 MA's), (7, 58557), (16, 58617), (18, 58638), (19, 58641), (22, 58689), (23, 58695), (27, 58710), (29, 58722), (34, 58767), (35, 58773),