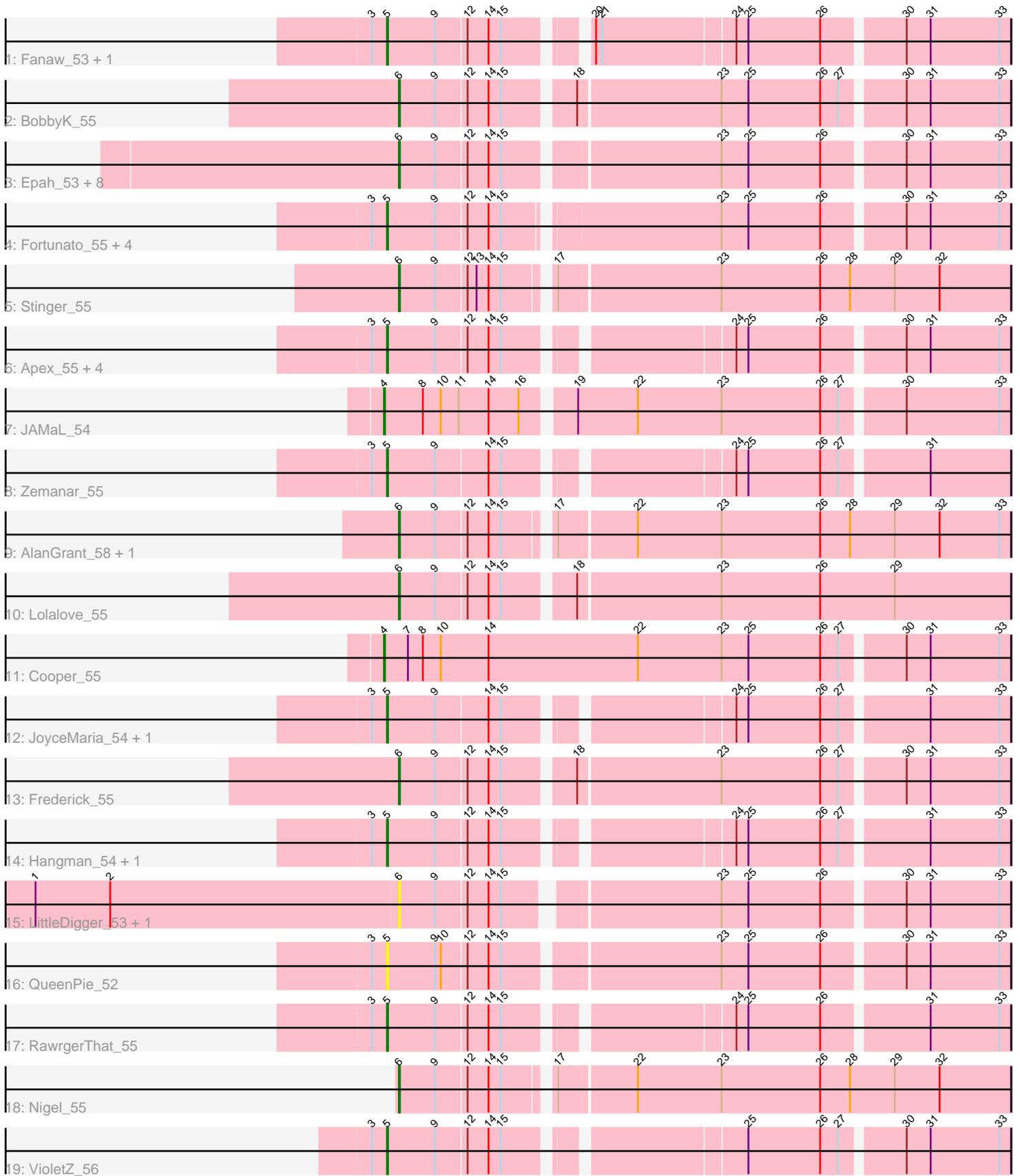


# Pham 289553



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 289553 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289553 has 40 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Fanaw\_53, Mithril\_54
- Track 2 : BobbyK\_55
- Track 3 : Epah\_53, GinPorsche\_54, Hally898\_53, Lambano\_53, Hydro\_54, Antihero\_53, Ahwei\_53, Poster\_53, Nanao\_53
- Track 4 : Fortunato\_55, ChrisnMich\_54, Heath\_53, Prince\_54, Magpie\_53
- Track 5 : Stinger\_55
- Track 6 : Apex\_55, Xincheng\_55, Austelle\_55, JaguarMi\_56, Mudslide\_54
- Track 7 : JAMaL\_54
- Track 8 : Zemanar\_55
- Track 9 : AlanGrant\_58, Vincenzo\_57
- Track 10 : Lolalove\_55
- Track 11 : Cooper\_55
- Track 12 : JoyceMaria\_54, Waleliano\_54
- Track 13 : Frederick\_55
- Track 14 : Hangman\_54, BrownCNA\_56
- Track 15 : LittleDigger\_53, Renkei\_53
- Track 16 : QueenPie\_52
- Track 17 : RawrgerThat\_55
- Track 18 : Nigel\_55
- Track 19 : VioletZ\_56

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

The start number called the most often in the published annotations is 5, it was called in 15 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apex\_55, Austelle\_55, BrownCNA\_56, ChrisnMich\_54, Fanaw\_53, Fortunato\_55, Hangman\_54, Heath\_53, JaguarMi\_56, JoyceMaria\_54, Magpie\_53, Mithril\_54, Mudslide\_54, Prince\_54, QueenPie\_52, RawrgerThat\_55, VioletZ\_56, Waleliano\_54, Xincheng\_55, Zemanar\_55,

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

-

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

- Ahwei\_53, AlanGrant\_58, Antihero\_53, BobbyK\_55, Cooper\_55, Epah\_53, Frederick\_55, GinPorsche\_54, Hally898\_53, Hydro\_54, JAMaL\_54, Lambano\_53, LittleDigger\_53, Lolalove\_55, Nanao\_53, Nigel\_55, Poster\_53, Renkei\_53, Stinger\_55, Vincenzo\_57,

### Summary by start number:

Start 4:

- Found in 2 of 40 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 2 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cooper\_55 (B4), JAMaL\_54 (B4),

Start 5:

- Found in 20 of 40 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 15 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apex\_55 (B4), Austelle\_55 (B4), BrownCNA\_56 (B4), ChrisMich\_54 (B4), Fanaw\_53 (B4), Fortunato\_55 (B4), Hangman\_54 (B4), Heath\_53 (B4), JaguarMi\_56 (B4), JoyceMaria\_54 (B4), Magpie\_53 (B4), Mithril\_54 (B4), Mudslide\_54 (B4), Prince\_54 (B4), QueenPie\_52 (B4), RawrgerThat\_55 (B4), VioletZ\_56 (B4), Waleliano\_54 (B4), Xincheng\_55 (B4), Zemanar\_55 (B4),

Start 6:

- Found in 18 of 40 ( 45.0% ) of genes in pham
- Manual Annotations of this start: 9 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ahwei\_53 (B4), AlanGrant\_58 (B4), Antihero\_53 (B4), BobbyK\_55 (B4), Epah\_53 (B4), Frederick\_55 (B4), GinPorsche\_54 (B4), Hally898\_53 (B4), Hydro\_54 (B4), Lambano\_53 (B4), LittleDigger\_53 (B4), Lolalove\_55 (B4), Nanao\_53 (B4), Nigel\_55 (B4), Poster\_53 (B4), Renkei\_53 (B4), Stinger\_55 (B4), Vincenzo\_57 (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 2 times for cluster B4.
- Start number 5 was manually annotated 15 times for cluster B4.
- Start number 6 was manually annotated 9 times for cluster B4.

### Gene Information:

Gene: Ahwei\_53 Start: 53560, Stop: 52982, Start Num: 6

Candidate Starts for Ahwei\_53:

(Start: 6 @53560 has 9 MA's), (9, 53524), (12, 53494), (14, 53473), (15, 53461), (23, 53260), (25, 53233), (26, 53161), (30, 53086), (31, 53062), (33, 52993),

Gene: AlanGrant\_58 Start: 55697, Stop: 55113, Start Num: 6

Candidate Starts for AlanGrant\_58:

(Start: 6 @55697 has 9 MA's), (9, 55661), (12, 55631), (14, 55610), (15, 55598), (17, 55559), (22, 55487), (23, 55403), (26, 55304), (28, 55274), (29, 55229), (32, 55184), (33, 55124),

Gene: Antihero\_53 Start: 53558, Stop: 52980, Start Num: 6

Candidate Starts for Antihero\_53:

(Start: 6 @53558 has 9 MA's), (9, 53522), (12, 53492), (14, 53471), (15, 53459), (23, 53258), (25, 53231), (26, 53159), (30, 53084), (31, 53060), (33, 52991),

Gene: Apex\_55 Start: 54771, Stop: 54196, Start Num: 5

Candidate Starts for Apex\_55:

(3, 54786), (Start: 5 @54771 has 15 MA's), (9, 54723), (12, 54693), (14, 54672), (15, 54660), (24, 54459), (25, 54447), (26, 54375), (30, 54300), (31, 54276), (33, 54207),

Gene: Austelle\_55 Start: 55224, Stop: 54649, Start Num: 5

Candidate Starts for Austelle\_55:

(3, 55239), (Start: 5 @55224 has 15 MA's), (9, 55176), (12, 55146), (14, 55125), (15, 55113), (24, 54912), (25, 54900), (26, 54828), (30, 54753), (31, 54729), (33, 54660),

Gene: BobbyK\_55 Start: 54543, Stop: 53965, Start Num: 6

Candidate Starts for BobbyK\_55:

(Start: 6 @54543 has 9 MA's), (9, 54507), (12, 54477), (14, 54456), (15, 54444), (18, 54381), (23, 54243), (25, 54216), (26, 54144), (27, 54126), (30, 54069), (31, 54045), (33, 53976),

Gene: BrownCNA\_56 Start: 54882, Stop: 54307, Start Num: 5

Candidate Starts for BrownCNA\_56:

(3, 54897), (Start: 5 @54882 has 15 MA's), (9, 54834), (12, 54804), (14, 54783), (15, 54771), (24, 54570), (25, 54558), (26, 54486), (27, 54468), (31, 54387), (33, 54318),

Gene: ChrisnMich\_54 Start: 53551, Stop: 52961, Start Num: 5

Candidate Starts for ChrisnMich\_54:

(3, 53566), (Start: 5 @53551 has 15 MA's), (9, 53503), (12, 53473), (14, 53452), (15, 53440), (23, 53239), (25, 53212), (26, 53140), (30, 53065), (31, 53041), (33, 52972),

Gene: Cooper\_55 Start: 53843, Stop: 53226, Start Num: 4

Candidate Starts for Cooper\_55:

(Start: 4 @53843 has 2 MA's), (7, 53819), (8, 53804), (10, 53786), (14, 53738), (22, 53588), (23, 53504), (25, 53477), (26, 53405), (27, 53387), (30, 53330), (31, 53306), (33, 53237),

Gene: Epah\_53 Start: 53558, Stop: 52980, Start Num: 6

Candidate Starts for Epah\_53:

(Start: 6 @53558 has 9 MA's), (9, 53522), (12, 53492), (14, 53471), (15, 53459), (23, 53258), (25, 53231), (26, 53159), (30, 53084), (31, 53060), (33, 52991),

Gene: Fanaw\_53 Start: 54311, Stop: 53736, Start Num: 5

Candidate Starts for Fanaw\_53:

(3, 54326), (Start: 5 @54311 has 15 MA's), (9, 54263), (12, 54233), (14, 54212), (15, 54200), (20, 54134), (21, 54128), (24, 53999), (25, 53987), (26, 53915), (30, 53840), (31, 53816), (33, 53747),

Gene: Fortunato\_55 Start: 54580, Stop: 53990, Start Num: 5

Candidate Starts for Fortunato\_55:

(3, 54595), (Start: 5 @54580 has 15 MA's), (9, 54532), (12, 54502), (14, 54481), (15, 54469), (23, 54268), (25, 54241), (26, 54169), (30, 54094), (31, 54070), (33, 54001),

Gene: Frederick\_55 Start: 54486, Stop: 53908, Start Num: 6

Candidate Starts for Frederick\_55:

(Start: 6 @54486 has 9 MA's), (9, 54450), (12, 54420), (14, 54399), (15, 54387), (18, 54324), (23, 54186), (26, 54087), (27, 54069), (30, 54012), (31, 53988), (33, 53919),

Gene: GinPorsche\_54 Start: 53558, Stop: 52980, Start Num: 6

Candidate Starts for GinPorsche\_54:

(Start: 6 @53558 has 9 MA's), (9, 53522), (12, 53492), (14, 53471), (15, 53459), (23, 53258), (25, 53231), (26, 53159), (30, 53084), (31, 53060), (33, 52991),

Gene: Hally898\_53 Start: 53573, Stop: 52995, Start Num: 6

Candidate Starts for Hally898\_53:

(Start: 6 @53573 has 9 MA's), (9, 53537), (12, 53507), (14, 53486), (15, 53474), (23, 53273), (25, 53246), (26, 53174), (30, 53099), (31, 53075), (33, 53006),

Gene: Hangman\_54 Start: 54625, Stop: 54050, Start Num: 5

Candidate Starts for Hangman\_54:

(3, 54640), (Start: 5 @54625 has 15 MA's), (9, 54577), (12, 54547), (14, 54526), (15, 54514), (24, 54313), (25, 54301), (26, 54229), (27, 54211), (31, 54130), (33, 54061),

Gene: Heath\_53 Start: 54251, Stop: 53661, Start Num: 5

Candidate Starts for Heath\_53:

(3, 54266), (Start: 5 @54251 has 15 MA's), (9, 54203), (12, 54173), (14, 54152), (15, 54140), (23, 53939), (25, 53912), (26, 53840), (30, 53765), (31, 53741), (33, 53672),

Gene: Hydro\_54 Start: 54620, Stop: 54042, Start Num: 6

Candidate Starts for Hydro\_54:

(Start: 6 @54620 has 9 MA's), (9, 54584), (12, 54554), (14, 54533), (15, 54521), (23, 54320), (25, 54293), (26, 54221), (30, 54146), (31, 54122), (33, 54053),

Gene: JAMaL\_54 Start: 54791, Stop: 54189, Start Num: 4

Candidate Starts for JAMaL\_54:

(Start: 4 @54791 has 2 MA's), (8, 54752), (10, 54734), (11, 54716), (14, 54686), (16, 54656), (19, 54611), (22, 54551), (23, 54467), (26, 54368), (27, 54350), (30, 54293), (33, 54200),

Gene: JaguarMi\_56 Start: 55675, Stop: 55100, Start Num: 5

Candidate Starts for JaguarMi\_56:

(3, 55690), (Start: 5 @55675 has 15 MA's), (9, 55627), (12, 55597), (14, 55576), (15, 55564), (24, 55363), (25, 55351), (26, 55279), (30, 55204), (31, 55180), (33, 55111),

Gene: JoyceMaria\_54 Start: 54505, Stop: 53930, Start Num: 5

Candidate Starts for JoyceMaria\_54:

(3, 54520), (Start: 5 @54505 has 15 MA's), (9, 54457), (14, 54406), (15, 54394), (24, 54193), (25, 54181), (26, 54109), (27, 54091), (31, 54010), (33, 53941),

Gene: Lambano\_53 Start: 53573, Stop: 52995, Start Num: 6

Candidate Starts for Lambano\_53:

(Start: 6 @53573 has 9 MA's), (9, 53537), (12, 53507), (14, 53486), (15, 53474), (23, 53273), (25, 53246), (26, 53174), (30, 53099), (31, 53075), (33, 53006),

Gene: LittleDigger\_53 Start: 53580, Stop: 53008, Start Num: 6

Candidate Starts for LittleDigger\_53:

(1, 53943), (2, 53868), (Start: 6 @53580 has 9 MA's), (9, 53544), (12, 53514), (14, 53493), (15, 53481), (23, 53286), (25, 53259), (26, 53187), (30, 53112), (31, 53088), (33, 53019),

Gene: Lolalove\_55 Start: 54603, Stop: 54013, Start Num: 6

Candidate Starts for Lolalove\_55:

(Start: 6 @54603 has 9 MA's), (9, 54567), (12, 54537), (14, 54516), (15, 54504), (18, 54441), (23, 54303), (26, 54204), (29, 54129),

Gene: Magpie\_53 Start: 54495, Stop: 53905, Start Num: 5

Candidate Starts for Magpie\_53:

(3, 54510), (Start: 5 @54495 has 15 MA's), (9, 54447), (12, 54417), (14, 54396), (15, 54384), (23, 54183), (25, 54156), (26, 54084), (30, 54009), (31, 53985), (33, 53916),

Gene: Mithril\_54 Start: 54577, Stop: 54002, Start Num: 5

Candidate Starts for Mithril\_54:

(3, 54592), (Start: 5 @54577 has 15 MA's), (9, 54529), (12, 54499), (14, 54478), (15, 54466), (20, 54400), (21, 54394), (24, 54265), (25, 54253), (26, 54181), (30, 54106), (31, 54082), (33, 54013),

Gene: Mudslide\_54 Start: 54844, Stop: 54260, Start Num: 5

Candidate Starts for Mudslide\_54:

(3, 54859), (Start: 5 @54844 has 15 MA's), (9, 54796), (12, 54766), (14, 54745), (15, 54733), (24, 54523), (25, 54511), (26, 54439), (30, 54364), (31, 54340), (33, 54271),

Gene: Nanao\_53 Start: 53563, Stop: 52985, Start Num: 6

Candidate Starts for Nanao\_53:

(Start: 6 @53563 has 9 MA's), (9, 53527), (12, 53497), (14, 53476), (15, 53464), (23, 53263), (25, 53236), (26, 53164), (30, 53089), (31, 53065), (33, 52996),

Gene: Nigel\_55 Start: 54169, Stop: 53585, Start Num: 6

Candidate Starts for Nigel\_55:

(Start: 6 @54169 has 9 MA's), (9, 54133), (12, 54103), (14, 54082), (15, 54070), (17, 54031), (22, 53959), (23, 53875), (26, 53776), (28, 53746), (29, 53701), (32, 53656),

Gene: Poster\_53 Start: 53564, Stop: 52986, Start Num: 6

Candidate Starts for Poster\_53:

(Start: 6 @53564 has 9 MA's), (9, 53528), (12, 53498), (14, 53477), (15, 53465), (23, 53264), (25, 53237), (26, 53165), (30, 53090), (31, 53066), (33, 52997),

Gene: Prince\_54 Start: 54757, Stop: 54167, Start Num: 5

Candidate Starts for Prince\_54:

(3, 54772), (Start: 5 @54757 has 15 MA's), (9, 54709), (12, 54679), (14, 54658), (15, 54646), (23, 54445), (25, 54418), (26, 54346), (30, 54271), (31, 54247), (33, 54178),

Gene: QueenPie\_52 Start: 54270, Stop: 53680, Start Num: 5

Candidate Starts for QueenPie\_52:

(3, 54285), (Start: 5 @54270 has 15 MA's), (9, 54222), (10, 54216), (12, 54192), (14, 54171), (15, 54159), (23, 53958), (25, 53931), (26, 53859), (30, 53784), (31, 53760), (33, 53691),

Gene: RawrgerThat\_55 Start: 54597, Stop: 54022, Start Num: 5

Candidate Starts for RawrgerThat\_55:

(3, 54612), (Start: 5 @54597 has 15 MA's), (9, 54549), (12, 54519), (14, 54498), (15, 54486), (24, 54285), (25, 54273), (26, 54201), (31, 54102), (33, 54033),

Gene: Renkei\_53 Start: 53574, Stop: 53002, Start Num: 6

Candidate Starts for Renkei\_53:

(1, 53937), (2, 53862), (Start: 6 @53574 has 9 MA's), (9, 53538), (12, 53508), (14, 53487), (15, 53475), (23, 53280), (25, 53253), (26, 53181), (30, 53106), (31, 53082), (33, 53013),

Gene: Stinger\_55 Start: 53491, Stop: 52907, Start Num: 6

Candidate Starts for Stinger\_55:

(Start: 6 @53491 has 9 MA's), (9, 53455), (12, 53425), (13, 53416), (14, 53404), (15, 53392), (17, 53353), (23, 53197), (26, 53098), (28, 53068), (29, 53023), (32, 52978),

Gene: Vincenzo\_57 Start: 55727, Stop: 55143, Start Num: 6

Candidate Starts for Vincenzo\_57:

(Start: 6 @55727 has 9 MA's), (9, 55691), (12, 55661), (14, 55640), (15, 55628), (17, 55589), (22, 55517), (23, 55433), (26, 55334), (28, 55304), (29, 55259), (32, 55214), (33, 55154),

Gene: VioletZ\_56 Start: 54661, Stop: 54086, Start Num: 5

Candidate Starts for VioletZ\_56:

(3, 54676), (Start: 5 @54661 has 15 MA's), (9, 54613), (12, 54583), (14, 54562), (15, 54550), (25, 54337), (26, 54265), (27, 54247), (30, 54190), (31, 54166), (33, 54097),

Gene: Waleliano\_54 Start: 54614, Stop: 54039, Start Num: 5

Candidate Starts for Waleliano\_54:

(3, 54629), (Start: 5 @54614 has 15 MA's), (9, 54566), (14, 54515), (15, 54503), (24, 54302), (25, 54290), (26, 54218), (27, 54200), (31, 54119), (33, 54050),

Gene: Xincheng\_55 Start: 55648, Stop: 55073, Start Num: 5

Candidate Starts for Xincheng\_55:

(3, 55663), (Start: 5 @55648 has 15 MA's), (9, 55600), (12, 55570), (14, 55549), (15, 55537), (24, 55336), (25, 55324), (26, 55252), (30, 55177), (31, 55153), (33, 55084),

Gene: Zemanar\_55 Start: 54446, Stop: 53871, Start Num: 5

Candidate Starts for Zemanar\_55:

(3, 54461), (Start: 5 @54446 has 15 MA's), (9, 54398), (14, 54347), (15, 54335), (24, 54134), (25, 54122), (26, 54050), (27, 54032), (31, 53951),