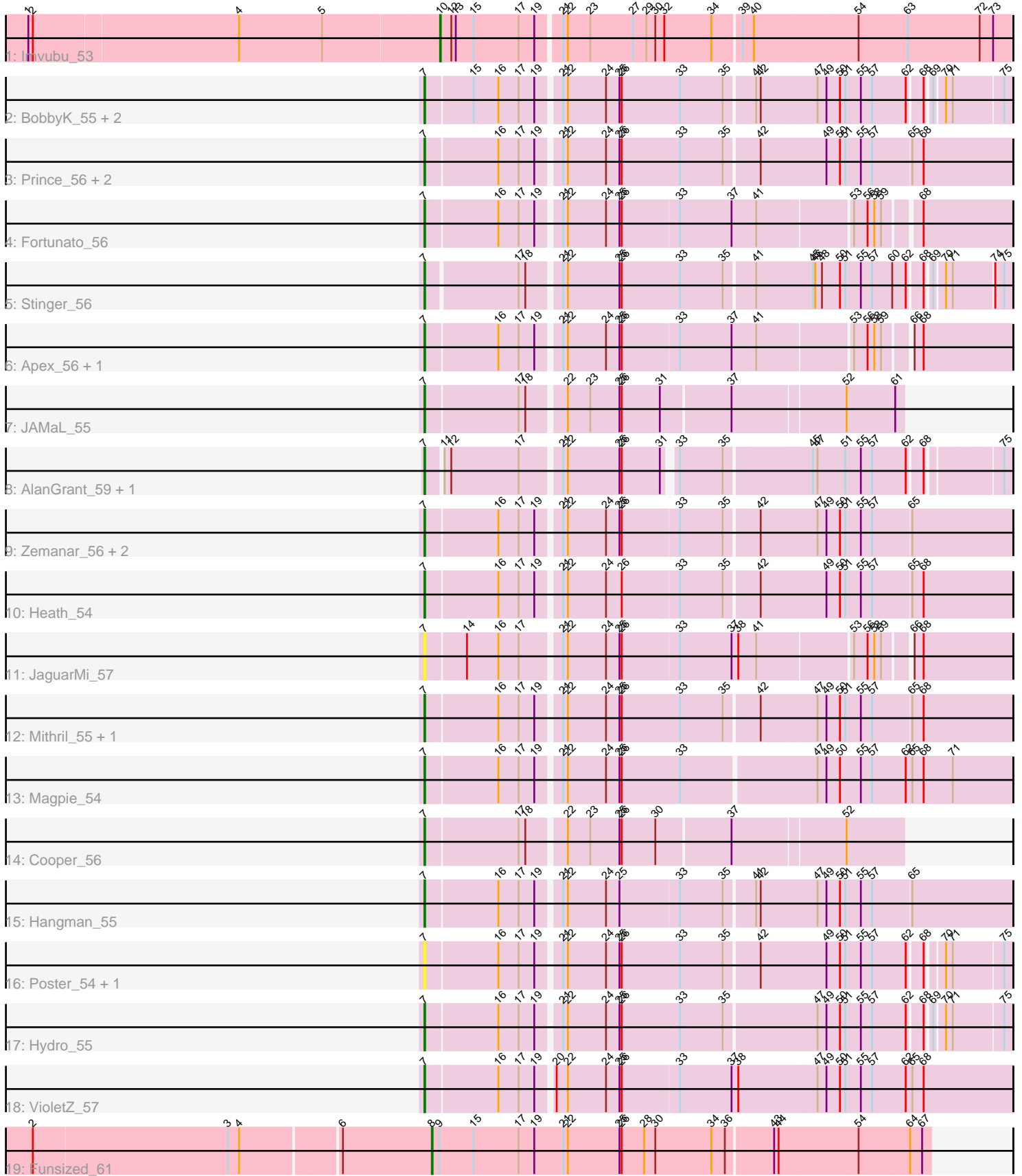


Pham 163844



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 163844 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163844 has 29 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Imvubu\_53
- Track 2 : BobbyK\_55, Lolalove\_56, Frederick\_55
- Track 3 : Prince\_56, ChrisnMich\_55, Mudslide\_55
- Track 4 : Fortunato\_56
- Track 5 : Stinger\_56
- Track 6 : Apex\_56, Austelle\_56
- Track 7 : JAMaL\_55
- Track 8 : AlanGrant\_59, Vincenzo\_58
- Track 9 : Zemanar\_56, Waleliano\_55, BrownCNA\_57
- Track 10 : Heath\_54
- Track 11 : JaguarMi\_57
- Track 12 : Mithril\_55, RawrgerThat\_56
- Track 13 : Magpie\_54
- Track 14 : Cooper\_56
- Track 15 : Hangman\_55
- Track 16 : Poster\_54, Nanao\_54
- Track 17 : Hydro\_55
- Track 18 : VioletZ\_57
- Track 19 : Funsized\_61

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

The start number called the most often in the published annotations is 7, it was called in 21 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlanGrant\_59, Apex\_56, Austelle\_56, BobbyK\_55, BrownCNA\_57, ChrisnMich\_55, Cooper\_56, Fortunato\_56, Frederick\_55, Hangman\_55, Heath\_54, Hydro\_55, JAMaL\_55, JaguarMi\_57, Lolalove\_56, Magpie\_54, Mithril\_55, Mudslide\_55, Nanao\_54, Poster\_54, Prince\_56, RawrgerThat\_56, Stinger\_56, Vincenzo\_58, VioletZ\_57, Waleliano\_55, Zemanar\_56,

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

-

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

- Funsized\_61, Imvubu\_53,

### Summary by start number:

Start 7:

- Found in 27 of 29 ( 93.1% ) of genes in pham
- Manual Annotations of this start: 21 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant\_59 (B4), Apex\_56 (B4), Austelle\_56 (B4), BobbyK\_55 (B4), BrownCNA\_57 (B4), ChrisnMich\_55 (B4), Cooper\_56 (B4), Fortunato\_56 (B4), Frederick\_55 (B4), Hangman\_55 (B4), Heath\_54 (B4), Hydro\_55 (B4), JAMaL\_55 (B4), JaguarMi\_57 (B4), Lolalove\_56 (B4), Magpie\_54 (B4), Mithril\_55 (B4), Mudslide\_55 (B4), Nanao\_54 (B4), Poster\_54 (B4), Prince\_56 (B4), RawrgerThat\_56 (B4), Stinger\_56 (B4), Vincenzo\_58 (B4), VioletZ\_57 (B4), Waleliano\_55 (B4), Zemanar\_56 (B4),

Start 8:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Funsized\_61 (B9),

Start 10:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Imvubu\_53 (B10),

### Summary by clusters:

There are 3 clusters represented in this pham: B4, B9, B10,

Info for manual annotations of cluster B10:

- Start number 10 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B4:

- Start number 7 was manually annotated 21 times for cluster B4.

Info for manual annotations of cluster B9:

- Start number 8 was manually annotated 1 time for cluster B9.

### Gene Information:

Gene: AlanGrant\_59 Start: 56404, Stop: 55694, Start Num: 7

Candidate Starts for AlanGrant\_59:

(Start: 7 @56404 has 21 MA's), (11, 56386), (12, 56380), (17, 56290), (21, 56242), (22, 56236), (25, 56167), (26, 56164), (31, 56113), (33, 56101), (35, 56044), (45, 55936), (47, 55930), (51, 55894), (55, 55873), (57, 55858), (62, 55813), (68, 55795), (75, 55705),

Gene: Apex\_56 Start: 55508, Stop: 54768, Start Num: 7

Candidate Starts for Apex\_56:

(Start: 7 @55508 has 21 MA's), (16, 55415), (17, 55388), (19, 55367), (21, 55340), (22, 55334), (24, 55283), (25, 55265), (26, 55262), (33, 55187), (37, 55118), (41, 55085), (53, 54965), (56, 54947), (58, 54938), (59, 54929), (66, 54899), (68, 54887),

Gene: Austelle\_56 Start: 55961, Stop: 55221, Start Num: 7

Candidate Starts for Austelle\_56:

(Start: 7 @55961 has 21 MA's), (16, 55868), (17, 55841), (19, 55820), (21, 55793), (22, 55787), (24, 55736), (25, 55718), (26, 55715), (33, 55640), (37, 55571), (41, 55538), (53, 55418), (56, 55400), (58, 55391), (59, 55382), (66, 55352), (68, 55340),

Gene: BobbyK\_55 Start: 55271, Stop: 54540, Start Num: 7

Candidate Starts for BobbyK\_55:

(Start: 7 @55271 has 21 MA's), (15, 55211), (16, 55178), (17, 55151), (19, 55130), (21, 55103), (22, 55097), (24, 55046), (25, 55028), (26, 55025), (33, 54947), (35, 54890), (41, 54854), (42, 54848), (47, 54776), (49, 54764), (50, 54746), (51, 54740), (55, 54719), (57, 54704), (62, 54659), (68, 54641), (69, 54635), (70, 54623), (71, 54614), (75, 54551),

Gene: BrownCNA\_57 Start: 55628, Stop: 54879, Start Num: 7

Candidate Starts for BrownCNA\_57:

(Start: 7 @55628 has 21 MA's), (16, 55535), (17, 55508), (19, 55487), (21, 55460), (22, 55454), (24, 55403), (25, 55385), (26, 55382), (33, 55307), (35, 55250), (42, 55208), (47, 55136), (49, 55124), (50, 55106), (51, 55100), (55, 55079), (57, 55064), (65, 55013),

Gene: ChrisnMich\_55 Start: 54300, Stop: 53548, Start Num: 7

Candidate Starts for ChrisnMich\_55:

(Start: 7 @54300 has 21 MA's), (16, 54207), (17, 54180), (19, 54159), (21, 54132), (22, 54126), (24, 54075), (25, 54057), (26, 54054), (33, 53976), (35, 53919), (42, 53877), (49, 53793), (50, 53775), (51, 53769), (55, 53748), (57, 53733), (65, 53682), (68, 53667),

Gene: Cooper\_56 Start: 54445, Stop: 53840, Start Num: 7

Candidate Starts for Cooper\_56:

(Start: 7 @54445 has 21 MA's), (17, 54325), (18, 54316), (22, 54271), (23, 54241), (25, 54202), (26, 54199), (30, 54154), (37, 54058), (52, 53914),

Gene: Fortunato\_56 Start: 55317, Stop: 54577, Start Num: 7

Candidate Starts for Fortunato\_56:

(Start: 7 @55317 has 21 MA's), (16, 55224), (17, 55197), (19, 55176), (21, 55149), (22, 55143), (24, 55092), (25, 55074), (26, 55071), (33, 54996), (37, 54927), (41, 54894), (53, 54774), (56, 54756), (58, 54747), (59, 54738), (68, 54696),

Gene: Frederick\_55 Start: 55214, Stop: 54483, Start Num: 7

Candidate Starts for Frederick\_55:

(Start: 7 @55214 has 21 MA's), (15, 55154), (16, 55121), (17, 55094), (19, 55073), (21, 55046), (22, 55040), (24, 54989), (25, 54971), (26, 54968), (33, 54890), (35, 54833), (41, 54797), (42, 54791), (47, 54719), (49, 54707), (50, 54689), (51, 54683), (55, 54662), (57, 54647), (62, 54602), (68, 54584), (69, 54578), (70, 54566), (71, 54557), (75, 54494),

Gene: Funsized\_61 Start: 57221, Stop: 56568, Start Num: 8

Candidate Starts for Funsized\_61:

(2, 57734), (3, 57476), (4, 57461), (6, 57338), (Start: 8 @57221 has 1 MA's), (9, 57212), (15, 57167), (17, 57107), (19, 57086), (21, 57047), (22, 57041), (25, 56972), (26, 56969), (28, 56939), (30, 56924),

(34, 56849), (36, 56831), (43, 56771), (44, 56765), (54, 56660), (64, 56594), (67, 56579),

Gene: Hangman\_55 Start: 55371, Stop: 54622, Start Num: 7

Candidate Starts for Hangman\_55:

(Start: 7 @55371 has 21 MA's), (16, 55278), (17, 55251), (19, 55230), (21, 55203), (22, 55197), (24, 55146), (25, 55128), (33, 55050), (35, 54993), (41, 54957), (42, 54951), (47, 54879), (49, 54867), (50, 54849), (51, 54843), (55, 54822), (57, 54807), (65, 54756),

Gene: Heath\_54 Start: 54997, Stop: 54248, Start Num: 7

Candidate Starts for Heath\_54:

(Start: 7 @54997 has 21 MA's), (16, 54904), (17, 54877), (19, 54856), (21, 54829), (22, 54823), (24, 54772), (26, 54751), (33, 54676), (35, 54619), (42, 54577), (49, 54493), (50, 54475), (51, 54469), (55, 54448), (57, 54433), (65, 54382), (68, 54367),

Gene: Hydro\_55 Start: 55348, Stop: 54617, Start Num: 7

Candidate Starts for Hydro\_55:

(Start: 7 @55348 has 21 MA's), (16, 55255), (17, 55228), (19, 55207), (21, 55180), (22, 55174), (24, 55123), (25, 55105), (26, 55102), (33, 55024), (35, 54967), (47, 54853), (49, 54841), (50, 54823), (51, 54817), (55, 54796), (57, 54781), (62, 54736), (68, 54718), (69, 54712), (70, 54700), (71, 54691), (75, 54628),

Gene: Imvubu\_53 Start: 52588, Stop: 51845, Start Num: 10

Candidate Starts for Imvubu\_53:

(1, 53128), (2, 53122), (4, 52852), (5, 52741), (Start: 10 @52588 has 1 MA's), (12, 52573), (13, 52567), (15, 52543), (17, 52483), (19, 52462), (21, 52432), (22, 52426), (23, 52396), (27, 52339), (29, 52321), (30, 52309), (32, 52297), (34, 52234), (39, 52198), (40, 52183), (54, 52045), (63, 51982), (72, 51886), (73, 51868),

Gene: JAMaL\_55 Start: 55393, Stop: 54788, Start Num: 7

Candidate Starts for JAMaL\_55:

(Start: 7 @55393 has 21 MA's), (17, 55273), (18, 55264), (22, 55219), (23, 55189), (25, 55150), (26, 55147), (31, 55096), (37, 55006), (52, 54862), (61, 54799),

Gene: JaguarMi\_57 Start: 56412, Stop: 55672, Start Num: 7

Candidate Starts for JaguarMi\_57:

(Start: 7 @56412 has 21 MA's), (14, 56361), (16, 56319), (17, 56292), (21, 56244), (22, 56238), (24, 56187), (25, 56169), (26, 56166), (33, 56091), (37, 56022), (38, 56013), (41, 55989), (53, 55869), (56, 55851), (58, 55842), (59, 55833), (66, 55803), (68, 55791),

Gene: Lolalove\_56 Start: 55331, Stop: 54600, Start Num: 7

Candidate Starts for Lolalove\_56:

(Start: 7 @55331 has 21 MA's), (15, 55271), (16, 55238), (17, 55211), (19, 55190), (21, 55163), (22, 55157), (24, 55106), (25, 55088), (26, 55085), (33, 55007), (35, 54950), (41, 54914), (42, 54908), (47, 54836), (49, 54824), (50, 54806), (51, 54800), (55, 54779), (57, 54764), (62, 54719), (68, 54701), (69, 54695), (70, 54683), (71, 54674), (75, 54611),

Gene: Magpie\_54 Start: 55250, Stop: 54492, Start Num: 7

Candidate Starts for Magpie\_54:

(Start: 7 @55250 has 21 MA's), (16, 55157), (17, 55130), (19, 55109), (21, 55082), (22, 55076), (24, 55025), (25, 55007), (26, 55004), (33, 54926), (47, 54752), (49, 54740), (50, 54722), (55, 54695), (57, 54680), (62, 54635), (65, 54626), (68, 54611), (71, 54572),

Gene: Mithril\_55 Start: 55326, Stop: 54574, Start Num: 7

Candidate Starts for Mithril\_55:

(Start: 7 @55326 has 21 MA's), (16, 55233), (17, 55206), (19, 55185), (21, 55158), (22, 55152), (24, 55101), (25, 55083), (26, 55080), (33, 55002), (35, 54945), (42, 54903), (47, 54831), (49, 54819), (50, 54801), (51, 54795), (55, 54774), (57, 54759), (65, 54708), (68, 54693),

Gene: Mudslide\_55 Start: 55593, Stop: 54841, Start Num: 7

Candidate Starts for Mudslide\_55:

(Start: 7 @55593 has 21 MA's), (16, 55500), (17, 55473), (19, 55452), (21, 55425), (22, 55419), (24, 55368), (25, 55350), (26, 55347), (33, 55269), (35, 55212), (42, 55170), (49, 55086), (50, 55068), (51, 55062), (55, 55041), (57, 55026), (65, 54975), (68, 54960),

Gene: Nanao\_54 Start: 54291, Stop: 53560, Start Num: 7

Candidate Starts for Nanao\_54:

(Start: 7 @54291 has 21 MA's), (16, 54198), (17, 54171), (19, 54150), (21, 54123), (22, 54117), (24, 54066), (25, 54048), (26, 54045), (33, 53967), (35, 53910), (42, 53868), (49, 53784), (50, 53766), (51, 53760), (55, 53739), (57, 53724), (62, 53679), (68, 53661), (70, 53643), (71, 53634), (75, 53571),

Gene: Poster\_54 Start: 54292, Stop: 53561, Start Num: 7

Candidate Starts for Poster\_54:

(Start: 7 @54292 has 21 MA's), (16, 54199), (17, 54172), (19, 54151), (21, 54124), (22, 54118), (24, 54067), (25, 54049), (26, 54046), (33, 53968), (35, 53911), (42, 53869), (49, 53785), (50, 53767), (51, 53761), (55, 53740), (57, 53725), (62, 53680), (68, 53662), (70, 53644), (71, 53635), (75, 53572),

Gene: Prince\_56 Start: 55506, Stop: 54754, Start Num: 7

Candidate Starts for Prince\_56:

(Start: 7 @55506 has 21 MA's), (16, 55413), (17, 55386), (19, 55365), (21, 55338), (22, 55332), (24, 55281), (25, 55263), (26, 55260), (33, 55182), (35, 55125), (42, 55083), (49, 54999), (50, 54981), (51, 54975), (55, 54954), (57, 54939), (65, 54888), (68, 54873),

Gene: RawrgerThat\_56 Start: 55346, Stop: 54594, Start Num: 7

Candidate Starts for RawrgerThat\_56:

(Start: 7 @55346 has 21 MA's), (16, 55253), (17, 55226), (19, 55205), (21, 55178), (22, 55172), (24, 55121), (25, 55103), (26, 55100), (33, 55022), (35, 54965), (42, 54923), (47, 54851), (49, 54839), (50, 54821), (51, 54815), (55, 54794), (57, 54779), (65, 54728), (68, 54713),

Gene: Stinger\_56 Start: 54216, Stop: 53488, Start Num: 7

Candidate Starts for Stinger\_56:

(Start: 7 @54216 has 21 MA's), (17, 54099), (18, 54090), (21, 54051), (22, 54045), (25, 53976), (26, 53973), (33, 53895), (35, 53838), (41, 53802), (45, 53730), (46, 53727), (48, 53718), (50, 53694), (51, 53688), (55, 53667), (57, 53652), (60, 53625), (62, 53607), (68, 53589), (69, 53583), (70, 53571), (71, 53562), (74, 53511), (75, 53499),

Gene: Vincenzo\_58 Start: 56434, Stop: 55724, Start Num: 7

Candidate Starts for Vincenzo\_58:

(Start: 7 @56434 has 21 MA's), (11, 56416), (12, 56410), (17, 56320), (21, 56272), (22, 56266), (25, 56197), (26, 56194), (31, 56143), (33, 56131), (35, 56074), (45, 55966), (47, 55960), (51, 55924), (55, 55903), (57, 55888), (62, 55843), (68, 55825), (75, 55735),

Gene: VioletZ\_57 Start: 55422, Stop: 54658, Start Num: 7

Candidate Starts for VioletZ\_57:

(Start: 7 @55422 has 21 MA's), (16, 55329), (17, 55302), (19, 55281), (20, 55263), (22, 55248), (24, 55197), (25, 55179), (26, 55176), (33, 55101), (37, 55032), (38, 55023), (47, 54918), (49, 54906), (50, 54888), (51, 54882), (55, 54861), (57, 54846), (62, 54801), (65, 54792), (68, 54777),

Gene: Waleliano\_55 Start: 55360, Stop: 54611, Start Num: 7

Candidate Starts for Waleliano\_55:

(Start: 7 @55360 has 21 MA's), (16, 55267), (17, 55240), (19, 55219), (21, 55192), (22, 55186), (24, 55135), (25, 55117), (26, 55114), (33, 55039), (35, 54982), (42, 54940), (47, 54868), (49, 54856), (50, 54838), (51, 54832), (55, 54811), (57, 54796), (65, 54745),

Gene: Zemanar\_56 Start: 55192, Stop: 54443, Start Num: 7

Candidate Starts for Zemanar\_56:

(Start: 7 @55192 has 21 MA's), (16, 55099), (17, 55072), (19, 55051), (21, 55024), (22, 55018), (24, 54967), (25, 54949), (26, 54946), (33, 54871), (35, 54814), (42, 54772), (47, 54700), (49, 54688), (50, 54670), (51, 54664), (55, 54643), (57, 54628), (65, 54577),