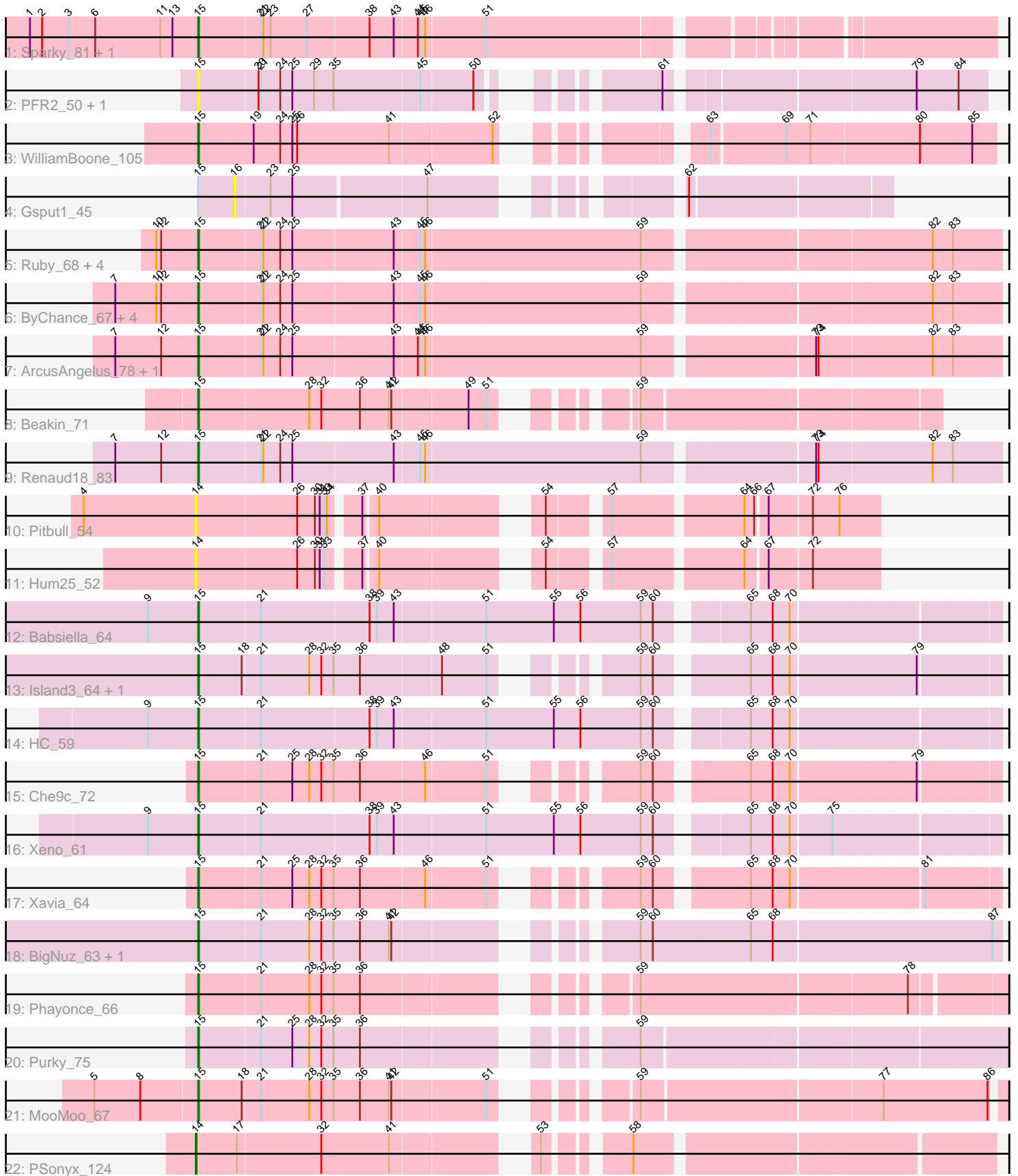


Pham 162034



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 162034 Report

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

Pham number 162034 has 35 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Sparky\_81, Farewell\_82
- Track 2 : PFR2\_50, PFR1\_48
- Track 3 : WilliamBoone\_105
- Track 4 : Gspu1\_45
- Track 5 : Ruby\_68, MisterCuddles\_70, Stap\_68, Krakatau\_68, Girr\_70
- Track 6 : ByChance\_67, Mova\_73, ShowerHandel\_75, Alexphander\_75, Madiba\_77
- Track 7 : ArcusAngelus\_78, Chevrolet\_83
- Track 8 : Beakin\_71
- Track 9 : Renaud18\_83
- Track 10 : Pitbull\_54
- Track 11 : Hum25\_52
- Track 12 : Babsiella\_64
- Track 13 : Island3\_64, Brujita\_63
- Track 14 : HC\_59
- Track 15 : Che9c\_72
- Track 16 : Xeno\_61
- Track 17 : Xavia\_64
- Track 18 : BigNuz\_63, Nazo\_64
- Track 19 : Phayonce\_66
- Track 20 : Purky\_75
- Track 21 : MooMoo\_67
- Track 22 : PSonyx\_124

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

The start number called the most often in the published annotations is 15, it was called in 27 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alexphander\_75, ArcusAngelus\_78, Babsiella\_64, Beakin\_71, BigNuz\_63, Brujita\_63, ByChance\_67, Che9c\_72, Chevrolet\_83, Farewell\_82, Girr\_70, HC\_59, Island3\_64, Krakatau\_68, Madiba\_77, MisterCuddles\_70, MooMoo\_67, Mova\_73, Nazo\_64, PFR1\_48, PFR2\_50, Phayonce\_66, Purky\_75, Renaud18\_83, Ruby\_68, ShowerHandel\_75, Sparky\_81, Stap\_68, WilliamBoone\_105, Xavia\_64, Xeno\_61,

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

- Gspu1\_45,

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

- Hum25\_52, PSonyx\_124, Pitbull\_54,

### Summary by start number:

Start 14:

- Found in 3 of 35 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25\_52 (FQ), PSonyx\_124 (singleton), Pitbull\_54 (FQ),

Start 15:

- Found in 32 of 35 ( 91.4% ) of genes in pham
- Manual Annotations of this start: 27 of 28
- Called 96.9% of time when present
- Phage (with cluster) where this start called: Alexphander\_75 (F1), ArcusAngelus\_78 (F1), Babsiella\_64 (I1), Beakin\_71 (F1), BigNuz\_63 (P4), Brujita\_63 (I1), ByChance\_67 (F1), Che9c\_72 (I2), Chevrolet\_83 (F1), Farewell\_82 (AF), Girr\_70 (F1), HC\_59 (I1), Island3\_64 (I1), Krakatau\_68 (F1), Madiba\_77 (F1), MisterCuddles\_70 (F1), MooMoo\_67 (singleton), Mova\_73 (F1), Nazo\_64 (P4), PFR1\_48 (BX), PFR2\_50 (BX), Phayonce\_66 (P5), Purky\_75 (P6), Renaud18\_83 (F4), Ruby\_68 (F1), ShowerHandel\_75 (F1), Sparky\_81 (AF), Stap\_68 (F1), WilliamBoone\_105 (CQ1), Xavia\_64 (P3), Xeno\_61 (N),

Start 16:

- 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: Gspu1\_45 (CU2),

### Summary by clusters:

There are 15 clusters represented in this pham: F1, singleton, I2, F4, CU2, P4, P3, I1, AF, FQ, N, P6, CQ1, BX, P5,

Info for manual annotations of cluster AF:

- Start number 15 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster CQ1:

- Start number 15 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster F1:

- Start number 15 was manually annotated 11 times for cluster F1.

Info for manual annotations of cluster F4:

- Start number 15 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster I1:

- Start number 15 was manually annotated 4 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 15 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:

- Start number 15 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P3:

- Start number 15 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:

- Start number 15 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 15 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:

- Start number 15 was manually annotated 1 time for cluster P6.

### ***Gene Information:***

Gene: Alexphander\_75 Start: 46658, Stop: 47605, Start Num: 15

Candidate Starts for Alexphander\_75:

(7, 46559), (10, 46610), (12, 46616), (Start: 15 @46658 has 27 MA's), (21, 46733), (22, 46736), (24, 46757), (25, 46772), (43, 46895), (45, 46925), (46, 46931), (59, 47195), (82, 47522), (83, 47546),

Gene: ArcusAngelus\_78 Start: 47565, Stop: 48512, Start Num: 15

Candidate Starts for ArcusAngelus\_78:

(7, 47466), (12, 47523), (Start: 15 @47565 has 27 MA's), (21, 47640), (22, 47643), (24, 47664), (25, 47679), (43, 47802), (44, 47829), (45, 47832), (46, 47838), (59, 48102), (73, 48291), (74, 48294), (82, 48429), (83, 48453),

Gene: Babsiella\_64 Start: 40664, Stop: 41602, Start Num: 15

Candidate Starts for Babsiella\_64:

(9, 40604), (Start: 15 @40664 has 27 MA's), (21, 40739), (38, 40871), (39, 40880), (43, 40901), (51, 41009), (55, 41093), (56, 41126), (59, 41201), (60, 41216), (65, 41309), (68, 41336), (70, 41357),

Gene: Beakin\_71 Start: 42319, Stop: 43122, Start Num: 15

Candidate Starts for Beakin\_71:

(Start: 15 @42319 has 27 MA's), (28, 42454), (32, 42469), (36, 42517), (41, 42553), (42, 42556), (49, 42646), (51, 42667), (59, 42772),

Gene: BigNuz\_63 Start: 41443, Stop: 42339, Start Num: 15

Candidate Starts for BigNuz\_63:

(Start: 15 @41443 has 27 MA's), (21, 41518), (28, 41578), (32, 41593), (35, 41608), (36, 41641), (41, 41677), (42, 41680), (59, 41905), (60, 41920), (65, 42040), (68, 42067), (87, 42328),

Gene: Brujita\_63 Start: 40794, Stop: 41660, Start Num: 15

Candidate Starts for Brujita\_63:

(Start: 15 @40794 has 27 MA's), (18, 40848), (21, 40869), (28, 40929), (32, 40944), (35, 40959), (36, 40992), (48, 41088), (51, 41142), (59, 41256), (60, 41271), (65, 41367), (68, 41394), (70, 41415), (79, 41565),

Gene: ByChance\_67 Start: 42797, Stop: 43744, Start Num: 15

Candidate Starts for ByChance\_67:

(7, 42698), (10, 42749), (12, 42755), (Start: 15 @42797 has 27 MA's), (21, 42872), (22, 42875), (24, 42896), (25, 42911), (43, 43034), (45, 43064), (46, 43070), (59, 43334), (82, 43661), (83, 43685),

Gene: Che9c\_72 Start: 50505, Stop: 51371, Start Num: 15

Candidate Starts for Che9c\_72:

(Start: 15 @50505 has 27 MA's), (21, 50580), (25, 50619), (28, 50640), (32, 50655), (35, 50670), (36, 50703), (46, 50781), (51, 50853), (59, 50967), (60, 50982), (65, 51078), (68, 51105), (70, 51126), (79, 51276),

Gene: Chevrolet\_83 Start: 47566, Stop: 48513, Start Num: 15

Candidate Starts for Chevrolet\_83:

(7, 47467), (12, 47524), (Start: 15 @47566 has 27 MA's), (21, 47641), (22, 47644), (24, 47665), (25, 47680), (43, 47803), (44, 47830), (45, 47833), (46, 47839), (59, 48103), (73, 48292), (74, 48295), (82, 48430), (83, 48454),

Gene: Farewell\_82 Start: 53367, Stop: 54266, Start Num: 15

Candidate Starts for Farewell\_82:

(1, 53160), (2, 53175), (3, 53208), (6, 53241), (11, 53322), (13, 53337), (Start: 15 @53367 has 27 MA's), (21, 53442), (22, 53445), (23, 53454), (27, 53499), (38, 53574), (43, 53604), (44, 53631), (45, 53634), (46, 53640), (51, 53712),

Gene: Girr\_70 Start: 46136, Stop: 47083, Start Num: 15

Candidate Starts for Girr\_70:

(10, 46088), (12, 46094), (Start: 15 @46136 has 27 MA's), (21, 46211), (22, 46214), (24, 46235), (25, 46250), (43, 46373), (45, 46403), (46, 46409), (59, 46673), (82, 47000), (83, 47024),

Gene: Gspu1\_45 Start: 32516, Stop: 33187, Start Num: 16

Candidate Starts for Gspu1\_45:

(Start: 15 @32471 has 27 MA's), (16, 32516), (23, 32558), (25, 32585), (47, 32741), (62, 32957),

Gene: HC\_59 Start: 38210, Stop: 39148, Start Num: 15

Candidate Starts for HC\_59:

(9, 38150), (Start: 15 @38210 has 27 MA's), (21, 38285), (38, 38417), (39, 38426), (43, 38447), (51, 38555), (55, 38639), (56, 38672), (59, 38747), (60, 38762), (65, 38855), (68, 38882), (70, 38903),

Gene: Hum25\_52 Start: 32602, Stop: 33336, Start Num: 14

Candidate Starts for Hum25\_52:

(Start: 14 @32602 has 1 MA's), (26, 32725), (30, 32746), (31, 32752), (33, 32758), (37, 32791), (40, 32806), (54, 32968), (57, 33028), (64, 33178), (67, 33202), (72, 33253),

Gene: Island3\_64 Start: 40794, Stop: 41660, Start Num: 15

Candidate Starts for Island3\_64:

(Start: 15 @40794 has 27 MA's), (18, 40848), (21, 40869), (28, 40929), (32, 40944), (35, 40959), (36, 40992), (48, 41088), (51, 41142), (59, 41256), (60, 41271), (65, 41367), (68, 41394), (70, 41415), (79, 41565),

Gene: Krakatau\_68 Start: 42516, Stop: 43463, Start Num: 15

Candidate Starts for Krakatau\_68:

(10, 42468), (12, 42474), (Start: 15 @42516 has 27 MA's), (21, 42591), (22, 42594), (24, 42615), (25, 42630), (43, 42753), (45, 42783), (46, 42789), (59, 43053), (82, 43380), (83, 43404),

Gene: Madiba\_77 Start: 47713, Stop: 48660, Start Num: 15

Candidate Starts for Madiba\_77:

(7, 47614), (10, 47665), (12, 47671), (Start: 15 @47713 has 27 MA's), (21, 47788), (22, 47791), (24, 47812), (25, 47827), (43, 47950), (45, 47980), (46, 47986), (59, 48250), (82, 48577), (83, 48601),

Gene: MisterCuddles\_70 Start: 46136, Stop: 47083, Start Num: 15

Candidate Starts for MisterCuddles\_70:

(10, 46088), (12, 46094), (Start: 15 @46136 has 27 MA's), (21, 46211), (22, 46214), (24, 46235), (25, 46250), (43, 46373), (45, 46403), (46, 46409), (59, 46673), (82, 47000), (83, 47024),

Gene: MooMoo\_67 Start: 43945, Stop: 44826, Start Num: 15

Candidate Starts for MooMoo\_67:

(5, 43822), (8, 43879), (Start: 15 @43945 has 27 MA's), (18, 43999), (21, 44020), (28, 44080), (32, 44095), (35, 44110), (36, 44143), (41, 44179), (42, 44182), (51, 44293), (59, 44401), (77, 44683), (86, 44812),

Gene: Mova\_73 Start: 45137, Stop: 46084, Start Num: 15

Candidate Starts for Mova\_73:

(7, 45038), (10, 45089), (12, 45095), (Start: 15 @45137 has 27 MA's), (21, 45212), (22, 45215), (24, 45236), (25, 45251), (43, 45374), (45, 45404), (46, 45410), (59, 45674), (82, 46001), (83, 46025),

Gene: Nazo\_64 Start: 41628, Stop: 42524, Start Num: 15

Candidate Starts for Nazo\_64:

(Start: 15 @41628 has 27 MA's), (21, 41703), (28, 41763), (32, 41778), (35, 41793), (36, 41826), (41, 41862), (42, 41865), (59, 42090), (60, 42105), (65, 42225), (68, 42252), (87, 42513),

Gene: PFR1\_48 Start: 33401, Stop: 34246, Start Num: 15

Candidate Starts for PFR1\_48:

(Start: 15 @33401 has 27 MA's), (20, 33473), (21, 33476), (24, 33500), (25, 33515), (29, 33542), (35, 33566), (45, 33671), (50, 33734), (61, 33878), (79, 34160), (84, 34211),

Gene: PFR2\_50 Start: 34970, Stop: 35815, Start Num: 15

Candidate Starts for PFR2\_50:

(Start: 15 @34970 has 27 MA's), (20, 35042), (21, 35045), (24, 35069), (25, 35084), (29, 35111), (35, 35135), (45, 35240), (50, 35303), (61, 35447), (79, 35729), (84, 35780),

Gene: PSonyx\_124 Start: 65104, Stop: 65970, Start Num: 14

Candidate Starts for PSonyx\_124:

(Start: 14 @65104 has 1 MA's), (17, 65155), (32, 65257), (41, 65341), (53, 65479), (58, 65557),

Gene: Phayonce\_66 Start: 43928, Stop: 44809, Start Num: 15

Candidate Starts for Phayonce\_66:

(Start: 15 @43928 has 27 MA's), (21, 44003), (28, 44063), (32, 44078), (35, 44093), (36, 44126), (59, 44384), (78, 44702),

Gene: Pitbull\_54 Start: 31198, Stop: 31932, Start Num: 14

Candidate Starts for Pitbull\_54:

(4, 31060), (Start: 14 @31198 has 1 MA's), (26, 31321), (30, 31342), (31, 31348), (33, 31354), (34, 31357), (37, 31387), (40, 31402), (54, 31564), (57, 31624), (64, 31774), (66, 31786), (67, 31798), (72, 31849), (76, 31882),

Gene: Purky\_75 Start: 45874, Stop: 46767, Start Num: 15

Candidate Starts for Purky\_75:

(Start: 15 @45874 has 27 MA's), (21, 45949), (25, 45988), (28, 46009), (32, 46024), (35, 46039), (36, 46072), (59, 46336),

Gene: Renaud18\_83 Start: 47137, Stop: 48084, Start Num: 15

Candidate Starts for Renaud18\_83:

(7, 47038), (12, 47095), (Start: 15 @47137 has 27 MA's), (21, 47212), (22, 47215), (24, 47236), (25, 47251), (43, 47374), (45, 47404), (46, 47410), (59, 47674), (73, 47863), (74, 47866), (82, 48001), (83, 48025),

Gene: Ruby\_68 Start: 46137, Stop: 47084, Start Num: 15

Candidate Starts for Ruby\_68:

(10, 46089), (12, 46095), (Start: 15 @46137 has 27 MA's), (21, 46212), (22, 46215), (24, 46236), (25, 46251), (43, 46374), (45, 46404), (46, 46410), (59, 46674), (82, 47001), (83, 47025),

Gene: ShowerHandel\_75 Start: 46737, Stop: 47684, Start Num: 15

Candidate Starts for ShowerHandel\_75:

(7, 46638), (10, 46689), (12, 46695), (Start: 15 @46737 has 27 MA's), (21, 46812), (22, 46815), (24, 46836), (25, 46851), (43, 46974), (45, 47004), (46, 47010), (59, 47274), (82, 47601), (83, 47625),

Gene: Sparky\_81 Start: 54961, Stop: 55860, Start Num: 15

Candidate Starts for Sparky\_81:

(1, 54754), (2, 54769), (3, 54802), (6, 54835), (11, 54916), (13, 54931), (Start: 15 @54961 has 27 MA's), (21, 55036), (22, 55039), (23, 55048), (27, 55093), (38, 55168), (43, 55198), (44, 55225), (45, 55228), (46, 55234), (51, 55306),

Gene: Stap\_68 Start: 43382, Stop: 44329, Start Num: 15

Candidate Starts for Stap\_68:

(10, 43334), (12, 43340), (Start: 15 @43382 has 27 MA's), (21, 43457), (22, 43460), (24, 43481), (25, 43496), (43, 43619), (45, 43649), (46, 43655), (59, 43919), (82, 44246), (83, 44270),

Gene: WilliamBoone\_105 Start: 60775, Stop: 61641, Start Num: 15

Candidate Starts for WilliamBoone\_105:

(Start: 15 @60775 has 27 MA's), (19, 60844), (24, 60877), (25, 60892), (26, 60898), (41, 61012), (52, 61135), (63, 61300), (69, 61387), (71, 61417), (80, 61549), (85, 61612),

Gene: Xavia\_64 Start: 45674, Stop: 46540, Start Num: 15

Candidate Starts for Xavia\_64:

(Start: 15 @45674 has 27 MA's), (21, 45749), (25, 45788), (28, 45809), (32, 45824), (35, 45839), (36, 45872), (46, 45950), (51, 46022), (59, 46136), (60, 46151), (65, 46247), (68, 46274), (70, 46295), (81, 46451),

Gene: Xeno\_61 Start: 38162, Stop: 39100, Start Num: 15

Candidate Starts for Xeno\_61:

(9, 38102), (Start: 15 @38162 has 27 MA's), (21, 38237), (38, 38369), (39, 38378), (43, 38399), (51, 38507), (55, 38591), (56, 38624), (59, 38699), (60, 38714), (65, 38807), (68, 38834), (70, 38855), (75, 38903),