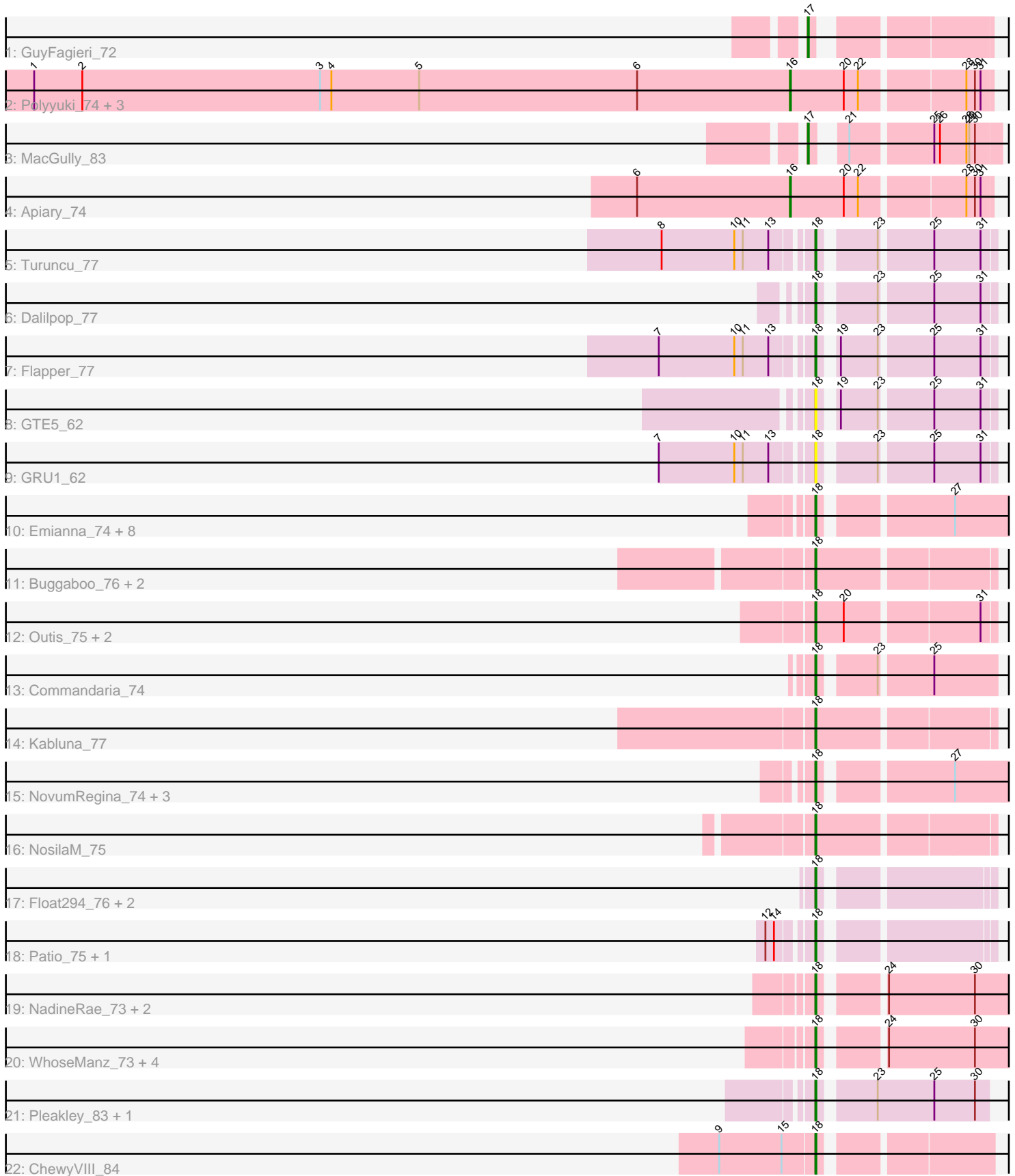


Pham 166779



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 166779 Report

This analysis was run 07/09/24 on database version 566.

Pham number 166779 has 50 members, 5 are drafts.

Phages represented in each track:

- Track 1 : GuyFagieri\_72
- Track 2 : Polyuyuki\_74, Maselop\_74, CoffeeBean\_74, Braxoaddie\_74
- Track 3 : MacGully\_83
- Track 4 : Apiary\_74
- Track 5 : Turuncu\_77
- Track 6 : Dalilpop\_77
- Track 7 : Flapper\_77
- Track 8 : GTE5\_62
- Track 9 : GRU1\_62
- Track 10 : Emianna\_74, Kurt\_74, NatB6\_74, Wheezy\_74, KidneyBean\_74, Jifall16\_73, Arti\_73, Phomeo\_74, Foxboro\_74
- Track 11 : Buggaboo\_76, SuperSulley\_76, Bonum\_78
- Track 12 : Outis\_75, MerCougar\_77, StarStruck\_75
- Track 13 : Commandaria\_74
- Track 14 : Kabluna\_77
- Track 15 : NovumRegina\_74, GrootJr\_76, GTE8\_62, Tracker\_74
- Track 16 : NosilaM\_75
- Track 17 : Float294\_76, Ennea\_81, Lollipop1437\_77
- Track 18 : Patio\_75, Skysand\_77
- Track 19 : NadineRae\_73, HubbaBubba\_70, IDyn\_71
- Track 20 : WhoseManz\_73, Marietta\_74, Sukkupi\_73, Yndexa\_73, BiPauneto\_76
- Track 21 : Pleakley\_83, Fury\_83
- Track 22 : ChewyVIII\_84

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

The start number called the most often in the published annotations is 18, it was called in 38 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arti\_73, BiPauneto\_76, Bonum\_78, Buggaboo\_76, ChewyVIII\_84, Commandaria\_74, Dalilpop\_77, Emianna\_74, Ennea\_81, Flapper\_77, Float294\_76, Foxboro\_74, Fury\_83, GRU1\_62, GTE5\_62, GTE8\_62, GrootJr\_76, HubbaBubba\_70, IDyn\_71, Jifall16\_73, Kabluna\_77, KidneyBean\_74, Kurt\_74,

Lollipop1437\_77, Marietta\_74, MerCougar\_77, NadineRae\_73, NatB6\_74, NosilaM\_75, NovumRegina\_74, Outis\_75, Patio\_75, Phomeo\_74, Pleakley\_83, Skysand\_77, StarStruck\_75, Sukkupi\_73, SuperSulley\_76, Tracker\_74, Turuncu\_77, Wheezy\_74, WhoseManz\_73, Yndexa\_73,

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

- 

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

- Apiary\_74, Braxoaddie\_74, CoffeeBean\_74, GuyFagieri\_72, MacGully\_83, Maselop\_74, Polyyuki\_74,

### Summary by start number:

Start 16:

- Found in 5 of 50 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 5 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apiary\_74 (CR), Braxoaddie\_74 (CR), CoffeeBean\_74 (CR), Maselop\_74 (CR), Polyyuki\_74 (CR),

Start 17:

- Found in 2 of 50 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 2 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GuyFagieri\_72 (CR), MacGully\_83 (CR),

Start 18:

- Found in 43 of 50 ( 86.0% ) of genes in pham
- Manual Annotations of this start: 38 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arti\_73 (CR2), BiPauneto\_76 (CR4), Bonum\_78 (CR2), Buggaboo\_76 (CR2), ChewyVIII\_84 (singleton), Commandaria\_74 (CR2), Dalilpop\_77 (CR1), Emianna\_74 (CR2), Ennea\_81 (CR3), Flapper\_77 (CR1), Float294\_76 (CR3), Foxboro\_74 (CR2), Fury\_83 (CR5), GRU1\_62 (CR1), GTE5\_62 (CR1), GTE8\_62 (CR2), GrootJr\_76 (CR2), HubbaBubba\_70 (CR4), IDyn\_71 (CR4), Jifall16\_73 (CR2), Kabluna\_77 (CR2), KidneyBean\_74 (CR2), Kurt\_74 (CR2), Lollipop1437\_77 (CR3), Marietta\_74 (CR4), MerCougar\_77 (CR2), NadineRae\_73 (CR4), NatB6\_74 (CR2), NosilaM\_75 (CR2), NovumRegina\_74 (CR2), Outis\_75 (CR2), Patio\_75 (CR3), Phomeo\_74 (CR2), Pleakley\_83 (CR5), Skysand\_77 (CR3), StarStruck\_75 (CR2), Sukkupi\_73 (CR4), SuperSulley\_76 (CR2), Tracker\_74 (CR2), Turuncu\_77 (CR1), Wheezy\_74 (CR2), WhoseManz\_73 (CR4), Yndexa\_73 (CR4),

### Summary by clusters:

There are 7 clusters represented in this pham: CR2, CR3, singleton, CR1, CR4, CR5, CR,

Info for manual annotations of cluster CR:

- Start number 16 was manually annotated 5 times for cluster CR.
- Start number 17 was manually annotated 2 times for cluster CR.

Info for manual annotations of cluster CR1:

- Start number 18 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 18 was manually annotated 20 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 18 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 18 was manually annotated 7 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 18 was manually annotated 2 times for cluster CR5.

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

Gene: Apiary\_74 Start: 53618, Stop: 53418, Start Num: 16

Candidate Starts for Apiary\_74:

(6, 53780), (Start: 16 @53618 has 5 MA's), (20, 53561), (22, 53546), (28, 53444), (30, 53435), (31, 53429),

Gene: Arti\_73 Start: 56166, Stop: 55981, Start Num: 18

Candidate Starts for Arti\_73:

(Start: 18 @56166 has 38 MA's), (27, 56043),

Gene: BiPauneto\_76 Start: 55535, Stop: 55356, Start Num: 18

Candidate Starts for BiPauneto\_76:

(Start: 18 @55535 has 38 MA's), (24, 55481), (30, 55391),

Gene: Bonum\_78 Start: 57314, Stop: 57138, Start Num: 18

Candidate Starts for Bonum\_78:

(Start: 18 @57314 has 38 MA's),

Gene: Braxoaddie\_74 Start: 53604, Stop: 53404, Start Num: 16

Candidate Starts for Braxoaddie\_74:

(1, 54405), (2, 54354), (3, 54102), (4, 54090), (5, 53997), (6, 53766), (Start: 16 @53604 has 5 MA's), (20, 53547), (22, 53532), (28, 53430), (30, 53421), (31, 53415),

Gene: Buggaboo\_76 Start: 57880, Stop: 57704, Start Num: 18

Candidate Starts for Buggaboo\_76:

(Start: 18 @57880 has 38 MA's),

Gene: ChewyVIII\_84 Start: 62052, Stop: 61891, Start Num: 18

Candidate Starts for ChewyVIII\_84:

(9, 62151), (15, 62085), (Start: 18 @62052 has 38 MA's),

Gene: CoffeeBean\_74 Start: 53562, Stop: 53362, Start Num: 16

Candidate Starts for CoffeeBean\_74:

(1, 54363), (2, 54312), (3, 54060), (4, 54048), (5, 53955), (6, 53724), (Start: 16 @53562 has 5 MA's), (20, 53505), (22, 53490), (28, 53388), (30, 53379), (31, 53373),

Gene: Commandaria\_74 Start: 57130, Stop: 56963, Start Num: 18  
Candidate Starts for Commandaria\_74:  
(Start: 18 @57130 has 38 MA's), (23, 57079), (25, 57028),

Gene: Dalilpop\_77 Start: 58079, Stop: 57915, Start Num: 18  
Candidate Starts for Dalilpop\_77:  
(Start: 18 @58079 has 38 MA's), (23, 58028), (25, 57977), (31, 57929),

Gene: Emianna\_74 Start: 57377, Stop: 57192, Start Num: 18  
Candidate Starts for Emianna\_74:  
(Start: 18 @57377 has 38 MA's), (27, 57254),

Gene: Ennea\_81 Start: 58543, Stop: 58382, Start Num: 18  
Candidate Starts for Ennea\_81:  
(Start: 18 @58543 has 38 MA's),

Gene: Flapper\_77 Start: 57632, Stop: 57468, Start Num: 18  
Candidate Starts for Flapper\_77:  
(7, 57782), (10, 57704), (11, 57695), (13, 57668), (Start: 18 @57632 has 38 MA's), (19, 57620), (23, 57581), (25, 57530), (31, 57482),

Gene: Float294\_76 Start: 58449, Stop: 58288, Start Num: 18  
Candidate Starts for Float294\_76:  
(Start: 18 @58449 has 38 MA's),

Gene: Foxboro\_74 Start: 57589, Stop: 57404, Start Num: 18  
Candidate Starts for Foxboro\_74:  
(Start: 18 @57589 has 38 MA's), (27, 57466),

Gene: Fury\_83 Start: 56305, Stop: 56138, Start Num: 18  
Candidate Starts for Fury\_83:  
(Start: 18 @56305 has 38 MA's), (23, 56254), (25, 56194), (30, 56152),

Gene: GRU1\_62 Start: 49477, Stop: 49313, Start Num: 18  
Candidate Starts for GRU1\_62:  
(7, 49627), (10, 49549), (11, 49540), (13, 49513), (Start: 18 @49477 has 38 MA's), (23, 49426), (25, 49375), (31, 49327),

Gene: GTE5\_62 Start: 50310, Stop: 50146, Start Num: 18  
Candidate Starts for GTE5\_62:  
(Start: 18 @50310 has 38 MA's), (19, 50298), (23, 50259), (25, 50208), (31, 50160),

Gene: GTE8\_62 Start: 50369, Stop: 50184, Start Num: 18  
Candidate Starts for GTE8\_62:  
(Start: 18 @50369 has 38 MA's), (27, 50246),

Gene: GrootJr\_76 Start: 56771, Stop: 56586, Start Num: 18  
Candidate Starts for GrootJr\_76:  
(Start: 18 @56771 has 38 MA's), (27, 56648),

Gene: GuyFagieri\_72 Start: 53418, Stop: 53260, Start Num: 17  
Candidate Starts for GuyFagieri\_72:  
(Start: 17 @53418 has 2 MA's),

Gene: HubbaBubba\_70 Start: 52383, Stop: 52204, Start Num: 18  
Candidate Starts for HubbaBubba\_70:  
(Start: 18 @52383 has 38 MA's), (24, 52329), (30, 52239),

Gene: IDyn\_71 Start: 53130, Stop: 52951, Start Num: 18  
Candidate Starts for IDyn\_71:  
(Start: 18 @53130 has 38 MA's), (24, 53076), (30, 52986),

Gene: Jifall16\_73 Start: 57082, Stop: 56897, Start Num: 18  
Candidate Starts for Jifall16\_73:  
(Start: 18 @57082 has 38 MA's), (27, 56959),

Gene: Kabluna\_77 Start: 56643, Stop: 56467, Start Num: 18  
Candidate Starts for Kabluna\_77:  
(Start: 18 @56643 has 38 MA's),

Gene: KidneyBean\_74 Start: 57206, Stop: 57021, Start Num: 18  
Candidate Starts for KidneyBean\_74:  
(Start: 18 @57206 has 38 MA's), (27, 57083),

Gene: Kurt\_74 Start: 57392, Stop: 57207, Start Num: 18  
Candidate Starts for Kurt\_74:  
(Start: 18 @57392 has 38 MA's), (27, 57269),

Gene: Lollipop1437\_77 Start: 58223, Stop: 58062, Start Num: 18  
Candidate Starts for Lollipop1437\_77:  
(Start: 18 @58223 has 38 MA's),

Gene: MacGully\_83 Start: 56833, Stop: 56663, Start Num: 17  
Candidate Starts for MacGully\_83:  
(Start: 17 @56833 has 2 MA's), (21, 56812), (25, 56731), (26, 56725), (28, 56698), (29, 56695), (30, 56689),

Gene: Marietta\_74 Start: 53430, Stop: 53251, Start Num: 18  
Candidate Starts for Marietta\_74:  
(Start: 18 @53430 has 38 MA's), (24, 53376), (30, 53286),

Gene: Maselop\_74 Start: 53638, Stop: 53438, Start Num: 16  
Candidate Starts for Maselop\_74:  
(1, 54439), (2, 54388), (3, 54136), (4, 54124), (5, 54031), (6, 53800), (Start: 16 @53638 has 5 MA's), (20, 53581), (22, 53566), (28, 53464), (30, 53455), (31, 53449),

Gene: MerCougar\_77 Start: 58347, Stop: 58171, Start Num: 18  
Candidate Starts for MerCougar\_77:  
(Start: 18 @58347 has 38 MA's), (20, 58317), (31, 58185),

Gene: NadineRae\_73 Start: 53039, Stop: 52860, Start Num: 18  
Candidate Starts for NadineRae\_73:  
(Start: 18 @53039 has 38 MA's), (24, 52985), (30, 52895),

Gene: NatB6\_74 Start: 56482, Stop: 56297, Start Num: 18  
Candidate Starts for NatB6\_74:

(Start: 18 @56482 has 38 MA's), (27, 56359),

Gene: NosilaM\_75 Start: 56957, Stop: 56781, Start Num: 18

Candidate Starts for NosilaM\_75:

(Start: 18 @56957 has 38 MA's),

Gene: NovumRegina\_74 Start: 56770, Stop: 56585, Start Num: 18

Candidate Starts for NovumRegina\_74:

(Start: 18 @56770 has 38 MA's), (27, 56647),

Gene: Outis\_75 Start: 57439, Stop: 57263, Start Num: 18

Candidate Starts for Outis\_75:

(Start: 18 @57439 has 38 MA's), (20, 57409), (31, 57277),

Gene: Patio\_75 Start: 57280, Stop: 57119, Start Num: 18

Candidate Starts for Patio\_75:

(12, 57319), (14, 57310), (Start: 18 @57280 has 38 MA's),

Gene: Phomeo\_74 Start: 57078, Stop: 56893, Start Num: 18

Candidate Starts for Phomeo\_74:

(Start: 18 @57078 has 38 MA's), (27, 56955),

Gene: Pleakley\_83 Start: 56306, Stop: 56139, Start Num: 18

Candidate Starts for Pleakley\_83:

(Start: 18 @56306 has 38 MA's), (23, 56255), (25, 56195), (30, 56153),

Gene: Polyzuki\_74 Start: 53630, Stop: 53430, Start Num: 16

Candidate Starts for Polyzuki\_74:

(1, 54431), (2, 54380), (3, 54128), (4, 54116), (5, 54023), (6, 53792), (Start: 16 @53630 has 5 MA's), (20, 53573), (22, 53558), (28, 53456), (30, 53447), (31, 53441),

Gene: Skysand\_77 Start: 57943, Stop: 57782, Start Num: 18

Candidate Starts for Skysand\_77:

(12, 57982), (14, 57973), (Start: 18 @57943 has 38 MA's),

Gene: StarStruck\_75 Start: 57439, Stop: 57263, Start Num: 18

Candidate Starts for StarStruck\_75:

(Start: 18 @57439 has 38 MA's), (20, 57409), (31, 57277),

Gene: Sukkupi\_73 Start: 55082, Stop: 54903, Start Num: 18

Candidate Starts for Sukkupi\_73:

(Start: 18 @55082 has 38 MA's), (24, 55028), (30, 54938),

Gene: SuperSulley\_76 Start: 57880, Stop: 57704, Start Num: 18

Candidate Starts for SuperSulley\_76:

(Start: 18 @57880 has 38 MA's),

Gene: Tracker\_74 Start: 56226, Stop: 56041, Start Num: 18

Candidate Starts for Tracker\_74:

(Start: 18 @56226 has 38 MA's), (27, 56103),

Gene: Turuncu\_77 Start: 57454, Stop: 57290, Start Num: 18

Candidate Starts for Turuncu\_77:

(8, 57601), (10, 57526), (11, 57517), (13, 57490), (Start: 18 @57454 has 38 MA's), (23, 57403), (25, 57352), (31, 57304),

Gene: Wheezy\_74 Start: 56440, Stop: 56255, Start Num: 18

Candidate Starts for Wheezy\_74:

(Start: 18 @56440 has 38 MA's), (27, 56317),

Gene: WhoseManz\_73 Start: 53097, Stop: 52918, Start Num: 18

Candidate Starts for WhoseManz\_73:

(Start: 18 @53097 has 38 MA's), (24, 53043), (30, 52953),

Gene: Yndexa\_73 Start: 55082, Stop: 54903, Start Num: 18

Candidate Starts for Yndexa\_73:

(Start: 18 @55082 has 38 MA's), (24, 55028), (30, 54938),