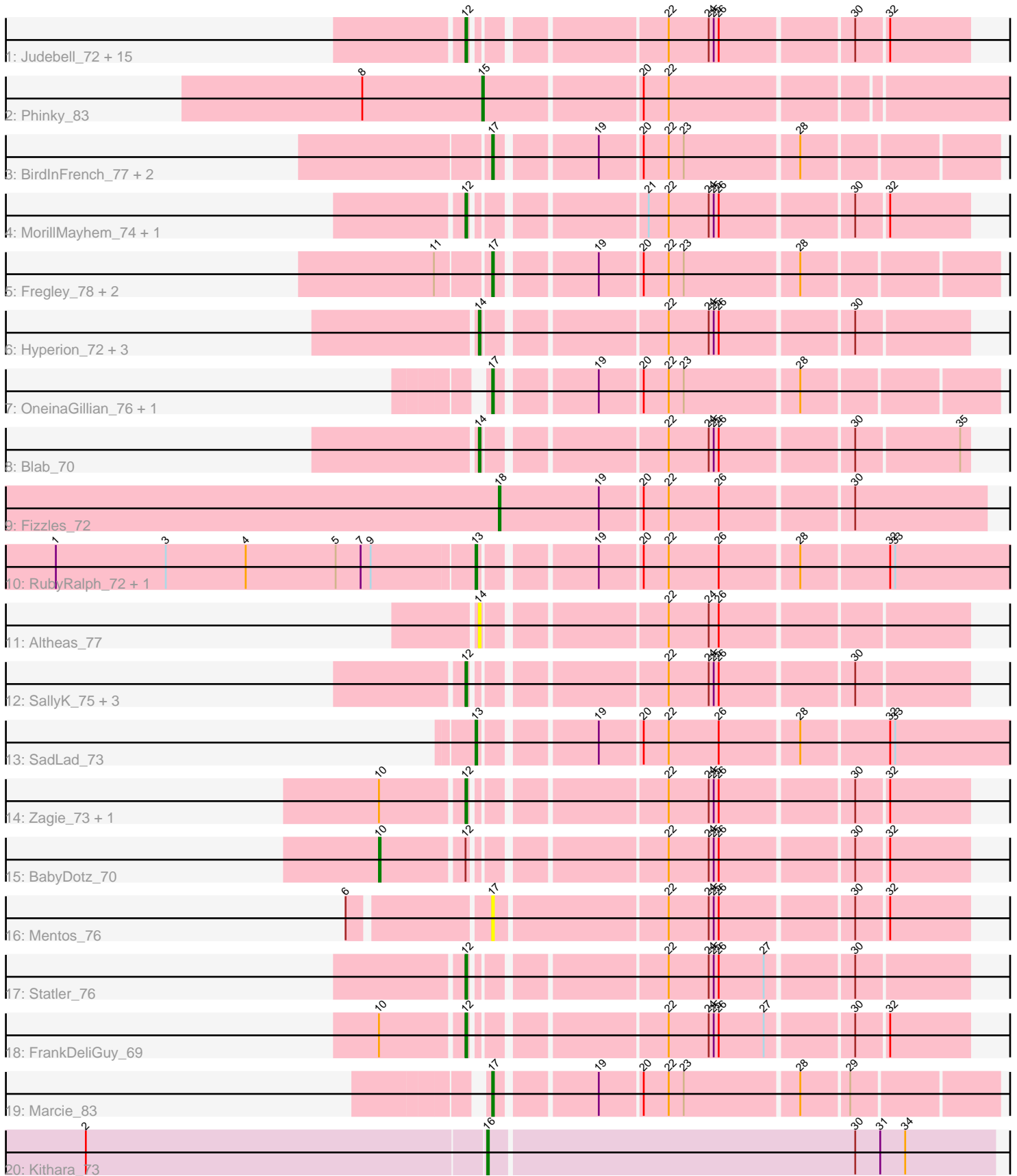


Pham 308760



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 308760 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308760 has 49 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Judebell\_72, Nike\_73, Namago\_73, Phabia\_72, Viceroy\_71, Quammi\_71, Sillytadpoles\_73, EverythinBagel\_72, Rudy\_70, Casend\_73, Wayne3\_74, Zhafia\_75, Teehee\_73, Squash\_75, Jehoshaphat\_74, Llemily\_72
- Track 2 : Phinky\_83
- Track 3 : BirdInFrench\_77, RobinRose\_79, Wilca\_77
- Track 4 : MorillMayhem\_74, Mila11\_76
- Track 5 : Fregley\_78, CandC\_75, Tempo\_78
- Track 6 : Hyperion\_72, Mashley\_74, Gazebo\_73, AluminumJesus\_70
- Track 7 : OneinaGillian\_76, KillerQueen\_80
- Track 8 : Blab\_70
- Track 9 : Fizzles\_72
- Track 10 : RubyRalph\_72, Fransoyer\_71
- Track 11 : Altheas\_77
- Track 12 : SallyK\_75, Lonelysoil\_70, StrawberryJamm\_77, Rowlf\_70
- Track 13 : SadLad\_73
- Track 14 : Zagie\_73, Tissue\_74
- Track 15 : BabyDotz\_70
- Track 16 : Mentos\_76
- Track 17 : Statler\_76
- Track 18 : FrankDeliGuy\_69
- Track 19 : Marcie\_83
- Track 20 : Kithara\_73

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

The start number called the most often in the published annotations is 12, it was called in 25 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Casend\_73, EverythinBagel\_72, FrankDeliGuy\_69, Jehoshaphat\_74, Judebell\_72, Llemily\_72, Lonelysoil\_70, Mila11\_76, MorillMayhem\_74, Namago\_73, Nike\_73, Phabia\_72, Quammi\_71, Rowlf\_70, Rudy\_70, SallyK\_75, Sillytadpoles\_73, Squash\_75, Statler\_76, StrawberryJamm\_77, Teehee\_73, Tissue\_74, Viceroy\_71, Wayne3\_74, Zagie\_73, Zhafia\_75,

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

- BabyDotz\_70,

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

- Altheas\_77, AluminumJesus\_70, BirdInFrench\_77, Blab\_70, CandC\_75, Fizzles\_72, Fransoyer\_71, Fregley\_78, Gazebo\_73, Hyperion\_72, KillerQueen\_80, Kithara\_73, Marcie\_83, Mashley\_74, Mentos\_76, OneinaGillian\_76, Phinky\_83, RobinRose\_79, RubyRalph\_72, SadLad\_73, Tempo\_78, Wilca\_77,

### Summary by start number:

Start 10:

- Found in 4 of 49 ( 8.2% ) of genes in pham
- Manual Annotations of this start: 1 of 46
- Called 25.0% of time when present
- Phage (with cluster) where this start called: BabyDotz\_70 (EG),

Start 12:

- Found in 27 of 49 ( 55.1% ) of genes in pham
- Manual Annotations of this start: 25 of 46
- Called 96.3% of time when present
- Phage (with cluster) where this start called: Casend\_73 (EG), EverythinBagel\_72 (EG), FrankDeliGuy\_69 (EG), Jehoshaphat\_74 (EG), Judebell\_72 (EG), Llemily\_72 (EG), Lonelysoil\_70 (EG), Mila11\_76 (EG), MorillMayhem\_74 (EG), Namago\_73 (EG), Nike\_73 (EG), Phabia\_72 (EG), Quammi\_71 (EG), Rowlf\_70 (EG), Rudy\_70 (EG), SallyK\_75 (EG), Sillytadpoles\_73 (EG), Squash\_75 (EG), Statler\_76 (EG), StrawberryJamm\_77 (EG), Teehee\_73 (EG), Tissue\_74 (EG), Viceroy\_71 (EG), Wayne3\_74 (EG), Zagie\_73 (EG), Zhafia\_75 (EG),

Start 13:

- Found in 3 of 49 ( 6.1% ) of genes in pham
- Manual Annotations of this start: 3 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fransoyer\_71 (EG), RubyRalph\_72 (EG), SadLad\_73 (EG),

Start 14:

- Found in 6 of 49 ( 12.2% ) of genes in pham
- Manual Annotations of this start: 5 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altheas\_77 (EG), AluminumJesus\_70 (EG), Blab\_70 (EG), Gazebo\_73 (EG), Hyperion\_72 (EG), Mashley\_74 (EG),

Start 15:

- Found in 1 of 49 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 1 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phinky\_83 (EG),

Start 16:

- Found in 1 of 49 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 1 of 46

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kithara\_73 (singleton),

Start 17:

- Found in 10 of 49 ( 20.4% ) of genes in pham
- Manual Annotations of this start: 9 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BirdInFrench\_77 (EG), CandC\_75 (EG), Fregley\_78 (EG), KillerQueen\_80 (EG), Marcie\_83 (EG), Mentos\_76 (EG), OneinaGillian\_76 (EG), RobinRose\_79 (EG), Tempo\_78 (EG), Wilca\_77 (EG),

Start 18:

- Found in 1 of 49 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 1 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fizzles\_72 (EG),

### **Summary by clusters:**

There are 2 clusters represented in this pham: EG, singleton,

Info for manual annotations of cluster EG:

- Start number 10 was manually annotated 1 time for cluster EG.
- Start number 12 was manually annotated 25 times for cluster EG.
- Start number 13 was manually annotated 3 times for cluster EG.
- Start number 14 was manually annotated 5 times for cluster EG.
- Start number 15 was manually annotated 1 time for cluster EG.
- Start number 17 was manually annotated 9 times for cluster EG.
- Start number 18 was manually annotated 1 time for cluster EG.

### **Gene Information:**

Gene: Altheas\_77 Start: 51282, Stop: 51013, Start Num: 14

Candidate Starts for Altheas\_77:

(Start: 14 @51282 has 5 MA's), (22, 51183), (24, 51159), (26, 51153),

Gene: AluminumJesus\_70 Start: 49888, Stop: 49619, Start Num: 14

Candidate Starts for AluminumJesus\_70:

(Start: 14 @49888 has 5 MA's), (22, 49789), (24, 49765), (25, 49762), (26, 49759), (30, 49684),

Gene: BabyDotz\_70 Start: 51169, Stop: 50849, Start Num: 10

Candidate Starts for BabyDotz\_70:

(Start: 10 @51169 has 1 MA's), (Start: 12 @51121 has 25 MA's), (22, 51019), (24, 50995), (25, 50992), (26, 50989), (30, 50914), (32, 50896),

Gene: BirdInFrench\_77 Start: 50673, Stop: 50395, Start Num: 17

Candidate Starts for BirdInFrench\_77:

(Start: 17 @50673 has 9 MA's), (19, 50619), (20, 50595), (22, 50580), (23, 50571), (28, 50505),

Gene: Blab\_70 Start: 50179, Stop: 49910, Start Num: 14

Candidate Starts for Blab\_70:

(Start: 14 @50179 has 5 MA's), (22, 50080), (24, 50056), (25, 50053), (26, 50050), (30, 49975), (35, 49915),

Gene: CandC\_75 Start: 50039, Stop: 49761, Start Num: 17

Candidate Starts for CandC\_75:

(11, 50069), (Start: 17 @50039 has 9 MA's), (19, 49985), (20, 49961), (22, 49946), (23, 49937), (28, 49871),

Gene: Casend\_73 Start: 50678, Stop: 50406, Start Num: 12

Candidate Starts for Casend\_73:

(Start: 12 @50678 has 25 MA's), (22, 50576), (24, 50552), (25, 50549), (26, 50546), (30, 50471), (32, 50453),

Gene: EverythinBagel\_72 Start: 50512, Stop: 50240, Start Num: 12

Candidate Starts for EverythinBagel\_72:

(Start: 12 @50512 has 25 MA's), (22, 50410), (24, 50386), (25, 50383), (26, 50380), (30, 50305), (32, 50287),

Gene: Fizzles\_72 Start: 50172, Stop: 49891, Start Num: 18

Candidate Starts for Fizzles\_72:

(Start: 18 @50172 has 1 MA's), (19, 50112), (20, 50088), (22, 50073), (26, 50043), (30, 49968),

Gene: FrankDeliGuy\_69 Start: 50123, Stop: 49851, Start Num: 12

Candidate Starts for FrankDeliGuy\_69:

(Start: 10 @50171 has 1 MA's), (Start: 12 @50123 has 25 MA's), (22, 50021), (24, 49997), (25, 49994), (26, 49991), (27, 49964), (30, 49916), (32, 49898),

Gene: Fransoyer\_71 Start: 50342, Stop: 50022, Start Num: 13

Candidate Starts for Fransoyer\_71:

(1, 50588), (3, 50522), (4, 50474), (5, 50420), (7, 50405), (9, 50399), (Start: 13 @50342 has 3 MA's), (19, 50282), (20, 50258), (22, 50243), (26, 50213), (28, 50168), (32, 50117), (33, 50114),

Gene: Fregley\_78 Start: 50388, Stop: 50110, Start Num: 17

Candidate Starts for Fregley\_78:

(11, 50418), (Start: 17 @50388 has 9 MA's), (19, 50334), (20, 50310), (22, 50295), (23, 50286), (28, 50220),

Gene: Gazebo\_73 Start: 50838, Stop: 50569, Start Num: 14

Candidate Starts for Gazebo\_73:

(Start: 14 @50838 has 5 MA's), (22, 50739), (24, 50715), (25, 50712), (26, 50709), (30, 50634),

Gene: Hyperion\_72 Start: 50369, Stop: 50100, Start Num: 14

Candidate Starts for Hyperion\_72:

(Start: 14 @50369 has 5 MA's), (22, 50270), (24, 50246), (25, 50243), (26, 50240), (30, 50165),

Gene: Jehoshaphat\_74 Start: 50946, Stop: 50674, Start Num: 12

Candidate Starts for Jehoshaphat\_74:

(Start: 12 @50946 has 25 MA's), (22, 50844), (24, 50820), (25, 50817), (26, 50814), (30, 50739), (32, 50721),

Gene: Judebell\_72 Start: 50170, Stop: 49898, Start Num: 12

Candidate Starts for Judebell\_72:

(Start: 12 @50170 has 25 MA's), (22, 50068), (24, 50044), (25, 50041), (26, 50038), (30, 49963), (32, 49945),

Gene: KillerQueen\_80 Start: 50846, Stop: 50568, Start Num: 17

Candidate Starts for KillerQueen\_80:

(Start: 17 @50846 has 9 MA's), (19, 50792), (20, 50768), (22, 50753), (23, 50744), (28, 50678),

Gene: Kithara\_73 Start: 52498, Stop: 52199, Start Num: 16

Candidate Starts for Kithara\_73:

(2, 52735), (Start: 16 @52498 has 1 MA's), (30, 52282), (31, 52267), (34, 52252),

Gene: Llemily\_72 Start: 49722, Stop: 49450, Start Num: 12

Candidate Starts for Llemily\_72:

(Start: 12 @49722 has 25 MA's), (22, 49620), (24, 49596), (25, 49593), (26, 49590), (30, 49515), (32, 49497),

Gene: Lonelysoil\_70 Start: 49482, Stop: 49210, Start Num: 12

Candidate Starts for Lonelysoil\_70:

(Start: 12 @49482 has 25 MA's), (22, 49380), (24, 49356), (25, 49353), (26, 49350), (30, 49275),

Gene: Marcie\_83 Start: 51613, Stop: 51335, Start Num: 17

Candidate Starts for Marcie\_83:

(Start: 17 @51613 has 9 MA's), (19, 51559), (20, 51535), (22, 51520), (23, 51511), (28, 51445), (29, 51418),

Gene: Mashley\_74 Start: 50891, Stop: 50622, Start Num: 14

Candidate Starts for Mashley\_74:

(Start: 14 @50891 has 5 MA's), (22, 50792), (24, 50768), (25, 50765), (26, 50762), (30, 50687),

Gene: Mentos\_76 Start: 51391, Stop: 51122, Start Num: 17

Candidate Starts for Mentos\_76:

(6, 51469), (Start: 17 @51391 has 9 MA's), (22, 51292), (24, 51268), (25, 51265), (26, 51262), (30, 51187), (32, 51169),

Gene: Mila11\_76 Start: 52102, Stop: 51830, Start Num: 12

Candidate Starts for Mila11\_76:

(Start: 12 @52102 has 25 MA's), (21, 52012), (22, 52000), (24, 51976), (25, 51973), (26, 51970), (30, 51895), (32, 51877),

Gene: MorillMayhem\_74 Start: 50941, Stop: 50669, Start Num: 12

Candidate Starts for MorillMayhem\_74:

(Start: 12 @50941 has 25 MA's), (21, 50851), (22, 50839), (24, 50815), (25, 50812), (26, 50809), (30, 50734), (32, 50716),

Gene: Namago\_73 Start: 49786, Stop: 49514, Start Num: 12

Candidate Starts for Namago\_73:

(Start: 12 @49786 has 25 MA's), (22, 49684), (24, 49660), (25, 49657), (26, 49654), (30, 49579), (32, 49561),

Gene: Nike\_73 Start: 51086, Stop: 50814, Start Num: 12

Candidate Starts for Nike\_73:

(Start: 12 @51086 has 25 MA's), (22, 50984), (24, 50960), (25, 50957), (26, 50954), (30, 50879), (32, 50861),

Gene: OneinaGillian\_76 Start: 50251, Stop: 49973, Start Num: 17  
Candidate Starts for OneinaGillian\_76:  
(Start: 17 @50251 has 9 MA's), (19, 50197), (20, 50173), (22, 50158), (23, 50149), (28, 50083),

Gene: Phabia\_72 Start: 50137, Stop: 49865, Start Num: 12  
Candidate Starts for Phabia\_72:  
(Start: 12 @50137 has 25 MA's), (22, 50035), (24, 50011), (25, 50008), (26, 50005), (30, 49930), (32, 49912),

Gene: Phinky\_83 Start: 53441, Stop: 53133, Start Num: 15  
Candidate Starts for Phinky\_83:  
(8, 53513), (Start: 15 @53441 has 1 MA's), (20, 53351), (22, 53336),

Gene: Quammi\_71 Start: 49837, Stop: 49565, Start Num: 12  
Candidate Starts for Quammi\_71:  
(Start: 12 @49837 has 25 MA's), (22, 49735), (24, 49711), (25, 49708), (26, 49705), (30, 49630), (32, 49612),

Gene: RobinRose\_79 Start: 50795, Stop: 50517, Start Num: 17  
Candidate Starts for RobinRose\_79:  
(Start: 17 @50795 has 9 MA's), (19, 50741), (20, 50717), (22, 50702), (23, 50693), (28, 50627),

Gene: Rowlf\_70 Start: 50044, Stop: 49772, Start Num: 12  
Candidate Starts for Rowlf\_70:  
(Start: 12 @50044 has 25 MA's), (22, 49942), (24, 49918), (25, 49915), (26, 49912), (30, 49837),

Gene: RubyRalph\_72 Start: 50116, Stop: 49796, Start Num: 13  
Candidate Starts for RubyRalph\_72:  
(1, 50362), (3, 50296), (4, 50248), (5, 50194), (7, 50179), (9, 50173), (Start: 13 @50116 has 3 MA's), (19, 50056), (20, 50032), (22, 50017), (26, 49987), (28, 49942), (32, 49891), (33, 49888),

Gene: Rudy\_70 Start: 49873, Stop: 49601, Start Num: 12  
Candidate Starts for Rudy\_70:  
(Start: 12 @49873 has 25 MA's), (22, 49771), (24, 49747), (25, 49744), (26, 49741), (30, 49666), (32, 49648),

Gene: SadLad\_73 Start: 51022, Stop: 50702, Start Num: 13  
Candidate Starts for SadLad\_73:  
(Start: 13 @51022 has 3 MA's), (19, 50962), (20, 50938), (22, 50923), (26, 50893), (28, 50848), (32, 50797), (33, 50794),

Gene: SallyK\_75 Start: 51575, Stop: 51303, Start Num: 12  
Candidate Starts for SallyK\_75:  
(Start: 12 @51575 has 25 MA's), (22, 51473), (24, 51449), (25, 51446), (26, 51443), (30, 51368),

Gene: Sillytadpoles\_73 Start: 49710, Stop: 49438, Start Num: 12  
Candidate Starts for Sillytadpoles\_73:  
(Start: 12 @49710 has 25 MA's), (22, 49608), (24, 49584), (25, 49581), (26, 49578), (30, 49503), (32, 49485),

Gene: Squash\_75 Start: 50808, Stop: 50536, Start Num: 12  
Candidate Starts for Squash\_75:

(Start: 12 @50808 has 25 MA's), (22, 50706), (24, 50682), (25, 50679), (26, 50676), (30, 50601), (32, 50583),

Gene: Statler\_76 Start: 50760, Stop: 50488, Start Num: 12

Candidate Starts for Statler\_76:

(Start: 12 @50760 has 25 MA's), (22, 50658), (24, 50634), (25, 50631), (26, 50628), (27, 50601), (30, 50553),

Gene: StrawberryJamm\_77 Start: 49978, Stop: 49706, Start Num: 12

Candidate Starts for StrawberryJamm\_77:

(Start: 12 @49978 has 25 MA's), (22, 49876), (24, 49852), (25, 49849), (26, 49846), (30, 49771),

Gene: Teehee\_73 Start: 50943, Stop: 50671, Start Num: 12

Candidate Starts for Teehee\_73:

(Start: 12 @50943 has 25 MA's), (22, 50841), (24, 50817), (25, 50814), (26, 50811), (30, 50736), (32, 50718),

Gene: Tempo\_78 Start: 50735, Stop: 50457, Start Num: 17

Candidate Starts for Tempo\_78:

(11, 50765), (Start: 17 @50735 has 9 MA's), (19, 50681), (20, 50657), (22, 50642), (23, 50633), (28, 50567),

Gene: Tissue\_74 Start: 50438, Stop: 50166, Start Num: 12

Candidate Starts for Tissue\_74:

(Start: 10 @50486 has 1 MA's), (Start: 12 @50438 has 25 MA's), (22, 50336), (24, 50312), (25, 50309), (26, 50306), (30, 50231), (32, 50213),

Gene: Viceroy\_71 Start: 49843, Stop: 49571, Start Num: 12

Candidate Starts for Viceroy\_71:

(Start: 12 @49843 has 25 MA's), (22, 49741), (24, 49717), (25, 49714), (26, 49711), (30, 49636), (32, 49618),

Gene: Wayne3\_74 Start: 50706, Stop: 50434, Start Num: 12

Candidate Starts for Wayne3\_74:

(Start: 12 @50706 has 25 MA's), (22, 50604), (24, 50580), (25, 50577), (26, 50574), (30, 50499), (32, 50481),

Gene: Wilca\_77 Start: 50673, Stop: 50395, Start Num: 17

Candidate Starts for Wilca\_77:

(Start: 17 @50673 has 9 MA's), (19, 50619), (20, 50595), (22, 50580), (23, 50571), (28, 50505),

Gene: Zagie\_73 Start: 50255, Stop: 49983, Start Num: 12

Candidate Starts for Zagie\_73:

(Start: 10 @50303 has 1 MA's), (Start: 12 @50255 has 25 MA's), (22, 50153), (24, 50129), (25, 50126), (26, 50123), (30, 50048), (32, 50030),

Gene: Zhafia\_75 Start: 50507, Stop: 50235, Start Num: 12

Candidate Starts for Zhafia\_75:

(Start: 12 @50507 has 25 MA's), (22, 50405), (24, 50381), (25, 50378), (26, 50375), (30, 50300), (32, 50282),