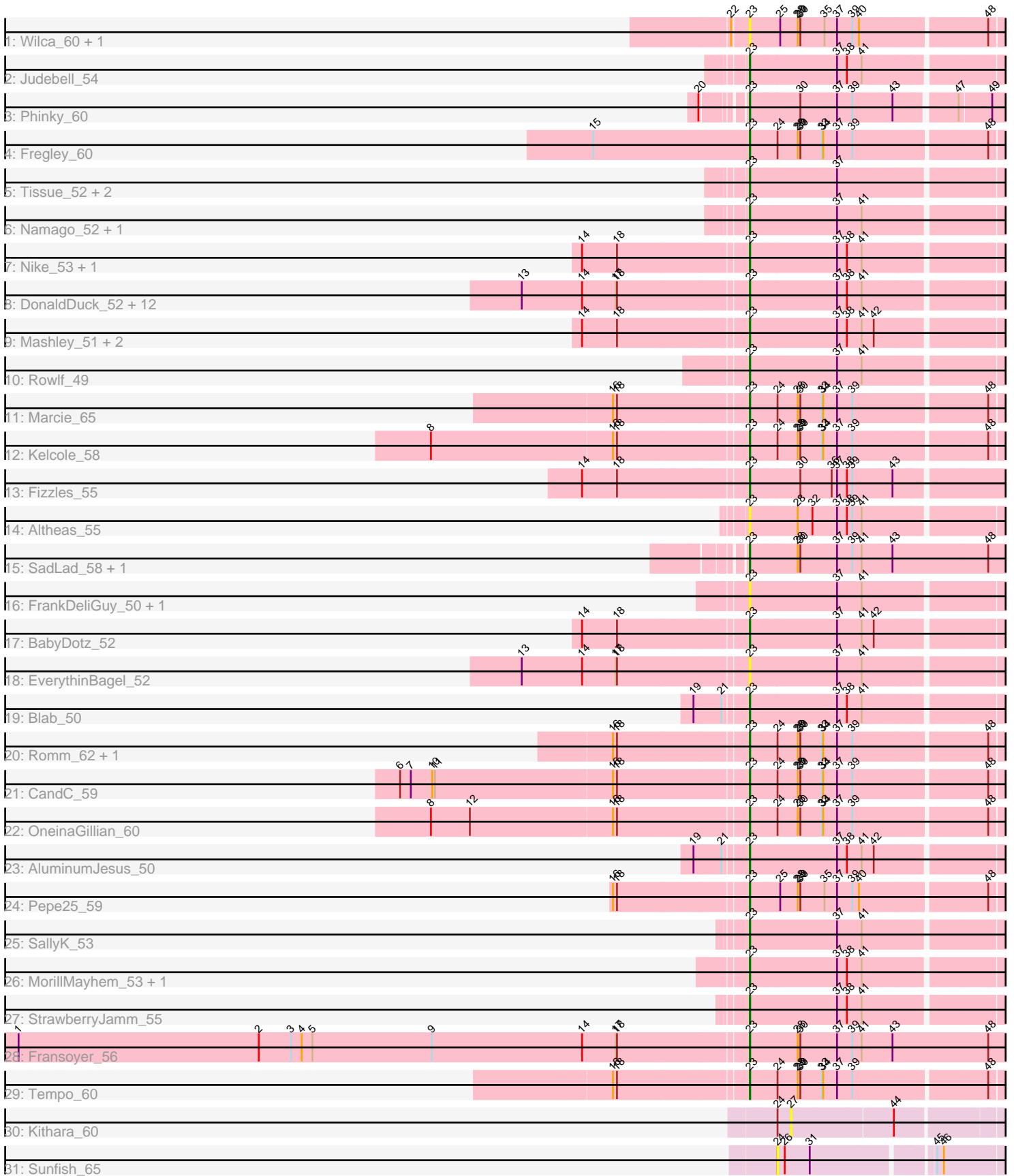


Pham 188196



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 188196 Report

This analysis was run 11/02/24 on database version 579.

Pham number 188196 has 54 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Wilca\_60, BirdInFrench\_60
- Track 2 : Judebell\_54
- Track 3 : Phinky\_60
- Track 4 : Fregley\_60
- Track 5 : Tissue\_52, Grassboy\_54, Zagie\_52
- Track 6 : Namago\_52, Kyva\_54
- Track 7 : Nike\_53, Squash\_55
- Track 8 : DonaldDuck\_52, Quammi\_50, Viceroy\_51, Rudy\_50, Casend\_53, Wayne3\_54, Jehoshaphat\_54, Wheelie\_52, Llemily\_52, Teehee\_53, Zhafia\_55, Sillytadpoles\_53, Phabia\_52
- Track 9 : Mashley\_51, Hyperion\_52, Lonelysoil\_51
- Track 10 : Rowlf\_49
- Track 11 : Marcie\_65
- Track 12 : Kelcole\_58
- Track 13 : Fizzles\_55
- Track 14 : Altheas\_55
- Track 15 : SadLad\_58, RubyRalph\_57
- Track 16 : FrankDeliGuy\_50, Statler\_55
- Track 17 : BabyDotz\_52
- Track 18 : EverythinBagel\_52
- Track 19 : Blab\_50
- Track 20 : Romm\_62, RobinRose\_62
- Track 21 : CandC\_59
- Track 22 : OneinaGillian\_60
- Track 23 : AluminumJesus\_50
- Track 24 : Pepe25\_59
- Track 25 : SallyK\_53
- Track 26 : MorillMayhem\_53, Gazebo\_52
- Track 27 : StrawberryJamm\_55
- Track 28 : Fransoyer\_56
- Track 29 : Tempo\_60
- Track 30 : Kithara\_60
- Track 31 : Sunfish\_65

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

The start number called the most often in the published annotations is 23, it was called in 38 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Altheas\_55, AluminumJesus\_50, BabyDotz\_52, BirdInFrench\_60, Blab\_50, CandC\_59, Casend\_53, DonaldDuck\_52, EverythinBagel\_52, Fizzles\_55, FrankDeliGuy\_50, Fransoyer\_56, Fregley\_60, Gazebo\_52, Grassboy\_54, Hyperion\_52, Jehoshaphat\_54, Judebell\_54, Kelcole\_58, Kyva\_54, Llemily\_52, Lonelysoil\_51, Marcie\_65, Mashley\_51, MorillMayhem\_53, Namago\_52, Nike\_53, OneinaGillian\_60, Pepe25\_59, Phabia\_52, Phinky\_60, Quammi\_50, RobinRose\_62, Romm\_62, Rowlf\_49, RubyRalph\_57, Rudy\_50, SadLad\_58, SallyK\_53, Sillytadpoles\_53, Squash\_55, Statler\_55, StrawberryJamm\_55, Teehee\_53, Tempo\_60, Tissue\_52, Viceroy\_51, Wayne3\_54, Wheelie\_52, Wilca\_60, Zagie\_52, Zhafia\_55,

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

- 

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

- Kithara\_60, Sunfish\_65,

### Summary by start number:

Start 23:

- Found in 52 of 54 ( 96.3% ) of genes in pham
- Manual Annotations of this start: 38 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altheas\_55 (EG), AluminumJesus\_50 (EG), BabyDotz\_52 (EG), BirdInFrench\_60 (EG), Blab\_50 (EG), CandC\_59 (EG), Casend\_53 (EG), DonaldDuck\_52 (EG), EverythinBagel\_52 (EG), Fizzles\_55 (EG), FrankDeliGuy\_50 (EG), Fransoyer\_56 (EG), Fregley\_60 (EG), Gazebo\_52 (EG), Grassboy\_54 (EG), Hyperion\_52 (EG), Jehoshaphat\_54 (EG), Judebell\_54 (EG), Kelcole\_58 (EG), Kyva\_54 (EG), Llemily\_52 (EG), Lonelysoil\_51 (EG), Marcie\_65 (EG), Mashley\_51 (EG), MorillMayhem\_53 (EG), Namago\_52 (EG), Nike\_53 (EG), OneinaGillian\_60 (EG), Pepe25\_59 (EG), Phabia\_52 (EG), Phinky\_60 (EG), Quammi\_50 (EG), RobinRose\_62 (EG), Romm\_62 (EG), Rowlf\_49 (EG), RubyRalph\_57 (EG), Rudy\_50 (EG), SadLad\_58 (EG), SallyK\_53 (EG), Sillytadpoles\_53 (EG), Squash\_55 (EG), Statler\_55 (EG), StrawberryJamm\_55 (EG), Teehee\_53 (EG), Tempo\_60 (EG), Tissue\_52 (EG), Viceroy\_51 (EG), Wayne3\_54 (EG), Wheelie\_52 (EG), Wilca\_60 (EG), Zagie\_52 (EG), Zhafia\_55 (EG),

Start 24:

- Found in 10 of 54 ( 18.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Sunfish\_65 (singleton),

Start 27:

- Found in 1 of 54 ( 1.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kithara\_60 (singleton),

## Summary by clusters:

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

Info for manual annotations of cluster EG:

•Start number 23 was manually annotated 38 times for cluster EG.

### **Gene Information:**

Gene: Altheas\_55 Start: 41582, Stop: 41049, Start Num: 23

Candidate Starts for Altheas\_55:

(Start: 23 @41582 has 38 MA's), (28, 41477), (32, 41444), (37, 41390), (38, 41372), (39, 41360), (41, 41339),

Gene: AluminumJesus\_50 Start: 40557, Stop: 40024, Start Num: 23

Candidate Starts for AluminumJesus\_50:

(19, 40662), (21, 40602), (Start: 23 @40557 has 38 MA's), (37, 40365), (38, 40347), (41, 40314), (42, 40287),

Gene: BabyDotz\_52 Start: 41571, Stop: 41038, Start Num: 23

Candidate Starts for BabyDotz\_52:

(14, 41922), (18, 41844), (Start: 23 @41571 has 38 MA's), (37, 41379), (41, 41328), (42, 41301),

Gene: BirdInFrench\_60 Start: 41682, Stop: 41146, Start Num: 23

Candidate Starts for BirdInFrench\_60:

(22, 41715), (Start: 23 @41682 has 38 MA's), (25, 41616), (28, 41577), (29, 41574), (30, 41571), (35, 41517), (37, 41490), (39, 41457), (40, 41442), (48, 41175),

Gene: Blab\_50 Start: 40404, Stop: 39871, Start Num: 23

Candidate Starts for Blab\_50:

(19, 40509), (21, 40449), (Start: 23 @40404 has 38 MA's), (37, 40212), (38, 40194), (41, 40161),

Gene: CandC\_59 Start: 41331, Stop: 40795, Start Num: 23

Candidate Starts for CandC\_59:

(6, 42081), (7, 42057), (10, 42009), (11, 42003), (16, 41613), (18, 41607), (Start: 23 @41331 has 38 MA's), (24, 41271), (28, 41226), (29, 41223), (30, 41220), (33, 41172), (34, 41169), (37, 41139), (39, 41106), (48, 40824),

Gene: Casend\_53 Start: 41375, Stop: 40842, Start Num: 23

Candidate Starts for Casend\_53:

(13, 41864), (14, 41729), (17, 41654), (18, 41651), (Start: 23 @41375 has 38 MA's), (37, 41183), (38, 41165), (41, 41132),

Gene: DonaldDuck\_52 Start: 40724, Stop: 40191, Start Num: 23

Candidate Starts for DonaldDuck\_52:

(13, 41213), (14, 41078), (17, 41003), (18, 41000), (Start: 23 @40724 has 38 MA's), (37, 40532), (38, 40514), (41, 40481),

Gene: EverythinBagel\_52 Start: 41085, Stop: 40552, Start Num: 23

Candidate Starts for EverythinBagel\_52:

(13, 41574), (14, 41439), (17, 41364), (18, 41361), (Start: 23 @41085 has 38 MA's), (37, 40893), (41, 40842),

Gene: Fizzles\_55 Start: 41709, Stop: 41167, Start Num: 23

Candidate Starts for Fizzles\_55:

(14, 42063), (18, 41985), (Start: 23 @41709 has 38 MA's), (30, 41598), (36, 41529), (37, 41517), (38, 41499), (39, 41487), (43, 41400),

Gene: FrankDeliGuy\_50 Start: 40705, Stop: 40172, Start Num: 23

Candidate Starts for FrankDeliGuy\_50:

(Start: 23 @40705 has 38 MA's), (37, 40513), (41, 40462),

Gene: Fransoyer\_56 Start: 43297, Stop: 42740, Start Num: 23

Candidate Starts for Fransoyer\_56:

(1, 44917), (2, 44380), (3, 44308), (4, 44284), (5, 44260), (9, 43993), (14, 43657), (17, 43582), (18, 43579), (Start: 23 @43297 has 38 MA's), (28, 43192), (30, 43186), (37, 43105), (39, 43075), (41, 43054), (43, 42988), (48, 42778),

Gene: Fregley\_60 Start: 41596, Stop: 41060, Start Num: 23

Candidate Starts for Fregley\_60:

(15, 41938), (Start: 23 @41596 has 38 MA's), (24, 41536), (28, 41491), (29, 41488), (30, 41485), (33, 41437), (34, 41434), (37, 41404), (39, 41371), (48, 41089),

Gene: Gazebo\_52 Start: 41255, Stop: 40722, Start Num: 23

Candidate Starts for Gazebo\_52:

(Start: 23 @41255 has 38 MA's), (37, 41063), (38, 41045), (41, 41012),

Gene: Grassboy\_54 Start: 41195, Stop: 40662, Start Num: 23

Candidate Starts for Grassboy\_54:

(Start: 23 @41195 has 38 MA's), (37, 41003),

Gene: Hyperion\_52 Start: 41032, Stop: 40499, Start Num: 23

Candidate Starts for Hyperion\_52:

(14, 41383), (18, 41305), (Start: 23 @41032 has 38 MA's), (37, 40840), (38, 40822), (41, 40789), (42, 40762),

Gene: Jehoshaphat\_54 Start: 41643, Stop: 41110, Start Num: 23

Candidate Starts for Jehoshaphat\_54:

(13, 42132), (14, 41997), (17, 41922), (18, 41919), (Start: 23 @41643 has 38 MA's), (37, 41451), (38, 41433), (41, 41400),

Gene: Judebell\_54 Start: 41095, Stop: 40562, Start Num: 23

Candidate Starts for Judebell\_54:

(Start: 23 @41095 has 38 MA's), (37, 40903), (38, 40885), (41, 40852),

Gene: Kelcole\_58 Start: 41559, Stop: 41023, Start Num: 23

Candidate Starts for Kelcole\_58:

(8, 42240), (16, 41841), (18, 41835), (Start: 23 @41559 has 38 MA's), (24, 41499), (28, 41454), (29, 41451), (30, 41448), (33, 41400), (34, 41397), (37, 41367), (39, 41334), (48, 41052),

Gene: Kithara\_60 Start: 44459, Stop: 44022, Start Num: 27

Candidate Starts for Kithara\_60:

(24, 44489), (27, 44459), (44, 44243),

Gene: Kyva\_54 Start: 41252, Stop: 40719, Start Num: 23  
Candidate Starts for Kyva\_54:  
(Start: 23 @41252 has 38 MA's), (37, 41060), (41, 41009),

Gene: Llemily\_52 Start: 40419, Stop: 39886, Start Num: 23  
Candidate Starts for Llemily\_52:  
(13, 40908), (14, 40773), (17, 40698), (18, 40695), (Start: 23 @40419 has 38 MA's), (37, 40227), (38, 40209), (41, 40176),

Gene: Lonelysoil\_51 Start: 40628, Stop: 40095, Start Num: 23  
Candidate Starts for Lonelysoil\_51:  
(14, 40979), (18, 40901), (Start: 23 @40628 has 38 MA's), (37, 40436), (38, 40418), (41, 40385), (42, 40358),

Gene: Marcie\_65 Start: 42458, Stop: 41922, Start Num: 23  
Candidate Starts for Marcie\_65:  
(16, 42740), (18, 42734), (Start: 23 @42458 has 38 MA's), (24, 42398), (28, 42353), (30, 42347), (33, 42299), (34, 42296), (37, 42266), (39, 42233), (48, 41951),

Gene: Mashley\_51 Start: 40811, Stop: 40278, Start Num: 23  
Candidate Starts for Mashley\_51:  
(14, 41162), (18, 41084), (Start: 23 @40811 has 38 MA's), (37, 40619), (38, 40601), (41, 40568), (42, 40541),

Gene: MorillMayhem\_53 Start: 41156, Stop: 40623, Start Num: 23  
Candidate Starts for MorillMayhem\_53:  
(Start: 23 @41156 has 38 MA's), (37, 40964), (38, 40946), (41, 40913),

Gene: Namago\_52 Start: 40373, Stop: 39840, Start Num: 23  
Candidate Starts for Namago\_52:  
(Start: 23 @40373 has 38 MA's), (37, 40181), (41, 40130),

Gene: Nike\_53 Start: 41346, Stop: 40813, Start Num: 23  
Candidate Starts for Nike\_53:  
(14, 41697), (18, 41619), (Start: 23 @41346 has 38 MA's), (37, 41154), (38, 41136), (41, 41103),

Gene: OneinaGillian\_60 Start: 41461, Stop: 40925, Start Num: 23  
Candidate Starts for OneinaGillian\_60:  
(8, 42142), (12, 42055), (16, 41743), (18, 41737), (Start: 23 @41461 has 38 MA's), (24, 41401), (28, 41356), (30, 41350), (33, 41302), (34, 41299), (37, 41269), (39, 41236), (48, 40954),

Gene: Pepe25\_59 Start: 40992, Stop: 40456, Start Num: 23  
Candidate Starts for Pepe25\_59:  
(16, 41274), (18, 41268), (Start: 23 @40992 has 38 MA's), (25, 40926), (28, 40887), (29, 40884), (30, 40881), (35, 40827), (37, 40800), (39, 40767), (40, 40752), (48, 40485),

Gene: Phabia\_52 Start: 40834, Stop: 40301, Start Num: 23  
Candidate Starts for Phabia\_52:  
(13, 41323), (14, 41188), (17, 41113), (18, 41110), (Start: 23 @40834 has 38 MA's), (37, 40642), (38, 40624), (41, 40591),

Gene: Phinky\_60 Start: 42967, Stop: 42434, Start Num: 23

Candidate Starts for Phinky\_60:

(20, 43045), (Start: 23 @42967 has 38 MA's), (30, 42856), (37, 42775), (39, 42745), (43, 42658), (47, 42532), (49, 42463),

Gene: Quammi\_50 Start: 40534, Stop: 40001, Start Num: 23

Candidate Starts for Quammi\_50:

(13, 41023), (14, 40888), (17, 40813), (18, 40810), (Start: 23 @40534 has 38 MA's), (37, 40342), (38, 40324), (41, 40291),

Gene: RobinRose\_62 Start: 41973, Stop: 41437, Start Num: 23

Candidate Starts for RobinRose\_62:

(16, 42255), (18, 42249), (Start: 23 @41973 has 38 MA's), (24, 41913), (28, 41868), (29, 41865), (30, 41862), (33, 41814), (34, 41811), (37, 41781), (39, 41748), (48, 41466),

Gene: Romm\_62 Start: 41970, Stop: 41434, Start Num: 23

Candidate Starts for Romm\_62:

(16, 42252), (18, 42246), (Start: 23 @41970 has 38 MA's), (24, 41910), (28, 41865), (29, 41862), (30, 41859), (33, 41811), (34, 41808), (37, 41778), (39, 41745), (48, 41463),

Gene: Rowlf\_49 Start: 40488, Stop: 39955, Start Num: 23

Candidate Starts for Rowlf\_49:

(Start: 23 @40488 has 38 MA's), (37, 40296), (41, 40245),

Gene: RubyRalph\_57 Start: 43444, Stop: 42887, Start Num: 23

Candidate Starts for RubyRalph\_57:

(Start: 23 @43444 has 38 MA's), (28, 43339), (30, 43333), (37, 43252), (39, 43222), (41, 43201), (43, 43135), (48, 42925),

Gene: Rudy\_50 Start: 40570, Stop: 40037, Start Num: 23

Candidate Starts for Rudy\_50:

(13, 41059), (14, 40924), (17, 40849), (18, 40846), (Start: 23 @40570 has 38 MA's), (37, 40378), (38, 40360), (41, 40327),

Gene: SadLad\_58 Start: 44298, Stop: 43741, Start Num: 23

Candidate Starts for SadLad\_58:

(Start: 23 @44298 has 38 MA's), (28, 44193), (30, 44187), (37, 44106), (39, 44076), (41, 44055), (43, 43989), (48, 43779),

Gene: SallyK\_53 Start: 41489, Stop: 40956, Start Num: 23

Candidate Starts for SallyK\_53:

(Start: 23 @41489 has 38 MA's), (37, 41297), (41, 41246),

Gene: Sillytadpoles\_53 Start: 40407, Stop: 39874, Start Num: 23

Candidate Starts for Sillytadpoles\_53:

(13, 40896), (14, 40761), (17, 40686), (18, 40683), (Start: 23 @40407 has 38 MA's), (37, 40215), (38, 40197), (41, 40164),

Gene: Squash\_55 Start: 41205, Stop: 40672, Start Num: 23

Candidate Starts for Squash\_55:

(14, 41556), (18, 41478), (Start: 23 @41205 has 38 MA's), (37, 41013), (38, 40995), (41, 40962),

Gene: Statler\_55 Start: 41207, Stop: 40674, Start Num: 23

Candidate Starts for Statler\_55:

(Start: 23 @41207 has 38 MA's), (37, 41015), (41, 40964),

Gene: StrawberryJamm\_55 Start: 40667, Stop: 40134, Start Num: 23

Candidate Starts for StrawberryJamm\_55:

(Start: 23 @40667 has 38 MA's), (37, 40475), (38, 40457), (41, 40424),

Gene: Sunfish\_65 Start: 42539, Stop: 42087, Start Num: 24

Candidate Starts for Sunfish\_65:

(24, 42539), (26, 42524), (31, 42470), (45, 42227), (46, 42212),

Gene: Teehee\_53 Start: 41640, Stop: 41107, Start Num: 23

Candidate Starts for Teehee\_53:

(13, 42129), (14, 41994), (17, 41919), (18, 41916), (Start: 23 @41640 has 38 MA's), (37, 41448), (38, 41430), (41, 41397),

Gene: Tempo\_60 Start: 41838, Stop: 41302, Start Num: 23

Candidate Starts for Tempo\_60:

(16, 42120), (18, 42114), (Start: 23 @41838 has 38 MA's), (24, 41778), (28, 41733), (29, 41730), (30, 41727), (33, 41679), (34, 41676), (37, 41646), (39, 41613), (48, 41331),

Gene: Tissue\_52 Start: 41091, Stop: 40558, Start Num: 23

Candidate Starts for Tissue\_52:

(Start: 23 @41091 has 38 MA's), (37, 40899),

Gene: Viceroy\_51 Start: 40540, Stop: 40007, Start Num: 23

Candidate Starts for Viceroy\_51:

(13, 41029), (14, 40894), (17, 40819), (18, 40816), (Start: 23 @40540 has 38 MA's), (37, 40348), (38, 40330), (41, 40297),

Gene: Wayne3\_54 Start: 41403, Stop: 40870, Start Num: 23

Candidate Starts for Wayne3\_54:

(13, 41892), (14, 41757), (17, 41682), (18, 41679), (Start: 23 @41403 has 38 MA's), (37, 41211), (38, 41193), (41, 41160),

Gene: Wheelie\_52 Start: 40724, Stop: 40191, Start Num: 23

Candidate Starts for Wheelie\_52:

(13, 41213), (14, 41078), (17, 41003), (18, 41000), (Start: 23 @40724 has 38 MA's), (37, 40532), (38, 40514), (41, 40481),

Gene: Wilca\_60 Start: 41682, Stop: 41146, Start Num: 23

Candidate Starts for Wilca\_60:

(22, 41715), (Start: 23 @41682 has 38 MA's), (25, 41616), (28, 41577), (29, 41574), (30, 41571), (35, 41517), (37, 41490), (39, 41457), (40, 41442), (48, 41175),

Gene: Zagie\_52 Start: 40873, Stop: 40340, Start Num: 23

Candidate Starts for Zagie\_52:

(Start: 23 @40873 has 38 MA's), (37, 40681),

Gene: Zhafia\_55 Start: 41204, Stop: 40671, Start Num: 23

Candidate Starts for Zhafia\_55:

(13, 41693), (14, 41558), (17, 41483), (18, 41480), (Start: 23 @41204 has 38 MA's), (37, 41012), (38, 40994), (41, 40961),