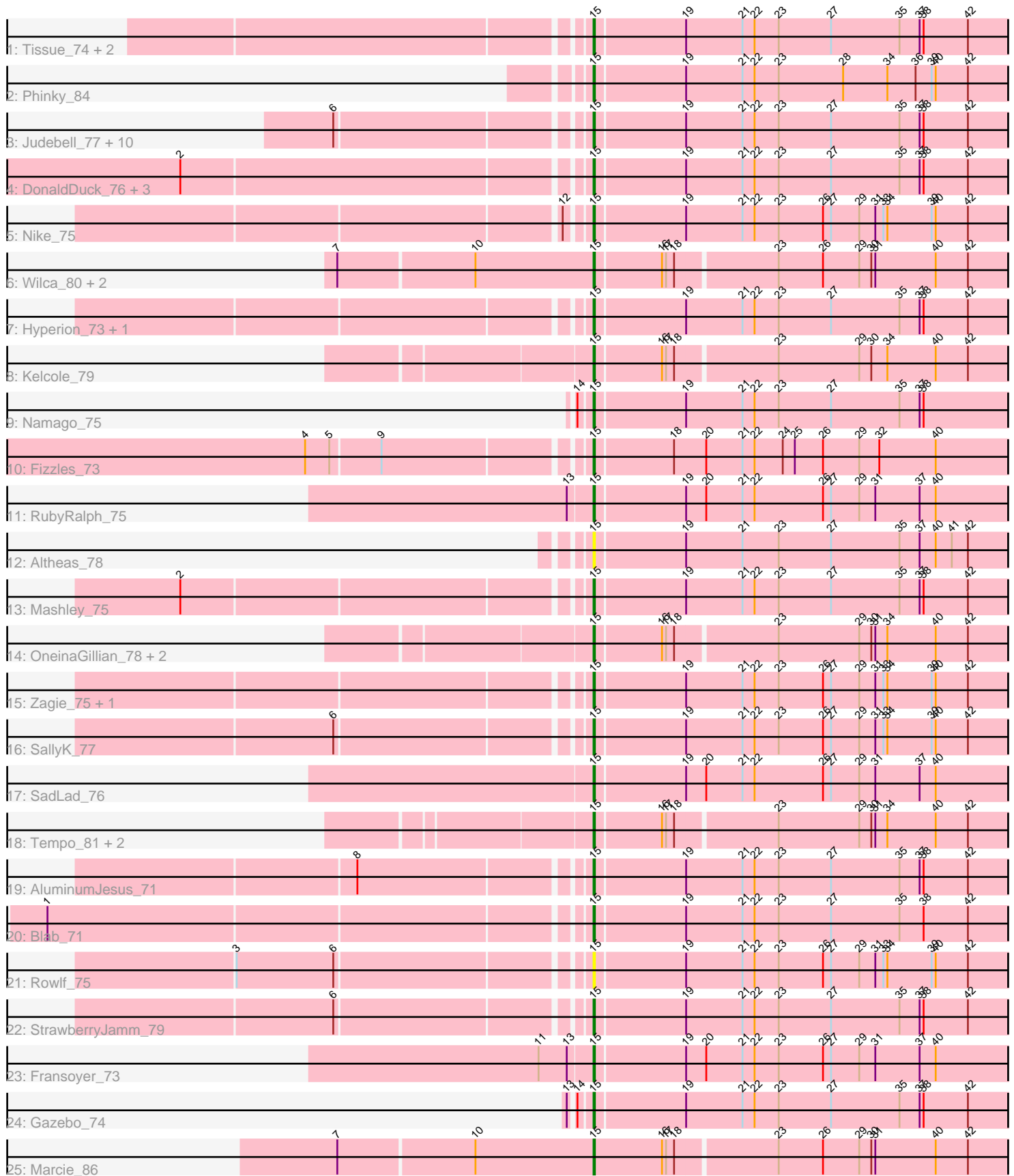


## Pham 2458



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 2458 Report

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

Pham number 2458 has 48 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Tissue\_74, Grassboy\_78, Kyva\_77
- Track 2 : Phinky\_84
- Track 3 : Judebell\_77, Quammi\_73, Rudy\_72, Lonelysoil\_72, Casend\_75, Wayne3\_76, Wheelie\_74, Zhafia\_79, Teehee\_75, Phabia\_74, Jehoshaphat\_76
- Track 4 : DonaldDuck\_76, Viceroy\_73, Llemily\_76, Sillytadpoles\_77
- Track 5 : Nike\_75
- Track 6 : Wilca\_80, Pepe25\_78, BirdInFrench\_80
- Track 7 : Hyperion\_73, Squash\_77
- Track 8 : Kelcole\_79
- Track 9 : Namago\_75
- Track 10 : Fizzles\_73
- Track 11 : RubyRalph\_75
- Track 12 : Altheas\_78
- Track 13 : Mashley\_75
- Track 14 : OneinaGillian\_78, CandC\_78, Fregley\_81
- Track 15 : Zagie\_75, BabyDotz\_72
- Track 16 : SallyK\_77
- Track 17 : SadLad\_76
- Track 18 : Tempo\_81, Romm\_83, RobinRose\_83
- Track 19 : AluminumJesus\_71
- Track 20 : Blab\_71
- Track 21 : Rowlf\_75
- Track 22 : StrawberryJamm\_79
- Track 23 : Fransoyer\_73
- Track 24 : Gazebo\_74
- Track 25 : Marcie\_86

### ***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 36 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Altheas\_78, AluminumJesus\_71, BabyDotz\_72, BirdInFrench\_80, Blab\_71, CandC\_78, Casend\_75, DonaldDuck\_76, Fizzles\_73, Fransoyer\_73, Fregley\_81, Gazebo\_74, Grassboy\_78, Hyperion\_73, Jehoshaphat\_76, Judebell\_77, Kelcole\_79, Kyva\_77, Llemily\_76, Lonelysoil\_72, Marcie\_86, Mashley\_75, Namago\_75, Nike\_75, OneinaGillian\_78, Pepe25\_78, Phabia\_74, Phinky\_84, Quammi\_73, RobinRose\_83, Romm\_83, Rowlf\_75, RubyRalph\_75, Rudy\_72, SadLad\_76, SallyK\_77, Sillytadpoles\_77, Squash\_77, StrawberryJamm\_79, Teehee\_75, Tempo\_81, Tissue\_74, Viceroy\_73, Wayne3\_76, Wheelie\_74, Wilca\_80, Zagie\_75, Zhafia\_79,

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

- 

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

- 

### Summary by start number:

Start 15:

- Found in 48 of 48 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 36 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altheas\_78 (EG), AluminumJesus\_71 (EG), BabyDotz\_72 (EG), BirdInFrench\_80 (EG), Blab\_71 (EG), CandC\_78 (EG), Casend\_75 (EG), DonaldDuck\_76 (EG), Fizzles\_73 (EG), Fransoyer\_73 (EG), Fregley\_81 (EG), Gazebo\_74 (EG), Grassboy\_78 (EG), Hyperion\_73 (EG), Jehoshaphat\_76 (EG), Judebell\_77 (EG), Kelcole\_79 (EG), Kyva\_77 (EG), Llemily\_76 (EG), Lonelysoil\_72 (EG), Marcie\_86 (EG), Mashley\_75 (EG), Namago\_75 (EG), Nike\_75 (EG), OneinaGillian\_78 (EG), Pepe25\_78 (EG), Phabia\_74 (EG), Phinky\_84 (EG), Quammi\_73 (EG), RobinRose\_83 (EG), Romm\_83 (EG), Rowlf\_75 (EG), RubyRalph\_75 (EG), Rudy\_72 (EG), SadLad\_76 (EG), SallyK\_77 (EG), Sillytadpoles\_77 (EG), Squash\_77 (EG), StrawberryJamm\_79 (EG), Teehee\_75 (EG), Tempo\_81 (EG), Tissue\_74 (EG), Viceroy\_73 (EG), Wayne3\_76 (EG), Wheelie\_74 (EG), Wilca\_80 (EG), Zagie\_75 (EG), Zhafia\_79 (EG),

### Summary by clusters:

There is one cluster represented in this pham: EG

Info for manual annotations of cluster EG:

- Start number 15 was manually annotated 36 times for cluster EG.

### Gene Information:

Gene: Altheas\_78 Start: 51607, Stop: 51269, Start Num: 15

Candidate Starts for Altheas\_78:

(Start: 15 @51607 has 36 MA's), (19, 51541), (21, 51499), (23, 51472), (27, 51433), (35, 51382), (37, 51367), (40, 51355), (41, 51343), (42, 51331),

Gene: AluminumJesus\_71 Start: 50213, Stop: 49875, Start Num: 15

Candidate Starts for AluminumJesus\_71:

(8, 50372), (Start: 15 @50213 has 36 MA's), (19, 50147), (21, 50105), (22, 50096), (23, 50078), (27, 50039), (35, 49988), (37, 49973), (38, 49970), (42, 49937),

Gene: BabyDotz\_72 Start: 51609, Stop: 51268, Start Num: 15

Candidate Starts for BabyDotz\_72:

(Start: 15 @51609 has 36 MA's), (19, 51543), (21, 51501), (22, 51492), (23, 51474), (26, 51441), (27, 51435), (29, 51414), (31, 51402), (33, 51396), (34, 51393), (39, 51360), (40, 51357), (42, 51333),

Gene: BirdInFrench\_80 Start: 51781, Stop: 51455, Start Num: 15

Candidate Starts for BirdInFrench\_80:

(7, 51967), (10, 51868), (Start: 15 @51781 has 36 MA's), (16, 51733), (17, 51730), (18, 51724), (23, 51652), (26, 51619), (29, 51592), (30, 51583), (31, 51580), (40, 51535), (42, 51511),

Gene: Blab\_71 Start: 50504, Stop: 50166, Start Num: 15

Candidate Starts for Blab\_71:

(1, 50888), (Start: 15 @50504 has 36 MA's), (19, 50438), (21, 50396), (22, 50387), (23, 50369), (27, 50330), (35, 50279), (38, 50261), (42, 50228),

Gene: CandC\_78 Start: 51141, Stop: 50815, Start Num: 15

Candidate Starts for CandC\_78:

(Start: 15 @51141 has 36 MA's), (16, 51093), (17, 51090), (18, 51084), (23, 51012), (29, 50952), (30, 50943), (31, 50940), (34, 50931), (40, 50895), (42, 50871),

Gene: Casend\_75 Start: 51166, Stop: 50825, Start Num: 15

Candidate Starts for Casend\_75:

(6, 51340), (Start: 15 @51166 has 36 MA's), (19, 51100), (21, 51058), (22, 51049), (23, 51031), (27, 50992), (35, 50941), (37, 50926), (38, 50923), (42, 50890),

Gene: DonaldDuck\_76 Start: 50515, Stop: 50174, Start Num: 15

Candidate Starts for DonaldDuck\_76:

(2, 50803), (Start: 15 @50515 has 36 MA's), (19, 50449), (21, 50407), (22, 50398), (23, 50380), (27, 50341), (35, 50290), (37, 50275), (38, 50272), (42, 50239),

Gene: Fizzles\_73 Start: 50513, Stop: 50169, Start Num: 15

Candidate Starts for Fizzles\_73:

(4, 50708), (5, 50690), (9, 50654), (Start: 15 @50513 has 36 MA's), (18, 50456), (20, 50432), (21, 50405), (22, 50396), (24, 50375), (25, 50366), (26, 50345), (29, 50318), (32, 50303), (40, 50261),

Gene: Fransoyer\_73 Start: 50975, Stop: 50637, Start Num: 15

Candidate Starts for Fransoyer\_73:

(11, 51014), (13, 50993), (Start: 15 @50975 has 36 MA's), (19, 50909), (20, 50894), (21, 50867), (22, 50858), (23, 50840), (26, 50807), (27, 50801), (29, 50780), (31, 50768), (37, 50735), (40, 50723),

Gene: Fregley\_81 Start: 51490, Stop: 51164, Start Num: 15

Candidate Starts for Fregley\_81:

(Start: 15 @51490 has 36 MA's), (16, 51442), (17, 51439), (18, 51433), (23, 51361), (29, 51301), (30, 51292), (31, 51289), (34, 51280), (40, 51244), (42, 51220),

Gene: Gazebo\_74 Start: 51163, Stop: 50825, Start Num: 15

Candidate Starts for Gazebo\_74:

(13, 51175), (14, 51172), (Start: 15 @51163 has 36 MA's), (19, 51097), (21, 51055), (22, 51046), (23, 51028), (27, 50989), (35, 50938), (37, 50923), (38, 50920), (42, 50887),

Gene: Grassboy\_78 Start: 51295, Stop: 50954, Start Num: 15

Candidate Starts for Grassboy\_78:

(Start: 15 @51295 has 36 MA's), (19, 51229), (21, 51187), (22, 51178), (23, 51160), (27, 51121), (35, 51070), (37, 51055), (38, 51052), (42, 51019),

Gene: Hyperion\_73 Start: 50694, Stop: 50356, Start Num: 15

Candidate Starts for Hyperion\_73:

(Start: 15 @50694 has 36 MA's), (19, 50628), (21, 50586), (22, 50577), (23, 50559), (27, 50520), (35, 50469), (37, 50454), (38, 50451), (42, 50418),

Gene: Jehoshaphat\_76 Start: 51434, Stop: 51093, Start Num: 15

Candidate Starts for Jehoshaphat\_76:

(6, 51608), (Start: 15 @51434 has 36 MA's), (19, 51368), (21, 51326), (22, 51317), (23, 51299), (27, 51260), (35, 51209), (37, 51194), (38, 51191), (42, 51158),

Gene: Judebell\_77 Start: 50658, Stop: 50317, Start Num: 15

Candidate Starts for Judebell\_77:

(6, 50832), (Start: 15 @50658 has 36 MA's), (19, 50592), (21, 50550), (22, 50541), (23, 50523), (27, 50484), (35, 50433), (37, 50418), (38, 50415), (42, 50382),

Gene: Kelcole\_79 Start: 51713, Stop: 51387, Start Num: 15

Candidate Starts for Kelcole\_79:

(Start: 15 @51713 has 36 MA's), (16, 51665), (17, 51662), (18, 51656), (23, 51584), (29, 51524), (30, 51515), (34, 51503), (40, 51467), (42, 51443),

Gene: Kyva\_77 Start: 51319, Stop: 50978, Start Num: 15

Candidate Starts for Kyva\_77:

(Start: 15 @51319 has 36 MA's), (19, 51253), (21, 51211), (22, 51202), (23, 51184), (27, 51145), (35, 51094), (37, 51079), (38, 51076), (42, 51043),

Gene: Llemily\_76 Start: 50210, Stop: 49869, Start Num: 15

Candidate Starts for Llemily\_76:

(2, 50498), (Start: 15 @50210 has 36 MA's), (19, 50144), (21, 50102), (22, 50093), (23, 50075), (27, 50036), (35, 49985), (37, 49970), (38, 49967), (42, 49934),

Gene: Lonelysoil\_72 Start: 49970, Stop: 49629, Start Num: 15

Candidate Starts for Lonelysoil\_72:

(6, 50144), (Start: 15 @49970 has 36 MA's), (19, 49904), (21, 49862), (22, 49853), (23, 49835), (27, 49796), (35, 49745), (37, 49730), (38, 49727), (42, 49694),

Gene: Marcie\_86 Start: 52641, Stop: 52312, Start Num: 15

Candidate Starts for Marcie\_86:

(7, 52827), (10, 52728), (Start: 15 @52641 has 36 MA's), (16, 52590), (17, 52587), (18, 52581), (23, 52509), (26, 52476), (29, 52449), (30, 52440), (31, 52437), (40, 52392), (42, 52368),

Gene: Mashley\_75 Start: 51216, Stop: 50878, Start Num: 15

Candidate Starts for Mashley\_75:

(2, 51501), (Start: 15 @51216 has 36 MA's), (19, 51150), (21, 51108), (22, 51099), (23, 51081), (27, 51042), (35, 50991), (37, 50976), (38, 50973), (42, 50940),

Gene: Namago\_75 Start: 50274, Stop: 49933, Start Num: 15

Candidate Starts for Namago\_75:

(14, 50283), (Start: 15 @50274 has 36 MA's), (19, 50208), (21, 50166), (22, 50157), (23, 50139), (27, 50100), (35, 50049), (37, 50034), (38, 50031),

Gene: Nike\_75 Start: 51574, Stop: 51233, Start Num: 15

Candidate Starts for Nike\_75:

(12, 51589), (Start: 15 @51574 has 36 MA's), (19, 51508), (21, 51466), (22, 51457), (23, 51439), (26, 51406), (27, 51400), (29, 51379), (31, 51367), (33, 51361), (34, 51358), (39, 51325), (40, 51322), (42, 51298),

Gene: OneinaGillian\_78 Start: 51034, Stop: 50708, Start Num: 15

Candidate Starts for OneinaGillian\_78:

(Start: 15 @51034 has 36 MA's), (16, 50986), (17, 50983), (18, 50977), (23, 50905), (29, 50845), (30, 50836), (31, 50833), (34, 50824), (40, 50788), (42, 50764),

Gene: Pepe25\_78 Start: 50700, Stop: 50374, Start Num: 15

Candidate Starts for Pepe25\_78:

(7, 50886), (10, 50787), (Start: 15 @50700 has 36 MA's), (16, 50652), (17, 50649), (18, 50643), (23, 50571), (26, 50538), (29, 50511), (30, 50502), (31, 50499), (40, 50454), (42, 50430),

Gene: Phabia\_74 Start: 50625, Stop: 50284, Start Num: 15

Candidate Starts for Phabia\_74:

(6, 50799), (Start: 15 @50625 has 36 MA's), (19, 50559), (21, 50517), (22, 50508), (23, 50490), (27, 50451), (35, 50400), (37, 50385), (38, 50382), (42, 50349),

Gene: Phinky\_84 Start: 53772, Stop: 53422, Start Num: 15

Candidate Starts for Phinky\_84:

(Start: 15 @53772 has 36 MA's), (19, 53706), (21, 53664), (22, 53655), (23, 53637), (28, 53589), (34, 53556), (36, 53535), (39, 53523), (40, 53520), (42, 53496),

Gene: Quammi\_73 Start: 50325, Stop: 49984, Start Num: 15

Candidate Starts for Quammi\_73:

(6, 50499), (Start: 15 @50325 has 36 MA's), (19, 50259), (21, 50217), (22, 50208), (23, 50190), (27, 50151), (35, 50100), (37, 50085), (38, 50082), (42, 50049),

Gene: RobinRose\_83 Start: 52145, Stop: 51816, Start Num: 15

Candidate Starts for RobinRose\_83:

(Start: 15 @52145 has 36 MA's), (16, 52097), (17, 52094), (18, 52088), (23, 52016), (29, 51956), (30, 51947), (31, 51944), (34, 51935), (40, 51899), (42, 51875),

Gene: Romm\_83 Start: 52142, Stop: 51813, Start Num: 15

Candidate Starts for Romm\_83:

(Start: 15 @52142 has 36 MA's), (16, 52094), (17, 52091), (18, 52085), (23, 52013), (29, 51953), (30, 51944), (31, 51941), (34, 51932), (40, 51896), (42, 51872),

Gene: Rowlf\_75 Start: 50532, Stop: 50191, Start Num: 15

Candidate Starts for Rowlf\_75:

(3, 50778), (6, 50706), (Start: 15 @50532 has 36 MA's), (19, 50466), (21, 50424), (22, 50415), (23, 50397), (26, 50364), (27, 50358), (29, 50337), (31, 50325), (33, 50319), (34, 50316), (39, 50283), (40, 50280), (42, 50256),

Gene: RubyRalph\_75 Start: 51000, Stop: 50665, Start Num: 15

Candidate Starts for RubyRalph\_75:

(13, 51018), (Start: 15 @51000 has 36 MA's), (19, 50934), (20, 50919), (21, 50892), (22, 50883), (26, 50832), (27, 50826), (29, 50805), (31, 50793), (37, 50760), (40, 50748),

Gene: Rudy\_72 Start: 50361, Stop: 50020, Start Num: 15

Candidate Starts for Rudy\_72:

(6, 50535), (Start: 15 @50361 has 36 MA's), (19, 50295), (21, 50253), (22, 50244), (23, 50226), (27, 50187), (35, 50136), (37, 50121), (38, 50118), (42, 50085),

Gene: SadLad\_76 Start: 51906, Stop: 51571, Start Num: 15

Candidate Starts for SadLad\_76:

(Start: 15 @51906 has 36 MA's), (19, 51840), (20, 51825), (21, 51798), (22, 51789), (26, 51738), (27, 51732), (29, 51711), (31, 51699), (37, 51666), (40, 51654),

Gene: SallyK\_77 Start: 52063, Stop: 51722, Start Num: 15

Candidate Starts for SallyK\_77:

(6, 52237), (Start: 15 @52063 has 36 MA's), (19, 51997), (21, 51955), (22, 51946), (23, 51928), (26, 51895), (27, 51889), (29, 51868), (31, 51856), (33, 51850), (34, 51847), (39, 51814), (40, 51811), (42, 51787),

Gene: Sillytadpoles\_77 Start: 50198, Stop: 49857, Start Num: 15

Candidate Starts for Sillytadpoles\_77:

(2, 50486), (Start: 15 @50198 has 36 MA's), (19, 50132), (21, 50090), (22, 50081), (23, 50063), (27, 50024), (35, 49973), (37, 49958), (38, 49955), (42, 49922),

Gene: Squash\_77 Start: 51296, Stop: 50955, Start Num: 15

Candidate Starts for Squash\_77:

(Start: 15 @51296 has 36 MA's), (19, 51230), (21, 51188), (22, 51179), (23, 51161), (27, 51122), (35, 51071), (37, 51056), (38, 51053), (42, 51020),

Gene: StrawberryJamm\_79 Start: 50466, Stop: 50125, Start Num: 15

Candidate Starts for StrawberryJamm\_79:

(6, 50640), (Start: 15 @50466 has 36 MA's), (19, 50400), (21, 50358), (22, 50349), (23, 50331), (27, 50292), (35, 50241), (37, 50226), (38, 50223), (42, 50190),

Gene: Teehee\_75 Start: 51431, Stop: 51090, Start Num: 15

Candidate Starts for Teehee\_75:

(6, 51605), (Start: 15 @51431 has 36 MA's), (19, 51365), (21, 51323), (22, 51314), (23, 51296), (27, 51257), (35, 51206), (37, 51191), (38, 51188), (42, 51155),

Gene: Tempo\_81 Start: 51837, Stop: 51511, Start Num: 15

Candidate Starts for Tempo\_81:

(Start: 15 @51837 has 36 MA's), (16, 51789), (17, 51786), (18, 51780), (23, 51708), (29, 51648), (30, 51639), (31, 51636), (34, 51627), (40, 51591), (42, 51567),

Gene: Tissue\_74 Start: 50926, Stop: 50585, Start Num: 15

Candidate Starts for Tissue\_74:

(Start: 15 @50926 has 36 MA's), (19, 50860), (21, 50818), (22, 50809), (23, 50791), (27, 50752), (35, 50701), (37, 50686), (38, 50683), (42, 50650),

Gene: Viceroy\_73 Start: 50331, Stop: 49990, Start Num: 15

Candidate Starts for Viceroy\_73:

(2, 50619), (Start: 15 @50331 has 36 MA's), (19, 50265), (21, 50223), (22, 50214), (23, 50196), (27, 50157), (35, 50106), (37, 50091), (38, 50088), (42, 50055),

Gene: Wayne3\_76 Start: 51194, Stop: 50853, Start Num: 15

Candidate Starts for Wayne3\_76:

(6, 51368), (Start: 15 @51194 has 36 MA's), (19, 51128), (21, 51086), (22, 51077), (23, 51059), (27, 51020), (35, 50969), (37, 50954), (38, 50951), (42, 50918),

Gene: Wheelie\_74 Start: 50515, Stop: 50174, Start Num: 15

Candidate Starts for Wheelie\_74:

(6, 50689), (Start: 15 @50515 has 36 MA's), (19, 50449), (21, 50407), (22, 50398), (23, 50380), (27, 50341), (35, 50290), (37, 50275), (38, 50272), (42, 50239),

Gene: Wilca\_80 Start: 51781, Stop: 51455, Start Num: 15

Candidate Starts for Wilca\_80:

(7, 51967), (10, 51868), (Start: 15 @51781 has 36 MA's), (16, 51733), (17, 51730), (18, 51724), (23, 51652), (26, 51619), (29, 51592), (30, 51583), (31, 51580), (40, 51535), (42, 51511),

Gene: Zagie\_75 Start: 50743, Stop: 50402, Start Num: 15

Candidate Starts for Zagie\_75:

(Start: 15 @50743 has 36 MA's), (19, 50677), (21, 50635), (22, 50626), (23, 50608), (26, 50575), (27, 50569), (29, 50548), (31, 50536), (33, 50530), (34, 50527), (39, 50494), (40, 50491), (42, 50467),

Gene: Zhafia\_79 Start: 50995, Stop: 50654, Start Num: 15

Candidate Starts for Zhafia\_79:

(6, 51169), (Start: 15 @50995 has 36 MA's), (19, 50929), (21, 50887), (22, 50878), (23, 50860), (27, 50821), (35, 50770), (37, 50755), (38, 50752), (42, 50719),