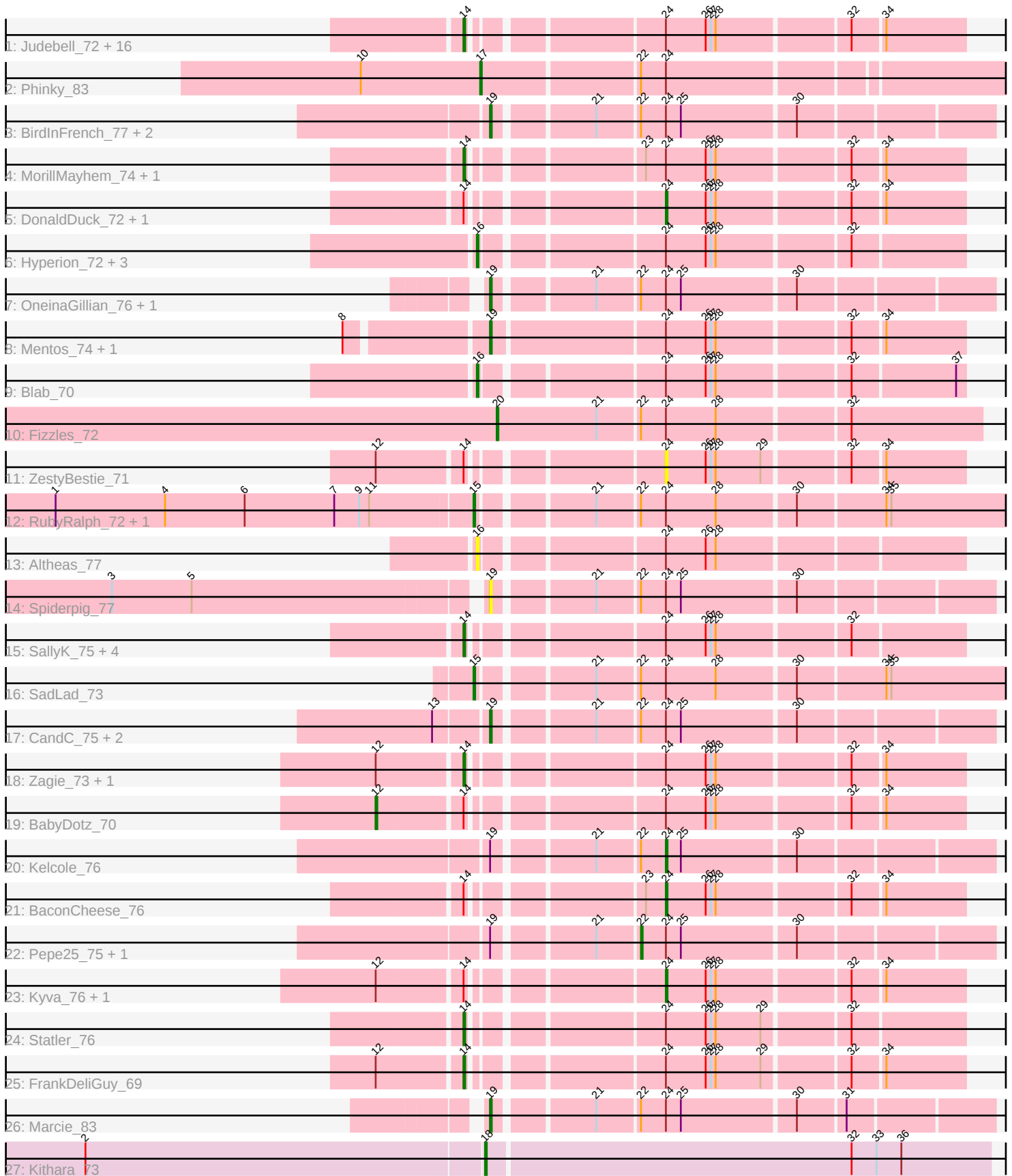


Pham 323291



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 323291 Report

This analysis was run 09/05/26 on database version 662.

Pham number 323291 has 62 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Judebell_72, Nike_73, Casend_73, LilCahh_71, Phabia_72, Quammi_71, Viceroy_71, EverythinBagel_72, Rudy_70, Sillytadpoles_73, Wayne3_74, Zhafia_75, Teehee_73, Namago_73, Squash_75, Jehoshaphat_74, Llemily_72
- Track 2 : Phinky_83
- Track 3 : BirdInFrench_77, Wilca_77, RobinRose_79
- Track 4 : MorillMayhem_74, Mila11_75
- Track 5 : DonaldDuck_72, Wheelie_72
- Track 6 : Hyperion_72, Mashley_74, AluminumJesus_70, Gazebo_73
- Track 7 : OneinaGillian_76, KillerQueen_80
- Track 8 : Mentos_74, SlySloth_74
- Track 9 : Blab_70
- Track 10 : Fizzles_72
- Track 11 : ZestyBestie_71
- Track 12 : RubyRalph_72, Fransoyer_71
- Track 13 : Altheas_77
- Track 14 : Spiderpig_77
- Track 15 : SallyK_75, Lonelysoil_70, WheelerS25_78, StrawberryJamm_77, Rowlf_70
- Track 16 : SadLad_73
- Track 17 : CandC_75, Fregley_78, Tempo_78
- Track 18 : Zagie_73, Tissue_74
- Track 19 : BabyDotz_70
- Track 20 : Kelcole_76
- Track 21 : BaconCheese_76
- Track 22 : Pepe25_75, Romm_79
- Track 23 : Kyva_76, Grassboy_76
- Track 24 : Statler_76
- Track 25 : FrankDeliGuy_69
- Track 26 : Marcie_83
- Track 27 : 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 14, it was called in 27 of the 57 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Casend_73, EverythinBagel_72, FrankDeliGuy_69, Jehoshaphat_74, Judebell_72, LilCahh_71, Llemily_72, Lonelysoil_70, Mila11_75, 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, WheelerS25_78, Zagie_73, Zhafia_75,

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

- BabyDotz_70, BaconCheese_76, DonaldDuck_72, Grassboy_76, Kyva_76, Wheelie_72, ZestyBestie_71,

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, Kelcole_76, KillerQueen_80, Kithara_73, Marcie_83, Mashley_74, Mentos_74, OneinaGillian_76, Pepe25_75, Phinky_83, RobinRose_79, Romm_79, RubyRalph_72, SadLad_73, SlySloth_74, Spiderpig_77, Tempo_78, Wilca_77,

Summary by start number:

Start 12:

- Found in 7 of 62 (11.3%) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 14.3% of time when present
- Phage (with cluster) where this start called: BabyDotz_70 (EG),

Start 14:

- Found in 35 of 62 (56.5%) of genes in pham
- Manual Annotations of this start: 27 of 57
- Called 80.0% 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), LilCahh_71 (EG), Llemily_72 (EG), Lonelysoil_70 (EG), Mila11_75 (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), WheelerS25_78 (EG), Zagie_73 (EG), Zhafia_75 (EG),

Start 15:

- Found in 3 of 62 (4.8%) of genes in pham
- Manual Annotations of this start: 3 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fransoyer_71 (EG), RubyRalph_72 (EG), SadLad_73 (EG),

Start 16:

- Found in 6 of 62 (9.7%) of genes in pham
- Manual Annotations of this start: 5 of 57
- 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 17:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phinky_83 (EG),

Start 18:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kithara_73 (singleton),

Start 19:

- Found in 15 of 62 (24.2%) of genes in pham
- Manual Annotations of this start: 11 of 57
- Called 80.0% 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_74 (EG), OneinaGillian_76 (EG), RobinRose_79 (EG), SlySloth_74 (EG), Spiderpig_77 (EG), Tempo_78 (EG), Wilca_77 (EG),

Start 20:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fizzles_72 (EG),

Start 22:

- Found in 18 of 62 (29.0%) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Pepe25_75 (EG), Romm_79 (EG),

Start 24:

- Found in 61 of 62 (98.4%) of genes in pham
- Manual Annotations of this start: 6 of 57
- Called 11.5% of time when present
- Phage (with cluster) where this start called: BaconCheese_76 (EG), DonaldDuck_72 (EG), Grassboy_76 (EG), Kelcole_76 (EG), Kyva_76 (EG), Wheelie_72 (EG), ZestyBestie_71 (EG),

Summary by clusters:

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

Info for manual annotations of cluster EG:

- Start number 12 was manually annotated 1 time for cluster EG.
- Start number 14 was manually annotated 27 times for cluster EG.
- Start number 15 was manually annotated 3 times for cluster EG.
- Start number 16 was manually annotated 5 times for cluster EG.

- Start number 17 was manually annotated 1 time for cluster EG.
- Start number 19 was manually annotated 11 times for cluster EG.
- Start number 20 was manually annotated 1 time for cluster EG.
- Start number 22 was manually annotated 1 time for cluster EG.
- Start number 24 was manually annotated 6 times for cluster EG.

Gene Information:

Gene: Altheas_77 Start: 51282, Stop: 51013, Start Num: 16

Candidate Starts for Altheas_77:

(Start: 16 @51282 has 5 MA's), (Start: 24 @51183 has 6 MA's), (26, 51159), (28, 51153),

Gene: AluminumJesus_70 Start: 49888, Stop: 49619, Start Num: 16

Candidate Starts for AluminumJesus_70:

(Start: 16 @49888 has 5 MA's), (Start: 24 @49789 has 6 MA's), (26, 49765), (27, 49762), (28, 49759), (32, 49684),

Gene: BabyDotz_70 Start: 51169, Stop: 50849, Start Num: 12

Candidate Starts for BabyDotz_70:

(Start: 12 @51169 has 1 MA's), (Start: 14 @51121 has 27 MA's), (Start: 24 @51019 has 6 MA's), (26, 50995), (27, 50992), (28, 50989), (32, 50914), (34, 50896),

Gene: BaconCheese_76 Start: 51949, Stop: 51779, Start Num: 24

Candidate Starts for BaconCheese_76:

(Start: 14 @52051 has 27 MA's), (23, 51961), (Start: 24 @51949 has 6 MA's), (26, 51925), (27, 51922), (28, 51919), (32, 51844), (34, 51826),

Gene: BirdInFrench_77 Start: 50673, Stop: 50395, Start Num: 19

Candidate Starts for BirdInFrench_77:

(Start: 19 @50673 has 11 MA's), (21, 50619), (Start: 22 @50595 has 1 MA's), (Start: 24 @50580 has 6 MA's), (25, 50571), (30, 50505),

Gene: Blab_70 Start: 50179, Stop: 49910, Start Num: 16

Candidate Starts for Blab_70:

(Start: 16 @50179 has 5 MA's), (Start: 24 @50080 has 6 MA's), (26, 50056), (27, 50053), (28, 50050), (32, 49975), (37, 49915),

Gene: CandC_75 Start: 50039, Stop: 49761, Start Num: 19

Candidate Starts for CandC_75:

(13, 50069), (Start: 19 @50039 has 11 MA's), (21, 49985), (Start: 22 @49961 has 1 MA's), (Start: 24 @49946 has 6 MA's), (25, 49937), (30, 49871),

Gene: Casend_73 Start: 50678, Stop: 50406, Start Num: 14

Candidate Starts for Casend_73:

(Start: 14 @50678 has 27 MA's), (Start: 24 @50576 has 6 MA's), (26, 50552), (27, 50549), (28, 50546), (32, 50471), (34, 50453),

Gene: DonaldDuck_72 Start: 49925, Stop: 49755, Start Num: 24

Candidate Starts for DonaldDuck_72:

(Start: 14 @50027 has 27 MA's), (Start: 24 @49925 has 6 MA's), (26, 49901), (27, 49898), (28, 49895), (32, 49820), (34, 49802),

Gene: EverythinBagel_72 Start: 50512, Stop: 50240, Start Num: 14

Candidate Starts for EverythinBagel_72:

(Start: 14 @50512 has 27 MA's), (Start: 24 @50410 has 6 MA's), (26, 50386), (27, 50383), (28, 50380), (32, 50305), (34, 50287),

Gene: Fizzles_72 Start: 50172, Stop: 49891, Start Num: 20

Candidate Starts for Fizzles_72:

(Start: 20 @50172 has 1 MA's), (21, 50112), (Start: 22 @50088 has 1 MA's), (Start: 24 @50073 has 6 MA's), (28, 50043), (32, 49968),

Gene: FrankDeliGuy_69 Start: 50123, Stop: 49851, Start Num: 14

Candidate Starts for FrankDeliGuy_69:

(Start: 12 @50171 has 1 MA's), (Start: 14 @50123 has 27 MA's), (Start: 24 @50021 has 6 MA's), (26, 49997), (27, 49994), (28, 49991), (29, 49964), (32, 49916), (34, 49898),

Gene: Fransoyer_71 Start: 50342, Stop: 50022, Start Num: 15

Candidate Starts for Fransoyer_71:

(1, 50588), (4, 50522), (6, 50474), (7, 50420), (9, 50405), (11, 50399), (Start: 15 @50342 has 3 MA's), (21, 50282), (Start: 22 @50258 has 1 MA's), (Start: 24 @50243 has 6 MA's), (28, 50213), (30, 50168), (34, 50117), (35, 50114),

Gene: Fregley_78 Start: 50388, Stop: 50110, Start Num: 19

Candidate Starts for Fregley_78:

(13, 50418), (Start: 19 @50388 has 11 MA's), (21, 50334), (Start: 22 @50310 has 1 MA's), (Start: 24 @50295 has 6 MA's), (25, 50286), (30, 50220),

Gene: Gazebo_73 Start: 50838, Stop: 50569, Start Num: 16

Candidate Starts for Gazebo_73:

(Start: 16 @50838 has 5 MA's), (Start: 24 @50739 has 6 MA's), (26, 50715), (27, 50712), (28, 50709), (32, 50634),

Gene: Grassboy_76 Start: 50705, Stop: 50535, Start Num: 24

Candidate Starts for Grassboy_76:

(Start: 12 @50855 has 1 MA's), (Start: 14 @50807 has 27 MA's), (Start: 24 @50705 has 6 MA's), (26, 50681), (27, 50678), (28, 50675), (32, 50600), (34, 50582),

Gene: Hyperion_72 Start: 50369, Stop: 50100, Start Num: 16

Candidate Starts for Hyperion_72:

(Start: 16 @50369 has 5 MA's), (Start: 24 @50270 has 6 MA's), (26, 50246), (27, 50243), (28, 50240), (32, 50165),

Gene: Jehoshaphat_74 Start: 50946, Stop: 50674, Start Num: 14

Candidate Starts for Jehoshaphat_74:

(Start: 14 @50946 has 27 MA's), (Start: 24 @50844 has 6 MA's), (26, 50820), (27, 50817), (28, 50814), (32, 50739), (34, 50721),

Gene: Judebell_72 Start: 50170, Stop: 49898, Start Num: 14

Candidate Starts for Judebell_72:

(Start: 14 @50170 has 27 MA's), (Start: 24 @50068 has 6 MA's), (26, 50044), (27, 50041), (28, 50038), (32, 49963), (34, 49945),

Gene: Kelcole_76 Start: 50518, Stop: 50333, Start Num: 24

Candidate Starts for Kelcole_76:

(Start: 19 @50611 has 11 MA's), (21, 50557), (Start: 22 @50533 has 1 MA's), (Start: 24 @50518 has 6 MA's), (25, 50509), (30, 50443),

Gene: KillerQueen_80 Start: 50846, Stop: 50568, Start Num: 19

Candidate Starts for KillerQueen_80:

(Start: 19 @50846 has 11 MA's), (21, 50792), (Start: 22 @50768 has 1 MA's), (Start: 24 @50753 has 6 MA's), (25, 50744), (30, 50678),

Gene: Kithara_73 Start: 52498, Stop: 52199, Start Num: 18

Candidate Starts for Kithara_73:

(2, 52735), (Start: 18 @52498 has 1 MA's), (32, 52282), (33, 52267), (36, 52252),

Gene: Kyva_76 Start: 50729, Stop: 50559, Start Num: 24

Candidate Starts for Kyva_76:

(Start: 12 @50879 has 1 MA's), (Start: 14 @50831 has 27 MA's), (Start: 24 @50729 has 6 MA's), (26, 50705), (27, 50702), (28, 50699), (32, 50624), (34, 50606),

Gene: LilCahh_71 Start: 50143, Stop: 49871, Start Num: 14

Candidate Starts for LilCahh_71:

(Start: 14 @50143 has 27 MA's), (Start: 24 @50041 has 6 MA's), (26, 50017), (27, 50014), (28, 50011), (32, 49936), (34, 49918),

Gene: Llemily_72 Start: 49722, Stop: 49450, Start Num: 14

Candidate Starts for Llemily_72:

(Start: 14 @49722 has 27 MA's), (Start: 24 @49620 has 6 MA's), (26, 49596), (27, 49593), (28, 49590), (32, 49515), (34, 49497),

Gene: Lonelysoil_70 Start: 49482, Stop: 49210, Start Num: 14

Candidate Starts for Lonelysoil_70:

(Start: 14 @49482 has 27 MA's), (Start: 24 @49380 has 6 MA's), (26, 49356), (27, 49353), (28, 49350), (32, 49275),

Gene: Marcie_83 Start: 51613, Stop: 51335, Start Num: 19

Candidate Starts for Marcie_83:

(Start: 19 @51613 has 11 MA's), (21, 51559), (Start: 22 @51535 has 1 MA's), (Start: 24 @51520 has 6 MA's), (25, 51511), (30, 51445), (31, 51418),

Gene: Mashley_74 Start: 50891, Stop: 50622, Start Num: 16

Candidate Starts for Mashley_74:

(Start: 16 @50891 has 5 MA's), (Start: 24 @50792 has 6 MA's), (26, 50768), (27, 50765), (28, 50762), (32, 50687),

Gene: Mentos_74 Start: 51391, Stop: 51122, Start Num: 19

Candidate Starts for Mentos_74:

(8, 51469), (Start: 19 @51391 has 11 MA's), (Start: 24 @51292 has 6 MA's), (26, 51268), (27, 51265), (28, 51262), (32, 51187), (34, 51169),

Gene: Mila11_75 Start: 52102, Stop: 51830, Start Num: 14

Candidate Starts for Mila11_75:

(Start: 14 @52102 has 27 MA's), (23, 52012), (Start: 24 @52000 has 6 MA's), (26, 51976), (27, 51973), (28, 51970), (32, 51895), (34, 51877),

Gene: MorillMayhem_74 Start: 50941, Stop: 50669, Start Num: 14

Candidate Starts for MorillMayhem_74:

(Start: 14 @50941 has 27 MA's), (23, 50851), (Start: 24 @50839 has 6 MA's), (26, 50815), (27, 50812), (28, 50809), (32, 50734), (34, 50716),

Gene: Namago_73 Start: 49786, Stop: 49514, Start Num: 14

Candidate Starts for Namago_73:

(Start: 14 @49786 has 27 MA's), (Start: 24 @49684 has 6 MA's), (26, 49660), (27, 49657), (28, 49654), (32, 49579), (34, 49561),

Gene: Nike_73 Start: 51086, Stop: 50814, Start Num: 14

Candidate Starts for Nike_73:

(Start: 14 @51086 has 27 MA's), (Start: 24 @50984 has 6 MA's), (26, 50960), (27, 50957), (28, 50954), (32, 50879), (34, 50861),

Gene: OneinaGillian_76 Start: 50251, Stop: 49973, Start Num: 19

Candidate Starts for OneinaGillian_76:

(Start: 19 @50251 has 11 MA's), (21, 50197), (Start: 22 @50173 has 1 MA's), (Start: 24 @50158 has 6 MA's), (25, 50149), (30, 50083),

Gene: Pepe25_75 Start: 49514, Stop: 49314, Start Num: 22

Candidate Starts for Pepe25_75:

(Start: 19 @49592 has 11 MA's), (21, 49538), (Start: 22 @49514 has 1 MA's), (Start: 24 @49499 has 6 MA's), (25, 49490), (30, 49424),

Gene: Phabia_72 Start: 50137, Stop: 49865, Start Num: 14

Candidate Starts for Phabia_72:

(Start: 14 @50137 has 27 MA's), (Start: 24 @50035 has 6 MA's), (26, 50011), (27, 50008), (28, 50005), (32, 49930), (34, 49912),

Gene: Phinky_83 Start: 53441, Stop: 53133, Start Num: 17

Candidate Starts for Phinky_83:

(10, 53513), (Start: 17 @53441 has 1 MA's), (Start: 22 @53351 has 1 MA's), (Start: 24 @53336 has 6 MA's),

Gene: Quammi_71 Start: 49837, Stop: 49565, Start Num: 14

Candidate Starts for Quammi_71:

(Start: 14 @49837 has 27 MA's), (Start: 24 @49735 has 6 MA's), (26, 49711), (27, 49708), (28, 49705), (32, 49630), (34, 49612),

Gene: RobinRose_79 Start: 50795, Stop: 50517, Start Num: 19

Candidate Starts for RobinRose_79:

(Start: 19 @50795 has 11 MA's), (21, 50741), (Start: 22 @50717 has 1 MA's), (Start: 24 @50702 has 6 MA's), (25, 50693), (30, 50627),

Gene: Romm_79 Start: 50714, Stop: 50514, Start Num: 22

Candidate Starts for Romm_79:

(Start: 19 @50792 has 11 MA's), (21, 50738), (Start: 22 @50714 has 1 MA's), (Start: 24 @50699 has 6 MA's), (25, 50690), (30, 50624),

Gene: Rowlf_70 Start: 50044, Stop: 49772, Start Num: 14

Candidate Starts for Rowlf_70:

(Start: 14 @50044 has 27 MA's), (Start: 24 @49942 has 6 MA's), (26, 49918), (27, 49915), (28, 49912), (32, 49837),

Gene: RubyRalph_72 Start: 50116, Stop: 49796, Start Num: 15

Candidate Starts for RubyRalph_72:

(1, 50362), (4, 50296), (6, 50248), (7, 50194), (9, 50179), (11, 50173), (Start: 15 @50116 has 3 MA's), (21, 50056), (Start: 22 @50032 has 1 MA's), (Start: 24 @50017 has 6 MA's), (28, 49987), (30, 49942), (34, 49891), (35, 49888),

Gene: Rudy_70 Start: 49873, Stop: 49601, Start Num: 14

Candidate Starts for Rudy_70:

(Start: 14 @49873 has 27 MA's), (Start: 24 @49771 has 6 MA's), (26, 49747), (27, 49744), (28, 49741), (32, 49666), (34, 49648),

Gene: SadLad_73 Start: 51022, Stop: 50702, Start Num: 15

Candidate Starts for SadLad_73:

(Start: 15 @51022 has 3 MA's), (21, 50962), (Start: 22 @50938 has 1 MA's), (Start: 24 @50923 has 6 MA's), (28, 50893), (30, 50848), (34, 50797), (35, 50794),

Gene: SallyK_75 Start: 51575, Stop: 51303, Start Num: 14

Candidate Starts for SallyK_75:

(Start: 14 @51575 has 27 MA's), (Start: 24 @51473 has 6 MA's), (26, 51449), (27, 51446), (28, 51443), (32, 51368),

Gene: Sillytadpoles_73 Start: 49710, Stop: 49438, Start Num: 14

Candidate Starts for Sillytadpoles_73:

(Start: 14 @49710 has 27 MA's), (Start: 24 @49608 has 6 MA's), (26, 49584), (27, 49581), (28, 49578), (32, 49503), (34, 49485),

Gene: SlySloth_74 Start: 50676, Stop: 50407, Start Num: 19

Candidate Starts for SlySloth_74:

(8, 50754), (Start: 19 @50676 has 11 MA's), (Start: 24 @50577 has 6 MA's), (26, 50553), (27, 50550), (28, 50547), (32, 50472), (34, 50454),

Gene: Spiderpig_77 Start: 50662, Stop: 50384, Start Num: 19

Candidate Starts for Spiderpig_77:

(3, 50875), (5, 50827), (Start: 19 @50662 has 11 MA's), (21, 50608), (Start: 22 @50584 has 1 MA's), (Start: 24 @50569 has 6 MA's), (25, 50560), (30, 50494),

Gene: Squash_75 Start: 50808, Stop: 50536, Start Num: 14

Candidate Starts for Squash_75:

(Start: 14 @50808 has 27 MA's), (Start: 24 @50706 has 6 MA's), (26, 50682), (27, 50679), (28, 50676), (32, 50601), (34, 50583),

Gene: Statler_76 Start: 50760, Stop: 50488, Start Num: 14

Candidate Starts for Statler_76:

(Start: 14 @50760 has 27 MA's), (Start: 24 @50658 has 6 MA's), (26, 50634), (27, 50631), (28, 50628), (29, 50601), (32, 50553),

Gene: StrawberryJamm_77 Start: 49978, Stop: 49706, Start Num: 14

Candidate Starts for StrawberryJamm_77:

(Start: 14 @49978 has 27 MA's), (Start: 24 @49876 has 6 MA's), (26, 49852), (27, 49849), (28, 49846), (32, 49771),

Gene: Teehee_73 Start: 50943, Stop: 50671, Start Num: 14

Candidate Starts for Teehee_73:

(Start: 14 @50943 has 27 MA's), (Start: 24 @50841 has 6 MA's), (26, 50817), (27, 50814), (28, 50811), (32, 50736), (34, 50718),

Gene: Tempo_78 Start: 50735, Stop: 50457, Start Num: 19

Candidate Starts for Tempo_78:

(13, 50765), (Start: 19 @50735 has 11 MA's), (21, 50681), (Start: 22 @50657 has 1 MA's), (Start: 24 @50642 has 6 MA's), (25, 50633), (30, 50567),

Gene: Tissue_74 Start: 50438, Stop: 50166, Start Num: 14

Candidate Starts for Tissue_74:

(Start: 12 @50486 has 1 MA's), (Start: 14 @50438 has 27 MA's), (Start: 24 @50336 has 6 MA's), (26, 50312), (27, 50309), (28, 50306), (32, 50231), (34, 50213),

Gene: Viceroy_71 Start: 49843, Stop: 49571, Start Num: 14

Candidate Starts for Viceroy_71:

(Start: 14 @49843 has 27 MA's), (Start: 24 @49741 has 6 MA's), (26, 49717), (27, 49714), (28, 49711), (32, 49636), (34, 49618),

Gene: Wayne3_74 Start: 50706, Stop: 50434, Start Num: 14

Candidate Starts for Wayne3_74:

(Start: 14 @50706 has 27 MA's), (Start: 24 @50604 has 6 MA's), (26, 50580), (27, 50577), (28, 50574), (32, 50499), (34, 50481),

Gene: WheelerS25_78 Start: 51341, Stop: 51069, Start Num: 14

Candidate Starts for WheelerS25_78:

(Start: 14 @51341 has 27 MA's), (Start: 24 @51239 has 6 MA's), (26, 51215), (27, 51212), (28, 51209), (32, 51134),

Gene: Wheelie_72 Start: 49925, Stop: 49755, Start Num: 24

Candidate Starts for Wheelie_72:

(Start: 14 @50027 has 27 MA's), (Start: 24 @49925 has 6 MA's), (26, 49901), (27, 49898), (28, 49895), (32, 49820), (34, 49802),

Gene: Wilca_77 Start: 50673, Stop: 50395, Start Num: 19

Candidate Starts for Wilca_77:

(Start: 19 @50673 has 11 MA's), (21, 50619), (Start: 22 @50595 has 1 MA's), (Start: 24 @50580 has 6 MA's), (25, 50571), (30, 50505),

Gene: Zagie_73 Start: 50255, Stop: 49983, Start Num: 14

Candidate Starts for Zagie_73:

(Start: 12 @50303 has 1 MA's), (Start: 14 @50255 has 27 MA's), (Start: 24 @50153 has 6 MA's), (26, 50129), (27, 50126), (28, 50123), (32, 50048), (34, 50030),

Gene: ZestyBestie_71 Start: 50016, Stop: 49846, Start Num: 24

Candidate Starts for ZestyBestie_71:

(Start: 12 @50166 has 1 MA's), (Start: 14 @50118 has 27 MA's), (Start: 24 @50016 has 6 MA's), (26, 49992), (27, 49989), (28, 49986), (29, 49959), (32, 49911), (34, 49893),

Gene: Zhafia_75 Start: 50507, Stop: 50235, Start Num: 14

Candidate Starts for Zhafia_75:

(Start: 14 @50507 has 27 MA's), (Start: 24 @50405 has 6 MA's), (26, 50381), (27, 50378), (28, 50375),
(32, 50300), (34, 50282),