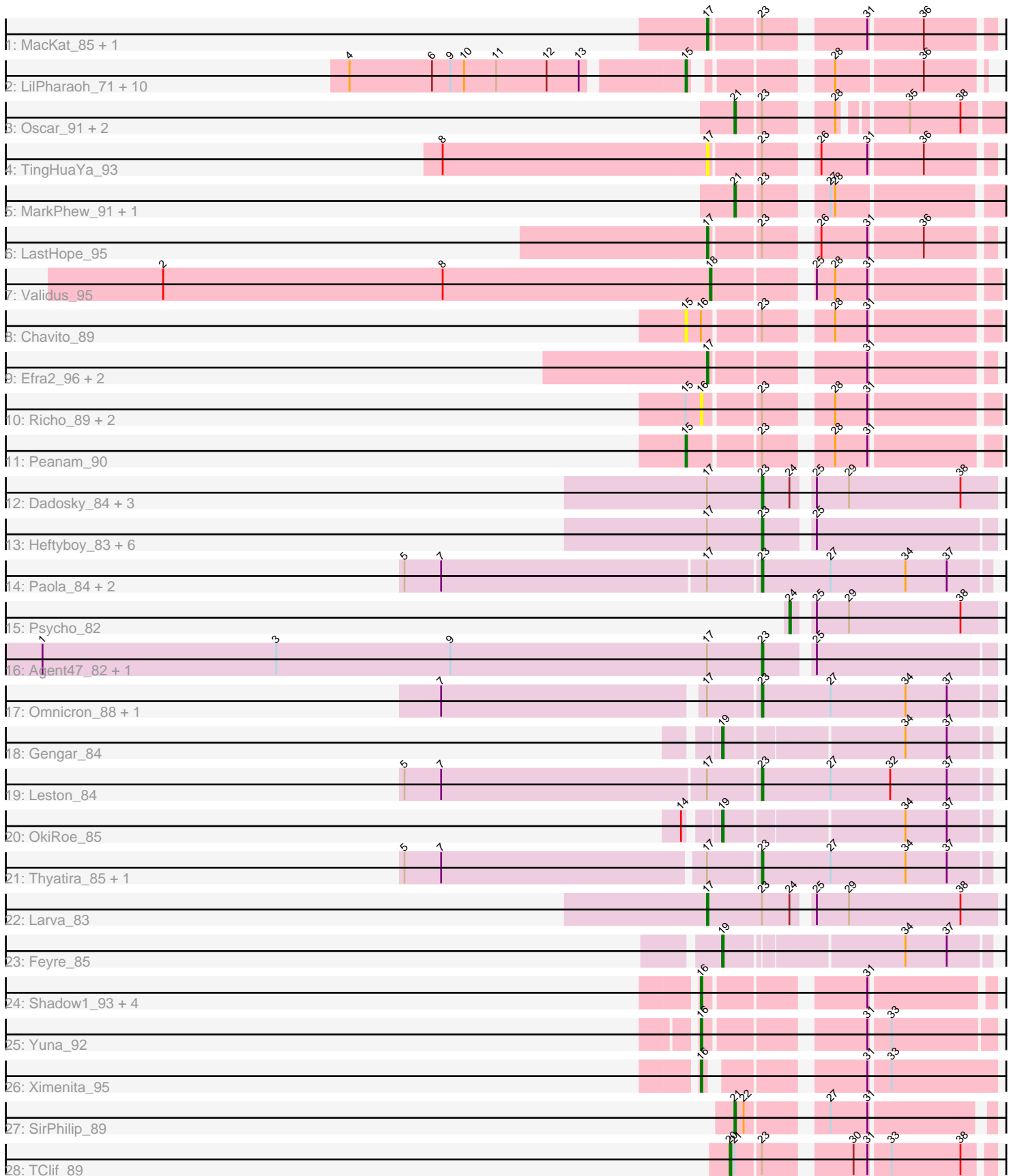


Pham 305010



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 305010 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305010 has 64 members, 9 are drafts.

Phages represented in each track:

- Track 1 : MacKat_85, Clipper_93
- Track 2 : LilPharaoh_71, Biglebops_70, Nutello_70, Amelie_70, Trice_70, Enkosi_72, Mdavu_71, Nikao_73, Teejan_72, SgtBeansprout_71, Torres_73
- Track 3 : Oscar_91, LeMond_90, KiSi_91
- Track 4 : TingHuaYa_93
- Track 5 : MarkPhew_91, Nibb_91
- Track 6 : LastHope_95
- Track 7 : Validus_95
- Track 8 : Chavito_89
- Track 9 : Efra2_96, Guanica15_95, Yunkel11_94
- Track 10 : Richo_89, Dartin_89, McMater_89
- Track 11 : Peanam_90
- Track 12 : Dadosky_84, Kratio_84, Neighly_84, AlleyCat_84
- Track 13 : Heftyboy_83, ViviJ_89, BananenDer11_83, DoubleChamp_80, LilDirt_82, Collard_81, SoSeph_83
- Track 14 : Paola_84, Miryou_86, Guillsminger_85
- Track 15 : Psycho_82
- Track 16 : Agent47_82, InvictusManeo_80
- Track 17 : Omnicron_88, Rando14_85
- Track 18 : Gengar_84
- Track 19 : Leston_84
- Track 20 : OkiRoe_85
- Track 21 : Thyatira_85, Waterfoul_84
- Track 22 : Larva_83
- Track 23 : Feyre_85
- Track 24 : Shadow1_93, Tigress9_93, Syra333_92, Sunflower1121_93, Krueger_93
- Track 25 : Yuna_92
- Track 26 : Ximenita_95
- Track 27 : SirPhilip_89
- Track 28 : TClif_89

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 19 of the 55 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agent47_82, AlleyCat_84, BananenDer11_83, Collard_81, Dadosky_84, DoubleChamp_80, Guillsminger_85, Heftyboy_83, InvictusManeo_80, Kratio_84, Leston_84, LilDirt_82, Miryou_86, Neighly_84, Omnicron_88, Paola_84, Rando14_85, SoSeph_83, Thyatira_85, ViviJ_89, Waterfoul_84,

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

- Chavito_89, Clipper_93, Dartin_89, KiSi_91, Larva_83, LastHope_95, LeMond_90, MacKat_85, MarkPhew_91, McMater_89, Nibb_91, Oscar_91, Peanam_90, Richo_89, TClif_89, TingHuaYa_93,

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

- Amelie_70, Binglebops_70, Efra2_96, Enkosi_72, Feyre_85, Gengar_84, Guanica15_95, Krueger_93, LilPharaoh_71, Mdavu_71, Nikao_73, Nutello_70, OkiRoe_85, Psycho_82, SgtBeansprout_71, Shadow1_93, SirPhilip_89, Sunflower1121_93, Syra333_92, Teejan_72, Tigress9_93, Torres_73, Trice_70, Validus_95, Ximenita_95, Yuna_92, Yunkel11_94,

Summary by start number:

Start 15:

- Found in 16 of 64 (25.0%) of genes in pham
- Manual Annotations of this start: 10 of 55
- Called 81.2% of time when present
- Phage (with cluster) where this start called: Amelie_70 (K1), Binglebops_70 (K1), Chavito_89 (K1), Enkosi_72 (K1), LilPharaoh_71 (K1), Mdavu_71 (K1), Nikao_73 (K1), Nutello_70 (K1), Peanam_90 (K1), SgtBeansprout_71 (K1), Teejan_72 (K1), Torres_73 (K1), Trice_70 (K1),

Start 16:

- Found in 11 of 64 (17.2%) of genes in pham
- Manual Annotations of this start: 7 of 55
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Dartin_89 (K1), Krueger_93 (K6), McMater_89 (K1), Richo_89 (K1), Shadow1_93 (K6), Sunflower1121_93 (K6), Syra333_92 (K6), Tigress9_93 (K6), Ximenita_95 (K6), Yuna_92 (K6),

Start 17:

- Found in 29 of 64 (45.3%) of genes in pham
- Manual Annotations of this start: 7 of 55
- Called 27.6% of time when present
- Phage (with cluster) where this start called: Clipper_93 (K1), Efra2_96 (K1), Guanica15_95 (K1), Larva_83 (K5), LastHope_95 (K1), MacKat_85 (K1), TingHuaYa_93 (K1), Yunkel11_94 (K1),

Start 18:

- Found in 1 of 64 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Validus_95 (K1),

Start 19:

- Found in 3 of 64 (4.7%) of genes in pham
- Manual Annotations of this start: 3 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Feyre_85 (K5), Gengar_84 (K5), OkiRoe_85 (K5),

Start 20:

- Found in 1 of 64 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TClif_89 (K6),

Start 21:

- Found in 7 of 64 (10.9%) of genes in pham
- Manual Annotations of this start: 6 of 55
- Called 85.7% of time when present
- Phage (with cluster) where this start called: KiSi_91 (K1), LeMond_90 (K1), MarkPhew_91 (K1), Nibb_91 (K1), Oscar_91 (K1), SirPhilip_89 (K6),

Start 23:

- Found in 37 of 64 (57.8%) of genes in pham
- Manual Annotations of this start: 19 of 55
- Called 56.8% of time when present
- Phage (with cluster) where this start called: Agent47_82 (K5), AlleyCat_84 (K5), BananenDer11_83 (K5), Collard_81 (K5), Dadosky_84 (K5), DoubleChamp_80 (K5), Guillsminger_85 (K5), Heftyboy_83 (K5), InvictusManeo_80 (K5), Kratio_84 (K5), Leston_84 (K5), LilDirt_82 (K5), Miryou_86 (K5), Neighly_84 (K3), Omnicron_88 (K5), Paola_84 (K5), Rando14_85 (K5), SoSeph_83 (K5), Thyatira_85 (K5), ViviJ_89 (K5), Waterfoul_84 (K5),

Start 24:

- Found in 6 of 64 (9.4%) of genes in pham
- Manual Annotations of this start: 1 of 55
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Psycho_82 (K5),

Summary by clusters:

There are 4 clusters represented in this pham: K3, K1, K6, K5,

Info for manual annotations of cluster K1:

- Start number 15 was manually annotated 10 times for cluster K1.
- Start number 17 was manually annotated 6 times for cluster K1.
- Start number 18 was manually annotated 1 time for cluster K1.
- Start number 21 was manually annotated 5 times for cluster K1.

Info for manual annotations of cluster K5:

- Start number 17 was manually annotated 1 time for cluster K5.
- Start number 19 was manually annotated 3 times for cluster K5.
- Start number 23 was manually annotated 19 times for cluster K5.

- Start number 24 was manually annotated 1 time for cluster K5.

Info for manual annotations of cluster K6:

- Start number 16 was manually annotated 7 times for cluster K6.
- Start number 20 was manually annotated 1 time for cluster K6.
- Start number 21 was manually annotated 1 time for cluster K6.

Gene Information:

Gene: Agent47_82 Start: 53328, Stop: 53468, Start Num: 23

Candidate Starts for Agent47_82:

(1, 52857), (3, 53010), (9, 53124), (Start: 17 @53292 has 7 MA's), (Start: 23 @53328 has 19 MA's), (25, 53355),

Gene: AlleyCat_84 Start: 54468, Stop: 54611, Start Num: 23

Candidate Starts for AlleyCat_84:

(Start: 17 @54432 has 7 MA's), (Start: 23 @54468 has 19 MA's), (Start: 24 @54486 has 1 MA's), (25, 54495), (29, 54516), (38, 54588),

Gene: Amelie_70 Start: 52418, Stop: 52576, Start Num: 15

Candidate Starts for Amelie_70:

(4, 52208), (6, 52262), (9, 52274), (10, 52283), (11, 52304), (12, 52337), (13, 52358), (Start: 15 @52418 has 10 MA's), (28, 52487), (36, 52541),

Gene: BananenDer11_83 Start: 53578, Stop: 53718, Start Num: 23

Candidate Starts for BananenDer11_83:

(Start: 17 @53542 has 7 MA's), (Start: 23 @53578 has 19 MA's), (25, 53605),

Gene: Binglebops_70 Start: 52433, Stop: 52591, Start Num: 15

Candidate Starts for Binglebops_70:

(4, 52223), (6, 52277), (9, 52289), (10, 52298), (11, 52319), (12, 52352), (13, 52373), (Start: 15 @52433 has 10 MA's), (28, 52502), (36, 52556),

Gene: Chavito_89 Start: 57982, Stop: 58158, Start Num: 15

Candidate Starts for Chavito_89:

(Start: 15 @57982 has 10 MA's), (Start: 16 @57991 has 7 MA's), (Start: 23 @58024 has 19 MA's), (28, 58060), (31, 58081),

Gene: Clipper_93 Start: 57298, Stop: 57459, Start Num: 17

Candidate Starts for Clipper_93:

(Start: 17 @57298 has 7 MA's), (Start: 23 @57328 has 19 MA's), (31, 57385), (36, 57418),

Gene: Collard_81 Start: 53578, Stop: 53718, Start Num: 23

Candidate Starts for Collard_81:

(Start: 17 @53542 has 7 MA's), (Start: 23 @53578 has 19 MA's), (25, 53605),

Gene: Dadosky_84 Start: 54469, Stop: 54612, Start Num: 23

Candidate Starts for Dadosky_84:

(Start: 17 @54433 has 7 MA's), (Start: 23 @54469 has 19 MA's), (Start: 24 @54487 has 1 MA's), (25, 54496), (29, 54517), (38, 54589),

Gene: Dartin_89 Start: 57633, Stop: 57800, Start Num: 16
Candidate Starts for Dartin_89:
(Start: 15 @57624 has 10 MA's), (Start: 16 @57633 has 7 MA's), (Start: 23 @57666 has 19 MA's), (28, 57702), (31, 57723),

Gene: DoubleChamp_80 Start: 53578, Stop: 53718, Start Num: 23
Candidate Starts for DoubleChamp_80:
(Start: 17 @53542 has 7 MA's), (Start: 23 @53578 has 19 MA's), (25, 53605),

Gene: Efra2_96 Start: 57967, Stop: 58128, Start Num: 17
Candidate Starts for Efra2_96:
(Start: 17 @57967 has 7 MA's), (31, 58054),

Gene: Enkosi_72 Start: 55031, Stop: 55189, Start Num: 15
Candidate Starts for Enkosi_72:
(4, 54821), (6, 54875), (9, 54887), (10, 54896), (11, 54917), (12, 54950), (13, 54971), (Start: 15 @55031 has 10 MA's), (28, 55100), (36, 55154),

Gene: Feyre_85 Start: 56970, Stop: 57128, Start Num: 19
Candidate Starts for Feyre_85:
(Start: 19 @56970 has 3 MA's), (34, 57075), (37, 57102),

Gene: Gengar_84 Start: 55837, Stop: 55998, Start Num: 19
Candidate Starts for Gengar_84:
(Start: 19 @55837 has 3 MA's), (34, 55945), (37, 55972),

Gene: Guanica15_95 Start: 57656, Stop: 57817, Start Num: 17
Candidate Starts for Guanica15_95:
(Start: 17 @57656 has 7 MA's), (31, 57743),

Gene: Guillsminger_85 Start: 55691, Stop: 55837, Start Num: 23
Candidate Starts for Guillsminger_85:
(5, 55463), (7, 55487), (Start: 17 @55658 has 7 MA's), (Start: 23 @55691 has 19 MA's), (27, 55736), (34, 55784), (37, 55811),

Gene: Heftyboy_83 Start: 55305, Stop: 55445, Start Num: 23
Candidate Starts for Heftyboy_83:
(Start: 17 @55269 has 7 MA's), (Start: 23 @55305 has 19 MA's), (25, 55332),

Gene: InvictusManeo_80 Start: 53332, Stop: 53472, Start Num: 23
Candidate Starts for InvictusManeo_80:
(1, 52861), (3, 53014), (9, 53128), (Start: 17 @53296 has 7 MA's), (Start: 23 @53332 has 19 MA's), (25, 53359),

Gene: KiSi_91 Start: 56904, Stop: 57056, Start Num: 21
Candidate Starts for KiSi_91:
(Start: 21 @56904 has 6 MA's), (Start: 23 @56919 has 19 MA's), (28, 56955), (35, 56991), (38, 57024),

Gene: Kratio_84 Start: 54363, Stop: 54506, Start Num: 23
Candidate Starts for Kratio_84:
(Start: 17 @54327 has 7 MA's), (Start: 23 @54363 has 19 MA's), (Start: 24 @54381 has 1 MA's), (25, 54390), (29, 54411), (38, 54483),

Gene: Krueger_93 Start: 57088, Stop: 57258, Start Num: 16

Candidate Starts for Krueger_93:

(Start: 16 @57088 has 7 MA's), (31, 57178),

Gene: Larva_83 Start: 55305, Stop: 55484, Start Num: 17

Candidate Starts for Larva_83:

(Start: 17 @55305 has 7 MA's), (Start: 23 @55341 has 19 MA's), (Start: 24 @55359 has 1 MA's), (25, 55368), (29, 55389), (38, 55461),

Gene: LastHope_95 Start: 57401, Stop: 57562, Start Num: 17

Candidate Starts for LastHope_95:

(Start: 17 @57401 has 7 MA's), (Start: 23 @57431 has 19 MA's), (26, 57458), (31, 57488), (36, 57521),

Gene: LeMond_90 Start: 56860, Stop: 57012, Start Num: 21

Candidate Starts for LeMond_90:

(Start: 21 @56860 has 6 MA's), (Start: 23 @56875 has 19 MA's), (28, 56911), (35, 56947), (38, 56980),

Gene: Leston_84 Start: 55808, Stop: 55954, Start Num: 23

Candidate Starts for Leston_84:

(5, 55580), (7, 55604), (Start: 17 @55775 has 7 MA's), (Start: 23 @55808 has 19 MA's), (27, 55853), (32, 55892), (37, 55928),

Gene: LilDirt_82 Start: 53379, Stop: 53519, Start Num: 23

Candidate Starts for LilDirt_82:

(Start: 17 @53343 has 7 MA's), (Start: 23 @53379 has 19 MA's), (25, 53406),

Gene: LilPharaoh_71 Start: 52146, Stop: 52304, Start Num: 15

Candidate Starts for LilPharaoh_71:

(4, 51936), (6, 51990), (9, 52002), (10, 52011), (11, 52032), (12, 52065), (13, 52086), (Start: 15 @52146 has 10 MA's), (28, 52215), (36, 52269),

Gene: MacKat_85 Start: 52182, Stop: 52343, Start Num: 17

Candidate Starts for MacKat_85:

(Start: 17 @52182 has 7 MA's), (Start: 23 @52212 has 19 MA's), (31, 52269), (36, 52302),

Gene: MarkPhew_91 Start: 56993, Stop: 57151, Start Num: 21

Candidate Starts for MarkPhew_91:

(Start: 21 @56993 has 6 MA's), (Start: 23 @57008 has 19 MA's), (27, 57041), (28, 57044),

Gene: McMater_89 Start: 57633, Stop: 57800, Start Num: 16

Candidate Starts for McMater_89:

(Start: 15 @57624 has 10 MA's), (Start: 16 @57633 has 7 MA's), (Start: 23 @57666 has 19 MA's), (28, 57702), (31, 57723),

Gene: Mdavu_71 Start: 52422, Stop: 52580, Start Num: 15

Candidate Starts for Mdavu_71:

(4, 52212), (6, 52266), (9, 52278), (10, 52287), (11, 52308), (12, 52341), (13, 52362), (Start: 15 @52422 has 10 MA's), (28, 52491), (36, 52545),

Gene: Miryou_86 Start: 57666, Stop: 57812, Start Num: 23

Candidate Starts for Miryou_86:

(5, 57438), (7, 57462), (Start: 17 @57633 has 7 MA's), (Start: 23 @57666 has 19 MA's), (27, 57711), (34, 57759), (37, 57786),

Gene: Neighly_84 Start: 55340, Stop: 55483, Start Num: 23

Candidate Starts for Neighly_84:

(Start: 17 @55304 has 7 MA's), (Start: 23 @55340 has 19 MA's), (Start: 24 @55358 has 1 MA's), (25, 55367), (29, 55388), (38, 55460),

Gene: Nibb_91 Start: 56666, Stop: 56824, Start Num: 21

Candidate Starts for Nibb_91:

(Start: 21 @56666 has 6 MA's), (Start: 23 @56681 has 19 MA's), (27, 56714), (28, 56717),

Gene: Nikao_73 Start: 55031, Stop: 55189, Start Num: 15

Candidate Starts for Nikao_73:

(4, 54821), (6, 54875), (9, 54887), (10, 54896), (11, 54917), (12, 54950), (13, 54971), (Start: 15 @55031 has 10 MA's), (28, 55100), (36, 55154),

Gene: Nutello_70 Start: 52418, Stop: 52576, Start Num: 15

Candidate Starts for Nutello_70:

(4, 52208), (6, 52262), (9, 52274), (10, 52283), (11, 52304), (12, 52337), (13, 52358), (Start: 15 @52418 has 10 MA's), (28, 52487), (36, 52541),

Gene: OkiRoe_85 Start: 56800, Stop: 56961, Start Num: 19

Candidate Starts for OkiRoe_85:

(14, 56782), (Start: 19 @56800 has 3 MA's), (34, 56908), (37, 56935),

Gene: Omnicron_88 Start: 57883, Stop: 58032, Start Num: 23

Candidate Starts for Omnicron_88:

(7, 57685), (Start: 17 @57850 has 7 MA's), (Start: 23 @57883 has 19 MA's), (27, 57928), (34, 57976), (37, 58003),

Gene: Oscar_91 Start: 56784, Stop: 56936, Start Num: 21

Candidate Starts for Oscar_91:

(Start: 21 @56784 has 6 MA's), (Start: 23 @56799 has 19 MA's), (28, 56835), (35, 56871), (38, 56904),

Gene: Paola_84 Start: 55691, Stop: 55837, Start Num: 23

Candidate Starts for Paola_84:

(5, 55463), (7, 55487), (Start: 17 @55658 has 7 MA's), (Start: 23 @55691 has 19 MA's), (27, 55736), (34, 55784), (37, 55811),

Gene: Peanam_90 Start: 57643, Stop: 57819, Start Num: 15

Candidate Starts for Peanam_90:

(Start: 15 @57643 has 10 MA's), (Start: 23 @57685 has 19 MA's), (28, 57721), (31, 57742),

Gene: Psycho_82 Start: 54484, Stop: 54609, Start Num: 24

Candidate Starts for Psycho_82:

(Start: 24 @54484 has 1 MA's), (25, 54493), (29, 54514), (38, 54586),

Gene: Rando14_85 Start: 56294, Stop: 56443, Start Num: 23

Candidate Starts for Rando14_85:

(7, 56096), (Start: 17 @56261 has 7 MA's), (Start: 23 @56294 has 19 MA's), (27, 56339), (34, 56387), (37, 56414),

Gene: Richo_89 Start: 57633, Stop: 57800, Start Num: 16

Candidate Starts for Richo_89:

(Start: 15 @57624 has 10 MA's), (Start: 16 @57633 has 7 MA's), (Start: 23 @57666 has 19 MA's), (28, 57702), (31, 57723),

Gene: SgtBeansprout_71 Start: 52418, Stop: 52576, Start Num: 15

Candidate Starts for SgtBeansprout_71:

(4, 52208), (6, 52262), (9, 52274), (10, 52283), (11, 52304), (12, 52337), (13, 52358), (Start: 15 @52418 has 10 MA's), (28, 52487), (36, 52541),

Gene: Shadow1_93 Start: 57228, Stop: 57392, Start Num: 16

Candidate Starts for Shadow1_93:

(Start: 16 @57228 has 7 MA's), (31, 57318),

Gene: SirPhilip_89 Start: 56815, Stop: 56958, Start Num: 21

Candidate Starts for SirPhilip_89:

(Start: 21 @56815 has 6 MA's), (22, 56821), (27, 56863), (31, 56887),

Gene: SoSeph_83 Start: 55305, Stop: 55445, Start Num: 23

Candidate Starts for SoSeph_83:

(Start: 17 @55269 has 7 MA's), (Start: 23 @55305 has 19 MA's), (25, 55332),

Gene: Sunflower1121_93 Start: 56987, Stop: 57151, Start Num: 16

Candidate Starts for Sunflower1121_93:

(Start: 16 @56987 has 7 MA's), (31, 57077),

Gene: Syra333_92 Start: 57044, Stop: 57214, Start Num: 16

Candidate Starts for Syra333_92:

(Start: 16 @57044 has 7 MA's), (31, 57134),

Gene: TClif_89 Start: 56195, Stop: 56344, Start Num: 20

Candidate Starts for TClif_89:

(Start: 20 @56195 has 1 MA's), (Start: 21 @56198 has 6 MA's), (Start: 23 @56213 has 19 MA's), (30, 56261), (31, 56270), (33, 56282), (38, 56327),

Gene: Teejan_72 Start: 55031, Stop: 55189, Start Num: 15

Candidate Starts for Teejan_72:

(4, 54821), (6, 54875), (9, 54887), (10, 54896), (11, 54917), (12, 54950), (13, 54971), (Start: 15 @55031 has 10 MA's), (28, 55100), (36, 55154),

Gene: Thyatira_85 Start: 57400, Stop: 57546, Start Num: 23

Candidate Starts for Thyatira_85:

(5, 57175), (7, 57199), (Start: 17 @57367 has 7 MA's), (Start: 23 @57400 has 19 MA's), (27, 57445), (34, 57493), (37, 57520),

Gene: Tigress9_93 Start: 57416, Stop: 57586, Start Num: 16

Candidate Starts for Tigress9_93:

(Start: 16 @57416 has 7 MA's), (31, 57506),

Gene: TingHuaYa_93 Start: 57729, Stop: 57890, Start Num: 17

Candidate Starts for TingHuaYa_93:

(8, 57558), (Start: 17 @57729 has 7 MA's), (Start: 23 @57759 has 19 MA's), (26, 57786), (31, 57816), (36, 57849),

Gene: Torres_73 Start: 55032, Stop: 55190, Start Num: 15

Candidate Starts for Torres_73:

(4, 54822), (6, 54876), (9, 54888), (10, 54897), (11, 54918), (12, 54951), (13, 54972), (Start: 15 @55032 has 10 MA's), (28, 55101), (36, 55155),

Gene: Trice_70 Start: 52419, Stop: 52577, Start Num: 15

Candidate Starts for Trice_70:

(4, 52209), (6, 52263), (9, 52275), (10, 52284), (11, 52305), (12, 52338), (13, 52359), (Start: 15 @52419 has 10 MA's), (28, 52488), (36, 52542),

Gene: Validus_95 Start: 58505, Stop: 58669, Start Num: 18

Candidate Starts for Validus_95:

(2, 58148), (8, 58331), (Start: 18 @58505 has 1 MA's), (25, 58559), (28, 58571), (31, 58592),

Gene: ViviJ_89 Start: 55667, Stop: 55807, Start Num: 23

Candidate Starts for ViviJ_89:

(Start: 17 @55631 has 7 MA's), (Start: 23 @55667 has 19 MA's), (25, 55694),

Gene: Waterfoul_84 Start: 55470, Stop: 55616, Start Num: 23

Candidate Starts for Waterfoul_84:

(5, 55245), (7, 55269), (Start: 17 @55437 has 7 MA's), (Start: 23 @55470 has 19 MA's), (27, 55515), (34, 55563), (37, 55590),

Gene: Ximenita_95 Start: 57796, Stop: 57960, Start Num: 16

Candidate Starts for Ximenita_95:

(Start: 16 @57796 has 7 MA's), (31, 57880), (33, 57892),

Gene: Yuna_92 Start: 58580, Stop: 58747, Start Num: 16

Candidate Starts for Yuna_92:

(Start: 16 @58580 has 7 MA's), (31, 58670), (33, 58682),

Gene: Yunkel11_94 Start: 57232, Stop: 57393, Start Num: 17

Candidate Starts for Yunkel11_94:

(Start: 17 @57232 has 7 MA's), (31, 57319),