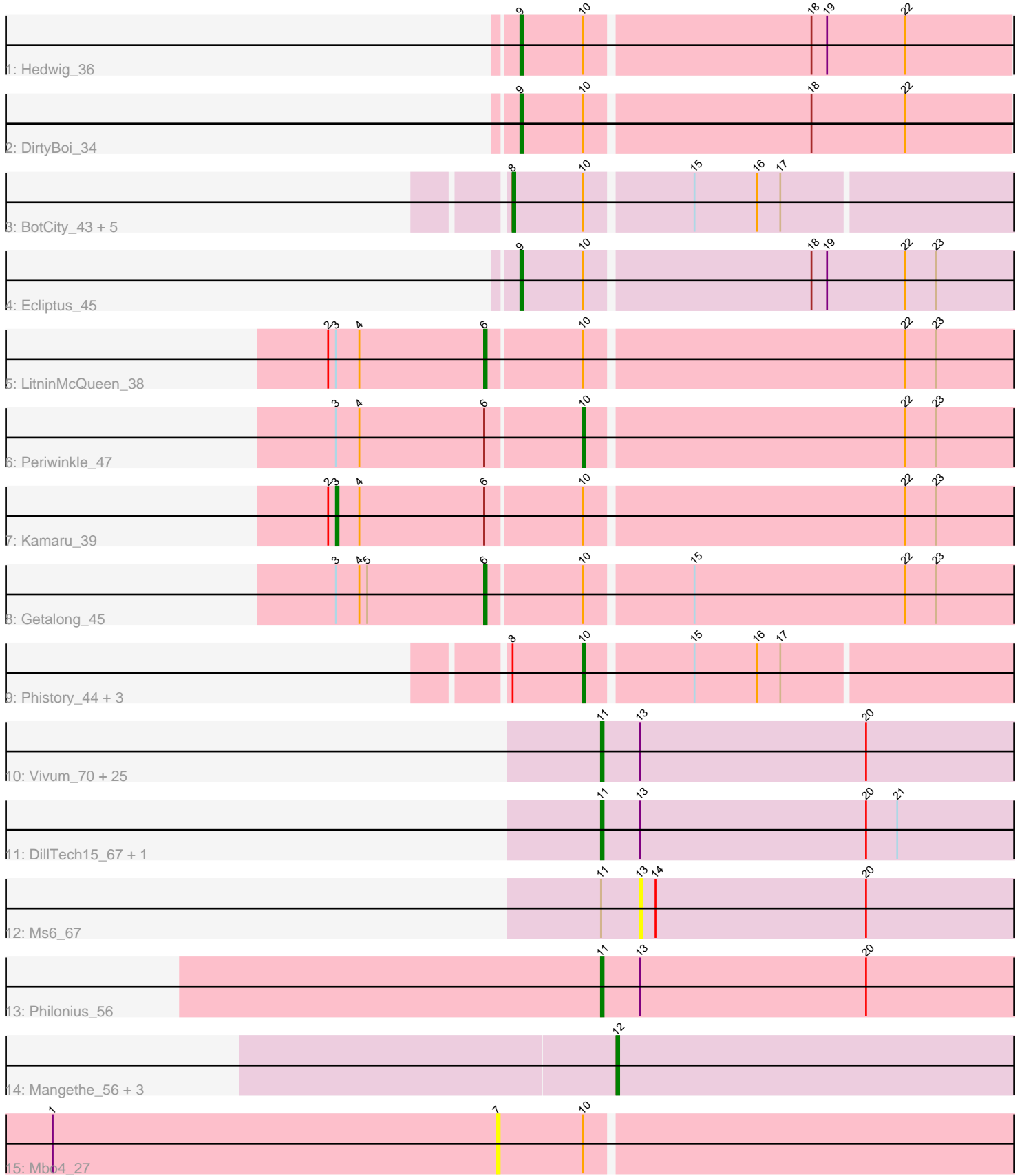


Pham 311680



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 311680 Report

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

Pham number 311680 has 52 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Hedwig_36
- Track 2 : DirtyBoi_34
- Track 3 : BotCity_43, Frickyeah_44, Lutum_44, CheeseTouch_42, Holliday_43, Crater_41
- Track 4 : Ecliptus_45
- Track 5 : LitninMcQueen_38
- Track 6 : Periwinkle_47
- Track 7 : Kamaru_39
- Track 8 : Getalong_45
- Track 9 : Phistory_44, ShawBrad_44, Kenna_43, Phabuloso_41
- Track 10 : Vivum_70, DLane_66, FreddyB_74, Babsiella_56, Seagreen_69, Akhila_61, Ovechkin_71, Medindi_67, Filuzino_69, Kingsley_72, Batiatus_67, Quico_78, DotProduct_65, Peridot_72, Girafales_78, Brushbloom_71, Kenuha5_67, PhlipPhlop_70, EmiMonkey_68, Ramsey_70, MilanaBonita_60, Florinda_81, Phanphagia_67, Shauna1_68, DaddyRickover_72, Hamulus_69
- Track 11 : DillTech15_67, Madiba_72
- Track 12 : Ms6_67
- Track 13 : Philonius_56
- Track 14 : Mangethe_56, Majeke_56, Zilizebeth_56, Phegasus_56
- Track 15 : Mbo4_27

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

The start number called the most often in the published annotations is 11, it was called in 26 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_61, Babsiella_56, Batiatus_67, Brushbloom_71, DLane_66, DaddyRickover_72, DillTech15_67, DotProduct_65, EmiMonkey_68, Filuzino_69, Florinda_81, FreddyB_74, Girafales_78, Hamulus_69, Kenuha5_67, Kingsley_72, Madiba_72, Medindi_67, MilanaBonita_60, Ovechkin_71, Peridot_72, Phanphagia_67, Philonius_56, PhlipPhlop_70, Quico_78, Ramsey_70, Seagreen_69, Shauna1_68, Vivum_70,

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

- Ms6_67,

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

- BotCity_43, CheeseTouch_42, Crater_41, DirtyBoi_34, Ecliptus_45, Frickyeah_44, Getalong_45, Hedwig_36, Holliday_43, Kamaru_39, Kenna_43, LitninMcQueen_38, Lutum_44, Majeke_56, Mangethe_56, Mbo4_27, Periwinkle_47, Phabuloso_41, Phegasus_56, Phistory_44, ShawBrad_44, Zilizebeth_56,

Summary by start number:

Start 3:

- Found in 4 of 52 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Kamaru_39 (DN1),

Start 6:

- Found in 4 of 52 (7.7%) of genes in pham
- Manual Annotations of this start: 2 of 45
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Getalong_45 (DN1), LitninMcQueen_38 (DN1),

Start 7:

- Found in 1 of 52 (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: Mbo4_27 (singleton),

Start 8:

- Found in 10 of 52 (19.2%) of genes in pham
- Manual Annotations of this start: 5 of 45
- Called 60.0% of time when present
- Phage (with cluster) where this start called: BotCity_43 (DN), CheeseTouch_42 (DN1), Crater_41 (DN3), Frickyeah_44 (DN1), Holliday_43 (DN1), Lutum_44 (DN1),

Start 9:

- Found in 3 of 52 (5.8%) of genes in pham
- Manual Annotations of this start: 3 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DirtyBoi_34 (DB), Ecliptus_45 (DN), Hedwig_36 (DB),

Start 10:

- Found in 18 of 52 (34.6%) of genes in pham
- Manual Annotations of this start: 4 of 45
- Called 27.8% of time when present
- Phage (with cluster) where this start called: Kenna_43 (DN1), Periwinkle_47 (DN1), Phabuloso_41 (DN1), Phistory_44 (DN1), ShawBrad_44 (DN1),

Start 11:

- Found in 30 of 52 (57.7%) of genes in pham

- Manual Annotations of this start: 26 of 45
- Called 96.7% of time when present
- Phage (with cluster) where this start called: Akhila_61 (F1), Babsiella_56 (I1), Batiatus_67 (F1), Brushbloom_71 (F1), DLane_66 (F1), DaddyRickover_72 (F1), DillTech15_67 (F1), DotProduct_65 (F1), EmiMonkey_68 (F1), Filuzino_69 (F1), Florinda_81 (F1), FreddyB_74 (F1), Girafales_78 (F1), Hamulus_69 (F1), Kenuha5_67 (F1), Kingsley_72 (F1), Madiba_72 (F1), Medindi_67 (F1), MilanaBonita_60 (F1), Ovechkin_71 (F1), Peridot_72 (F1), Phanphagia_67 (F1), Philonius_56 (N), PhlipPhlop_70 (F1), Quico_78 (F1), Ramsey_70 (F1), Seagreen_69 (F1), Shauna1_68 (F1), Vivum_70 (F1),

Start 12:

- Found in 4 of 52 (7.7%) of genes in pham
- Manual Annotations of this start: 4 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Majeke_56 (P1), Mangethe_56 (P1), Phegasus_56 (P1), Zilizebeth_56 (P1),

Start 13:

- Found in 30 of 52 (57.7%) of genes in pham
- No Manual Annotations of this start.
- Called 3.3% of time when present
- Phage (with cluster) where this start called: Ms6_67 (F1),

Summary by clusters:

There are 9 clusters represented in this pham: DN, F1, singleton, P1, I1, DB, N, DN1, DN3,

Info for manual annotations of cluster DB:

- Start number 9 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DN:

- Start number 8 was manually annotated 1 time for cluster DN.
- Start number 9 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 3 was manually annotated 1 time for cluster DN1.
- Start number 6 was manually annotated 2 times for cluster DN1.
- Start number 8 was manually annotated 3 times for cluster DN1.
- Start number 10 was manually annotated 4 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 8 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster F1:

- Start number 11 was manually annotated 24 times for cluster F1.

Info for manual annotations of cluster I1:

- Start number 11 was manually annotated 1 time for cluster I1.

Info for manual annotations of cluster N:

- Start number 11 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P1:

•Start number 12 was manually annotated 4 times for cluster P1.

Gene Information:

Gene: Akhila_61 Start: 40673, Stop: 40512, Start Num: 11

Candidate Starts for Akhila_61:

(Start: 11 @40673 has 26 MA's), (13, 40658), (20, 40571),

Gene: Babsiella_56 Start: 38691, Stop: 38530, Start Num: 11

Candidate Starts for Babsiella_56:

(Start: 11 @38691 has 26 MA's), (13, 38676), (20, 38589),

Gene: Batiatus_67 Start: 44226, Stop: 44065, Start Num: 11

Candidate Starts for Batiatus_67:

(Start: 11 @44226 has 26 MA's), (13, 44211), (20, 44124),

Gene: BotCity_43 Start: 30522, Stop: 30728, Start Num: 8

Candidate Starts for BotCity_43:

(Start: 8 @30522 has 5 MA's), (Start: 10 @30549 has 4 MA's), (15, 30588), (16, 30612), (17, 30621),

Gene: Brushbloom_71 Start: 45158, Stop: 44997, Start Num: 11

Candidate Starts for Brushbloom_71:

(Start: 11 @45158 has 26 MA's), (13, 45143), (20, 45056),

Gene: CheeseTouch_42 Start: 28258, Stop: 28476, Start Num: 8

Candidate Starts for CheeseTouch_42:

(Start: 8 @28258 has 5 MA's), (Start: 10 @28285 has 4 MA's), (15, 28324), (16, 28348), (17, 28357),

Gene: Crater_41 Start: 29856, Stop: 30074, Start Num: 8

Candidate Starts for Crater_41:

(Start: 8 @29856 has 5 MA's), (Start: 10 @29883 has 4 MA's), (15, 29922), (16, 29946), (17, 29955),

Gene: DLane_66 Start: 44160, Stop: 43999, Start Num: 11

Candidate Starts for DLane_66:

(Start: 11 @44160 has 26 MA's), (13, 44145), (20, 44058),

Gene: DaddyRickover_72 Start: 46759, Stop: 46598, Start Num: 11

Candidate Starts for DaddyRickover_72:

(Start: 11 @46759 has 26 MA's), (13, 46744), (20, 46657),

Gene: DillTech15_67 Start: 43001, Stop: 42840, Start Num: 11

Candidate Starts for DillTech15_67:

(Start: 11 @43001 has 26 MA's), (13, 42986), (20, 42899), (21, 42887),

Gene: DirtyBoi_34 Start: 28640, Stop: 28837, Start Num: 9

Candidate Starts for DirtyBoi_34:

(Start: 9 @28640 has 3 MA's), (Start: 10 @28664 has 4 MA's), (18, 28748), (22, 28784),

Gene: DotProduct_65 Start: 43940, Stop: 43779, Start Num: 11

Candidate Starts for DotProduct_65:
(Start: 11 @43940 has 26 MA's), (13, 43925), (20, 43838),

Gene: Ecliptus_45 Start: 32219, Stop: 32419, Start Num: 9
Candidate Starts for Ecliptus_45:
(Start: 9 @32219 has 3 MA's), (Start: 10 @32243 has 4 MA's), (18, 32327), (19, 32333), (22, 32363),
(23, 32375),

Gene: EmiMonkey_68 Start: 48687, Stop: 48526, Start Num: 11
Candidate Starts for EmiMonkey_68:
(Start: 11 @48687 has 26 MA's), (13, 48672), (20, 48585),

Gene: Filuzino_69 Start: 44711, Stop: 44550, Start Num: 11
Candidate Starts for Filuzino_69:
(Start: 11 @44711 has 26 MA's), (13, 44696), (20, 44609),

Gene: Florinda_81 Start: 46866, Stop: 46705, Start Num: 11
Candidate Starts for Florinda_81:
(Start: 11 @46866 has 26 MA's), (13, 46851), (20, 46764),

Gene: FreddyB_74 Start: 46101, Stop: 45940, Start Num: 11
Candidate Starts for FreddyB_74:
(Start: 11 @46101 has 26 MA's), (13, 46086), (20, 45999),

Gene: Frickyeah_44 Start: 29808, Stop: 30026, Start Num: 8
Candidate Starts for Frickyeah_44:
(Start: 8 @29808 has 5 MA's), (Start: 10 @29835 has 4 MA's), (15, 29874), (16, 29898), (17, 29907),

Gene: Getalong_45 Start: 32518, Stop: 32730, Start Num: 6
Candidate Starts for Getalong_45:
(Start: 3 @32461 has 1 MA's), (4, 32470), (5, 32473), (Start: 6 @32518 has 2 MA's), (Start: 10 @32554
has 4 MA's), (15, 32593), (22, 32674), (23, 32686),

Gene: Girafales_78 Start: 46657, Stop: 46496, Start Num: 11
Candidate Starts for Girafales_78:
(Start: 11 @46657 has 26 MA's), (13, 46642), (20, 46555),

Gene: Hamulus_69 Start: 44779, Stop: 44618, Start Num: 11
Candidate Starts for Hamulus_69:
(Start: 11 @44779 has 26 MA's), (13, 44764), (20, 44677),

Gene: Hedwig_36 Start: 29107, Stop: 29304, Start Num: 9
Candidate Starts for Hedwig_36:
(Start: 9 @29107 has 3 MA's), (Start: 10 @29131 has 4 MA's), (18, 29215), (19, 29221), (22, 29251),

Gene: Holliday_43 Start: 30383, Stop: 30601, Start Num: 8
Candidate Starts for Holliday_43:
(Start: 8 @30383 has 5 MA's), (Start: 10 @30410 has 4 MA's), (15, 30449), (16, 30473), (17, 30482),

Gene: Kamaru_39 Start: 29394, Stop: 29663, Start Num: 3
Candidate Starts for Kamaru_39:
(2, 29391), (Start: 3 @29394 has 1 MA's), (4, 29403), (Start: 6 @29451 has 2 MA's), (Start: 10 @29487
has 4 MA's), (22, 29607), (23, 29619),

Gene: Kenna_43 Start: 30746, Stop: 30937, Start Num: 10
Candidate Starts for Kenna_43:
(Start: 8 @30719 has 5 MA's), (Start: 10 @30746 has 4 MA's), (15, 30785), (16, 30809), (17, 30818),

Gene: Kenuha5_67 Start: 45969, Stop: 45808, Start Num: 11
Candidate Starts for Kenuha5_67:
(Start: 11 @45969 has 26 MA's), (13, 45954), (20, 45867),

Gene: Kingsley_72 Start: 47621, Stop: 47460, Start Num: 11
Candidate Starts for Kingsley_72:
(Start: 11 @47621 has 26 MA's), (13, 47606), (20, 47519),

Gene: LitninMcQueen_38 Start: 29200, Stop: 29412, Start Num: 6
Candidate Starts for LitninMcQueen_38:
(2, 29140), (Start: 3 @29143 has 1 MA's), (4, 29152), (Start: 6 @29200 has 2 MA's), (Start: 10 @29236 has 4 MA's), (22, 29356), (23, 29368),

Gene: Lutum_44 Start: 30719, Stop: 30937, Start Num: 8
Candidate Starts for Lutum_44:
(Start: 8 @30719 has 5 MA's), (Start: 10 @30746 has 4 MA's), (15, 30785), (16, 30809), (17, 30818),

Gene: Madiba_72 Start: 46532, Stop: 46371, Start Num: 11
Candidate Starts for Madiba_72:
(Start: 11 @46532 has 26 MA's), (13, 46517), (20, 46430), (21, 46418),

Gene: Majeke_56 Start: 37433, Stop: 37278, Start Num: 12
Candidate Starts for Majeke_56:
(Start: 12 @37433 has 4 MA's),

Gene: Mangethe_56 Start: 37433, Stop: 37278, Start Num: 12
Candidate Starts for Mangethe_56:
(Start: 12 @37433 has 4 MA's),

Gene: Mbo4_27 Start: 26962, Stop: 27171, Start Num: 7
Candidate Starts for Mbo4_27:
(1, 26791), (7, 26962), (Start: 10 @26995 has 4 MA's),

Gene: Medindi_67 Start: 43366, Stop: 43205, Start Num: 11
Candidate Starts for Medindi_67:
(Start: 11 @43366 has 26 MA's), (13, 43351), (20, 43264),

Gene: MilanaBonita_60 Start: 40673, Stop: 40512, Start Num: 11
Candidate Starts for MilanaBonita_60:
(Start: 11 @40673 has 26 MA's), (13, 40658), (20, 40571),

Gene: Ms6_67 Start: 40374, Stop: 40228, Start Num: 13
Candidate Starts for Ms6_67:
(Start: 11 @40389 has 26 MA's), (13, 40374), (14, 40368), (20, 40287),

Gene: Ovechkin_71 Start: 45449, Stop: 45288, Start Num: 11
Candidate Starts for Ovechkin_71:
(Start: 11 @45449 has 26 MA's), (13, 45434), (20, 45347),

Gene: Peridot_72 Start: 45346, Stop: 45185, Start Num: 11

Candidate Starts for Peridot_72:

(Start: 11 @45346 has 26 MA's), (13, 45331), (20, 45244),

Gene: Periwinkle_47 Start: 32200, Stop: 32376, Start Num: 10

Candidate Starts for Periwinkle_47:

(Start: 3 @32107 has 1 MA's), (4, 32116), (Start: 6 @32164 has 2 MA's), (Start: 10 @32200 has 4 MA's), (22, 32320), (23, 32332),

Gene: Phabuloso_41 Start: 30462, Stop: 30653, Start Num: 10

Candidate Starts for Phabuloso_41:

(Start: 8 @30435 has 5 MA's), (Start: 10 @30462 has 4 MA's), (15, 30501), (16, 30525), (17, 30534),

Gene: Phanphagia_67 Start: 44407, Stop: 44246, Start Num: 11

Candidate Starts for Phanphagia_67:

(Start: 11 @44407 has 26 MA's), (13, 44392), (20, 44305),

Gene: Phegasus_56 Start: 37400, Stop: 37245, Start Num: 12

Candidate Starts for Phegasus_56:

(Start: 12 @37400 has 4 MA's),

Gene: Philonius_56 Start: 37045, Stop: 36884, Start Num: 11

Candidate Starts for Philonius_56:

(Start: 11 @37045 has 26 MA's), (13, 37030), (20, 36943),

Gene: Phistory_44 Start: 31097, Stop: 31288, Start Num: 10

Candidate Starts for Phistory_44:

(Start: 8 @31070 has 5 MA's), (Start: 10 @31097 has 4 MA's), (15, 31136), (16, 31160), (17, 31169),

Gene: PhlipPhlop_70 Start: 48687, Stop: 48526, Start Num: 11

Candidate Starts for PhlipPhlop_70:

(Start: 11 @48687 has 26 MA's), (13, 48672), (20, 48585),

Gene: Quico_78 Start: 46686, Stop: 46525, Start Num: 11

Candidate Starts for Quico_78:

(Start: 11 @46686 has 26 MA's), (13, 46671), (20, 46584),

Gene: Ramsey_70 Start: 46837, Stop: 46676, Start Num: 11

Candidate Starts for Ramsey_70:

(Start: 11 @46837 has 26 MA's), (13, 46822), (20, 46735),

Gene: Seagreen_69 Start: 44285, Stop: 44124, Start Num: 11

Candidate Starts for Seagreen_69:

(Start: 11 @44285 has 26 MA's), (13, 44270), (20, 44183),

Gene: Shauna1_68 Start: 44657, Stop: 44496, Start Num: 11

Candidate Starts for Shauna1_68:

(Start: 11 @44657 has 26 MA's), (13, 44642), (20, 44555),

Gene: ShawBrad_44 Start: 30320, Stop: 30511, Start Num: 10

Candidate Starts for ShawBrad_44:

(Start: 8 @30293 has 5 MA's), (Start: 10 @30320 has 4 MA's), (15, 30359), (16, 30383), (17, 30392),

Gene: Vivum_70 Start: 47295, Stop: 47134, Start Num: 11
Candidate Starts for Vivum_70:
(Start: 11 @47295 has 26 MA's), (13, 47280), (20, 47193),

Gene: Zilizebeth_56 Start: 37424, Stop: 37269, Start Num: 12
Candidate Starts for Zilizebeth_56:
(Start: 12 @37424 has 4 MA's),