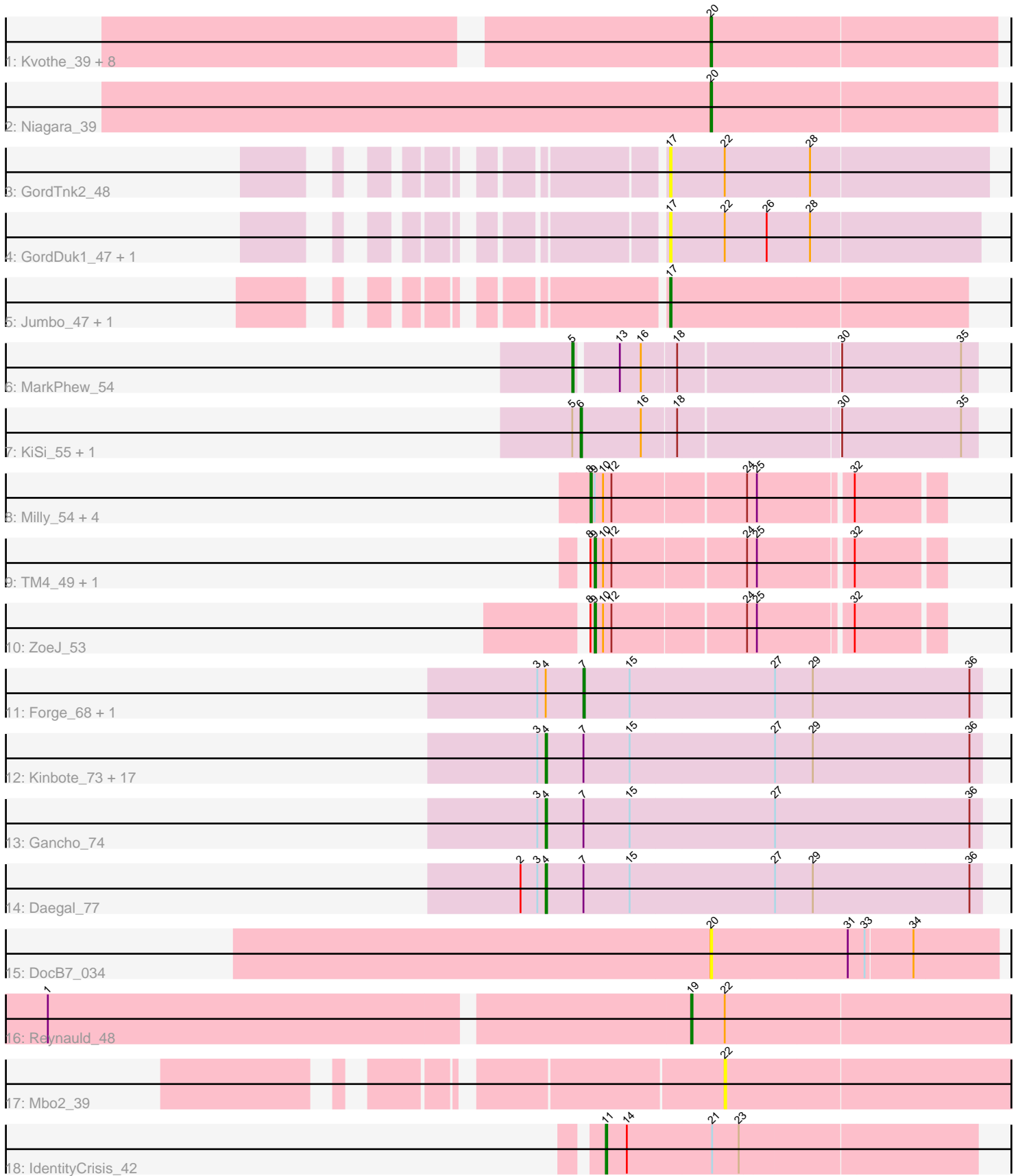


Pham 170023



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 170023 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170023 has 52 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Kvothe_39, Benczkowski14_39, Katyusha_39, Teech_40, Hollow_40, Demosthenes_39, Teatealatte_40, ASerpRocky_40, Tredge_40
- Track 2 : Niagara_39
- Track 3 : GordTnk2_48
- Track 4 : GordDuk1_47, Gmala1_46
- Track 5 : Jumbo_47, GMA3_48
- Track 6 : MarkPhew_54
- Track 7 : KiSi_55, LeMond_55
- Track 8 : Milly_54, Findley_54, DismalFunk_54, DismalStressor_54, Marcoliusprime_54
- Track 9 : TM4_49, Strobilo_54
- Track 10 : ZoeJ_53
- Track 11 : Forge_68, Wishmaker_68
- Track 12 : Kinbote_73, Ubuntu_75, Dewey_68, Hadrien_72, Evanesce_74, Gravaillia_69, LilHazelNut_75, Amymech_75, Ein37_75, Hail_68, OBUpride_74, Luna22_68, HH92_74, Luke_72, Amochick_76, DeepSoil15_75, Giles_68, Webster2_75
- Track 13 : Gancho_74
- Track 14 : Daegal_77
- Track 15 : DocB7_034
- Track 16 : Reynauld_48
- Track 17 : Mbo2_39
- Track 18 : IdentityCrisis_42

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

The start number called the most often in the published annotations is 4, it was called in 20 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amochick_76, Amymech_75, Daegal_77, DeepSoil15_75, Dewey_68, Ein37_75, Evanesce_74, Gancho_74, Giles_68, Gravaillia_69, HH92_74, Hadrien_72, Hail_68, Kinbote_73, LilHazelNut_75, Luke_72, Luna22_68, OBUpride_74, Ubuntu_75, Webster2_75,

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

- Forge_68, Wishmaker_68,

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

- ASerpRocky_40, Benczkowski14_39, Demosthenes_39, DismalFunk_54, DismalStressor_54, DocB7_034, Findley_54, GMA3_48, Gmala1_46, GordDuk1_47, GordTnk2_48, Hollow_40, IdentityCrisis_42, Jumbo_47, Katyusha_39, KiSi_55, Kvothe_39, LeMond_55, Marcoliusprime_54, MarkPhew_54, Mbo2_39, Milly_54, Niagara_39, Reynauld_48, Strobilo_54, TM4_49, Teatealatte_40, Teech_40, Tredge_40, ZoeJ_53,

Summary by start number:

Start 4:

- Found in 22 of 52 (42.3%) of genes in pham
- Manual Annotations of this start: 20 of 45
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Amochick_76 (Q), Amymech_75 (Q), Daegal_77 (Q), DeepSoil15_75 (Q), Dewey_68 (Q), Ein37_75 (Q), Evanesce_74 (Q), Gancho_74 (Q), Giles_68 (Q), Gravaillia_69 (Q), HH92_74 (Q), Hadrien_72 (Q), Hail_68 (Q), Kinbote_73 (Q), LilHazelnut_75 (Q), Luke_72 (Q), Luna22_68 (Q), OBUpride_74 (Q), Ubuntu_75 (Q), Webster2_75 (Q),

Start 5:

- Found in 3 of 52 (5.8%) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 33.3% of time when present
- Phage (with cluster) where this start called: MarkPhew_54 (K1),

Start 6:

- Found in 2 of 52 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KiSi_55 (K1), LeMond_55 (K1),

Start 7:

- Found in 22 of 52 (42.3%) of genes in pham
- Manual Annotations of this start: 2 of 45
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Forge_68 (Q), Wishmaker_68 (Q),

Start 8:

- Found in 8 of 52 (15.4%) of genes in pham
- Manual Annotations of this start: 5 of 45
- Called 62.5% of time when present
- Phage (with cluster) where this start called: DismalFunk_54 (K2), DismalStressor_54 (K2), Findley_54 (K2), Marcoliusprime_54 (K2), Milly_54 (K2),

Start 9:

- Found in 8 of 52 (15.4%) of genes in pham
- Manual Annotations of this start: 3 of 45
- Called 37.5% of time when present

- Phage (with cluster) where this start called: Strobilo_54 (K2), TM4_49 (K2), ZoeJ_53 (K2),

Start 11:

- Found in 1 of 52 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: IdentityCrisis_42 (singleton),

Start 17:

- Found in 5 of 52 (9.6%) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA3_48 (DF2), Gmala1_46 (DF1), GordDuk1_47 (DF1), GordTnk2_48 (DF1), Jumbo_47 (DF3),

Start 19:

- Found in 1 of 52 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Reynauld_48 (singleton),

Start 20:

- Found in 11 of 52 (21.2%) of genes in pham
- Manual Annotations of this start: 9 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_40 (CS4), Benczkowski14_39 (CS4), Demosthenes_39 (CS4), DocB7_034 (singleton), Hollow_40 (CS4), Katyusha_39 (CS4), Kvothe_39 (CS4), Niagara_39 (CS4), Teatealatte_40 (CS4), Teech_40 (CS4), Tredge_40 (CS4),

Start 22:

- Found in 5 of 52 (9.6%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Mbo2_39 (singleton),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, DF1, DF3, DF2, Q, K2, K1, CS4,

Info for manual annotations of cluster CS4:

- Start number 20 was manually annotated 9 times for cluster CS4.

Info for manual annotations of cluster DF3:

- Start number 17 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster K1:

- Start number 5 was manually annotated 1 time for cluster K1.
- Start number 6 was manually annotated 2 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 8 was manually annotated 5 times for cluster K2.
- Start number 9 was manually annotated 3 times for cluster K2.

Info for manual annotations of cluster Q:

- Start number 4 was manually annotated 20 times for cluster Q.
- Start number 7 was manually annotated 2 times for cluster Q.

Gene Information:

Gene: ASerpRocky_40 Start: 44241, Stop: 44041, Start Num: 20

Candidate Starts for ASerpRocky_40:

(Start: 20 @44241 has 9 MA's),

Gene: Amochick_76 Start: 49396, Stop: 49704, Start Num: 4

Candidate Starts for Amochick_76:

(3, 49390), (Start: 4 @49396 has 20 MA's), (Start: 7 @49423 has 2 MA's), (15, 49456), (27, 49558), (29, 49585), (36, 49696),

Gene: Amymech_75 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Amymech_75:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Benczkowski14_39 Start: 44274, Stop: 44074, Start Num: 20

Candidate Starts for Benczkowski14_39:

(Start: 20 @44274 has 9 MA's),

Gene: Daegal_77 Start: 49955, Stop: 50263, Start Num: 4

Candidate Starts for Daegal_77:

(2, 49937), (3, 49949), (Start: 4 @49955 has 20 MA's), (Start: 7 @49982 has 2 MA's), (15, 50015), (27, 50117), (29, 50144), (36, 50255),

Gene: DeepSoil15_75 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for DeepSoil15_75:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Demosthenes_39 Start: 44214, Stop: 44014, Start Num: 20

Candidate Starts for Demosthenes_39:

(Start: 20 @44214 has 9 MA's),

Gene: Dewey_68 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Dewey_68:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: DismalFunk_54 Start: 39559, Stop: 39792, Start Num: 8

Candidate Starts for DismalFunk_54:

(Start: 8 @39559 has 5 MA's), (Start: 9 @39562 has 3 MA's), (10, 39568), (12, 39574), (24, 39664), (25, 39670), (32, 39733),

Gene: DismalStressor_54 Start: 39559, Stop: 39792, Start Num: 8

Candidate Starts for DismalStressor_54:

(Start: 8 @39559 has 5 MA's), (Start: 9 @39562 has 3 MA's), (10, 39568), (12, 39574), (24, 39664), (25, 39670), (32, 39733),

Gene: DocB7_034 Start: 36428, Stop: 36228, Start Num: 20

Candidate Starts for DocB7_034:

(Start: 20 @36428 has 9 MA's), (31, 36332), (33, 36320), (34, 36287),

Gene: Ein37_75 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Ein37_75:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Evanesce_74 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Evanesce_74:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Findley_54 Start: 39552, Stop: 39785, Start Num: 8

Candidate Starts for Findley_54:

(Start: 8 @39552 has 5 MA's), (Start: 9 @39555 has 3 MA's), (10, 39561), (12, 39567), (24, 39657), (25, 39663), (32, 39726),

Gene: Forge_68 Start: 48876, Stop: 49157, Start Num: 7

Candidate Starts for Forge_68:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: GMA3_48 Start: 45185, Stop: 44973, Start Num: 17

Candidate Starts for GMA3_48:

(Start: 17 @45185 has 1 MA's),

Gene: Gancho_74 Start: 48624, Stop: 48932, Start Num: 4

Candidate Starts for Gancho_74:

(3, 48618), (Start: 4 @48624 has 20 MA's), (Start: 7 @48651 has 2 MA's), (15, 48684), (27, 48786), (36, 48924),

Gene: Giles_68 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Giles_68:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Gmala1_46 Start: 43387, Stop: 43169, Start Num: 17

Candidate Starts for Gmala1_46:

(Start: 17 @43387 has 1 MA's), (22, 43348), (26, 43318), (28, 43288),

Gene: GordDuk1_47 Start: 43538, Stop: 43320, Start Num: 17

Candidate Starts for GordDuk1_47:

(Start: 17 @43538 has 1 MA's), (22, 43499), (26, 43469), (28, 43439),

Gene: GordTnk2_48 Start: 43692, Stop: 43468, Start Num: 17

Candidate Starts for GordTnk2_48:

(Start: 17 @43692 has 1 MA's), (22, 43653), (28, 43593),

Gene: Gravaillia_69 Start: 48905, Stop: 49213, Start Num: 4

Candidate Starts for Gravaillia_69:

(3, 48899), (Start: 4 @48905 has 20 MA's), (Start: 7 @48932 has 2 MA's), (15, 48965), (27, 49067), (29, 49094), (36, 49205),

Gene: HH92_74 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for HH92_74:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Hadrien_72 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Hadrien_72:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Hail_68 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Hail_68:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Hollow_40 Start: 44620, Stop: 44420, Start Num: 20

Candidate Starts for Hollow_40:

(Start: 20 @44620 has 9 MA's),

Gene: IdentityCrisis_42 Start: 29075, Stop: 29332, Start Num: 11

Candidate Starts for IdentityCrisis_42:

(Start: 11 @29075 has 1 MA's), (14, 29090), (21, 29150), (23, 29168),

Gene: Jumbo_47 Start: 48027, Stop: 47818, Start Num: 17

Candidate Starts for Jumbo_47:

(Start: 17 @48027 has 1 MA's),

Gene: Katyusha_39 Start: 44274, Stop: 44074, Start Num: 20

Candidate Starts for Katyusha_39:

(Start: 20 @44274 has 9 MA's),

Gene: KiSi_55 Start: 38687, Stop: 38956, Start Num: 6

Candidate Starts for KiSi_55:

(Start: 5 @38681 has 1 MA's), (Start: 6 @38687 has 2 MA's), (16, 38729), (18, 38753), (30, 38861), (35, 38945),

Gene: Kinbote_73 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Kinbote_73:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Kvothe_39 Start: 44173, Stop: 43973, Start Num: 20

Candidate Starts for Kvothe_39:

(Start: 20 @44173 has 9 MA's),

Gene: LeMond_55 Start: 38671, Stop: 38940, Start Num: 6

Candidate Starts for LeMond_55:

(Start: 5 @38665 has 1 MA's), (Start: 6 @38671 has 2 MA's), (16, 38713), (18, 38737), (30, 38845), (35, 38929),

Gene: LilHazelnut_75 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for LilHazelnut_75:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Luke_72 Start: 48804, Stop: 49112, Start Num: 4

Candidate Starts for Luke_72:

(3, 48798), (Start: 4 @48804 has 20 MA's), (Start: 7 @48831 has 2 MA's), (15, 48864), (27, 48966), (29, 48993), (36, 49104),

Gene: Luna22_68 Start: 48833, Stop: 49141, Start Num: 4

Candidate Starts for Luna22_68:

(3, 48827), (Start: 4 @48833 has 20 MA's), (Start: 7 @48860 has 2 MA's), (15, 48893), (27, 48995), (29, 49022), (36, 49133),

Gene: Marcoliusprime_54 Start: 39559, Stop: 39792, Start Num: 8

Candidate Starts for Marcoliusprime_54:

(Start: 8 @39559 has 5 MA's), (Start: 9 @39562 has 3 MA's), (10, 39568), (12, 39574), (24, 39664), (25, 39670), (32, 39733),

Gene: MarkPhew_54 Start: 38124, Stop: 38393, Start Num: 5

Candidate Starts for MarkPhew_54:

(Start: 5 @38124 has 1 MA's), (13, 38151), (16, 38166), (18, 38190), (30, 38298), (35, 38382),

Gene: Mbo2_39 Start: 36317, Stop: 36114, Start Num: 22

Candidate Starts for Mbo2_39:

(22, 36317),

Gene: Milly_54 Start: 39532, Stop: 39765, Start Num: 8

Candidate Starts for Milly_54:

(Start: 8 @39532 has 5 MA's), (Start: 9 @39535 has 3 MA's), (10, 39541), (12, 39547), (24, 39637), (25, 39643), (32, 39706),

Gene: Niagara_39 Start: 44231, Stop: 44031, Start Num: 20

Candidate Starts for Niagara_39:

(Start: 20 @44231 has 9 MA's),

Gene: OBUpride_74 Start: 48893, Stop: 49201, Start Num: 4

Candidate Starts for OBUpride_74:

(3, 48887), (Start: 4 @48893 has 20 MA's), (Start: 7 @48920 has 2 MA's), (15, 48953), (27, 49055), (29, 49082), (36, 49193),

Gene: Reynauld_48 Start: 45364, Stop: 45140, Start Num: 19

Candidate Starts for Reynauld_48:

(1, 45808), (Start: 19 @45364 has 1 MA's), (22, 45340),

Gene: Strobilo_54 Start: 39537, Stop: 39767, Start Num: 9

Candidate Starts for Strobilo_54:

(Start: 8 @39534 has 5 MA's), (Start: 9 @39537 has 3 MA's), (10, 39543), (12, 39549), (24, 39639), (25, 39645), (32, 39708),

Gene: TM4_49 Start: 33917, Stop: 34147, Start Num: 9

Candidate Starts for TM4_49:

(Start: 8 @33914 has 5 MA's), (Start: 9 @33917 has 3 MA's), (10, 33923), (12, 33929), (24, 34019), (25, 34025), (32, 34088),

Gene: Teatealatte_40 Start: 44176, Stop: 43976, Start Num: 20

Candidate Starts for Teatealatte_40:

(Start: 20 @44176 has 9 MA's),

Gene: Teech_40 Start: 43977, Stop: 43777, Start Num: 20

Candidate Starts for Teech_40:

(Start: 20 @43977 has 9 MA's),

Gene: Tredge_40 Start: 44176, Stop: 43976, Start Num: 20

Candidate Starts for Tredge_40:

(Start: 20 @44176 has 9 MA's),

Gene: Ubuntu_75 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Ubuntu_75:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Webster2_75 Start: 48849, Stop: 49157, Start Num: 4

Candidate Starts for Webster2_75:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: Wishmaker_68 Start: 48876, Stop: 49157, Start Num: 7

Candidate Starts for Wishmaker_68:

(3, 48843), (Start: 4 @48849 has 20 MA's), (Start: 7 @48876 has 2 MA's), (15, 48909), (27, 49011), (29, 49038), (36, 49149),

Gene: ZoeJ_53 Start: 39008, Stop: 39238, Start Num: 9

Candidate Starts for ZoeJ_53:

(Start: 8 @39005 has 5 MA's), (Start: 9 @39008 has 3 MA's), (10, 39014), (12, 39020), (24, 39110), (25, 39116), (32, 39179),