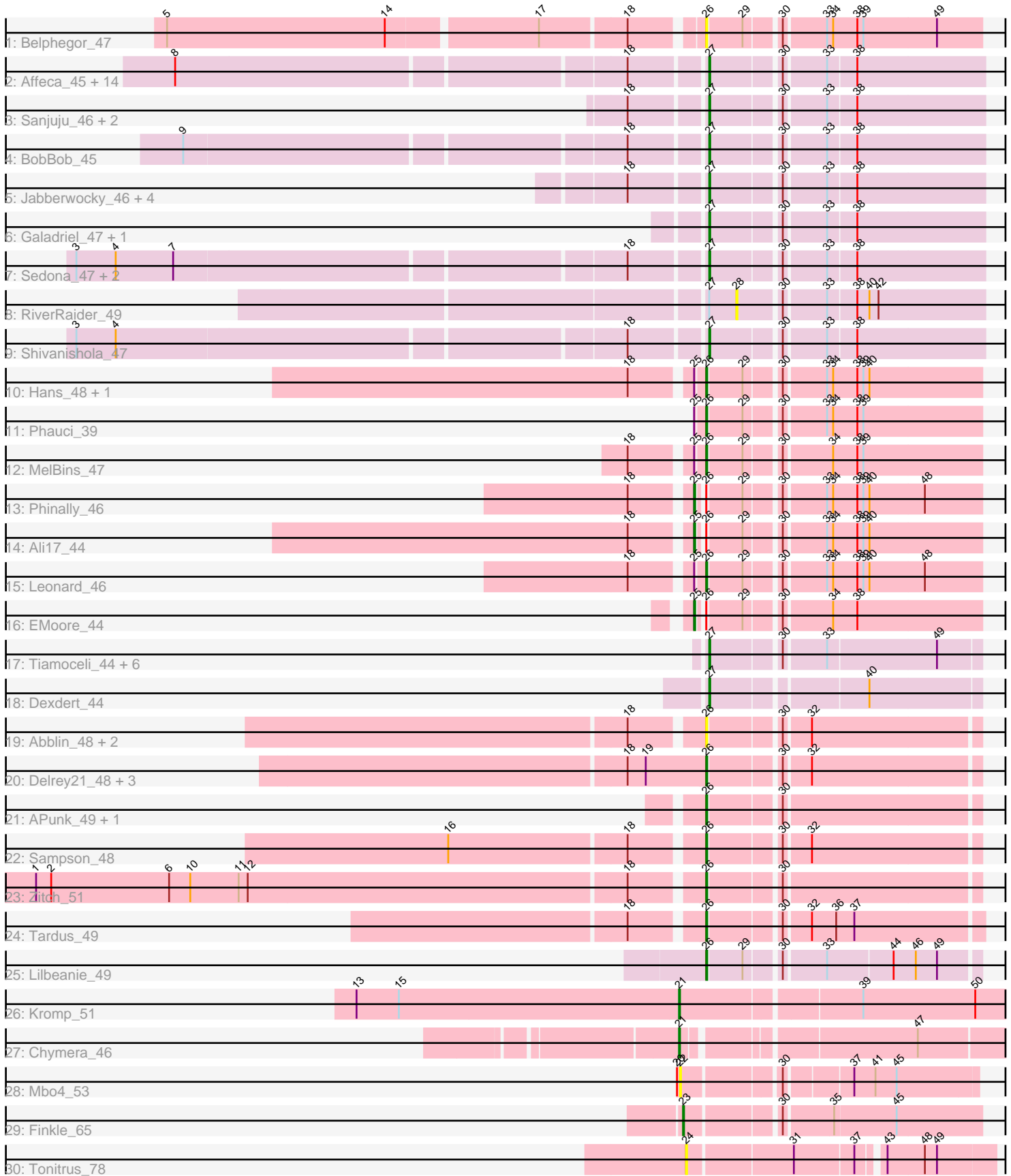


Pham 85583



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 85583 Report

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

Pham number 85583 has 66 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Belphegor_47
- Track 2 : Affeca_45, Charming_48, Lennon_47, Geodirt_46, Ailee_44, ChadMasterC_48, Angelicage_45, Tangent_48, Sitar_47, Kamashten_45, Fosterous_45, Keitabear_47, Thing3_45, Stultus_46, Love_51
- Track 3 : Sanjuju_46, MoontowerMania_47, Fitzgerald_46
- Track 4 : BobBob_45
- Track 5 : Jabberwocky_46, Vivi2_50, Barsten_48, McKinley_49, Kewpiedoll_47
- Track 6 : Galadriel_47, Paries_50
- Track 7 : Sedona_47, Nordenberg_42, Brandonk123_49
- Track 8 : RiverRaider_49
- Track 9 : Shivanishola_47
- Track 10 : Hans_48, Inspectinfecti_47
- Track 11 : Phauci_39
- Track 12 : MelBins_47
- Track 13 : Phinally_46
- Track 14 : Ali17_44
- Track 15 : Leonard_46
- Track 16 : EMoore_44
- Track 17 : Tiamoceli_44, Kwekel_43, Chickadee_43, GTE6_43, RoadKill_41, Twonlo_41, EdmundFerry_42
- Track 18 : Dextert_44
- Track 19 : Abblin_48, Natkenzie_48, Scioto_49
- Track 20 : Delrey21_48, Verity_48, Zipp_49, DoctorFroggo_48
- Track 21 : APunk_49, ViaConlectus_48
- Track 22 : Sampson_48
- Track 23 : Zitch_51
- Track 24 : Tardus_49
- Track 25 : Lilbeanie_49
- Track 26 : Kromp_51
- Track 27 : Chymera_46
- Track 28 : Mbo4_53
- Track 29 : Finkle_65
- Track 30 : Tonitrus_78

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

The start number called the most often in the published annotations is 27, it was called in 34 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Affeca_45, Ailee_44, Angelicage_45, Barsten_48, BobBob_45, Brandonk123_49, ChadMasterC_48, Charming_48, Chickadee_43, Dextert_44, EdmundFerry_42, Fitzgerald_46, Fosterous_45, GTE6_43, Galadriel_47, Geodirt_46, Jabberwocky_46, Kamashten_45, Keitabear_47, Kewpiedoll_47, Kwekel_43, Lennon_47, Love_51, McKinley_49, MoontowerMania_47, Nordenberg_42, Paries_50, RoadKill_41, Sanjuju_46, Sedona_47, Shivanishola_47, Sitar_47, Stultus_46, Tangent_48, Thing3_45, Tiamoceli_44, Twonlo_41, Vivi2_50,

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

- RiverRaider_49,

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

- APunk_49, Abblin_48, Ali17_44, Belphegor_47, Chymera_46, Delrey21_48, DoctorFroggo_48, EMOore_44, Finkle_65, Hans_48, Inspectinfecti_47, Kromp_51, Leonard_46, Lilbeanie_49, Mbo4_53, MelBins_47, Natkenzie_48, Phauci_39, Phinally_46, Sampson_48, Scioto_49, Tardus_49, Tonitrus_78, Verity_48, ViaConlectus_48, Zipp_49, Zitch_51,

Summary by start number:

Start 21:

- Found in 2 of 66 (3.0%) of genes in pham
- Manual Annotations of this start: 2 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chymera_46 (singleton), Kromp_51 (singleton),

Start 22:

- Found in 1 of 66 (1.5%) 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_53 (singleton),

Start 23:

- Found in 1 of 66 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finkle_65 (singleton),

Start 24:

- Found in 1 of 66 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tonitrus_78 (singleton),

Start 25:

- Found in 8 of 66 (12.1%) of genes in pham
- Manual Annotations of this start: 3 of 54

- Called 37.5% of time when present
- Phage (with cluster) where this start called: Ali17_44 (DE2), EMoore_44 (DE2), Phinally_46 (DE2),

Start 26:

- Found in 22 of 66 (33.3%) of genes in pham
- Manual Annotations of this start: 14 of 54
- Called 86.4% of time when present
- Phage (with cluster) where this start called: APunk_49 (DE4), Abblin_48 (DE4), Belphegor_47 (DE), Delrey21_48 (DE4), DoctorFroggo_48 (DE4), Hans_48 (DE2), Inspectinfecti_47 (DE2), Leonard_46 (DE2), Lilbeanie_49 (DE5), MelBins_47 (DE2), Natkenzie_48 (DE4), Phauci_39 (DE2), Sampson_48 (DE4), Scioto_49 (DE4), Tardus_49 (DE4), Verity_48 (DE4), ViaConlectus_48 (DE4), Zipp_49 (DE4), Zitch_51 (DE4),

Start 27:

- Found in 39 of 66 (59.1%) of genes in pham
- Manual Annotations of this start: 34 of 54
- Called 97.4% of time when present
- Phage (with cluster) where this start called: Affeca_45 (DE1), Ailee_44 (DE1), Angelicage_45 (DE1), Barsten_48 (DE1), BobBob_45 (DE1), Brandonk123_49 (DE1), ChadMasterC_48 (DE1), Charming_48 (DE1), Chickadee_43 (DE3), Dextert_44 (DE3), EdmundFerry_42 (DE3), Fitzgerald_46 (DE1), Fosterous_45 (DE1), GTE6_43 (DE3), Galadriel_47 (DE1), Geodirt_46 (DE1), Jabberwocky_46 (DE1), Kamashten_45 (DE1), Keitabear_47 (DE1), Kewpiedoll_47 (DE1), Kwekel_43 (DE3), Lennon_47 (DE1), Love_51 (DE1), McKinley_49 (DE1), MoontowerMania_47 (DE1), Nordenberg_42 (DE1), Paries_50 (DE1), RoadKill_41 (DE3), Sanjuju_46 (DE1), Sedona_47 (DE1), Shivanishola_47 (DE1), Sitar_47 (DE1), Stultus_46 (DE1), Tangent_48 (DE1), Thing3_45 (DE1), Tiamoceli_44 (DE3), Twonlo_41 (DE3), Vivi2_50 (DE1),

Start 28:

- Found in 1 of 66 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RiverRaider_49 (DE1),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, DE, DE1, DE2, DE3, DE4, DE5,

Info for manual annotations of cluster DE1:

- Start number 27 was manually annotated 28 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 25 was manually annotated 3 times for cluster DE2.
- Start number 26 was manually annotated 4 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 27 was manually annotated 6 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 26 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 26 was manually annotated 1 time for cluster DE5.

Gene Information:

Gene: APunk_49 Start: 41353, Stop: 41601, Start Num: 26

Candidate Starts for APunk_49:

(Start: 26 @41353 has 14 MA's), (30, 41416),

Gene: Abblin_48 Start: 41901, Stop: 42149, Start Num: 26

Candidate Starts for Abblin_48:

(18, 41841), (Start: 26 @41901 has 14 MA's), (30, 41964), (32, 41988),

Gene: Affeca_45 Start: 40714, Stop: 40968, Start Num: 27

Candidate Starts for Affeca_45:

(8, 40219), (18, 40645), (Start: 27 @40714 has 34 MA's), (30, 40777), (33, 40816), (38, 40843),

Gene: Ailee_44 Start: 40307, Stop: 40561, Start Num: 27

Candidate Starts for Ailee_44:

(8, 39812), (18, 40238), (Start: 27 @40307 has 34 MA's), (30, 40370), (33, 40409), (38, 40436),

Gene: Ali17_44 Start: 39603, Stop: 39860, Start Num: 25

Candidate Starts for Ali17_44:

(18, 39549), (Start: 25 @39603 has 3 MA's), (Start: 26 @39606 has 14 MA's), (29, 39639), (30, 39669), (33, 39708), (34, 39714), (38, 39738), (39, 39744), (40, 39750),

Gene: Angelicage_45 Start: 41132, Stop: 41386, Start Num: 27

Candidate Starts for Angelicage_45:

(8, 40637), (18, 41063), (Start: 27 @41132 has 34 MA's), (30, 41195), (33, 41234), (38, 41261),

Gene: Barsten_48 Start: 41287, Stop: 41541, Start Num: 27

Candidate Starts for Barsten_48:

(18, 41218), (Start: 27 @41287 has 34 MA's), (30, 41350), (33, 41389), (38, 41416),

Gene: Belphegor_47 Start: 41646, Stop: 41900, Start Num: 26

Candidate Starts for Belphegor_47:

(5, 41151), (14, 41367), (17, 41508), (18, 41589), (Start: 26 @41646 has 14 MA's), (29, 41679), (30, 41709), (33, 41748), (34, 41754), (38, 41778), (39, 41784), (49, 41856),

Gene: BobBob_45 Start: 40405, Stop: 40659, Start Num: 27

Candidate Starts for BobBob_45:

(9, 39919), (18, 40336), (Start: 27 @40405 has 34 MA's), (30, 40468), (33, 40507), (38, 40534),

Gene: Brandonk123_49 Start: 41539, Stop: 41793, Start Num: 27

Candidate Starts for Brandonk123_49:

(3, 40948), (4, 40987), (7, 41044), (18, 41470), (Start: 27 @41539 has 34 MA's), (30, 41602), (33, 41641), (38, 41668),

Gene: ChadMasterC_48 Start: 42686, Stop: 42940, Start Num: 27
Candidate Starts for ChadMasterC_48:
(8, 42191), (18, 42617), (Start: 27 @42686 has 34 MA's), (30, 42749), (33, 42788), (38, 42815),

Gene: Charming_48 Start: 41042, Stop: 41296, Start Num: 27
Candidate Starts for Charming_48:
(8, 40547), (18, 40973), (Start: 27 @41042 has 34 MA's), (30, 41105), (33, 41144), (38, 41171),

Gene: Chickadee_43 Start: 37502, Stop: 37750, Start Num: 27
Candidate Starts for Chickadee_43:
(Start: 27 @37502 has 34 MA's), (30, 37565), (33, 37604), (49, 37709),

Gene: Chymera_46 Start: 29959, Stop: 30270, Start Num: 21
Candidate Starts for Chymera_46:
(Start: 21 @29959 has 2 MA's), (47, 30166),

Gene: Delrey21_48 Start: 42667, Stop: 42915, Start Num: 26
Candidate Starts for Delrey21_48:
(18, 42595), (19, 42613), (Start: 26 @42667 has 14 MA's), (30, 42730), (32, 42754),

Gene: Dexdert_44 Start: 37764, Stop: 38012, Start Num: 27
Candidate Starts for Dexdert_44:
(Start: 27 @37764 has 34 MA's), (40, 37905),

Gene: DoctorFroggo_48 Start: 42667, Stop: 42915, Start Num: 26
Candidate Starts for DoctorFroggo_48:
(18, 42595), (19, 42613), (Start: 26 @42667 has 14 MA's), (30, 42730), (32, 42754),

Gene: EMoore_44 Start: 40804, Stop: 41061, Start Num: 25
Candidate Starts for EMoore_44:
(Start: 25 @40804 has 3 MA's), (Start: 26 @40807 has 14 MA's), (29, 40840), (30, 40870), (34, 40915), (38, 40939),

Gene: EdmundFerry_42 Start: 37543, Stop: 37791, Start Num: 27
Candidate Starts for EdmundFerry_42:
(Start: 27 @37543 has 34 MA's), (30, 37606), (33, 37645), (49, 37750),

Gene: Finkle_65 Start: 40751, Stop: 41023, Start Num: 23
Candidate Starts for Finkle_65:
(Start: 23 @40751 has 1 MA's), (30, 40835), (35, 40880), (45, 40940),

Gene: Fitzgerald_46 Start: 41944, Stop: 42198, Start Num: 27
Candidate Starts for Fitzgerald_46:
(18, 41875), (Start: 27 @41944 has 34 MA's), (30, 42007), (33, 42046), (38, 42073),

Gene: Fosterous_45 Start: 40503, Stop: 40757, Start Num: 27
Candidate Starts for Fosterous_45:
(8, 40008), (18, 40434), (Start: 27 @40503 has 34 MA's), (30, 40566), (33, 40605), (38, 40632),

Gene: GTE6_43 Start: 38035, Stop: 38283, Start Num: 27
Candidate Starts for GTE6_43:
(Start: 27 @38035 has 34 MA's), (30, 38098), (33, 38137), (49, 38242),

Gene: Galadriel_47 Start: 41310, Stop: 41564, Start Num: 27

Candidate Starts for Galadriel_47:

(Start: 27 @41310 has 34 MA's), (30, 41373), (33, 41412), (38, 41439),

Gene: Geodirt_46 Start: 41922, Stop: 42176, Start Num: 27

Candidate Starts for Geodirt_46:

(8, 41427), (18, 41853), (Start: 27 @41922 has 34 MA's), (30, 41985), (33, 42024), (38, 42051),

Gene: Hans_48 Start: 40246, Stop: 40500, Start Num: 26

Candidate Starts for Hans_48:

(18, 40189), (Start: 25 @40243 has 3 MA's), (Start: 26 @40246 has 14 MA's), (29, 40279), (30, 40309), (33, 40348), (34, 40354), (38, 40378), (39, 40384), (40, 40390),

Gene: Inspectinfecti_47 Start: 40692, Stop: 40946, Start Num: 26

Candidate Starts for Inspectinfecti_47:

(18, 40635), (Start: 25 @40689 has 3 MA's), (Start: 26 @40692 has 14 MA's), (29, 40725), (30, 40755), (33, 40794), (34, 40800), (38, 40824), (39, 40830), (40, 40836),

Gene: Jabberwocky_46 Start: 42348, Stop: 42602, Start Num: 27

Candidate Starts for Jabberwocky_46:

(18, 42279), (Start: 27 @42348 has 34 MA's), (30, 42411), (33, 42450), (38, 42477),

Gene: Kamashten_45 Start: 40283, Stop: 40537, Start Num: 27

Candidate Starts for Kamashten_45:

(8, 39788), (18, 40214), (Start: 27 @40283 has 34 MA's), (30, 40346), (33, 40385), (38, 40412),

Gene: Keitabear_47 Start: 41938, Stop: 42192, Start Num: 27

Candidate Starts for Keitabear_47:

(8, 41443), (18, 41869), (Start: 27 @41938 has 34 MA's), (30, 42001), (33, 42040), (38, 42067),

Gene: Kewpiedoll_47 Start: 41224, Stop: 41478, Start Num: 27

Candidate Starts for Kewpiedoll_47:

(18, 41155), (Start: 27 @41224 has 34 MA's), (30, 41287), (33, 41326), (38, 41353),

Gene: Kromp_51 Start: 37631, Stop: 37978, Start Num: 21

Candidate Starts for Kromp_51:

(13, 37313), (15, 37355), (Start: 21 @37631 has 2 MA's), (39, 37799), (50, 37910),

Gene: Kwekel_43 Start: 37463, Stop: 37711, Start Num: 27

Candidate Starts for Kwekel_43:

(Start: 27 @37463 has 34 MA's), (30, 37526), (33, 37565), (49, 37670),

Gene: Lennon_47 Start: 42027, Stop: 42281, Start Num: 27

Candidate Starts for Lennon_47:

(8, 41532), (18, 41958), (Start: 27 @42027 has 34 MA's), (30, 42090), (33, 42129), (38, 42156),

Gene: Leonard_46 Start: 40336, Stop: 40590, Start Num: 26

Candidate Starts for Leonard_46:

(18, 40279), (Start: 25 @40333 has 3 MA's), (Start: 26 @40336 has 14 MA's), (29, 40369), (30, 40399), (33, 40438), (34, 40444), (38, 40468), (39, 40474), (40, 40480), (48, 40534),

Gene: Lilbeanie_49 Start: 37033, Stop: 37278, Start Num: 26

Candidate Starts for Lilbeanie_49:

(Start: 26 @37033 has 14 MA's), (29, 37066), (30, 37096), (33, 37135), (44, 37198), (46, 37219), (49, 37240),

Gene: Love_51 Start: 42475, Stop: 42729, Start Num: 27

Candidate Starts for Love_51:

(8, 41980), (18, 42406), (Start: 27 @42475 has 34 MA's), (30, 42538), (33, 42577), (38, 42604),

Gene: Mbo4_53 Start: 39385, Stop: 39651, Start Num: 22

Candidate Starts for Mbo4_53:

(20, 39382), (22, 39385), (30, 39472), (37, 39532), (41, 39553), (45, 39574),

Gene: McKinley_49 Start: 41848, Stop: 42102, Start Num: 27

Candidate Starts for McKinley_49:

(18, 41779), (Start: 27 @41848 has 34 MA's), (30, 41911), (33, 41950), (38, 41977),

Gene: MelBins_47 Start: 40486, Stop: 40740, Start Num: 26

Candidate Starts for MelBins_47:

(18, 40429), (Start: 25 @40483 has 3 MA's), (Start: 26 @40486 has 14 MA's), (29, 40519), (30, 40549), (34, 40594), (38, 40618), (39, 40624),

Gene: MoontowerMania_47 Start: 41683, Stop: 41937, Start Num: 27

Candidate Starts for MoontowerMania_47:

(18, 41614), (Start: 27 @41683 has 34 MA's), (30, 41746), (33, 41785), (38, 41812),

Gene: Natkenzie_48 Start: 41901, Stop: 42149, Start Num: 26

Candidate Starts for Natkenzie_48:

(18, 41841), (Start: 26 @41901 has 14 MA's), (30, 41964), (32, 41988),

Gene: Nordenberg_42 Start: 40666, Stop: 40920, Start Num: 27

Candidate Starts for Nordenberg_42:

(3, 40075), (4, 40114), (7, 40171), (18, 40597), (Start: 27 @40666 has 34 MA's), (30, 40729), (33, 40768), (38, 40795),

Gene: Paries_50 Start: 42137, Stop: 42391, Start Num: 27

Candidate Starts for Paries_50:

(Start: 27 @42137 has 34 MA's), (30, 42200), (33, 42239), (38, 42266),

Gene: Phauci_39 Start: 37188, Stop: 37442, Start Num: 26

Candidate Starts for Phauci_39:

(Start: 25 @37185 has 3 MA's), (Start: 26 @37188 has 14 MA's), (29, 37221), (30, 37251), (33, 37290), (34, 37296), (38, 37320), (39, 37326),

Gene: Phinally_46 Start: 40330, Stop: 40587, Start Num: 25

Candidate Starts for Phinally_46:

(18, 40276), (Start: 25 @40330 has 3 MA's), (Start: 26 @40333 has 14 MA's), (29, 40366), (30, 40396), (33, 40435), (34, 40441), (38, 40465), (39, 40471), (40, 40477), (48, 40531),

Gene: RiverRaider_49 Start: 39950, Stop: 40180, Start Num: 28

Candidate Starts for RiverRaider_49:

(Start: 27 @39923 has 34 MA's), (28, 39950), (30, 39989), (33, 40028), (38, 40055), (40, 40067), (42, 40076),

Gene: RoadKill_41 Start: 37038, Stop: 37286, Start Num: 27

Candidate Starts for RoadKill_41:

(Start: 27 @37038 has 34 MA's), (30, 37101), (33, 37140), (49, 37245),

Gene: Sampson_48 Start: 41846, Stop: 42094, Start Num: 26

Candidate Starts for Sampson_48:

(16, 41615), (18, 41786), (Start: 26 @41846 has 14 MA's), (30, 41909), (32, 41933),

Gene: Sanjuju_46 Start: 42077, Stop: 42331, Start Num: 27

Candidate Starts for Sanjuju_46:

(18, 42008), (Start: 27 @42077 has 34 MA's), (30, 42140), (33, 42179), (38, 42206),

Gene: Scioto_49 Start: 41902, Stop: 42150, Start Num: 26

Candidate Starts for Scioto_49:

(18, 41842), (Start: 26 @41902 has 14 MA's), (30, 41965), (32, 41989),

Gene: Sedona_47 Start: 41672, Stop: 41926, Start Num: 27

Candidate Starts for Sedona_47:

(3, 41081), (4, 41120), (7, 41177), (18, 41603), (Start: 27 @41672 has 34 MA's), (30, 41735), (33, 41774), (38, 41801),

Gene: Shivanishola_47 Start: 40342, Stop: 40596, Start Num: 27

Candidate Starts for Shivanishola_47:

(3, 39751), (4, 39790), (18, 40273), (Start: 27 @40342 has 34 MA's), (30, 40405), (33, 40444), (38, 40471),

Gene: Sitar_47 Start: 42027, Stop: 42281, Start Num: 27

Candidate Starts for Sitar_47:

(8, 41532), (18, 41958), (Start: 27 @42027 has 34 MA's), (30, 42090), (33, 42129), (38, 42156),

Gene: Stultus_46 Start: 40980, Stop: 41234, Start Num: 27

Candidate Starts for Stultus_46:

(8, 40485), (18, 40911), (Start: 27 @40980 has 34 MA's), (30, 41043), (33, 41082), (38, 41109),

Gene: Tangent_48 Start: 41054, Stop: 41308, Start Num: 27

Candidate Starts for Tangent_48:

(8, 40559), (18, 40985), (Start: 27 @41054 has 34 MA's), (30, 41117), (33, 41156), (38, 41183),

Gene: Tardus_49 Start: 41242, Stop: 41493, Start Num: 26

Candidate Starts for Tardus_49:

(18, 41182), (Start: 26 @41242 has 14 MA's), (30, 41305), (32, 41329), (36, 41353), (37, 41371),

Gene: Thing3_45 Start: 40283, Stop: 40537, Start Num: 27

Candidate Starts for Thing3_45:

(8, 39788), (18, 40214), (Start: 27 @40283 has 34 MA's), (30, 40346), (33, 40385), (38, 40412),

Gene: Tiamoceli_44 Start: 38359, Stop: 38607, Start Num: 27

Candidate Starts for Tiamoceli_44:

(Start: 27 @38359 has 34 MA's), (30, 38422), (33, 38461), (49, 38566),

Gene: Tonitrus_78 Start: 54338, Stop: 54619, Start Num: 24

Candidate Starts for Tonitrus_78:

(24, 54338), (31, 54437), (37, 54494), (43, 54515), (48, 54551), (49, 54563),

Gene: Twonlo_41 Start: 36989, Stop: 37237, Start Num: 27
Candidate Starts for Twonlo_41:
(Start: 27 @36989 has 34 MA's), (30, 37052), (33, 37091), (49, 37196),

Gene: Verity_48 Start: 42667, Stop: 42915, Start Num: 26
Candidate Starts for Verity_48:
(18, 42595), (19, 42613), (Start: 26 @42667 has 14 MA's), (30, 42730), (32, 42754),

Gene: ViaConlectus_48 Start: 40525, Stop: 40773, Start Num: 26
Candidate Starts for ViaConlectus_48:
(Start: 26 @40525 has 14 MA's), (30, 40588),

Gene: Vivi2_50 Start: 42081, Stop: 42335, Start Num: 27
Candidate Starts for Vivi2_50:
(18, 42012), (Start: 27 @42081 has 34 MA's), (30, 42144), (33, 42183), (38, 42210),

Gene: Zipp_49 Start: 42582, Stop: 42830, Start Num: 26
Candidate Starts for Zipp_49:
(18, 42510), (19, 42528), (Start: 26 @42582 has 14 MA's), (30, 42645), (32, 42669),

Gene: Zitch_51 Start: 40681, Stop: 40929, Start Num: 26
Candidate Starts for Zitch_51:
(1, 40042), (2, 40057), (6, 40174), (10, 40195), (11, 40243), (12, 40252), (18, 40621), (Start: 26 @40681 has 14 MA's), (30, 40744),