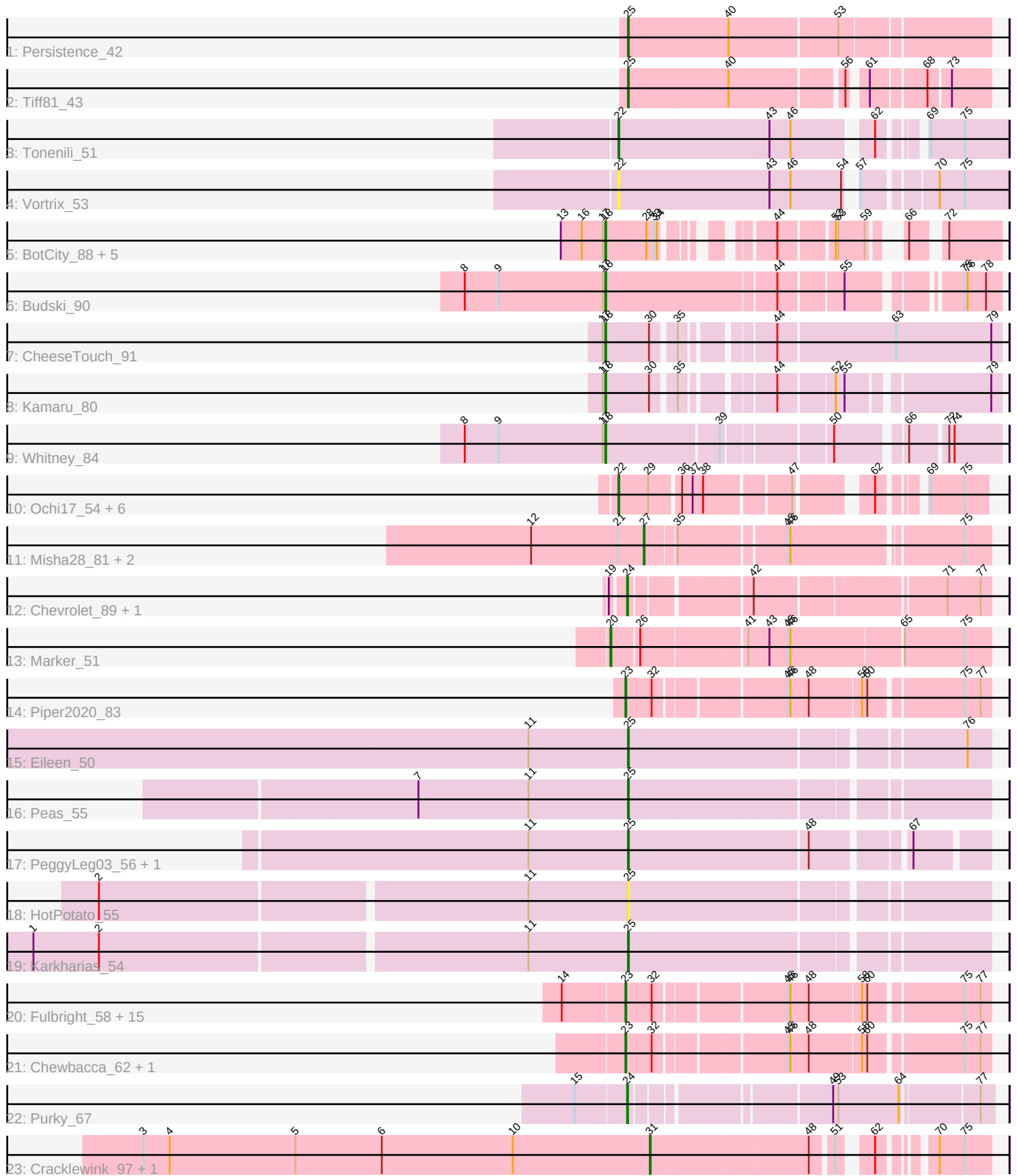


Pham 278252



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 278252 Report

This analysis was run 02/07/26 on database version 634.

Pham number 278252 has 55 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Persistence_42
- Track 2 : Tiff81_43
- Track 3 : Tonenili_51
- Track 4 : Vortrix_53
- Track 5 : BotCity_88, Lutum_87, Kenna_81, BENtherdunthat_86, Getalong_89, Phabuloso_93
- Track 6 : Budski_90
- Track 7 : CheeseTouch_91
- Track 8 : Kamaru_80
- Track 9 : Whitney_84
- Track 10 : Ochi17_54, AlpineSix_56, Seabastian_56, OfUltron_56, Jinglebell_56, Modragons_55, Llama_56
- Track 11 : Misha28_81, Awesomesauce_81, TootsiePop_81
- Track 12 : Chevrolet_89, ArcusAngelus_86
- Track 13 : Marker_51
- Track 14 : Piper2020_83
- Track 15 : Eileen_50
- Track 16 : Peas_55
- Track 17 : PeggyLeg03_56, Pucara_53
- Track 18 : HotPotato_55
- Track 19 : Karkharias_54
- Track 20 : Fulbright_58, Melville_65, Duplicity_58, Frankie_78, Parmesanjohn_60, Schnauzer_61, Pipsqueaks_61, Silvy_56, Philonius_60, Smurph_60, Aggie_56, Gex_61, Xerxes_60, Phloss_58, Carcharodon_60, Silvafighter_61
- Track 21 : Chewbacca_62, FirstPlacePfu_61
- Track 22 : Purky_67
- Track 23 : Cracklewink_97, Bipper_97

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 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aggie_56, Carcharodon_60, Chewbacca_62, Duplicity_58, FirstPlacePfu_61, Frankie_78, Fulbright_58, Gex_61, Melville_65, Parmesanjohn_60, Philonius_60, Phloss_58, Piper2020_83, Pipsqueaks_61, Schnauzer_61, Silvafighter_61, Silvy_56, Smurph_60, Xerxes_60,

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

-

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

- AlpineSix_56, ArcusAngelus_86, Awesomesauce_81, BENtherdunthat_86, Bipper_97, BotCity_88, Budski_90, CheeseTouch_91, Chevrolet_89, Cracklewink_97, Eileen_50, Getalong_89, HotPotato_55, Jinglebell_56, Kamaru_80, Karkharias_54, Kenna_81, Llama_56, Lutum_87, Marker_51, Misha28_81, Modragons_55, Ochi17_54, OfUltron_56, Peas_55, PeggyLeg03_56, Persistence_42, Phabuloso_93, Pucara_53, Purky_67, Seabastian_56, Tiff81_43, Tonenili_51, TootsiePop_81, Vortrix_53, Whitney_84,

Summary by start number:

Start 18:

- Found in 10 of 55 (18.2%) of genes in pham
- Manual Annotations of this start: 10 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BENtherdunthat_86 (DN1), BotCity_88 (DN), Budski_90 (DN), CheeseTouch_91 (DN1), Getalong_89 (DN1), Kamaru_80 (DN1), Kenna_81 (DN1), Lutum_87 (DN1), Phabuloso_93 (DN1), Whitney_84 (DN1),

Start 20:

- Found in 1 of 55 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Marker_51 (F1),

Start 22:

- Found in 9 of 55 (16.4%) of genes in pham
- Manual Annotations of this start: 8 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlpineSix_56 (F1), Jinglebell_56 (F1), Llama_56 (F1), Modragons_55 (F1), Ochi17_54 (F1), OfUltron_56 (F1), Seabastian_56 (F1), Tonenili_51 (C1), Vortrix_53 (C1),

Start 23:

- Found in 19 of 55 (34.5%) of genes in pham
- Manual Annotations of this start: 19 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aggie_56 (N), Carcharodon_60 (N), Chewbacca_62 (N), Duplicity_58 (N), FirstPlacePfu_61 (P1), Frankie_78 (F1), Fulbright_58 (N), Gex_61 (N), Melville_65 (N), Parmesanjohn_60 (N), Philonius_60 (N), Phloss_58 (N), Piper2020_83 (F1), Pipsqueaks_61 (N), Schnauzer_61 (N), Silvafighter_61 (N), Silvy_56 (N), Smurph_60 (N), Xerxes_60 (N),

Start 24:

- Found in 3 of 55 (5.5%) of genes in pham

- Manual Annotations of this start: 3 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArcusAngelus_86 (F1), Chevrolet_89 (F1), Purky_67 (P6),

Start 25:

- Found in 8 of 55 (14.5%) of genes in pham
- Manual Annotations of this start: 6 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Eileen_50 (FA), HotPotato_55 (FA), Karkharias_54 (FA), Peas_55 (FA), PeggyLeg03_56 (FA), Persistence_42 (AY), Pucara_53 (FA), Tiff81_43 (AY),

Start 27:

- Found in 3 of 55 (5.5%) of genes in pham
- Manual Annotations of this start: 3 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Awesomesauce_81 (F1), Misha28_81 (F1), TootsiePop_81 (F1),

Start 31:

- Found in 2 of 55 (3.6%) of genes in pham
- Manual Annotations of this start: 2 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipper_97 (Y), Cracklewink_97 (Y),

Summary by clusters:

There are 10 clusters represented in this pham: DN, F1, P1, P6, N, FA, AY, DN1, Y, C1,

Info for manual annotations of cluster AY:

- Start number 25 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster C1:

- Start number 22 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster DN:

- Start number 18 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 18 was manually annotated 8 times for cluster DN1.

Info for manual annotations of cluster F1:

- Start number 20 was manually annotated 1 time for cluster F1.
- Start number 22 was manually annotated 7 times for cluster F1.
- Start number 23 was manually annotated 2 times for cluster F1.
- Start number 24 was manually annotated 2 times for cluster F1.
- Start number 27 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster FA:

- Start number 25 was manually annotated 4 times for cluster FA.

Info for manual annotations of cluster N:

- Start number 23 was manually annotated 16 times for cluster N.

Info for manual annotations of cluster P1:

- Start number 23 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster P6:

- Start number 24 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster Y:

- Start number 31 was manually annotated 2 times for cluster Y.

Gene Information:

Gene: Aggie_56 Start: 38873, Stop: 39247, Start Num: 23

Candidate Starts for Aggie_56:

(14, 38804), (Start: 23 @38873 has 19 MA's), (32, 38903), (45, 39035), (46, 39038), (48, 39059), (58, 39116), (60, 39122), (75, 39218), (77, 39236),

Gene: AlpineSix_56 Start: 38900, Stop: 39235, Start Num: 22

Candidate Starts for AlpineSix_56:

(Start: 22 @38900 has 8 MA's), (29, 38933), (36, 38960), (37, 38972), (38, 38984), (47, 39068), (62, 39134), (69, 39170), (75, 39209),

Gene: ArcusAngelus_86 Start: 50829, Stop: 51188, Start Num: 24

Candidate Starts for ArcusAngelus_86:

(19, 50814), (Start: 24 @50829 has 3 MA's), (42, 50943), (71, 51141), (77, 51177),

Gene: Awesomesauce_81 Start: 49905, Stop: 50261, Start Num: 27

Candidate Starts for Awesomesauce_81:

(12, 49779), (21, 49875), (Start: 27 @49905 has 3 MA's), (35, 49938), (45, 50049), (46, 50052), (75, 50232),

Gene: BENtherdunthat_86 Start: 47569, Stop: 47898, Start Num: 18

Candidate Starts for BENtherdunthat_86:

(13, 47518), (16, 47542), (17, 47566), (Start: 18 @47569 has 10 MA's), (28, 47614), (33, 47623), (34, 47626), (44, 47707), (52, 47761), (53, 47764), (59, 47794), (66, 47812), (72, 47839),

Gene: Bipper_97 Start: 61646, Stop: 61966, Start Num: 31

Candidate Starts for Bipper_97:

(3, 61067), (4, 61097), (5, 61241), (6, 61340), (10, 61490), (Start: 31 @61646 has 2 MA's), (48, 61820), (51, 61841), (62, 61868), (70, 61910), (75, 61937),

Gene: BotCity_88 Start: 49098, Stop: 49427, Start Num: 18

Candidate Starts for BotCity_88:

(13, 49047), (16, 49071), (17, 49095), (Start: 18 @49098 has 10 MA's), (28, 49143), (33, 49152), (34, 49155), (44, 49236), (52, 49290), (53, 49293), (59, 49323), (66, 49341), (72, 49368),

Gene: Budski_90 Start: 49904, Stop: 50302, Start Num: 18

Candidate Starts for Budski_90:

(8, 49745), (9, 49784), (17, 49901), (Start: 18 @49904 has 10 MA's), (44, 50090), (55, 50156), (75, 50261), (76, 50264), (78, 50285),

Gene: Carcharodon_60 Start: 38217, Stop: 38591, Start Num: 23

Candidate Starts for Carcharodon_60:

(14, 38148), (Start: 23 @38217 has 19 MA's), (32, 38247), (45, 38379), (46, 38382), (48, 38403), (58, 38460), (60, 38466), (75, 38562), (77, 38580),

Gene: CheeseTouch_91 Start: 45223, Stop: 45627, Start Num: 18

Candidate Starts for CheeseTouch_91:

(17, 45220), (Start: 18 @45223 has 10 MA's), (30, 45271), (35, 45295), (44, 45379), (63, 45508), (79, 45616),

Gene: Chevrolet_89 Start: 50830, Stop: 51189, Start Num: 24

Candidate Starts for Chevrolet_89:

(19, 50815), (Start: 24 @50830 has 3 MA's), (42, 50944), (71, 51142), (77, 51178),

Gene: Chewbacca_62 Start: 38112, Stop: 38486, Start Num: 23

Candidate Starts for Chewbacca_62:

(Start: 23 @38112 has 19 MA's), (32, 38142), (45, 38274), (46, 38277), (48, 38298), (58, 38355), (60, 38361), (75, 38457), (77, 38475),

Gene: Cracklewink_97 Start: 60881, Stop: 61201, Start Num: 31

Candidate Starts for Cracklewink_97:

(3, 60302), (4, 60332), (5, 60476), (6, 60575), (10, 60725), (Start: 31 @60881 has 2 MA's), (48, 61055), (51, 61076), (62, 61103), (70, 61145), (75, 61172),

Gene: Duplicity_58 Start: 37474, Stop: 37848, Start Num: 23

Candidate Starts for Duplicity_58:

(14, 37405), (Start: 23 @37474 has 19 MA's), (32, 37504), (45, 37636), (46, 37639), (48, 37660), (58, 37717), (60, 37723), (75, 37819), (77, 37837),

Gene: Eileen_50 Start: 33209, Stop: 33589, Start Num: 25

Candidate Starts for Eileen_50:

(11, 33095), (Start: 25 @33209 has 6 MA's), (76, 33563),

Gene: FirstPlacePfu_61 Start: 38017, Stop: 38391, Start Num: 23

Candidate Starts for FirstPlacePfu_61:

(Start: 23 @38017 has 19 MA's), (32, 38047), (45, 38179), (46, 38182), (48, 38203), (58, 38260), (60, 38266), (75, 38362), (77, 38380),

Gene: Frankie_78 Start: 46606, Stop: 46980, Start Num: 23

Candidate Starts for Frankie_78:

(14, 46537), (Start: 23 @46606 has 19 MA's), (32, 46636), (45, 46768), (46, 46771), (48, 46792), (58, 46849), (60, 46855), (75, 46951), (77, 46969),

Gene: Fulbright_58 Start: 36911, Stop: 37285, Start Num: 23

Candidate Starts for Fulbright_58:

(14, 36842), (Start: 23 @36911 has 19 MA's), (32, 36941), (45, 37073), (46, 37076), (48, 37097), (58, 37154), (60, 37160), (75, 37256), (77, 37274),

Gene: Getalong_89 Start: 50024, Stop: 50353, Start Num: 18

Candidate Starts for Getalong_89:

(13, 49973), (16, 49997), (17, 50021), (Start: 18 @50024 has 10 MA's), (28, 50069), (33, 50078), (34, 50081), (44, 50162), (52, 50216), (53, 50219), (59, 50249), (66, 50267), (72, 50294),

Gene: Gex_61 Start: 38233, Stop: 38607, Start Num: 23

Candidate Starts for Gex_61:

(14, 38164), (Start: 23 @38233 has 19 MA's), (32, 38263), (45, 38395), (46, 38398), (48, 38419), (58, 38476), (60, 38482), (75, 38578), (77, 38596),

Gene: HotPotato_55 Start: 35870, Stop: 36250, Start Num: 25

Candidate Starts for HotPotato_55:

(2, 35288), (11, 35756), (Start: 25 @35870 has 6 MA's),

Gene: Jinglebell_56 Start: 38899, Stop: 39234, Start Num: 22

Candidate Starts for Jinglebell_56:

(Start: 22 @38899 has 8 MA's), (29, 38932), (36, 38959), (37, 38971), (38, 38983), (47, 39067), (62, 39133), (69, 39169), (75, 39208),

Gene: Kamaru_80 Start: 46524, Stop: 46901, Start Num: 18

Candidate Starts for Kamaru_80:

(17, 46521), (Start: 18 @46524 has 10 MA's), (30, 46572), (35, 46596), (44, 46680), (52, 46737), (55, 46746), (79, 46890),

Gene: Karkharias_54 Start: 35360, Stop: 35740, Start Num: 25

Candidate Starts for Karkharias_54:

(1, 34703), (2, 34778), (11, 35246), (Start: 25 @35360 has 6 MA's),

Gene: Kenna_81 Start: 46842, Stop: 47171, Start Num: 18

Candidate Starts for Kenna_81:

(13, 46791), (16, 46815), (17, 46839), (Start: 18 @46842 has 10 MA's), (28, 46887), (33, 46896), (34, 46899), (44, 46980), (52, 47034), (53, 47037), (59, 47067), (66, 47085), (72, 47112),

Gene: Llama_56 Start: 38897, Stop: 39232, Start Num: 22

Candidate Starts for Llama_56:

(Start: 22 @38897 has 8 MA's), (29, 38930), (36, 38957), (37, 38969), (38, 38981), (47, 39065), (62, 39131), (69, 39167), (75, 39206),

Gene: Lutum_87 Start: 48004, Stop: 48333, Start Num: 18

Candidate Starts for Lutum_87:

(13, 47953), (16, 47977), (17, 48001), (Start: 18 @48004 has 10 MA's), (28, 48049), (33, 48058), (34, 48061), (44, 48142), (52, 48196), (53, 48199), (59, 48229), (66, 48247), (72, 48274),

Gene: Marker_51 Start: 36567, Stop: 36971, Start Num: 20

Candidate Starts for Marker_51:

(Start: 20 @36567 has 1 MA's), (26, 36597), (41, 36705), (43, 36729), (45, 36750), (46, 36753), (65, 36873), (75, 36942),

Gene: Melville_65 Start: 37788, Stop: 38162, Start Num: 23

Candidate Starts for Melville_65:

(14, 37719), (Start: 23 @37788 has 19 MA's), (32, 37818), (45, 37950), (46, 37953), (48, 37974), (58, 38031), (60, 38037), (75, 38133), (77, 38151),

Gene: Misha28_81 Start: 50604, Stop: 50960, Start Num: 27

Candidate Starts for Misha28_81:

(12, 50478), (21, 50574), (Start: 27 @50604 has 3 MA's), (35, 50637), (45, 50748), (46, 50751), (75, 50931),

Gene: Modragons_55 Start: 38743, Stop: 39078, Start Num: 22

Candidate Starts for Modragons_55:

(Start: 22 @38743 has 8 MA's), (29, 38776), (36, 38803), (37, 38815), (38, 38827), (47, 38911), (62, 38977), (69, 39013), (75, 39052),

Gene: Ochi17_54 Start: 38350, Stop: 38685, Start Num: 22

Candidate Starts for Ochi17_54:

(Start: 22 @38350 has 8 MA's), (29, 38383), (36, 38410), (37, 38422), (38, 38434), (47, 38518), (62, 38584), (69, 38620), (75, 38659),

Gene: OfUltron_56 Start: 38899, Stop: 39234, Start Num: 22

Candidate Starts for OfUltron_56:

(Start: 22 @38899 has 8 MA's), (29, 38932), (36, 38959), (37, 38971), (38, 38983), (47, 39067), (62, 39133), (69, 39169), (75, 39208),

Gene: Parmesanjohn_60 Start: 38237, Stop: 38611, Start Num: 23

Candidate Starts for Parmesanjohn_60:

(14, 38168), (Start: 23 @38237 has 19 MA's), (32, 38267), (45, 38399), (46, 38402), (48, 38423), (58, 38480), (60, 38486), (75, 38582), (77, 38600),

Gene: Peas_55 Start: 37101, Stop: 37481, Start Num: 25

Candidate Starts for Peas_55:

(7, 36861), (11, 36987), (Start: 25 @37101 has 6 MA's),

Gene: PeggyLeg03_56 Start: 35841, Stop: 36212, Start Num: 25

Candidate Starts for PeggyLeg03_56:

(11, 35727), (Start: 25 @35841 has 6 MA's), (48, 36039), (67, 36135),

Gene: Persistence_42 Start: 28529, Stop: 28921, Start Num: 25

Candidate Starts for Persistence_42:

(Start: 25 @28529 has 6 MA's), (40, 28643), (53, 28760),

Gene: Phabuloso_93 Start: 49496, Stop: 49825, Start Num: 18

Candidate Starts for Phabuloso_93:

(13, 49445), (16, 49469), (17, 49493), (Start: 18 @49496 has 10 MA's), (28, 49541), (33, 49550), (34, 49553), (44, 49634), (52, 49688), (53, 49691), (59, 49721), (66, 49739), (72, 49766),

Gene: Philonius_60 Start: 38402, Stop: 38776, Start Num: 23

Candidate Starts for Philonius_60:

(14, 38333), (Start: 23 @38402 has 19 MA's), (32, 38432), (45, 38564), (46, 38567), (48, 38588), (58, 38645), (60, 38651), (75, 38747), (77, 38765),

Gene: Phloss_58 Start: 37644, Stop: 38018, Start Num: 23

Candidate Starts for Phloss_58:

(14, 37575), (Start: 23 @37644 has 19 MA's), (32, 37674), (45, 37806), (46, 37809), (48, 37830), (58, 37887), (60, 37893), (75, 37989), (77, 38007),

Gene: Piper2020_83 Start: 51001, Stop: 51375, Start Num: 23

Candidate Starts for Piper2020_83:

(Start: 23 @51001 has 19 MA's), (32, 51031), (45, 51163), (46, 51166), (48, 51187), (58, 51244), (60, 51250), (75, 51346), (77, 51364),

Gene: Pipsqueaks_61 Start: 38215, Stop: 38589, Start Num: 23

Candidate Starts for Pipsqueaks_61:

(14, 38146), (Start: 23 @38215 has 19 MA's), (32, 38245), (45, 38377), (46, 38380), (48, 38401), (58, 38458), (60, 38464), (75, 38560), (77, 38578),

Gene: Pucara_53 Start: 35446, Stop: 35817, Start Num: 25

Candidate Starts for Pucara_53:

(11, 35332), (Start: 25 @35446 has 6 MA's), (48, 35644), (67, 35740),

Gene: Purky_67 Start: 42925, Stop: 43284, Start Num: 24

Candidate Starts for Purky_67:

(15, 42868), (Start: 24 @42925 has 3 MA's), (49, 43117), (53, 43123), (64, 43189), (77, 43270),

Gene: Schnauzer_61 Start: 38237, Stop: 38611, Start Num: 23

Candidate Starts for Schnauzer_61:

(14, 38168), (Start: 23 @38237 has 19 MA's), (32, 38267), (45, 38399), (46, 38402), (48, 38423), (58, 38480), (60, 38486), (75, 38582), (77, 38600),

Gene: Seabastian_56 Start: 38900, Stop: 39235, Start Num: 22

Candidate Starts for Seabastian_56:

(Start: 22 @38900 has 8 MA's), (29, 38933), (36, 38960), (37, 38972), (38, 38984), (47, 39068), (62, 39134), (69, 39170), (75, 39209),

Gene: Silvafighter_61 Start: 37780, Stop: 38154, Start Num: 23

Candidate Starts for Silvafighter_61:

(14, 37711), (Start: 23 @37780 has 19 MA's), (32, 37810), (45, 37942), (46, 37945), (48, 37966), (58, 38023), (60, 38029), (75, 38125), (77, 38143),

Gene: Silvy_56 Start: 38873, Stop: 39247, Start Num: 23

Candidate Starts for Silvy_56:

(14, 38804), (Start: 23 @38873 has 19 MA's), (32, 38903), (45, 39035), (46, 39038), (48, 39059), (58, 39116), (60, 39122), (75, 39218), (77, 39236),

Gene: Smurph_60 Start: 38237, Stop: 38611, Start Num: 23

Candidate Starts for Smurph_60:

(14, 38168), (Start: 23 @38237 has 19 MA's), (32, 38267), (45, 38399), (46, 38402), (48, 38423), (58, 38480), (60, 38486), (75, 38582), (77, 38600),

Gene: Tiff81_43 Start: 27821, Stop: 28186, Start Num: 25

Candidate Starts for Tiff81_43:

(Start: 25 @27821 has 6 MA's), (40, 27935), (56, 28052), (61, 28067), (68, 28121), (73, 28142),

Gene: Tonenili_51 Start: 16033, Stop: 16419, Start Num: 22

Candidate Starts for Tonenili_51:

(Start: 22 @16033 has 8 MA's), (43, 16195), (46, 16219), (62, 16294), (69, 16330), (75, 16369),

Gene: TootsiePop_81 Start: 50604, Stop: 50960, Start Num: 27

Candidate Starts for TootsiePop_81:

(12, 50478), (21, 50574), (Start: 27 @50604 has 3 MA's), (35, 50637), (45, 50748), (46, 50751), (75, 50931),

Gene: Vortrix_53 Start: 16317, Stop: 16712, Start Num: 22

Candidate Starts for Vortrix_53:

(Start: 22 @16317 has 8 MA's), (43, 16479), (46, 16503), (54, 16560), (57, 16563), (70, 16635), (75, 16662),

Gene: Whitney_84 Start: 49207, Stop: 49602, Start Num: 18

Candidate Starts for Whitney_84:

(8, 49048), (9, 49087), (17, 49204), (Start: 18 @49207 has 10 MA's), (39, 49327), (50, 49435), (66, 49504), (72, 49543), (74, 49549),

Gene: Xerxes_60 Start: 38234, Stop: 38608, Start Num: 23

Candidate Starts for Xerxes_60:

(14, 38165), (Start: 23 @38234 has 19 MA's), (32, 38264), (45, 38396), (46, 38399), (48, 38420), (58, 38477), (60, 38483), (75, 38579), (77, 38597),