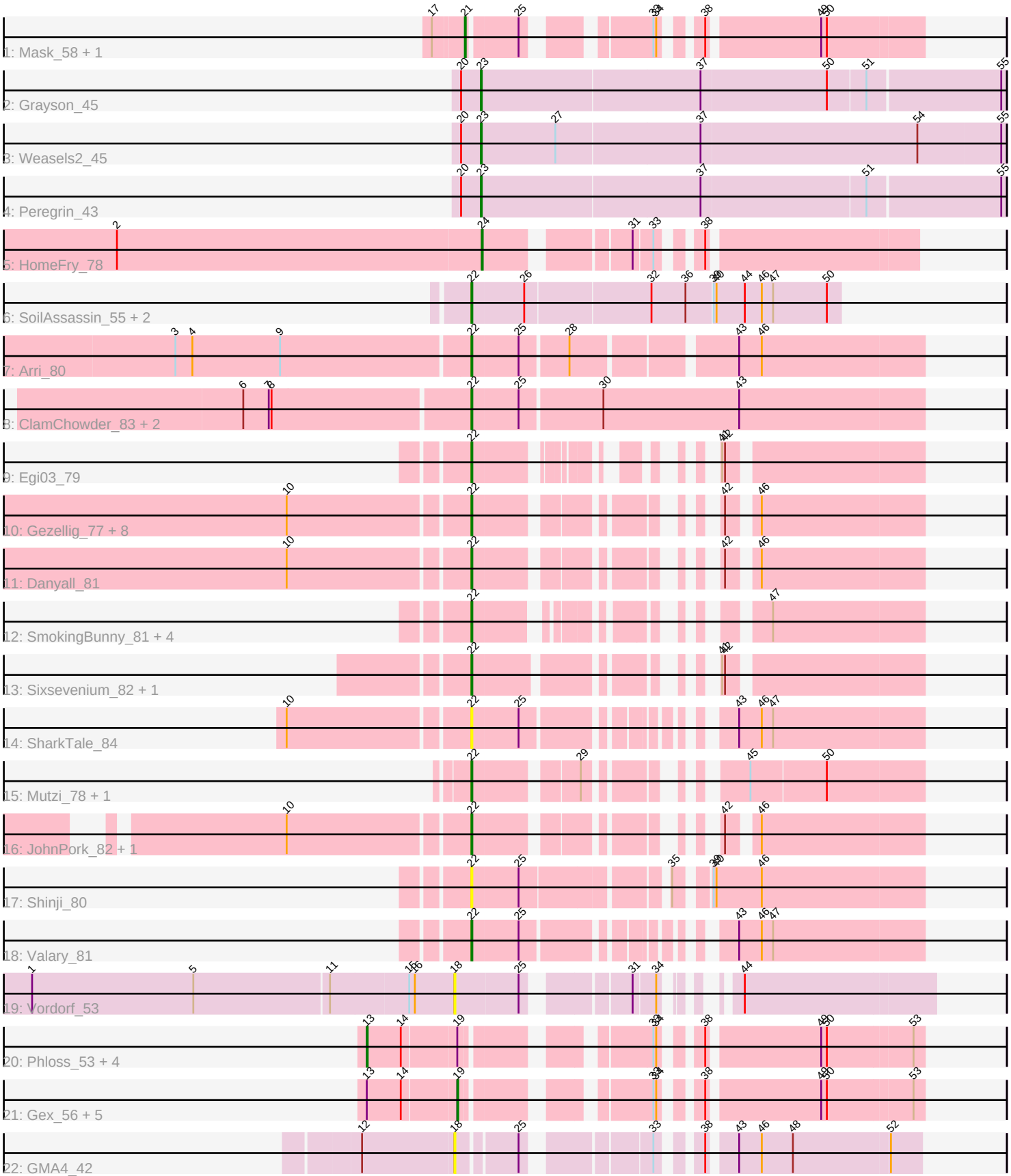
Pham 347715


1: Mask_58 + 1
2: Grayson_45
3: Weasels2_45
4: Peregrin_43
5: HomeFry_78
6: SoilAssassin_55 + 2
7: Arri_80
8: ClamChowder_83 + 2
9: Egi03_79
10: Gezellig_77 + 8
11: Danyall_81
12: SmokingBunny_81 + 4
13: Sixsevenium_82 + 1
14: SharkTale_84
15: Mutzi_78 + 1
16: JohnPork_82 + 1
17: Shinji_80
18: Valary_81
19: Vordorf_53
20: Phloss_53 + 4
21: Gex_56 + 5
22: GMA4_42

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 347715 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347715 has 51 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Mask_58, Dori_58
• Track 2 : Grayson_45
• Track 3 : Weasels2_45
• Track 4 : Peregrin_43
• Track 5 : HomeFry_78
• Track 6 : SoilAssassin_55, Attis_55, LordFarquaad_57
• Track 7 : Arri_80
• Track 8 : ClamChowder_83, Barb_83, Fugax_84
• Track 9 : Egi03_79
• Track 10 : Gezellig_77, KimmyK_80, Halo3_78, CoveyB_81, CherryCola_80, PullumCavea_79, Phlop_78, RogerDodger_84, Wizard_77
• Track 11 : Danyall_81
• Track 12 : SmokingBunny_81, Evamon_80, Salvador_80, Twister6_81, Togo_80
• Track 13 : Sixsevenium_82, Bakery_85
• Track 14 : SharkTale_84
• Track 15 : Mutzi_78, YungMoney_79
• Track 16 : JohnPork_82, Portcullis_81
• Track 17 : Shinji_80
• Track 18 : Valary_81
• Track 19 : Vordorf_53
• Track 20 : Phloss_53, Carcharodon_55, Schnauzer_56, Parmesanjohn_55, Smurph_55
• Track 21 : Gex_56, EGUnicorn_51, Xerxes_55, Magsby_55, Tessdabest_55, Pipsqueaks_56
• Track 22 : GMA4_42

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

The start number called the most often in the published annotations is 22, it was called in 28 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arri_80, Attis_55, Bakery_85, Barb_83, CherryCola_80, ClamChowder_83, CoveyB_81, Danyall_81, Egi03_79, Evamon_80, Fugax_84, Gezellig_77, Halo3_78,

JohnPork_82, KimmyK_80, LordFarquaad_57, Mutzi_78, Phlop_78, Portcullis_81, PullumCavea_79, RogerDodger_84, Salvador_80, SharkTale_84, Shinji_80, Sixsevenium_82, SmokingBunny_81, SoilAssassin_55, Togo_80, Twister6_81, Valary_81, Wizard_77, YungMoney_79,

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

Genes that do not have the "Most Annotated" start:
• Carcharodon_55, Dori_58, EGUnicorn_51, GMA4_42, Gex_56, Grayson_45, HomeFry_78, Magsby_55, Mask_58, Parmesanjohn_55, Peregrin_43, Phloss_53, Pipsqueaks_56, Schnauzer_56, Smurph_55, Tessdabest_55, Vordorf_53, Weasels2_45, Xerxes_55,

Summary by start number:

Start 13:
• Found in 11 of 51 (21.6%) of genes in pham
• Manual Annotations of this start: 5 of 44
• Called 45.5% of time when present
• Phage (with cluster) where this start called: Carcharodon_55 (N), Parmesanjohn_55 (N), Phloss_53 (N), Schnauzer_56 (N), Smurph_55 (N),

Start 18:
• Found in 2 of 51 (3.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA4_42 (singleton), Vordorf_53 (DT),

Start 19:
• Found in 11 of 51 (21.6%) of genes in pham
• Manual Annotations of this start: 5 of 44
• Called 54.5% of time when present
• Phage (with cluster) where this start called: EGUnicorn_51 (N), Gex_56 (N), Magsby_55 (N), Pipsqueaks_56 (N), Tessdabest_55 (N), Xerxes_55 (N),

Start 21:
• Found in 2 of 51 (3.9%) of genes in pham
• Manual Annotations of this start: 2 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dori_58 (AD), Mask_58 (AD),

Start 22:
• Found in 32 of 51 (62.7%) of genes in pham
• Manual Annotations of this start: 28 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arri_80 (DC1), Attis_55 (CZ2), Bakery_85 (DC1), Barb_83 (DC1), CherryCola_80 (DC1), ClamChowder_83 (DC1), CoveyB_81 (DC1), Danyall_81 (DC1), Egi03_79 (DC1), Evamon_80 (DC1), Fugax_84 (DC1), Gezellig_77 (DC1), Halo3_78 (DC1), JohnPork_82 (DC1), KimmyK_80 (DC1), LordFarquaad_57 (CZ2), Mutzi_78 (DC1), Phlop_78 (DC1), Portcullis_81 (DC1), PullumCavea_79 (DC1), RogerDodger_84 (DC1), Salvador_80 (DC1), SharkTale_84 (DC1), Shinji_80 (DC1), Sixsevenium_82 (DC1),

SmokingBunny_81 (DC1), SoilAssassin_55 (CZ2), Togo_80 (DC1), Twister6_81 (DC1), Valary_81 (DC1), Wizard_77 (DC1), YungMoney_79 (DC1),

Start 23:
• Found in 3 of 51 (5.9%) of genes in pham
• Manual Annotations of this start: 3 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Grayson_45 (CB), Peregrin_43 (CB), Weasels2_45 (CB),

Start 24:
• Found in 1 of 51 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: HomeFry_78 (CR5),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, AD, CR5, CZ2, CB, N, DT, DC1,

Info for manual annotations of cluster AD:
•Start number 21 was manually annotated 2 times for cluster AD.

Info for manual annotations of cluster CB:
•Start number 23 was manually annotated 3 times for cluster CB.

Info for manual annotations of cluster CR5:
•Start number 24 was manually annotated 1 time for cluster CR5.

Info for manual annotations of cluster CZ2:
•Start number 22 was manually annotated 3 times for cluster CZ2.

Info for manual annotations of cluster DC1:
•Start number 22 was manually annotated 25 times for cluster DC1.

Info for manual annotations of cluster N:
•Start number 13 was manually annotated 5 times for cluster N.
•Start number 19 was manually annotated 5 times for cluster N.

Gene Information:

Gene: Arri_80 Start: 52921, Stop: 53367, Start Num: 22
Candidate Starts for Arri_80:
(3, 52615), (4, 52633), (9, 52726), (Start: 22 @52921 has 28 MA's), (25, 52969), (28, 53017), (43, 53173), (46, 53197),

Gene: Attis_55 Start: 39035, Stop: 39415, Start Num: 22
Candidate Starts for Attis_55:

(Start: 22 @39035 has 28 MA's), (26, 39089), (32, 39218), (36, 39254), (39, 39281), (40, 39284), (44, 39314), (46, 39332), (47, 39344), (50, 39401),

Gene: Bakery_85 Start: 55359, Stop: 55733, Start Num: 22
Candidate Starts for Bakery_85:
(Start: 22 @55359 has 28 MA's), (41, 55536), (42, 55539),

Gene: Barb_83 Start: 53513, Stop: 53983, Start Num: 22
Candidate Starts for Barb_83:
(6, 53279), (7, 53306), (8, 53309), (Start: 22 @53513 has 28 MA's), (25, 53561), (30, 53645), (43, 53789),

Gene: Carcharodon_55 Start: 36177, Stop: 36665, Start Num: 13
Candidate Starts for Carcharodon_55:
(Start: 13 @36177 has 5 MA's), (14, 36213), (Start: 19 @36267 has 5 MA's), (33, 36420), (34, 36423), (38, 36450), (49, 36561), (50, 36567), (53, 36654),

Gene: CherryCola_80 Start: 53607, Stop: 53978, Start Num: 22
Candidate Starts for CherryCola_80:
(10, 53424), (Start: 22 @53607 has 28 MA's), (42, 53784), (46, 53808),

Gene: ClamChowder_83 Start: 53513, Stop: 53983, Start Num: 22
Candidate Starts for ClamChowder_83:
(6, 53279), (7, 53306), (8, 53309), (Start: 22 @53513 has 28 MA's), (25, 53561), (30, 53645), (43, 53789),

Gene: CoveyB_81 Start: 53099, Stop: 53470, Start Num: 22
Candidate Starts for CoveyB_81:
(10, 52916), (Start: 22 @53099 has 28 MA's), (42, 53276), (46, 53300),

Gene: Danyall_81 Start: 52793, Stop: 53164, Start Num: 22
Candidate Starts for Danyall_81:
(10, 52610), (Start: 22 @52793 has 28 MA's), (42, 52970), (46, 52994),

Gene: Dori_58 Start: 47703, Stop: 48095, Start Num: 21
Candidate Starts for Dori_58:
(17, 47673), (Start: 21 @47703 has 2 MA's), (25, 47751), (33, 47850), (34, 47853), (38, 47880), (49, 47991), (50, 47997),

Gene: EGUnicorn_51 Start: 35104, Stop: 35502, Start Num: 19
Candidate Starts for EGUnicorn_51:
(Start: 13 @35014 has 5 MA's), (14, 35050), (Start: 19 @35104 has 5 MA's), (33, 35257), (34, 35260), (38, 35287), (49, 35398), (50, 35404), (53, 35491),

Gene: Egi03_79 Start: 52659, Stop: 53000, Start Num: 22
Candidate Starts for Egi03_79:
(Start: 22 @52659 has 28 MA's), (41, 52803), (42, 52806),

Gene: Evamon_80 Start: 53024, Stop: 53377, Start Num: 22
Candidate Starts for Evamon_80:
(Start: 22 @53024 has 28 MA's), (47, 53219),

Gene: Fugax_84 Start: 53505, Stop: 53975, Start Num: 22

Candidate Starts for Fugax_84:
(6, 53271), (7, 53298), (8, 53301), (Start: 22 @53505 has 28 MA's), (25, 53553), (30, 53637), (43, 53781),

Gene: GMA4_42 Start: 31658, Stop: 32065, Start Num: 18
Candidate Starts for GMA4_42:
(12, 31565), (18, 31658), (25, 31715), (33, 31823), (38, 31853), (43, 31877), (46, 31901), (48, 31934), (52, 32033),

Gene: Gex_56 Start: 36283, Stop: 36681, Start Num: 19
Candidate Starts for Gex_56:
(Start: 13 @36193 has 5 MA's), (14, 36229), (Start: 19 @36283 has 5 MA's), (33, 36436), (34, 36439), (38, 36466), (49, 36577), (50, 36583), (53, 36670),

Gene: Gezellig_77 Start: 52852, Stop: 53223, Start Num: 22
Candidate Starts for Gezellig_77:
(10, 52669), (Start: 22 @52852 has 28 MA's), (42, 53029), (46, 53053),

Gene: Grayson_45 Start: 15645, Stop: 15103, Start Num: 23
Candidate Starts for Grayson_45:
(20, 15666), (Start: 23 @15645 has 3 MA's), (37, 15417), (50, 15285), (51, 15246), (55, 15108),

Gene: Halo3_78 Start: 53437, Stop: 53808, Start Num: 22
Candidate Starts for Halo3_78:
(10, 53254), (Start: 22 @53437 has 28 MA's), (42, 53614), (46, 53638),

Gene: HomeFry_78 Start: 53143, Stop: 52757, Start Num: 24
Candidate Starts for HomeFry_78:
(2, 53527), (Start: 24 @53143 has 1 MA's), (31, 53014), (33, 52996), (38, 52966),

Gene: JohnPork_82 Start: 52908, Stop: 53279, Start Num: 22
Candidate Starts for JohnPork_82:
(10, 52725), (Start: 22 @52908 has 28 MA's), (42, 53085), (46, 53109),

Gene: KimmyK_80 Start: 53299, Stop: 53670, Start Num: 22
Candidate Starts for KimmyK_80:
(10, 53116), (Start: 22 @53299 has 28 MA's), (42, 53476), (46, 53500),

Gene: LordFarquaad_57 Start: 39016, Stop: 39396, Start Num: 22
Candidate Starts for LordFarquaad_57:
(Start: 22 @39016 has 28 MA's), (26, 39070), (32, 39199), (36, 39235), (39, 39262), (40, 39265), (44, 39295), (46, 39313), (47, 39325), (50, 39382),

Gene: Magsby_55 Start: 36284, Stop: 36682, Start Num: 19
Candidate Starts for Magsby_55:
(Start: 13 @36194 has 5 MA's), (14, 36230), (Start: 19 @36284 has 5 MA's), (33, 36437), (34, 36440), (38, 36467), (49, 36578), (50, 36584), (53, 36671),

Gene: Mask_58 Start: 48446, Stop: 48838, Start Num: 21
Candidate Starts for Mask_58:
(17, 48416), (Start: 21 @48446 has 2 MA's), (25, 48494), (33, 48593), (34, 48596), (38, 48623), (49, 48734), (50, 48740),

Gene: Mutzi_78 Start: 53560, Stop: 53943, Start Num: 22
Candidate Starts for Mutzi_78:
(Start: 22 @53560 has 28 MA's), (29, 53656), (45, 53764), (50, 53842),

Gene: Parmesanjohn_55 Start: 36197, Stop: 36685, Start Num: 13
Candidate Starts for Parmesanjohn_55:
(Start: 13 @36197 has 5 MA's), (14, 36233), (Start: 19 @36287 has 5 MA's), (33, 36440), (34, 36443), (38, 36470), (49, 36581), (50, 36587), (53, 36674),

Gene: Peregrin_43 Start: 15003, Stop: 14461, Start Num: 23
Candidate Starts for Peregrin_43:
(20, 15024), (Start: 23 @15003 has 3 MA's), (37, 14775), (51, 14604), (55, 14466),

Gene: Phlop_78 Start: 52902, Stop: 53273, Start Num: 22
Candidate Starts for Phlop_78:
(10, 52719), (Start: 22 @52902 has 28 MA's), (42, 53079), (46, 53103),

Gene: Phloss_53 Start: 35604, Stop: 36092, Start Num: 13
Candidate Starts for Phloss_53:
(Start: 13 @35604 has 5 MA's), (14, 35640), (Start: 19 @35694 has 5 MA's), (33, 35847), (34, 35850), (38, 35877), (49, 35988), (50, 35994), (53, 36081),

Gene: Pipsqueaks_56 Start: 36265, Stop: 36663, Start Num: 19
Candidate Starts for Pipsqueaks_56:
(Start: 13 @36175 has 5 MA's), (14, 36211), (Start: 19 @36265 has 5 MA's), (33, 36418), (34, 36421), (38, 36448), (49, 36559), (50, 36565), (53, 36652),

Gene: Portcullis_81 Start: 52908, Stop: 53279, Start Num: 22
Candidate Starts for Portcullis_81:
(10, 52725), (Start: 22 @52908 has 28 MA's), (42, 53085), (46, 53109),

Gene: PullumCavea_79 Start: 53079, Stop: 53450, Start Num: 22
Candidate Starts for PullumCavea_79:
(10, 52896), (Start: 22 @53079 has 28 MA's), (42, 53256), (46, 53280),

Gene: RogerDodger_84 Start: 53667, Stop: 54038, Start Num: 22
Candidate Starts for RogerDodger_84:
(10, 53484), (Start: 22 @53667 has 28 MA's), (42, 53844), (46, 53868),

Gene: Salvador_80 Start: 53022, Stop: 53375, Start Num: 22
Candidate Starts for Salvador_80:
(Start: 22 @53022 has 28 MA's), (47, 53217),

Gene: Schnauzer_56 Start: 36197, Stop: 36685, Start Num: 13
Candidate Starts for Schnauzer_56:
(Start: 13 @36197 has 5 MA's), (14, 36233), (Start: 19 @36287 has 5 MA's), (33, 36440), (34, 36443), (38, 36470), (49, 36581), (50, 36587), (53, 36674),

Gene: SharkTale_84 Start: 55255, Stop: 55656, Start Num: 22
Candidate Starts for SharkTale_84:
(10, 55072), (Start: 22 @55255 has 28 MA's), (25, 55303), (43, 55462), (46, 55486), (47, 55498),

Gene: Shinji_80 Start: 53025, Stop: 53456, Start Num: 22

Candidate Starts for Shinji_80:
(Start: 22 @53025 has 28 MA's), (25, 53073), (35, 53208), (39, 53235), (40, 53238), (46, 53286),

Gene: Sixsevenium_82 Start: 54340, Stop: 54714, Start Num: 22
Candidate Starts for Sixsevenium_82:
(Start: 22 @54340 has 28 MA's), (41, 54517), (42, 54520),

Gene: SmokingBunny_81 Start: 54018, Stop: 54371, Start Num: 22
Candidate Starts for SmokingBunny_81:
(Start: 22 @54018 has 28 MA's), (47, 54213),

Gene: Smurph_55 Start: 36197, Stop: 36685, Start Num: 13
Candidate Starts for Smurph_55:
(Start: 13 @36197 has 5 MA's), (14, 36233), (Start: 19 @36287 has 5 MA's), (33, 36440), (34, 36443), (38, 36470), (49, 36581), (50, 36587), (53, 36674),

Gene: SoilAssassin_55 Start: 39034, Stop: 39414, Start Num: 22
Candidate Starts for SoilAssassin_55:
(Start: 22 @39034 has 28 MA's), (26, 39088), (32, 39217), (36, 39253), (39, 39280), (40, 39283), (44, 39313), (46, 39331), (47, 39343), (50, 39400),

Gene: Tessdabest_55 Start: 36420, Stop: 36818, Start Num: 19
Candidate Starts for Tessdabest_55:
(Start: 13 @36330 has 5 MA's), (14, 36366), (Start: 19 @36420 has 5 MA's), (33, 36573), (34, 36576), (38, 36603), (49, 36714), (50, 36720), (53, 36807),

Gene: Togo_80 Start: 54018, Stop: 54371, Start Num: 22
Candidate Starts for Togo_80:
(Start: 22 @54018 has 28 MA's), (47, 54213),

Gene: Twister6_81 Start: 52367, Stop: 52720, Start Num: 22
Candidate Starts for Twister6_81:
(Start: 22 @52367 has 28 MA's), (47, 52562),

Gene: Valary_81 Start: 53764, Stop: 54165, Start Num: 22
Candidate Starts for Valary_81:
(Start: 22 @53764 has 28 MA's), (25, 53812), (43, 53971), (46, 53995), (47, 54007),

Gene: Vordorf_53 Start: 39065, Stop: 39475, Start Num: 18
Candidate Starts for Vordorf_53:
(1, 38624), (5, 38795), (11, 38936), (15, 39017), (16, 39023), (18, 39065), (25, 39131), (31, 39221), (34, 39242), (44, 39278),

Gene: Weasels2_45 Start: 15946, Stop: 15398, Start Num: 23
Candidate Starts for Weasels2_45:
(20, 15967), (Start: 23 @15946 has 3 MA's), (27, 15868), (37, 15718), (54, 15490), (55, 15403),

Gene: Wizard_77 Start: 52852, Stop: 53223, Start Num: 22
Candidate Starts for Wizard_77:
(10, 52669), (Start: 22 @52852 has 28 MA's), (42, 53029), (46, 53053),

Gene: Xerxes_55 Start: 36284, Stop: 36682, Start Num: 19
Candidate Starts for Xerxes_55:

(Start: 13 @36194 has 5 MA's), (14, 36230), (Start: 19 @36284 has 5 MA's), (33, 36437), (34, 36440), (38, 36467), (49, 36578), (50, 36584), (53, 36671),

Gene: YungMoney_79 Start: 54400, Stop: 54783, Start Num: 22
Candidate Starts for YungMoney_79:
(Start: 22 @54400 has 28 MA's), (29, 54496), (45, 54604), (50, 54682),