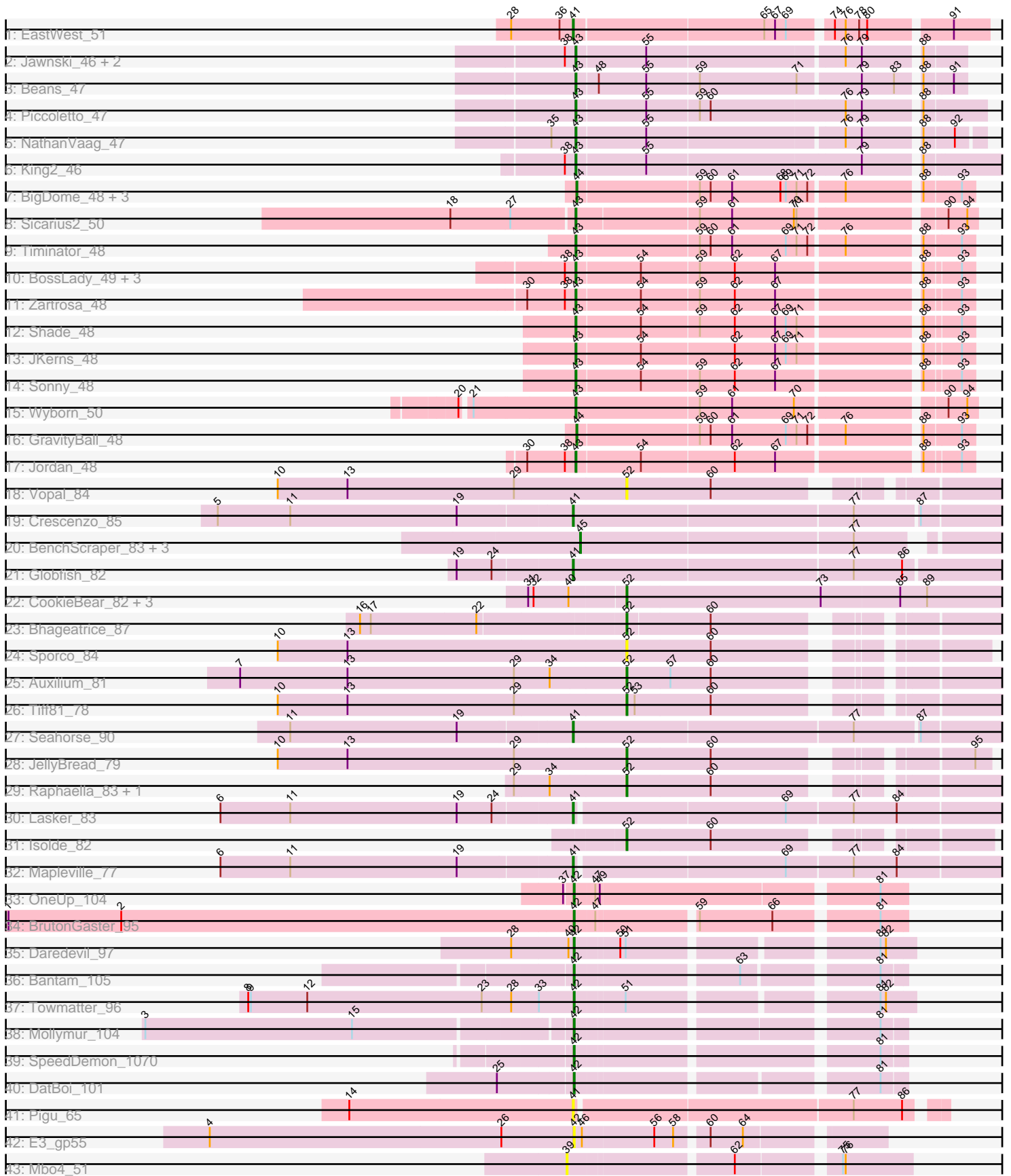


Pham 311626



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 311626 Report

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

Pham number 311626 has 58 members, 7 are drafts.

Phages represented in each track:

- Track 1 : EastWest_51
- Track 2 : Jawnski_46, Franzy_47, Brent_47
- Track 3 : Beans_47
- Track 4 : Piccoletto_47
- Track 5 : NathanVaag_47
- Track 6 : King2_46
- Track 7 : BigDome_48, BarretLemon_48, LeeroyJ_48, StevieBAY_48
- Track 8 : Sicarius2_50
- Track 9 : Timinator_48
- Track 10 : BossLady_49, Martha_48, Grekaycon_48, TaeYoung_49
- Track 11 : Zartrosa_48
- Track 12 : Shade_48
- Track 13 : JKerns_48
- Track 14 : Sonny_48
- Track 15 : Wyborn_50
- Track 16 : GravityBall_48
- Track 17 : Jordan_48
- Track 18 : Vopal_84
- Track 19 : Crescenzo_85
- Track 20 : BenchScraper_83, MUWow_86, Windest_87, Richie_86
- Track 21 : Globfish_82
- Track 22 : CookieBear_82, SonDevVon_91, Gorpy_81, Sakai_80
- Track 23 : Bhageatrice_87
- Track 24 : Sporco_84
- Track 25 : Auxilium_81
- Track 26 : Tiff81_78
- Track 27 : Seahorse_90
- Track 28 : JellyBread_79
- Track 29 : Raphaella_83, Faja_85
- Track 30 : Lasker_83
- Track 31 : Isolde_82
- Track 32 : Mapleville_77
- Track 33 : OneUp_104
- Track 34 : BrutonGaster_95
- Track 35 : Daredevil_97
- Track 36 : Bantam_105
- Track 37 : Towmatter_96

- Track 38 : Mollymur_104
- Track 39 : SpeedDemon_1070
- Track 40 : DatBoi_101
- Track 41 : Pigu_65
- Track 42 : E3_gp55
- Track 43 : Mbo4_51

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

The start number called the most often in the published annotations is 43, it was called in 19 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beans_47, BossLady_49, Brent_47, Franzy_47, Grekaycon_48, JKerns_48, Jawnski_46, Jordan_48, King2_46, Martha_48, NathanVaag_47, Piccoletto_47, Shade_48, Sicarius2_50, Sonny_48, TaeYoung_49, Timinator_48, Wyborn_50, Zartrosa_48,

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

-

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

- Auxilium_81, Bantam_105, BarretLemon_48, BenchScraper_83, Bhageatrice_87, BigDome_48, BrutonGaster_95, CookieBear_82, Crescenzo_85, Daredevil_97, DatBoi_101, E3_gp55, EastWest_51, Faja_85, Globfish_82, Gorpy_81, GravityBall_48, Isolde_82, JellyBread_79, Lasker_83, LeeroyJ_48, MUWow_86, Mapleville_77, Mbo4_51, Mollymur_104, OneUp_104, Pigu_65, Raphaella_83, Richie_86, Sakai_80, Seahorse_90, SonDevVon_91, SpeedDemon_1070, Sporco_84, StevieBAY_48, Tiff81_78, Towmatter_96, Vopal_84, Windest_87,

Summary by start number:

Start 39:

- Found in 1 of 58 (1.7%) 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_51 (singleton),

Start 41:

- Found in 7 of 58 (12.1%) of genes in pham
- Manual Annotations of this start: 6 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Crescenzo_85 (AY), EastWest_51 (AO), Globfish_82 (AY), Lasker_83 (AY), Mapleville_77 (AY), Pigu_65 (FB), Seahorse_90 (AY),

Start 42:

- Found in 9 of 58 (15.5%) of genes in pham
- Manual Annotations of this start: 8 of 51
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Bantam_105 (DL), BrutonGaster_95 (CQ2), Daredevil_97 (DL), DatBoi_101 (DL), E3_gp55 (singleton), Mollymur_104 (DL), OneUp_104 (CQ2), SpeedDemon_1070 (DL), Towmatter_96 (DL),

Start 43:

- Found in 19 of 58 (32.8%) of genes in pham
- Manual Annotations of this start: 19 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beans_47 (AO1), BossLady_49 (AO2), Brent_47 (AO1), Franzy_47 (AO1), Grekaycon_48 (AO2), JKerns_48 (AO2), Jawnski_46 (AO1), Jordan_48 (AO2), King2_46 (AO1), Martha_48 (AO2), NathanVaag_47 (AO1), Piccoletto_47 (AO1), Shade_48 (AO2), Sicarius2_50 (AO2), Sonny_48 (AO2), TaeYoung_49 (AO2), Timinator_48 (AO2), Wyborn_50 (AO2), Zartrosa_48 (AO2),

Start 44:

- Found in 5 of 58 (8.6%) of genes in pham
- Manual Annotations of this start: 4 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarretLemon_48 (AO2), BigDome_48 (AO2), GravityBall_48 (AO2), LeeroyJ_48 (AO2), StevieBAY_48 (AO2),

Start 45:

- Found in 4 of 58 (6.9%) of genes in pham
- Manual Annotations of this start: 4 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BenchScraper_83 (AY), MUWow_86 (AY), Richie_86 (AY), Windest_87 (AY),

Start 52:

- Found in 13 of 58 (22.4%) of genes in pham
- Manual Annotations of this start: 10 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Auxilium_81 (AY), Bhageatrice_87 (AY), CookieBear_82 (AY), Faja_85 (AY), Gorpy_81 (AY), Isolde_82 (AY), JellyBread_79 (AY), Raphaella_83 (AY), Sakai_80 (AY), SonDevVon_91 (AY), Sporco_84 (AY), Tiff81_78 (AY), Vopal_84 (AY),

Summary by clusters:

There are 8 clusters represented in this pham: DL, singleton, AO, FB, AO2, AO1, AY, CQ2,

Info for manual annotations of cluster AO:

- Start number 41 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 43 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 43 was manually annotated 12 times for cluster AO2.
- Start number 44 was manually annotated 4 times for cluster AO2.

Info for manual annotations of cluster AY:

- Start number 41 was manually annotated 5 times for cluster AY.
- Start number 45 was manually annotated 4 times for cluster AY.
- Start number 52 was manually annotated 10 times for cluster AY.

Info for manual annotations of cluster CQ2:

- Start number 42 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DL:

- Start number 42 was manually annotated 6 times for cluster DL.

Gene Information:

Gene: Auxilium_81 Start: 45001, Stop: 45360, Start Num: 52

Candidate Starts for Auxilium_81:

(7, 44572), (13, 44692), (29, 44878), (34, 44917), (Start: 52 @45001 has 10 MA's), (57, 45049), (60, 45094),

Gene: Bantam_105 Start: 68901, Stop: 69227, Start Num: 42

Candidate Starts for Bantam_105:

(Start: 42 @68901 has 8 MA's), (63, 69066), (81, 69201),

Gene: BarretLemon_48 Start: 36575, Stop: 36988, Start Num: 44

Candidate Starts for BarretLemon_48:

(Start: 44 @36575 has 4 MA's), (59, 36704), (60, 36716), (61, 36740), (68, 36794), (69, 36800), (71, 36812), (72, 36824), (76, 36860), (88, 36935), (93, 36974),

Gene: Beans_47 Start: 36659, Stop: 37063, Start Num: 43

Candidate Starts for Beans_47:

(Start: 43 @36659 has 19 MA's), (48, 36680), (55, 36731), (59, 36788), (71, 36896), (79, 36962), (83, 36998), (88, 37019), (91, 37049),

Gene: BenchScraper_83 Start: 45886, Stop: 46317, Start Num: 45

Candidate Starts for BenchScraper_83:

(Start: 45 @45886 has 4 MA's), (77, 46183),

Gene: Bhageatrice_87 Start: 50237, Stop: 50593, Start Num: 52

Candidate Starts for Bhageatrice_87:

(16, 49952), (17, 49964), (22, 50081), (Start: 52 @50237 has 10 MA's), (60, 50327),

Gene: BigDome_48 Start: 36599, Stop: 37012, Start Num: 44

Candidate Starts for BigDome_48:

(Start: 44 @36599 has 4 MA's), (59, 36728), (60, 36740), (61, 36764), (68, 36818), (69, 36824), (71, 36836), (72, 36848), (76, 36884), (88, 36959), (93, 36998),

Gene: BossLady_49 Start: 36654, Stop: 37064, Start Num: 43

Candidate Starts for BossLady_49:

(38, 36642), (Start: 43 @36654 has 19 MA's), (54, 36720), (59, 36783), (62, 36822), (67, 36867), (88, 37014), (93, 37050),

Gene: Brent_47 Start: 36916, Stop: 37317, Start Num: 43
Candidate Starts for Brent_47:
(38, 36904), (Start: 43 @36916 has 19 MA's), (55, 36988), (76, 37198), (79, 37216), (88, 37273),

Gene: BrutonGaster_95 Start: 62658, Stop: 62993, Start Num: 42
Candidate Starts for BrutonGaster_95:
(1, 62028), (2, 62154), (Start: 42 @62658 has 8 MA's), (47, 62679), (59, 62778), (66, 62859), (81, 62964),

Gene: CookieBear_82 Start: 46578, Stop: 46994, Start Num: 52
Candidate Starts for CookieBear_82:
(31, 46473), (32, 46479), (40, 46518), (Start: 52 @46578 has 10 MA's), (73, 46794), (85, 46881), (89, 46911),

Gene: Crescenzo_85 Start: 48901, Stop: 49359, Start Num: 41
Candidate Starts for Crescenzo_85:
(5, 48511), (11, 48592), (19, 48778), (Start: 41 @48901 has 6 MA's), (77, 49204), (87, 49273),

Gene: Daredevil_97 Start: 64928, Stop: 65263, Start Num: 42
Candidate Starts for Daredevil_97:
(28, 64859), (40, 64922), (Start: 42 @64928 has 8 MA's), (50, 64973), (51, 64979), (81, 65225), (82, 65231),

Gene: DatBoi_101 Start: 68050, Stop: 68376, Start Num: 42
Candidate Starts for DatBoi_101:
(25, 67969), (Start: 42 @68050 has 8 MA's), (81, 68350),

Gene: E3_gp55 Start: 22695, Stop: 23006, Start Num: 42
Candidate Starts for E3_gp55:
(4, 22290), (26, 22614), (Start: 42 @22695 has 8 MA's), (46, 22704), (56, 22779), (58, 22800), (60, 22830), (64, 22866),

Gene: EastWest_51 Start: 35918, Stop: 36346, Start Num: 41
Candidate Starts for EastWest_51:
(28, 35849), (36, 35903), (Start: 41 @35918 has 6 MA's), (65, 36122), (67, 36134), (69, 36146), (74, 36188), (76, 36200), (78, 36215), (80, 36224), (91, 36308),

Gene: Faja_85 Start: 48003, Stop: 48362, Start Num: 52
Candidate Starts for Faja_85:
(29, 47880), (34, 47919), (Start: 52 @48003 has 10 MA's), (60, 48096),

Gene: Franzy_47 Start: 36932, Stop: 37333, Start Num: 43
Candidate Starts for Franzy_47:
(38, 36920), (Start: 43 @36932 has 19 MA's), (55, 37004), (76, 37214), (79, 37232), (88, 37289),

Gene: Globfish_82 Start: 45656, Stop: 46117, Start Num: 41
Candidate Starts for Globfish_82:
(19, 45533), (24, 45572), (Start: 41 @45656 has 6 MA's), (77, 45959), (86, 46013),

Gene: Gorpy_81 Start: 47920, Stop: 48336, Start Num: 52
Candidate Starts for Gorpy_81:
(31, 47815), (32, 47821), (40, 47860), (Start: 52 @47920 has 10 MA's), (73, 48136), (85, 48223), (89, 48253),

Gene: GravityBall_48 Start: 36671, Stop: 37084, Start Num: 44

Candidate Starts for GravityBall_48:

(Start: 44 @36671 has 4 MA's), (59, 36800), (60, 36812), (61, 36836), (69, 36896), (71, 36908), (72, 36920), (76, 36956), (88, 37031), (93, 37070),

Gene: Grekaycon_48 Start: 36550, Stop: 36960, Start Num: 43

Candidate Starts for Grekaycon_48:

(38, 36538), (Start: 43 @36550 has 19 MA's), (54, 36616), (59, 36679), (62, 36718), (67, 36763), (88, 36910), (93, 36946),

Gene: Isolde_82 Start: 47475, Stop: 47825, Start Num: 52

Candidate Starts for Isolde_82:

(Start: 52 @47475 has 10 MA's), (60, 47568),

Gene: JKerns_48 Start: 36809, Stop: 37219, Start Num: 43

Candidate Starts for JKerns_48:

(Start: 43 @36809 has 19 MA's), (54, 36875), (62, 36977), (67, 37022), (69, 37034), (71, 37046), (88, 37169), (93, 37205),

Gene: Jawnski_46 Start: 36440, Stop: 36841, Start Num: 43

Candidate Starts for Jawnski_46:

(38, 36428), (Start: 43 @36440 has 19 MA's), (55, 36512), (76, 36722), (79, 36740), (88, 36797),

Gene: JellyBread_79 Start: 46390, Stop: 46737, Start Num: 52

Candidate Starts for JellyBread_79:

(10, 46003), (13, 46081), (29, 46267), (Start: 52 @46390 has 10 MA's), (60, 46483), (95, 46720),

Gene: Jordan_48 Start: 36636, Stop: 37046, Start Num: 43

Candidate Starts for Jordan_48:

(30, 36582), (38, 36624), (Start: 43 @36636 has 19 MA's), (54, 36702), (62, 36804), (67, 36849), (88, 36996), (93, 37032),

Gene: King2_46 Start: 36763, Stop: 37218, Start Num: 43

Candidate Starts for King2_46:

(38, 36751), (Start: 43 @36763 has 19 MA's), (55, 36835), (79, 37069), (88, 37126),

Gene: Lasker_83 Start: 47959, Stop: 48417, Start Num: 41

Candidate Starts for Lasker_83:

(6, 47572), (11, 47650), (19, 47836), (24, 47875), (Start: 41 @47959 has 6 MA's), (69, 48184), (77, 48256), (84, 48304),

Gene: LeeroyJ_48 Start: 36604, Stop: 37017, Start Num: 44

Candidate Starts for LeeroyJ_48:

(Start: 44 @36604 has 4 MA's), (59, 36733), (60, 36745), (61, 36769), (68, 36823), (69, 36829), (71, 36841), (72, 36853), (76, 36889), (88, 36964), (93, 37003),

Gene: MUWow_86 Start: 48726, Stop: 49157, Start Num: 45

Candidate Starts for MUWow_86:

(Start: 45 @48726 has 4 MA's), (77, 49023),

Gene: Mapleville_77 Start: 45908, Stop: 46366, Start Num: 41

Candidate Starts for Mapleville_77:

(6, 45521), (11, 45599), (19, 45785), (Start: 41 @45908 has 6 MA's), (69, 46133), (77, 46205), (84, 46253),

Gene: Martha_48 Start: 36667, Stop: 37077, Start Num: 43

Candidate Starts for Martha_48:

(38, 36655), (Start: 43 @36667 has 19 MA's), (54, 36733), (59, 36796), (62, 36835), (67, 36880), (88, 37027), (93, 37063),

Gene: Mbo4_51 Start: 38577, Stop: 38924, Start Num: 39

Candidate Starts for Mbo4_51:

(39, 38577), (62, 38745), (75, 38847), (76, 38850),

Gene: Mollymur_104 Start: 69311, Stop: 69640, Start Num: 42

Candidate Starts for Mollymur_104:

(3, 68855), (15, 69086), (Start: 42 @69311 has 8 MA's), (81, 69614),

Gene: NathanVaag_47 Start: 36675, Stop: 37091, Start Num: 43

Candidate Starts for NathanVaag_47:

(35, 36648), (Start: 43 @36675 has 19 MA's), (55, 36747), (76, 36957), (79, 36975), (88, 37032), (92, 37062),

Gene: OneUp_104 Start: 66053, Stop: 66397, Start Num: 42

Candidate Starts for OneUp_104:

(37, 66044), (Start: 42 @66053 has 8 MA's), (47, 66074), (49, 66077), (81, 66368),

Gene: Piccoletto_47 Start: 36738, Stop: 37166, Start Num: 43

Candidate Starts for Piccoletto_47:

(Start: 43 @36738 has 19 MA's), (55, 36810), (59, 36867), (60, 36879), (76, 37026), (79, 37044), (88, 37101),

Gene: Pigu_65 Start: 34448, Stop: 34834, Start Num: 41

Candidate Starts for Pigu_65:

(14, 34199), (Start: 41 @34448 has 6 MA's), (77, 34745), (86, 34799),

Gene: Raphaella_83 Start: 46297, Stop: 46656, Start Num: 52

Candidate Starts for Raphaella_83:

(29, 46174), (34, 46213), (Start: 52 @46297 has 10 MA's), (60, 46390),

Gene: Richie_86 Start: 48458, Stop: 48889, Start Num: 45

Candidate Starts for Richie_86:

(Start: 45 @48458 has 4 MA's), (77, 48755),

Gene: Sakai_80 Start: 46631, Stop: 47047, Start Num: 52

Candidate Starts for Sakai_80:

(31, 46526), (32, 46532), (40, 46571), (Start: 52 @46631 has 10 MA's), (73, 46847), (85, 46934), (89, 46964),

Gene: Seahorse_90 Start: 51836, Stop: 52294, Start Num: 41

Candidate Starts for Seahorse_90:

(11, 51527), (19, 51713), (Start: 41 @51836 has 6 MA's), (77, 52139), (87, 52208),

Gene: Shade_48 Start: 36561, Stop: 36971, Start Num: 43

Candidate Starts for Shade_48:

(Start: 43 @36561 has 19 MA's), (54, 36627), (59, 36690), (62, 36729), (67, 36774), (69, 36786), (71, 36798), (88, 36921), (93, 36957),

Gene: Sicarius2_50 Start: 35904, Stop: 36320, Start Num: 43

Candidate Starts for Sicarius2_50:

(18, 35772), (27, 35838), (Start: 43 @35904 has 19 MA's), (59, 36033), (61, 36069), (70, 36138), (71, 36141), (90, 36288), (94, 36309),

Gene: SonDevVon_91 Start: 47576, Stop: 47992, Start Num: 52

Candidate Starts for SonDevVon_91:

(31, 47471), (32, 47477), (40, 47516), (Start: 52 @47576 has 10 MA's), (73, 47792), (85, 47879), (89, 47909),

Gene: Sonny_48 Start: 36648, Stop: 37058, Start Num: 43

Candidate Starts for Sonny_48:

(Start: 43 @36648 has 19 MA's), (54, 36714), (59, 36777), (62, 36816), (67, 36861), (88, 37008), (93, 37044),

Gene: SpeedDemon_1070 Start: 71415, Stop: 71747, Start Num: 42

Candidate Starts for SpeedDemon_1070:

(Start: 42 @71415 has 8 MA's), (81, 71721),

Gene: Sporco_84 Start: 47977, Stop: 48324, Start Num: 52

Candidate Starts for Sporco_84:

(10, 47590), (13, 47668), (Start: 52 @47977 has 10 MA's), (60, 48070),

Gene: StevieBAY_48 Start: 36668, Stop: 37081, Start Num: 44

Candidate Starts for StevieBAY_48:

(Start: 44 @36668 has 4 MA's), (59, 36797), (60, 36809), (61, 36833), (68, 36887), (69, 36893), (71, 36905), (72, 36917), (76, 36953), (88, 37028), (93, 37067),

Gene: TaeYoung_49 Start: 36622, Stop: 37032, Start Num: 43

Candidate Starts for TaeYoung_49:

(38, 36610), (Start: 43 @36622 has 19 MA's), (54, 36688), (59, 36751), (62, 36790), (67, 36835), (88, 36982), (93, 37018),

Gene: Tiff81_78 Start: 45438, Stop: 45797, Start Num: 52

Candidate Starts for Tiff81_78:

(10, 45051), (13, 45129), (29, 45315), (Start: 52 @45438 has 10 MA's), (53, 45447), (60, 45531),

Gene: Timinator_48 Start: 36535, Stop: 36948, Start Num: 43

Candidate Starts for Timinator_48:

(Start: 43 @36535 has 19 MA's), (59, 36664), (60, 36676), (61, 36700), (69, 36760), (71, 36772), (72, 36784), (76, 36820), (88, 36895), (93, 36934),

Gene: Towmatter_96 Start: 65010, Stop: 65345, Start Num: 42

Candidate Starts for Towmatter_96:

(8, 64647), (9, 64650), (12, 64713), (23, 64908), (28, 64941), (33, 64971), (Start: 42 @65010 has 8 MA's), (51, 65061), (81, 65307), (82, 65313),

Gene: Vopal_84 Start: 48363, Stop: 48722, Start Num: 52

Candidate Starts for Vopal_84:

(10, 47976), (13, 48054), (29, 48240), (Start: 52 @48363 has 10 MA's), (60, 48456),

Gene: Windest_87 Start: 45943, Stop: 46374, Start Num: 45

Candidate Starts for Windest_87:

(Start: 45 @45943 has 4 MA's), (77, 46240),

Gene: Wyborn_50 Start: 36752, Stop: 37171, Start Num: 43

Candidate Starts for Wyborn_50:

(20, 36632), (21, 36641), (Start: 43 @36752 has 19 MA's), (59, 36884), (61, 36920), (70, 36989), (90, 37139), (94, 37160),

Gene: Zartrosa_48 Start: 36612, Stop: 37022, Start Num: 43

Candidate Starts for Zartrosa_48:

(30, 36558), (38, 36600), (Start: 43 @36612 has 19 MA's), (54, 36678), (59, 36741), (62, 36780), (67, 36825), (88, 36972), (93, 37008),