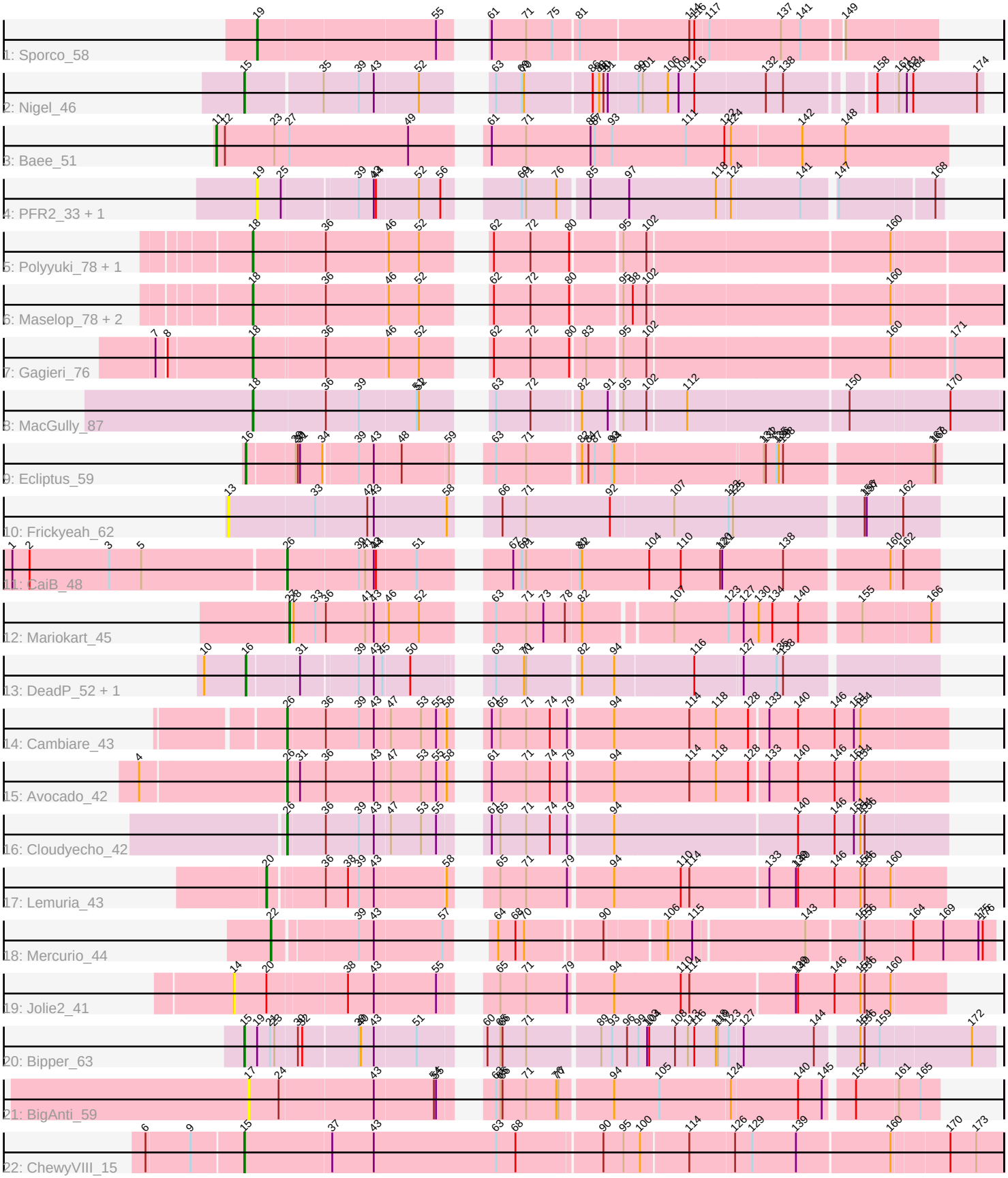
# Pham 347946


1: Sporco_58
2: Nigel_46
3: Baee_51
4: PFR2_33 + 1
5: Polyyuki_78 + 1
6: Maselop_78 + 2
7: Gagieri_76
8: MacGully_87
9: Ecliptus_59
10: Frickyeah_62
11: CaiB_48
12: Mariokart_45
13: DeadP_52 + 1
14: Cambiare_43
15: Avocado_42
16: Cloudyecho_42
17: Lemuria_43
18: Mercurio_44
19: Jolie2_41
20: Bipper_63
21: BigAnti_59
22: ChewyVIII_15

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 347946 Report

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

Pham number 347946 has 27 members, 5 are drafts.

Phages represented in each track:
- Track 1 : Sporco_58
- Track 2 : Nigel_46
- Track 3 : Baee_51
- Track 4 : PFR2_33, PFR1_31
- Track 5 : Polyyuki_78, Apiary_78
- Track 6 : Maselop_78, CoffeeBean_78, Braxoaddie_78
- Track 7 : Gagieri_76
- Track 8 : MacGully_87
- Track 9 : Ecliptus_59
- Track 10 : Frickyeah_62
- Track 11 : CaiB_48
- Track 12 : Mariokart_45
- Track 13 : DeadP_52, Oksu_51
- Track 14 : Cambiare_43
- Track 15 : Avocado_42
- Track 16 : Cloudyecho_42
- Track 17 : Lemuria_43
- Track 18 : Mercurio_44
- Track 19 : Jolie2_41
- Track 20 : Bipper_63
- Track 21 : BigAnti_59
- Track 22 : ChewyVIII_15

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

The start number called the most often in the published annotations is 18, it was called in 7 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Apiary_78, Braxoaddie_78, CoffeeBean_78, Gagieri_76, MacGully_87, Maselop_78, Polyyuki_78,

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

Genes that do not have the "Most Annotated" start:
• Avocado_42, Baee_51, BigAnti_59, Bipper_63, CaiB_48, Cambiare_43, ChewyVIII_15, Cloudyecho_42, DeadP_52, Ecliptus_59, Frickyeah_62, Jolie2_41, Lemuria_43, Mariokart_45, Mercurio_44, Nigel_46, Oksu_51, PFR1_31, PFR2_33, Sporco_58,

**Summary by start number:**

Start 11:
• Found in 1 of 27 ( 3.7% ) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Baee_51 (B5),

Start 13:
• Found in 1 of 27 ( 3.7% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Frickyeah_62 (DN1),

Start 14:
• Found in 1 of 27 ( 3.7% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jolie2_41 (G4),

Start 15:
• Found in 3 of 27 ( 11.1% ) of genes in pham
• Manual Annotations of this start: 3 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bipper_63 (Y), ChewyVIII_15 (singleton), Nigel_46 (B4),

Start 16:
• Found in 3 of 27 ( 11.1% ) of genes in pham
• Manual Annotations of this start: 3 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DeadP_52 (F1), Ecliptus_59 (DN), Oksu_51 (F1),

Start 17:
• Found in 1 of 27 ( 3.7% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BigAnti_59 (singleton),

Start 18:
• Found in 7 of 27 ( 25.9% ) of genes in pham
• Manual Annotations of this start: 7 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apiary_78 (CR6), Braxoaddie_78 (CR6), CoffeeBean_78 (CR6), Gagieri_76 (CR6), MacGully_87 (CR7), Maselop_78 (CR6),

Polyyuki_78 (CR6),

Start 19:
• Found in 4 of 27 ( 14.8% ) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 75.0% of time when present
• Phage (with cluster) where this start called: PFR1_31 (BX), PFR2_33 (BX), Sporco_58 (AY),

Start 20:
• Found in 2 of 27 ( 7.4% ) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Lemuria_43 (G4),

Start 22:
• Found in 1 of 27 ( 3.7% ) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mercurio_44 (G4),

Start 26:
• Found in 4 of 27 ( 14.8% ) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Avocado_42 (G2), CaiB_48 (DR), Cambiare_43 (G2), Cloudyecho_42 (G3),

Start 27:
• Found in 2 of 27 ( 7.4% ) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Mariokart_45 (DR),

**Summary by clusters:**

There are 15 clusters represented in this pham: DN, F1, singleton, G4, CR6, G2, B5, BX, B4, AY, DN1, Y, G3, DR, CR7,

Info for manual annotations of cluster AY:
•Start number 19 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster B4:
•Start number 15 was manually annotated 1 time for cluster B4.

Info for manual annotations of cluster B5:
•Start number 11 was manually annotated 1 time for cluster B5.

Info for manual annotations of cluster CR6:
•Start number 18 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:

•Start number 18 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster DN:
•Start number 16 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DR:
•Start number 26 was manually annotated 1 time for cluster DR.
•Start number 27 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster F1:
•Start number 16 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster G2:
•Start number 26 was manually annotated 2 times for cluster G2.

Info for manual annotations of cluster G3:
•Start number 26 was manually annotated 1 time for cluster G3.

Info for manual annotations of cluster G4:
•Start number 20 was manually annotated 1 time for cluster G4.
•Start number 22 was manually annotated 1 time for cluster G4.

Info for manual annotations of cluster Y:
•Start number 15 was manually annotated 1 time for cluster Y.

### *Gene Information:*

Gene: Apiary_78 Start: 56582, Stop: 55644, Start Num: 18
Candidate Starts for Apiary_78:
(Start: 18 @56582 has 7 MA's), (36, 56492), (46, 56408), (52, 56366), (62, 56312), (72, 56261), (80, 56207), (95, 56144), (102, 56114), (160, 55790),

Gene: Avocado_42 Start: 33150, Stop: 33995, Start Num: 26
Candidate Starts for Avocado_42:
(4, 32958), (Start: 26 @33150 has 4 MA's), (31, 33165), (36, 33198), (43, 33264), (47, 33285), (53, 33327), (55, 33348), (58, 33360), (61, 33381), (71, 33429), (74, 33462), (79, 33486), (94, 33543), (114, 33645), (118, 33681), (128, 33726), (133, 33750), (140, 33789), (146, 33840), (151, 33867), (154, 33876),

Gene: Baee_51 Start: 46986, Stop: 46012, Start Num: 11
Candidate Starts for Baee_51:
(Start: 11 @46986 has 1 MA's), (12, 46974), (23, 46905), (Start: 27 @46884 has 1 MA's), (49, 46719), (61, 46644), (71, 46596), (85, 46506), (87, 46500), (93, 46476), (111, 46374), (122, 46320), (124, 46311), (142, 46215), (148, 46155),

Gene: BigAnti_59 Start: 47461, Stop: 48333, Start Num: 17
Candidate Starts for BigAnti_59:
(17, 47461), (24, 47503), (43, 47629), (54, 47710), (55, 47713), (63, 47752), (65, 47758), (66, 47761), (71, 47794), (76, 47836), (77, 47839), (94, 47908), (105, 47968), (124, 48064), (140, 48154), (145, 48187), (152, 48220), (161, 48277), (165, 48307),

Gene: Bipper_63 Start: 44027, Stop: 44980, Start Num: 15
Candidate Starts for Bipper_63:
(Start: 15 @44027 has 3 MA's), (Start: 19 @44045 has 1 MA's), (21, 44063), (23, 44069), (30, 44099), (32, 44105), (39, 44177), (40, 44180), (43, 44198), (51, 44255), (60, 44309), (65, 44327), (66, 44330), (71, 44363), (89, 44459), (93, 44474), (96, 44495), (99, 44510), (103, 44522), (104, 44525), (108, 44558), (113, 44576), (116, 44585), (118, 44615), (119, 44618), (123, 44633), (127, 44651), (144, 44747), (154, 44798), (156, 44804), (159, 44825), (172, 44948),

Gene: Braxoaddie_78 Start: 56567, Stop: 55629, Start Num: 18
Candidate Starts for Braxoaddie_78:
(Start: 18 @56567 has 7 MA's), (36, 56477), (46, 56393), (52, 56351), (62, 56297), (72, 56246), (80, 56192), (95, 56129), (98, 56117), (102, 56099), (160, 55775),

Gene: CaiB_48 Start: 41138, Stop: 40308, Start Num: 26
Candidate Starts for CaiB_48:
(1, 41507), (2, 41483), (3, 41372), (5, 41327), (Start: 26 @41138 has 4 MA's), (39, 41045), (41, 41036), (43, 41024), (44, 41021), (51, 40967), (67, 40874), (69, 40862), (71, 40856), (81, 40784), (82, 40781), (104, 40688), (110, 40646), (120, 40595), (121, 40592), (138, 40508), (160, 40373), (162, 40358),

Gene: Cambiare_43 Start: 33393, Stop: 34238, Start Num: 26
Candidate Starts for Cambiare_43:
(Start: 26 @33393 has 4 MA's), (36, 33441), (39, 33486), (43, 33507), (47, 33528), (53, 33570), (55, 33591), (58, 33603), (61, 33624), (65, 33636), (71, 33672), (74, 33705), (79, 33729), (94, 33786), (114, 33888), (118, 33924), (128, 33969), (133, 33993), (140, 34032), (146, 34083), (151, 34110), (154, 34119),

Gene: ChewyVIII_15 Start: 6891, Stop: 7907, Start Num: 15
Candidate Starts for ChewyVIII_15:
(6, 6765), (9, 6825), (Start: 15 @6891 has 3 MA's), (37, 7011), (43, 7068), (63, 7236), (68, 7263), (90, 7377), (95, 7404), (100, 7425), (114, 7488), (126, 7548), (129, 7572), (139, 7632), (160, 7758), (170, 7833), (173, 7869),

Gene: Cloudyecho_42 Start: 32850, Stop: 33695, Start Num: 26
Candidate Starts for Cloudyecho_42:
(Start: 26 @32850 has 4 MA's), (36, 32898), (39, 32943), (43, 32964), (47, 32985), (53, 33027), (55, 33048), (61, 33081), (65, 33093), (71, 33129), (74, 33162), (79, 33186), (94, 33243), (140, 33489), (146, 33540), (151, 33567), (154, 33576), (156, 33582),

Gene: CoffeeBean_78 Start: 56525, Stop: 55587, Start Num: 18
Candidate Starts for CoffeeBean_78:
(Start: 18 @56525 has 7 MA's), (36, 56435), (46, 56351), (52, 56309), (62, 56255), (72, 56204), (80, 56150), (95, 56087), (98, 56075), (102, 56057), (160, 55733),

Gene: DeadP_52 Start: 36351, Stop: 37211, Start Num: 16
Candidate Starts for DeadP_52:
(10, 36294), (Start: 16 @36351 has 3 MA's), (31, 36420), (39, 36492), (43, 36513), (45, 36525), (50, 36561), (63, 36633), (70, 36672), (71, 36675), (82, 36744), (94, 36789), (116, 36894), (127, 36957), (135, 37002), (138, 37011),

Gene: Ecliptus_59 Start: 39066, Stop: 39929, Start Num: 16
Candidate Starts for Ecliptus_59:

(Start: 16 @39066 has 3 MA's), (29, 39129), (30, 39132), (31, 39135), (34, 39165), (39, 39207), (43, 39228), (48, 39264), (59, 39327), (63, 39348), (71, 39390), (82, 39459), (84, 39468), (87, 39477), (93, 39501), (94, 39504), (131, 39699), (132, 39702), (135, 39717), (136, 39720), (138, 39726), (167, 39918), (168, 39921),

Gene: Frickyeah_62 Start: 37087, Stop: 37995, Start Num: 13
Candidate Starts for Frickyeah_62:
(13, 37087), (33, 37201), (42, 37270), (43, 37279), (58, 37378), (66, 37414), (71, 37447), (92, 37564), (107, 37648), (123, 37720), (125, 37726), (156, 37894), (157, 37897), (162, 37945),

Gene: Gagieri_76 Start: 56376, Stop: 55438, Start Num: 18
Candidate Starts for Gagieri_76:
(7, 56499), (8, 56487), (Start: 18 @56376 has 7 MA's), (36, 56286), (46, 56202), (52, 56160), (62, 56106), (72, 56055), (80, 56001), (83, 55983), (95, 55938), (102, 55908), (160, 55584), (171, 55506),

Gene: Jolie2_41 Start: 31510, Stop: 32421, Start Num: 14
Candidate Starts for Jolie2_41:
(14, 31510), (Start: 20 @31555 has 1 MA's), (38, 31657), (43, 31693), (55, 31777), (65, 31822), (71, 31858), (79, 31915), (94, 31972), (110, 32062), (114, 32074), (139, 32215), (140, 32218), (146, 32269), (154, 32305), (156, 32311), (160, 32347),

Gene: Lemuria_43 Start: 32899, Stop: 33759, Start Num: 20
Candidate Starts for Lemuria_43:
(Start: 20 @32899 has 1 MA's), (36, 32965), (38, 32995), (39, 33010), (43, 33031), (58, 33127), (65, 33160), (71, 33196), (79, 33253), (94, 33310), (110, 33400), (114, 33412), (133, 33517), (139, 33553), (140, 33556), (146, 33607), (154, 33643), (156, 33649), (160, 33685),

Gene: MacGully_87 Start: 59557, Stop: 58619, Start Num: 18
Candidate Starts for MacGully_87:
(Start: 18 @59557 has 7 MA's), (36, 59464), (39, 59419), (51, 59341), (52, 59338), (63, 59281), (72, 59233), (82, 59170), (91, 59134), (95, 59119), (102, 59089), (112, 59038), (150, 58822), (170, 58687),

Gene: Mariokart_45 Start: 38547, Stop: 37738, Start Num: 27
Candidate Starts for Mariokart_45:
(Start: 27 @38547 has 1 MA's), (28, 38544), (33, 38514), (36, 38502), (41, 38448), (43, 38436), (46, 38418), (52, 38376), (63, 38310), (71, 38268), (73, 38244), (78, 38214), (82, 38193), (107, 38082), (123, 38010), (127, 37989), (130, 37968), (134, 37950), (140, 37914), (155, 37839), (166, 37749),

Gene: Maselop_78 Start: 56601, Stop: 55663, Start Num: 18
Candidate Starts for Maselop_78:
(Start: 18 @56601 has 7 MA's), (36, 56511), (46, 56427), (52, 56385), (62, 56331), (72, 56280), (80, 56226), (95, 56163), (98, 56151), (102, 56133), (160, 55809),

Gene: Mercurio_44 Start: 33423, Stop: 34298, Start Num: 22
Candidate Starts for Mercurio_44:
(Start: 22 @33423 has 1 MA's), (39, 33528), (43, 33549), (57, 33642), (64, 33669), (68, 33693), (70, 33705), (90, 33804), (106, 33876), (115, 33906), (143, 34047), (153, 34116), (156, 34122), (164, 34185), (169, 34227), (175, 34275), (176, 34281),

Gene: Nigel_46 Start: 45469, Stop: 44555, Start Num: 15
Candidate Starts for Nigel_46:
(Start: 15 @45469 has 3 MA's), (35, 45367), (39, 45319), (43, 45298), (52, 45238), (63, 45181), (69, 45145), (70, 45142), (86, 45052), (88, 45043), (90, 45037), (91, 45031), (99, 44992), (101, 44986),

(106, 44953), (109, 44938), (116, 44917), (132, 44824), (138, 44800), (158, 44695), (161, 44668), (163, 44659), (164, 44650), (174, 44563),

Gene: Oksu_51 Start: 36971, Stop: 37831, Start Num: 16
Candidate Starts for Oksu_51:
(10, 36914), (Start: 16 @36971 has 3 MA's), (31, 37040), (39, 37112), (43, 37133), (45, 37145), (50, 37181), (63, 37253), (70, 37292), (71, 37295), (82, 37364), (94, 37409), (116, 37514), (127, 37577), (135, 37622), (138, 37631),

Gene: PFR1_31 Start: 24480, Stop: 25334, Start Num: 19
Candidate Starts for PFR1_31:
(Start: 19 @24480 has 1 MA's), (25, 24513), (39, 24609), (43, 24630), (44, 24633), (52, 24690), (56, 24720), (69, 24789), (71, 24795), (76, 24837), (85, 24876), (97, 24930), (118, 25047), (124, 25065), (141, 25158), (147, 25197), (168, 25323),

Gene: PFR2_33 Start: 26049, Stop: 26903, Start Num: 19
Candidate Starts for PFR2_33:
(Start: 19 @26049 has 1 MA's), (25, 26082), (39, 26178), (43, 26199), (44, 26202), (52, 26259), (56, 26289), (69, 26358), (71, 26364), (76, 26406), (85, 26445), (97, 26499), (118, 26616), (124, 26634), (141, 26727), (147, 26766), (168, 26892),

Gene: Polyyuki_78 Start: 56593, Stop: 55655, Start Num: 18
Candidate Starts for Polyyuki_78:
(Start: 18 @56593 has 7 MA's), (36, 56503), (46, 56419), (52, 56377), (62, 56323), (72, 56272), (80, 56218), (95, 56155), (102, 56125), (160, 55801),

Gene: Sporco_58 Start: 33488, Stop: 34336, Start Num: 19
Candidate Starts for Sporco_58:
(Start: 19 @33488 has 1 MA's), (55, 33728), (61, 33755), (71, 33803), (75, 33839), (81, 33872), (114, 34016), (116, 34022), (117, 34040), (137, 34136), (141, 34163), (149, 34214),