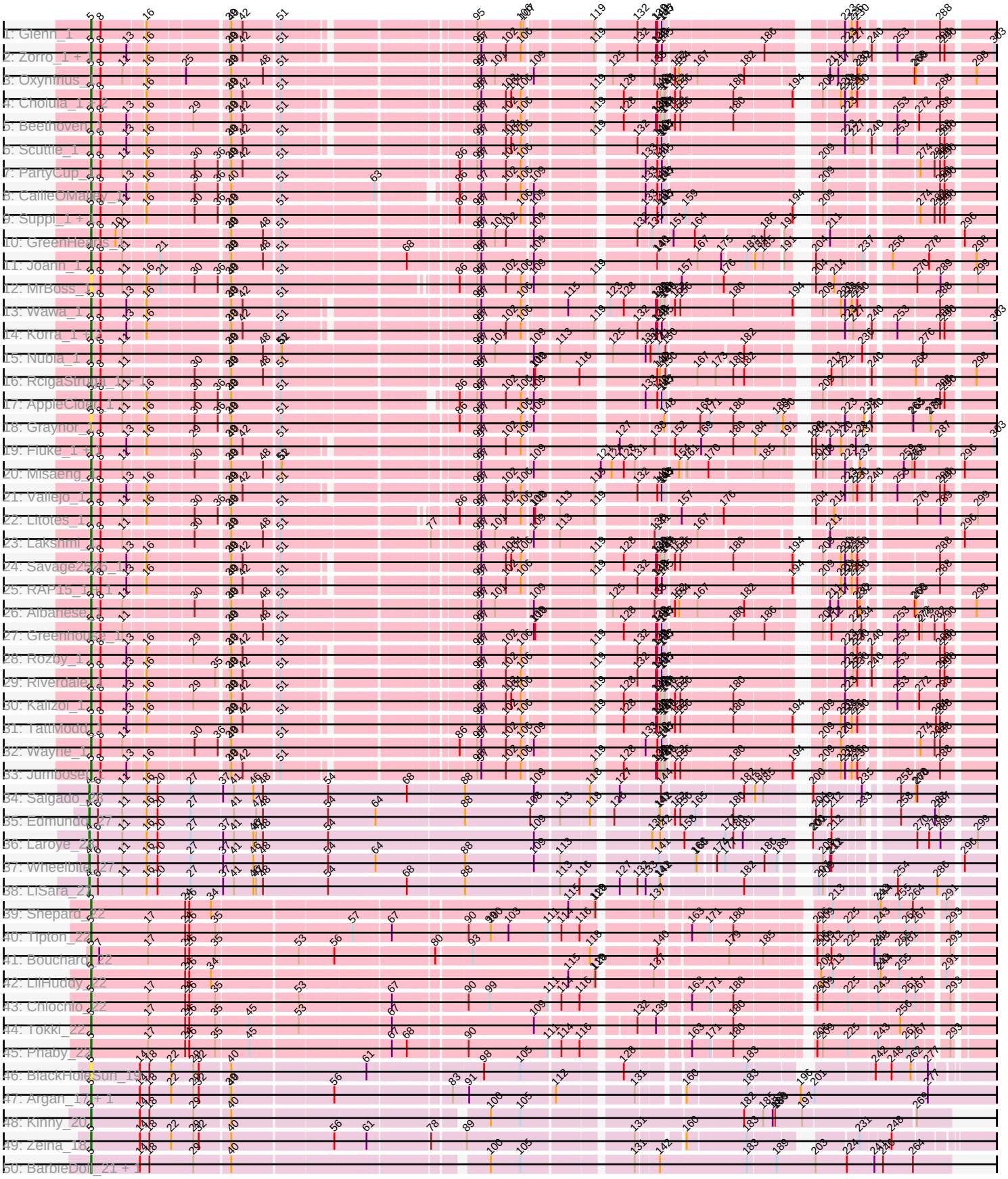
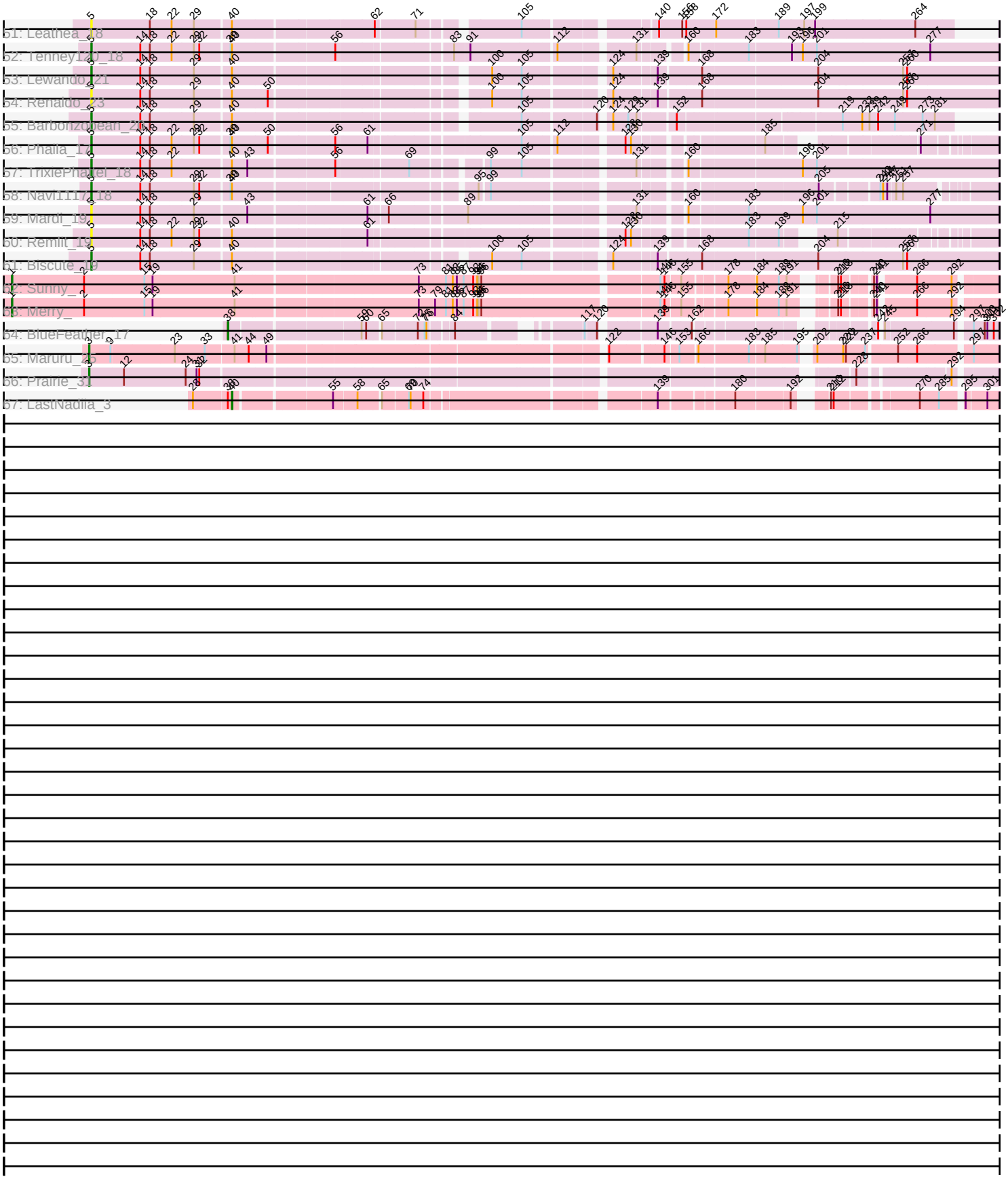
Pham 345658



Pham 345658


51: Leathea_18
52: Tenney120_18
53: Lewando_21
54: Renaldo_23
55: Barbonzobean_20
56: Phalla_15
57: TrixiePhaniel_18
58: Navi1117_18
59: Mardi_19
60: Remlit_19
61: Biscuite_19
62: Sunny_
63: Merry_
64: BlueFeather_17
65: Maruru_15
66: Prairie_31
67: LastNadila_3

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 345658 Report

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

Pham number 345658 has 78 members, 8 are drafts.

Phages represented in each track:
- Track 1 : Glenn_1
- Track 2 : Zorro_1, Dino_1
- Track 3 : Oxynfrius_1
- Track 4 : Cholula_1, Immaculata_1, Potatoes_1
- Track 5 : Beethoven_1
- Track 6 : Scuttle_1
- Track 7 : PartyCup_1
- Track 8 : CallieOMalley_1
- Track 9 : Suppi_1, Canowicakte_1
- Track 10 : GreenHearts_1
- Track 11 : Joann_1
- Track 12 : MrBoss_1
- Track 13 : Wawa_1
- Track 14 : Korra_1, Carpal_1, BrotherBLo_1
- Track 15 : Nubia_1
- Track 16 : RcigaStruga_1, Huntingdon_1
- Track 17 : AppleCider_1
- Track 18 : Graynor_1
- Track 19 : Fluke_1, MrGloopy_1
- Track 20 : Misaeng_1
- Track 21 : Vallejo_1
- Track 22 : Litotes_1
- Track 23 : Lakshmi_1
- Track 24 : Savage2526_1
- Track 25 : RAP15_1, MeganNoll_1
- Track 26 : Albanese_1
- Track 27 : Greenhouse_1
- Track 28 : Rozby_1
- Track 29 : Riverdale_1
- Track 30 : Kalizoi_1
- Track 31 : TattModd_1
- Track 32 : Wayne_1
- Track 33 : Jumboset_1
- Track 34 : Salgado_28
- Track 35 : Edmundo_27
- Track 36 : Laroye_28
- Track 37 : Wheelbite_27

• Track 38 : LiSara_27
• Track 39 : Shepard_22
• Track 40 : Tipton_22
• Track 41 : Bouchard_22
• Track 42 : LilHuddy_22
• Track 43 : Chlochlo_22
• Track 44 : Tokki_22
• Track 45 : Phaby_22
• Track 46 : BlackHoleSun_19
• Track 47 : Argan_17, GantcherGoblin_17
• Track 48 : Kinny_20
• Track 49 : Zeina_18
• Track 50 : BarbieDoll_21, Muglass_20
• Track 51 : Leathea_18
• Track 52 : Tenney120_18
• Track 53 : Lewando_21
• Track 54 : Renaldo_23
• Track 55 : Barbonzobean_20
• Track 56 : Phaila_17
• Track 57 : TrixiePhattel_18
• Track 58 : Navi1117_18
• Track 59 : Mardi_19
• Track 60 : Remlit_19
• Track 61 : Biscute_19
• Track 62 : Sunny_
• Track 63 : Merry_
• Track 64 : BlueFeather_17
• Track 65 : Maruru_25
• Track 66 : Prairie_31
• Track 67 : LastNadiia_3

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

The start number called the most often in the published annotations is 5, it was called in 59 of the 70 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_1, AppleCider_1, Argan_17, BarbieDoll_21, Barbonzobean_20, Beethoven_1, Biscute_19, BlackHoleSun_19, Bouchard_22, BrotherBLo_1, CallieOMalley_1, Canowicakte_1, Carpal_1, Chlochlo_22, Cholula_1, Dino_1, Fluke_1, GantcherGoblin_17, Glenn_1, Graynor_1, GreenHearts_1, Greenhouse_1, Huntingdon_1, Immaculata_1, Joann_1, Jumboset_1, Kalizoi_1, Kinny_20, Korra_1, Lakshmi_1, Leathea_18, Lewando_21, LilHuddy_22, Litotes_1, Mardi_19, MeganNoll_1, Misaeng_1, MrBoss_1, MrGloopy_1, Muglass_20, Navi1117_18, Nubia_1, Oxynfrius_1, PartyCup_1, Phaby_22, Phaila_17, Potatoes_1, RAP15_1, RcigaStruga_1, Remlit_19, Renaldo_23, Riverdale_1, Rozby_1, Savage2526_1, Scuttle_1, Shepard_22, Suppi_1, TattModd_1, Tenney120_18, Tipton_22, Tokki_22, TrixiePhattel_18, Vallejo_1, Wawa_1, Wayne_1, Zeina_18, Zorro_1,

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

•

Genes that do not have the "Most Annotated" start:
• BlueFeather_17, Edmundo_27, Laroye_28, LastNadiia_3, LiSara_27, Maruru_25, Merry_, Prairie_31, Salgado_28, Sunny_, Wheelbite_27,

Summary by start number:

Start 1:
• Found in 2 of 78 (2.6%) of genes in pham
• Manual Annotations of this start: 2 of 70
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Merry_ (EC), Sunny_ (EC),

Start 3:
• Found in 2 of 78 (2.6%) of genes in pham
• Manual Annotations of this start: 2 of 70
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Maruru_25 (FG), Prairie_31 (FH),

Start 4:
• Found in 5 of 78 (6.4%) of genes in pham
• Manual Annotations of this start: 5 of 70
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Edmundo_27 (AL), Laroye_28 (AL), LiSara_27 (AL), Salgado_28 (AL), Wheelbite_27 (AL),

Start 5:
• Found in 67 of 78 (85.9%) of genes in pham
• Manual Annotations of this start: 59 of 70
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Albanese_1 (AK), AppleCider_1 (AK), Argan_17 (AU6), BarbieDoll_21 (AU6), Barbonzobean_20 (AU6), Beethoven_1 (AK), Biscute_19 (AU6), BlackHoleSun_19 (AU6), Bouchard_22 (AU2), BrotherBLo_1 (AK), CallieOMalley_1 (AK), Canowicakte_1 (AK), Carpal_1 (AK), Chlochlo_22 (AU2), Cholula_1 (AK), Dino_1 (AK), Fluke_1 (AK), GantcherGoblin_17 (AU6), Glenn_1 (AK), Graynor_1 (AK), GreenHearts_1 (AK), Greenhouse_1 (AK), Huntingdon_1 (AK), Immaculata_1 (AK), Joann_1 (AK), Jumboset_1 (AK), Kalizoi_1 (AK), Kinny_20 (AU6), Korra_1 (AK), Lakshmi_1 (AK), Leathea_18 (AU6), Lewando_21 (AU6), LilHuddy_22 (AU2), Litotes_1 (AK), Mardi_19 (AU6), MeganNoll_1 (AK), Misaeng_1 (AK), MrBoss_1 (AK), MrGloopy_1 (AK), Muglass_20 (AU6), Navi1117_18 (AU6), Nubia_1 (AK), Oxynfrius_1 (AK), PartyCup_1 (AK), Phaby_22 (AU2), Phaila_17 (AU6), Potatoes_1 (AK), RAP15_1 (AK), RcigaStruga_1 (AK), Remlit_19 (AU6), Renaldo_23 (AU6), Riverdale_1 (AK), Rozby_1 (AK), Savage2526_1 (AK), Scuttle_1 (AK), Shepard_22 (AU2), Suppi_1 (AK), TattModd_1 (AK), Tenney120_18 (AU6), Tipton_22 (AU2), Tokki_22 (AU2), TrixiePhattel_18 (AU6), Vallejo_1 (AK), Wawa_1 (AK), Wayne_1 (AK), Zeina_18 (AU6), Zorro_1 (AK),

Start 38:
• Found in 2 of 78 (2.6%) of genes in pham
• Manual Annotations of this start: 1 of 70
• Called 50.0% of time when present
• Phage (with cluster) where this start called: BlueFeather_17 (FE),

Start 40:
• Found in 60 of 78 (76.9%) of genes in pham
• Manual Annotations of this start: 1 of 70
• Called 1.7% of time when present
• Phage (with cluster) where this start called: LastNadiia_3 (FR),

Summary by clusters:

There are 9 clusters represented in this pham: FR, AK, AU6, AL, EC, AU2, FE, FG, FH,

Info for manual annotations of cluster AK:
•Start number 5 was manually annotated 40 times for cluster AK.

Info for manual annotations of cluster AL:
•Start number 4 was manually annotated 5 times for cluster AL.

Info for manual annotations of cluster AU2:
•Start number 5 was manually annotated 7 times for cluster AU2.

Info for manual annotations of cluster AU6:
•Start number 5 was manually annotated 12 times for cluster AU6.

Info for manual annotations of cluster EC:
•Start number 1 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster FE:
•Start number 38 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster FG:
•Start number 3 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster FH:
•Start number 3 was manually annotated 1 time for cluster FH.

Info for manual annotations of cluster FR:
•Start number 40 was manually annotated 1 time for cluster FR.

Gene Information:

Gene: Albanese_1 Start: 77, Stop: 1699, Start Num: 5
Candidate Starts for Albanese_1:
(Start: 5 @77 has 59 MA's), (8, 98), (11, 143), (30, 275), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (95, 794), (97, 803), (101, 833), (109, 902), (125, 1031), (138, 1109), (152, 1145), (154, 1154), (167, 1193), (182, 1283), (211, 1415), (217, 1433), (230, 1463), (232, 1469), (266, 1556), (268, 1559), (298, 1658),

Gene: AppleCider_1 Start: 78, Stop: 1697, Start Num: 5
Candidate Starts for AppleCider_1:

(Start: 5 @78 has 59 MA's), (8, 99), (11, 144), (16, 186), (30, 276), (36, 321), (39, 336), (Start: 40 @339 has 1 MA's), (51, 432), (86, 741), (95, 774), (97, 783), (102, 837), (106, 867), (109, 882), (133, 1074), (140, 1098), (145, 1107), (147, 1110), (209, 1398), (288, 1596), (290, 1605),

Gene: Argan_17 Start: 12723, Stop: 14513, Start Num: 5
Candidate Starts for Argan_17:
(Start: 5 @12723 has 59 MA's), (14, 12831), (18, 12849), (22, 12894), (29, 12942), (32, 12954), (39, 13014), (Start: 40 @13017 has 1 MA's), (56, 13218), (83, 13440), (91, 13470), (112, 13644), (131, 13782), (160, 13857), (183, 13977), (196, 14088), (201, 14118), (277, 14364),

Gene: BarbieDoll_21 Start: 14676, Stop: 16361, Start Num: 5
Candidate Starts for BarbieDoll_21:
(Start: 5 @14676 has 59 MA's), (14, 14784), (18, 14802), (29, 14895), (Start: 40 @14970 has 1 MA's), (100, 15450), (105, 15513), (131, 15717), (142, 15762), (183, 15939), (189, 15999), (203, 16083), (224, 16149), (241, 16206), (246, 16224), (264, 16287),

Gene: Barbonzobean_20 Start: 14372, Stop: 16036, Start Num: 5
Candidate Starts for Barbonzobean_20:
(Start: 5 @14372 has 59 MA's), (14, 14480), (18, 14498), (29, 14591), (Start: 40 @14666 has 1 MA's), (105, 15209), (120, 15350), (124, 15365), (129, 15398), (131, 15416), (152, 15485), (219, 15806), (232, 15845), (239, 15860), (242, 15878), (249, 15911), (273, 15971), (281, 15998),

Gene: Beethoven_1 Start: 77, Stop: 1690, Start Num: 5
Candidate Starts for Beethoven_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (29, 272), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (128, 1031), (139, 1094), (140, 1097), (143, 1103), (147, 1109), (149, 1112), (152, 1127), (156, 1139), (180, 1244), (223, 1433), (253, 1505), (272, 1544), (288, 1589),

Gene: Biscute_19 Start: 14372, Stop: 16153, Start Num: 5
Candidate Starts for Biscute_19:
(Start: 5 @14372 has 59 MA's), (14, 14480), (18, 14498), (29, 14591), (Start: 40 @14666 has 1 MA's), (100, 15146), (105, 15209), (124, 15362), (139, 15446), (168, 15524), (204, 15764), (257, 15947), (260, 15956),

Gene: BlackHoleSun_19 Start: 12547, Stop: 14223, Start Num: 5
Candidate Starts for BlackHoleSun_19:
(Start: 5 @12547 has 59 MA's), (14, 12655), (18, 12673), (22, 12718), (29, 12766), (32, 12778), (Start: 40 @12841 has 1 MA's), (61, 13105), (98, 13327), (105, 13405), (128, 13579), (183, 13801), (242, 14011), (248, 14038), (262, 14077), (277, 14104),

Gene: BlueFeather_17 Start: 12181, Stop: 13506, Start Num: 38
Candidate Starts for BlueFeather_17:
(Start: 38 @12181 has 1 MA's), (59, 12442), (60, 12451), (65, 12475), (72, 12544), (75, 12559), (76, 12562), (84, 12604), (117, 12802), (120, 12823), (139, 12919), (162, 12985), (242, 13285), (245, 13288), (294, 13429), (297, 13453), (300, 13477), (301, 13483), (302, 13495),

Gene: Bouchard_22 Start: 16178, Stop: 17881, Start Num: 5
Candidate Starts for Bouchard_22:
(Start: 5 @16178 has 59 MA's), (7, 16196), (17, 16301), (24, 16379), (26, 16388), (35, 16445), (53, 16604), (56, 16676), (80, 16868), (93, 16937), (118, 17165), (140, 17279), (179, 17408), (185, 17477), (206, 17558), (209, 17570), (212, 17588), (225, 17624), (241, 17675), (243, 17681), (255, 17723), (261, 17738), (293, 17807),

Gene: BrotherBLo_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for BrotherBLo_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (223, 1439), (227, 1451), (240, 1481), (253, 1511), (288, 1595), (290, 1604), (303, 1691),

Gene: CallieOMalley_1 Start: 78, Stop: 1697, Start Num: 5
Candidate Starts for CallieOMalley_1:
(Start: 5 @78 has 59 MA's), (8, 99), (13, 153), (16, 186), (30, 276), (36, 321), (Start: 40 @339 has 1 MA's), (51, 432), (63, 618), (86, 741), (97, 783), (102, 837), (106, 867), (109, 882), (133, 1074), (140, 1098), (145, 1107), (147, 1110), (209, 1398), (288, 1596), (290, 1605),

Gene: Canowicakte_1 Start: 78, Stop: 1718, Start Num: 5
Candidate Starts for Canowicakte_1:
(Start: 5 @78 has 59 MA's), (8, 99), (11, 144), (16, 186), (30, 276), (36, 321), (39, 336), (Start: 40 @339 has 1 MA's), (51, 432), (86, 762), (95, 795), (97, 804), (106, 888), (109, 903), (133, 1095), (140, 1119), (145, 1128), (147, 1131), (159, 1173), (194, 1392), (209, 1419), (274, 1575), (282, 1605), (288, 1617), (290, 1626),

Gene: Carpal_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Carpal_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (223, 1439), (227, 1451), (240, 1481), (253, 1511), (288, 1595), (290, 1604), (303, 1691),

Gene: Chlochlo_22 Start: 16206, Stop: 17915, Start Num: 5
Candidate Starts for Chlochlo_22:
(Start: 5 @16206 has 59 MA's), (17, 16329), (24, 16407), (26, 16416), (35, 16473), (53, 16632), (67, 16812), (90, 16956), (99, 17001), (111, 17118), (114, 17139), (116, 17175), (163, 17370), (171, 17406), (180, 17451), (206, 17592), (209, 17604), (225, 17658), (243, 17715), (261, 17772), (267, 17790), (293, 17841),

Gene: Cholula_1 Start: 77, Stop: 1690, Start Num: 5
Candidate Starts for Cholula_1:
(Start: 5 @77 has 59 MA's), (8, 98), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (104, 848), (106, 866), (119, 992), (128, 1031), (140, 1097), (143, 1103), (147, 1109), (149, 1112), (152, 1127), (156, 1139), (180, 1244), (194, 1364), (209, 1391), (220, 1424), (223, 1433), (226, 1442), (230, 1454), (288, 1589),

Gene: Dino_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Dino_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (186, 1313), (223, 1439), (227, 1451), (240, 1481), (253, 1511), (288, 1595), (290, 1604), (303, 1691),

Gene: Edmundo_27 Start: 20364, Stop: 22106, Start Num: 4
Candidate Starts for Edmundo_27:
(Start: 4 @20364 has 5 MA's), (6, 20379), (11, 20430), (16, 20481), (20, 20505), (27, 20574), (41, 20661), (47, 20706), (48, 20721), (54, 20862), (64, 20964), (88, 21150), (108, 21291), (113, 21339),

(118, 21396), (126, 21426), (141, 21513), (142, 21516), (152, 21540), (156, 21552), (165, 21585), (180, 21657), (204, 21792), (209, 21807), (212, 21819), (233, 21870), (258, 21921), (283, 21993), (287, 22002),

Gene: Fluke_1 Start: 77, Stop: 1687, Start Num: 5
Candidate Starts for Fluke_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (29, 272), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (127, 1022), (138, 1082), (152, 1118), (169, 1169), (180, 1235), (184, 1277), (191, 1337), (198, 1352), (204, 1361), (211, 1385), (220, 1406), (229, 1433), (237, 1448), (287, 1583), (303, 1682),

Gene: GantcherGoblin_17 Start: 12723, Stop: 14513, Start Num: 5
Candidate Starts for GantcherGoblin_17:
(Start: 5 @12723 has 59 MA's), (14, 12831), (18, 12849), (22, 12894), (29, 12942), (32, 12954), (39, 13014), (Start: 40 @13017 has 1 MA's), (56, 13218), (83, 13440), (91, 13470), (112, 13644), (131, 13782), (160, 13857), (183, 13977), (196, 14088), (201, 14118), (277, 14364),

Gene: Glenn_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Glenn_1:
(Start: 5 @77 has 59 MA's), (8, 98), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (106, 866), (107, 872), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (147, 1109), (223, 1439), (226, 1448), (230, 1460), (288, 1595),

Gene: Graynor_1 Start: 78, Stop: 1715, Start Num: 5
Candidate Starts for Graynor_1:
(Start: 5 @78 has 59 MA's), (8, 99), (11, 144), (16, 186), (30, 276), (36, 321), (39, 336), (Start: 40 @339 has 1 MA's), (51, 432), (86, 762), (95, 795), (97, 804), (106, 888), (109, 903), (148, 1128), (168, 1194), (171, 1215), (180, 1263), (189, 1353), (190, 1362), (223, 1452), (238, 1482), (240, 1488), (263, 1560), (265, 1563), (279, 1599), (280, 1602),

Gene: GreenHearts_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for GreenHearts_1:
(Start: 5 @77 has 59 MA's), (8, 98), (10, 128), (11, 143), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (95, 794), (97, 803), (101, 833), (102, 857), (109, 902), (132, 1076), (135, 1097), (151, 1139), (164, 1184), (186, 1316), (191, 1349), (211, 1397), (296, 1631),

Gene: Greenhouse_1 Start: 77, Stop: 1717, Start Num: 5
Candidate Starts for Greenhouse_1:
(Start: 5 @77 has 59 MA's), (8, 98), (11, 143), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (95, 794), (97, 803), (109, 902), (110, 905), (128, 1052), (139, 1115), (140, 1118), (145, 1127), (147, 1130), (180, 1265), (186, 1334), (209, 1418), (212, 1430), (227, 1472), (234, 1490), (253, 1532), (272, 1571), (275, 1577), (282, 1604), (290, 1625),

Gene: Huntingdon_1 Start: 77, Stop: 1708, Start Num: 5
Candidate Starts for Huntingdon_1:
(Start: 5 @77 has 59 MA's), (8, 98), (11, 143), (30, 275), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (95, 794), (97, 803), (109, 902), (110, 905), (116, 986), (140, 1118), (142, 1124), (150, 1136), (167, 1193), (173, 1226), (180, 1265), (182, 1289), (212, 1424), (221, 1448), (240, 1490), (268, 1565), (298, 1667),

Gene: Immaculata_1 Start: 77, Stop: 1690, Start Num: 5
Candidate Starts for Immaculata_1:

(Start: 5 @77 has 59 MA's), (8, 98), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (104, 848), (106, 866), (119, 992), (128, 1031), (140, 1097), (143, 1103), (147, 1109), (149, 1112), (152, 1127), (156, 1139), (180, 1244), (194, 1364), (209, 1391), (220, 1424), (223, 1433), (226, 1442), (230, 1454), (288, 1589),

Gene: Joann_1 Start: 77, Stop: 1702, Start Num: 5
Candidate Starts for Joann_1:
(Start: 5 @77 has 59 MA's), (8, 98), (11, 143), (21, 215), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (68, 671), (95, 794), (97, 803), (109, 902), (140, 1118), (141, 1121), (167, 1193), (175, 1241), (183, 1289), (184, 1301), (185, 1319), (191, 1355), (204, 1379), (237, 1463), (250, 1499), (278, 1577), (298, 1661),

Gene: Jumboset_1 Start: 77, Stop: 1690, Start Num: 5
Candidate Starts for Jumboset_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (128, 1031), (139, 1094), (140, 1097), (143, 1103), (147, 1109), (149, 1112), (152, 1127), (156, 1139), (180, 1244), (194, 1364), (209, 1391), (220, 1424), (223, 1433), (226, 1442), (230, 1454), (288, 1589),

Gene: Kalizoi_1 Start: 77, Stop: 1690, Start Num: 5
Candidate Starts for Kalizoi_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (29, 272), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (104, 848), (106, 866), (119, 992), (128, 1031), (139, 1094), (140, 1097), (143, 1103), (147, 1109), (149, 1112), (152, 1127), (156, 1139), (180, 1244), (223, 1433), (253, 1505), (272, 1544), (288, 1589),

Gene: Kinny_20 Start: 14676, Stop: 16337, Start Num: 5
Candidate Starts for Kinny_20:
(Start: 5 @14676 has 59 MA's), (14, 14784), (18, 14802), (29, 14895), (Start: 40 @14970 has 1 MA's), (100, 15450), (105, 15513), (182, 15930), (185, 15966), (187, 15987), (188, 15993), (189, 15996), (197, 16047), (269, 16269),

Gene: Korra_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Korra_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (223, 1439), (227, 1451), (240, 1481), (253, 1511), (288, 1595), (290, 1604), (303, 1691),

Gene: Lakshmi_1 Start: 77, Stop: 1702, Start Num: 5
Candidate Starts for Lakshmi_1:
(Start: 5 @77 has 59 MA's), (8, 98), (11, 143), (30, 275), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (77, 713), (95, 794), (97, 803), (101, 833), (109, 902), (113, 947), (138, 1109), (141, 1118), (167, 1193), (211, 1403), (296, 1637),

Gene: Laroye_28 Start: 20087, Stop: 21829, Start Num: 4
Candidate Starts for Laroye_28:
(Start: 4 @20087 has 5 MA's), (6, 20102), (11, 20153), (16, 20204), (20, 20228), (27, 20297), (37, 20360), (41, 20384), (46, 20423), (47, 20429), (48, 20444), (54, 20585), (109, 21017), (136, 21221), (142, 21236), (158, 21281), (177, 21371), (180, 21389), (181, 21410), (200, 21515), (201, 21518), (212, 21545), (270, 21680), (278, 21704), (289, 21728), (299, 21791),

Gene: LastNadiia_3 Start: 947, Stop: 2341, Start Num: 40

Candidate Starts for LastNadiia_3:
(28, 866), (Start: 38 @938 has 1 MA's), (Start: 40 @947 has 1 MA's), (55, 1136), (58, 1184), (65, 1226), (69, 1277), (70, 1280), (74, 1307), (139, 1745), (180, 1886), (192, 1994), (210, 2033), (212, 2039), (270, 2192), (285, 2234), (295, 2273), (301, 2315),

Gene: Leathea_18 Start: 12893, Stop: 14584, Start Num: 5
Candidate Starts for Leathea_18:
(Start: 5 @12893 has 59 MA's), (18, 13019), (22, 13064), (29, 13112), (Start: 40 @13187 has 1 MA's), (62, 13463), (71, 13541), (105, 13730), (140, 13967), (156, 14018), (158, 14027), (172, 14087), (189, 14219), (197, 14273), (199, 14297), (264, 14510),

Gene: Lewando_21 Start: 14675, Stop: 16456, Start Num: 5
Candidate Starts for Lewando_21:
(Start: 5 @14675 has 59 MA's), (14, 14783), (18, 14801), (29, 14894), (Start: 40 @14969 has 1 MA's), (100, 15449), (105, 15512), (124, 15665), (139, 15749), (168, 15827), (204, 16067), (257, 16250), (260, 16259),

Gene: LiSara_27 Start: 20143, Stop: 21849, Start Num: 4
Candidate Starts for LiSara_27:
(Start: 4 @20143 has 5 MA's), (6, 20158), (11, 20209), (16, 20260), (20, 20284), (27, 20353), (37, 20416), (41, 20440), (46, 20479), (47, 20485), (48, 20500), (54, 20641), (68, 20812), (88, 20929), (113, 21118), (116, 21157), (127, 21214), (132, 21253), (133, 21265), (141, 21292), (142, 21295), (182, 21451), (207, 21553), (209, 21562), (254, 21661), (286, 21739),

Gene: LilHuddy_22 Start: 16218, Stop: 17945, Start Num: 5
Candidate Starts for LilHuddy_22:
(Start: 5 @16218 has 59 MA's), (24, 16419), (26, 16428), (34, 16476), (115, 17166), (119, 17211), (120, 17214), (137, 17313), (208, 17622), (213, 17646), (243, 17736), (244, 17742), (255, 17778), (291, 17862),

Gene: Litotes_1 Start: 78, Stop: 1676, Start Num: 5
Candidate Starts for Litotes_1:
(Start: 5 @78 has 59 MA's), (8, 99), (11, 144), (16, 186), (30, 276), (36, 321), (39, 336), (Start: 40 @339 has 1 MA's), (51, 432), (86, 741), (95, 774), (97, 783), (102, 837), (106, 867), (109, 882), (110, 885), (113, 927), (119, 993), (157, 1134), (176, 1215), (204, 1365), (214, 1398), (270, 1527), (289, 1575), (299, 1638),

Gene: Mardi_19 Start: 13311, Stop: 15101, Start Num: 5
Candidate Starts for Mardi_19:
(Start: 5 @13311 has 59 MA's), (14, 13419), (18, 13437), (29, 13530), (43, 13635), (61, 13869), (66, 13905), (89, 14055), (131, 14370), (160, 14445), (183, 14565), (196, 14676), (201, 14706), (277, 14952),

Gene: Maruru_25 Start: 23992, Stop: 25752, Start Num: 3
Candidate Starts for Maruru_25:
(Start: 3 @23992 has 2 MA's), (9, 24037), (23, 24169), (33, 24235), (41, 24295), (44, 24322), (49, 24358), (122, 25021), (146, 25120), (153, 25147), (166, 25180), (183, 25282), (185, 25312), (195, 25381), (202, 25393), (220, 25450), (222, 25456), (237, 25498), (252, 25555), (266, 25597), (297, 25699),

Gene: MeganNoll_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for MeganNoll_1:

(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (194, 1370), (209, 1397), (220, 1430), (223, 1439), (226, 1448), (230, 1460), (288, 1595),

Gene: Merry_ Start: 18072, Stop: 20003, Start Num: 1
Candidate Starts for Merry_:
(Start: 1 @18072 has 2 MA's), (2, 18231), (15, 18360), (19, 18378), (41, 18558), (73, 18933), (79, 18969), (81, 18993), (82, 19008), (85, 19017), (87, 19032), (92, 19053), (94, 19062), (95, 19065), (96, 19071), (141, 19425), (146, 19434), (155, 19464), (178, 19548), (184, 19605), (189, 19653), (191, 19668), (216, 19728), (218, 19734), (240, 19785), (241, 19791), (266, 19857), (292, 19929),

Gene: Misaeng_1 Start: 77, Stop: 1708, Start Num: 5
Candidate Starts for Misaeng_1:
(Start: 5 @77 has 59 MA's), (8, 98), (11, 143), (30, 275), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (52, 434), (95, 794), (97, 803), (109, 902), (121, 1028), (124, 1052), (128, 1076), (131, 1100), (154, 1181), (161, 1193), (170, 1232), (185, 1334), (204, 1400), (209, 1415), (223, 1457), (232, 1469), (259, 1535), (263, 1553), (266, 1559), (296, 1643),

Gene: MrBoss_1 Start: 78, Stop: 1676, Start Num: 5
Candidate Starts for MrBoss_1:
(Start: 5 @78 has 59 MA's), (8, 99), (11, 144), (16, 186), (21, 216), (30, 276), (36, 321), (39, 336), (Start: 40 @339 has 1 MA's), (51, 432), (86, 741), (95, 774), (97, 783), (102, 837), (106, 867), (109, 882), (119, 993), (157, 1134), (176, 1215), (204, 1365), (214, 1398), (270, 1527), (289, 1575), (299, 1638),

Gene: MrGloopy_1 Start: 77, Stop: 1687, Start Num: 5
Candidate Starts for MrGloopy_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (29, 272), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (127, 1022), (138, 1082), (152, 1118), (169, 1169), (180, 1235), (184, 1277), (191, 1337), (198, 1352), (204, 1361), (211, 1385), (220, 1406), (229, 1433), (237, 1448), (287, 1583), (303, 1682),

Gene: Muglass_20 Start: 14372, Stop: 16057, Start Num: 5
Candidate Starts for Muglass_20:
(Start: 5 @14372 has 59 MA's), (14, 14480), (18, 14498), (29, 14591), (Start: 40 @14666 has 1 MA's), (100, 15146), (105, 15209), (131, 15413), (142, 15458), (183, 15635), (189, 15695), (203, 15779), (224, 15845), (241, 15902), (246, 15920), (264, 15983),

Gene: Navi1117_18 Start: 13118, Stop: 14803, Start Num: 5
Candidate Starts for Navi1117_18:
(Start: 5 @13118 has 59 MA's), (14, 13226), (18, 13244), (29, 13337), (32, 13349), (39, 13409), (Start: 40 @13412 has 1 MA's), (95, 13871), (99, 13889), (205, 14486), (243, 14591), (244, 14597), (247, 14606), (251, 14621), (257, 14636),

Gene: Nubia_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Nubia_1:
(Start: 5 @77 has 59 MA's), (8, 98), (11, 143), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (52, 434), (95, 794), (97, 803), (101, 833), (109, 902), (113, 947), (125, 1031), (133, 1094), (134, 1103), (141, 1121), (150, 1136), (182, 1280), (236, 1460), (276, 1556),

Gene: Oxynfrius_1 Start: 77, Stop: 1699, Start Num: 5
Candidate Starts for Oxynfrius_1:

(Start: 5 @77 has 59 MA's), (8, 98), (11, 143), (16, 185), (25, 257), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (95, 794), (97, 803), (101, 833), (109, 902), (125, 1031), (138, 1109), (152, 1145), (154, 1154), (167, 1193), (182, 1283), (211, 1415), (217, 1433), (230, 1463), (232, 1469), (266, 1556), (268, 1559), (298, 1658),

Gene: PartyCup_1 Start: 78, Stop: 1718, Start Num: 5
Candidate Starts for PartyCup_1:
(Start: 5 @78 has 59 MA's), (8, 99), (11, 144), (16, 186), (30, 276), (36, 321), (39, 336), (Start: 40 @339 has 1 MA's), (42, 360), (51, 432), (86, 762), (95, 795), (97, 804), (102, 858), (106, 888), (133, 1095), (140, 1119), (145, 1128), (209, 1419), (274, 1575), (282, 1605), (288, 1617), (290, 1626),

Gene: Phaby_22 Start: 16171, Stop: 17880, Start Num: 5
Candidate Starts for Phaby_22:
(Start: 5 @16171 has 59 MA's), (17, 16294), (24, 16372), (26, 16381), (35, 16438), (45, 16504), (67, 16777), (68, 16807), (90, 16921), (111, 17083), (114, 17104), (116, 17140), (163, 17335), (171, 17371), (180, 17416), (206, 17557), (209, 17569), (225, 17623), (243, 17680), (261, 17737), (267, 17755), (293, 17806),

Gene: Phaila_17 Start: 12449, Stop: 14119, Start Num: 5
Candidate Starts for Phaila_17:
(Start: 5 @12449 has 59 MA's), (14, 12557), (18, 12575), (22, 12620), (29, 12668), (32, 12680), (39, 12740), (Start: 40 @12743 has 1 MA's), (50, 12815), (56, 12944), (61, 13007), (105, 13307), (112, 13370), (128, 13481), (130, 13493), (185, 13733), (271, 13988),

Gene: Potatoes_1 Start: 77, Stop: 1690, Start Num: 5
Candidate Starts for Potatoes_1:
(Start: 5 @77 has 59 MA's), (8, 98), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (104, 848), (106, 866), (119, 992), (128, 1031), (140, 1097), (143, 1103), (147, 1109), (149, 1112), (152, 1127), (156, 1139), (180, 1244), (194, 1364), (209, 1391), (220, 1424), (223, 1433), (226, 1442), (230, 1454), (288, 1589),

Gene: Prairie_31 Start: 24482, Stop: 26215, Start Num: 3
Candidate Starts for Prairie_31:
(Start: 3 @24482 has 2 MA's), (12, 24554), (24, 24686), (31, 24710), (32, 24716), (228, 25970), (292, 26138),

Gene: RAP15_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for RAP15_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (194, 1370), (209, 1397), (220, 1430), (223, 1439), (226, 1448), (230, 1460), (288, 1595),

Gene: RcigaStruga_1 Start: 77, Stop: 1708, Start Num: 5
Candidate Starts for RcigaStruga_1:
(Start: 5 @77 has 59 MA's), (8, 98), (11, 143), (30, 275), (39, 335), (Start: 40 @338 has 1 MA's), (48, 401), (51, 431), (95, 794), (97, 803), (109, 902), (110, 905), (116, 986), (140, 1118), (142, 1124), (150, 1136), (167, 1193), (173, 1226), (180, 1265), (182, 1289), (212, 1424), (221, 1448), (240, 1490), (268, 1565), (298, 1667),

Gene: Remlit_19 Start: 12460, Stop: 14124, Start Num: 5
Candidate Starts for Remlit_19:

(Start: 5 @12460 has 59 MA's), (14, 12568), (18, 12586), (22, 12631), (29, 12679), (32, 12691), (Start: 40 @12754 has 1 MA's), (61, 13018), (128, 13492), (130, 13504), (183, 13714), (189, 13774), (215, 13849),

Gene: Renaldo_23 Start: 14676, Stop: 16457, Start Num: 5
Candidate Starts for Renaldo_23:
(Start: 5 @14676 has 59 MA's), (14, 14784), (18, 14802), (29, 14895), (Start: 40 @14970 has 1 MA's), (50, 15042), (100, 15450), (105, 15513), (124, 15666), (139, 15750), (168, 15828), (204, 16068), (257, 16251), (260, 16260),

Gene: Riverdale_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Riverdale_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (35, 314), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (147, 1109), (223, 1439), (227, 1451), (230, 1460), (240, 1481), (253, 1511), (288, 1595), (290, 1604),

Gene: Rozby_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Rozby_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (29, 272), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (147, 1109), (223, 1439), (227, 1451), (230, 1460), (240, 1481), (253, 1511), (288, 1595), (290, 1604),

Gene: Salgado_28 Start: 20094, Stop: 21821, Start Num: 4
Candidate Starts for Salgado_28:
(Start: 4 @20094 has 5 MA's), (6, 20109), (11, 20160), (16, 20211), (20, 20235), (27, 20304), (37, 20367), (41, 20391), (46, 20430), (48, 20451), (54, 20592), (68, 20763), (88, 20880), (109, 21024), (118, 21123), (127, 21162), (144, 21243), (182, 21402), (184, 21420), (185, 21438), (200, 21507), (235, 21591), (258, 21639), (268, 21669), (270, 21672),

Gene: Savage2526_1 Start: 77, Stop: 1690, Start Num: 5
Candidate Starts for Savage2526_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (104, 848), (106, 866), (119, 992), (128, 1031), (139, 1094), (140, 1097), (143, 1103), (147, 1109), (149, 1112), (152, 1127), (156, 1139), (180, 1244), (194, 1364), (209, 1391), (220, 1424), (223, 1433), (226, 1442), (230, 1454), (288, 1589),

Gene: Scuttle_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Scuttle_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (104, 848), (106, 866), (119, 992), (132, 1061), (140, 1097), (143, 1103), (145, 1106), (147, 1109), (223, 1439), (227, 1451), (240, 1481), (253, 1511), (288, 1595), (290, 1604),

Gene: Shepard_22 Start: 16215, Stop: 17942, Start Num: 5
Candidate Starts for Shepard_22:
(Start: 5 @16215 has 59 MA's), (24, 16416), (26, 16425), (34, 16473), (115, 17163), (119, 17208), (120, 17211), (137, 17310), (213, 17643), (243, 17733), (244, 17739), (255, 17775), (264, 17805), (291, 17859),

Gene: Sunny_ Start: 18072, Stop: 20003, Start Num: 1
Candidate Starts for Sunny_:

(Start: 1 @18072 has 2 MA's), (2, 18231), (15, 18360), (19, 18378), (41, 18558), (73, 18933), (81, 18993), (82, 19008), (85, 19017), (87, 19032), (92, 19053), (94, 19062), (95, 19065), (96, 19071), (141, 19425), (146, 19434), (155, 19464), (178, 19548), (184, 19605), (189, 19653), (191, 19668), (216, 19728), (218, 19734), (240, 19785), (241, 19791), (266, 19857), (292, 19929),

Gene: Suppi_1 Start: 78, Stop: 1718, Start Num: 5
Candidate Starts for Suppi_1:
(Start: 5 @78 has 59 MA's), (8, 99), (11, 144), (16, 186), (30, 276), (36, 321), (39, 336), (Start: 40 @339 has 1 MA's), (51, 432), (86, 762), (95, 795), (97, 804), (106, 888), (109, 903), (133, 1095), (140, 1119), (145, 1128), (147, 1131), (159, 1173), (194, 1392), (209, 1419), (274, 1575), (282, 1605), (288, 1617), (290, 1626),

Gene: TattModd_1 Start: 77, Stop: 1690, Start Num: 5
Candidate Starts for TattModd_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (128, 1031), (139, 1094), (140, 1097), (143, 1103), (147, 1109), (149, 1112), (152, 1127), (156, 1139), (180, 1244), (194, 1364), (209, 1391), (220, 1424), (223, 1433), (226, 1442), (230, 1454), (284, 1580), (288, 1589),

Gene: Tenney120_18 Start: 13006, Stop: 14796, Start Num: 5
Candidate Starts for Tenney120_18:
(Start: 5 @13006 has 59 MA's), (14, 13114), (18, 13132), (22, 13177), (29, 13225), (32, 13237), (39, 13297), (Start: 40 @13300 has 1 MA's), (56, 13501), (83, 13723), (91, 13753), (112, 13927), (131, 14065), (160, 14140), (183, 14260), (193, 14347), (196, 14371), (201, 14401), (277, 14647),

Gene: Tipton_22 Start: 16212, Stop: 17921, Start Num: 5
Candidate Starts for Tipton_22:
(Start: 5 @16212 has 59 MA's), (17, 16335), (24, 16413), (26, 16422), (35, 16479), (57, 16743), (67, 16818), (90, 16962), (99, 17007), (100, 17010), (103, 17049), (111, 17124), (114, 17145), (116, 17181), (163, 17376), (171, 17412), (180, 17457), (206, 17598), (209, 17610), (225, 17664), (243, 17721), (261, 17778), (267, 17796), (293, 17847),

Gene: Tokki_22 Start: 16221, Stop: 17915, Start Num: 5
Candidate Starts for Tokki_22:
(Start: 5 @16221 has 59 MA's), (17, 16344), (24, 16422), (26, 16431), (35, 16488), (45, 16554), (53, 16647), (67, 16827), (109, 17106), (132, 17280), (139, 17313), (180, 17445), (256, 17754),

Gene: TrixiePhattel_18 Start: 12969, Stop: 14735, Start Num: 5
Candidate Starts for TrixiePhattel_18:
(Start: 5 @12969 has 59 MA's), (14, 13077), (18, 13095), (22, 13140), (Start: 40 @13263 has 1 MA's), (43, 13293), (56, 13464), (69, 13605), (99, 13740), (105, 13806), (131, 14004), (160, 14079), (196, 14310), (201, 14340),

Gene: Vallejo_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Vallejo_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (140, 1097), (143, 1103), (145, 1106), (147, 1109), (223, 1439), (227, 1451), (230, 1460), (240, 1481), (253, 1511), (288, 1595), (290, 1604),

Gene: Wawa_1 Start: 77, Stop: 1690, Start Num: 5
Candidate Starts for Wawa_1:

(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (106, 866), (115, 944), (123, 1004), (128, 1031), (139, 1094), (140, 1097), (143, 1103), (147, 1109), (149, 1112), (152, 1127), (156, 1139), (180, 1244), (194, 1364), (209, 1391), (220, 1424), (223, 1433), (226, 1442), (230, 1454), (288, 1589),

Gene: Wayne_1 Start: 78, Stop: 1718, Start Num: 5
Candidate Starts for Wayne_1:
(Start: 5 @78 has 59 MA's), (8, 99), (11, 144), (30, 276), (36, 321), (39, 336), (Start: 40 @339 has 1 MA's), (51, 432), (86, 762), (95, 795), (97, 804), (102, 858), (106, 888), (109, 903), (133, 1095), (140, 1119), (145, 1128), (147, 1131), (209, 1419), (220, 1452), (274, 1575), (282, 1605), (288, 1617),

Gene: Wheelbite_27 Start: 20209, Stop: 21939, Start Num: 4
Candidate Starts for Wheelbite_27:
(Start: 4 @20209 has 5 MA's), (6, 20224), (11, 20275), (16, 20326), (20, 20350), (27, 20419), (37, 20482), (41, 20506), (46, 20545), (48, 20566), (54, 20707), (64, 20809), (88, 20995), (109, 21139), (113, 21184), (141, 21358), (165, 21430), (166, 21433), (174, 21460), (177, 21478), (186, 21559), (189, 21586), (209, 21631), (211, 21640), (212, 21643), (296, 21874),

Gene: Zeina_18 Start: 13016, Stop: 14692, Start Num: 5
Candidate Starts for Zeina_18:
(Start: 5 @13016 has 59 MA's), (14, 13124), (18, 13142), (22, 13187), (29, 13235), (32, 13247), (Start: 40 @13310 has 1 MA's), (56, 13511), (61, 13574), (78, 13694), (89, 13760), (131, 14075), (160, 14150), (183, 14270), (231, 14450), (248, 14507),

Gene: Zorro_1 Start: 77, Stop: 1696, Start Num: 5
Candidate Starts for Zorro_1:
(Start: 5 @77 has 59 MA's), (8, 98), (13, 152), (16, 185), (39, 335), (Start: 40 @338 has 1 MA's), (42, 359), (51, 431), (95, 773), (97, 782), (102, 836), (106, 866), (119, 992), (132, 1061), (139, 1094), (140, 1097), (145, 1106), (186, 1313), (223, 1439), (227, 1451), (240, 1481), (253, 1511), (288, 1595), (290, 1604), (303, 1691),