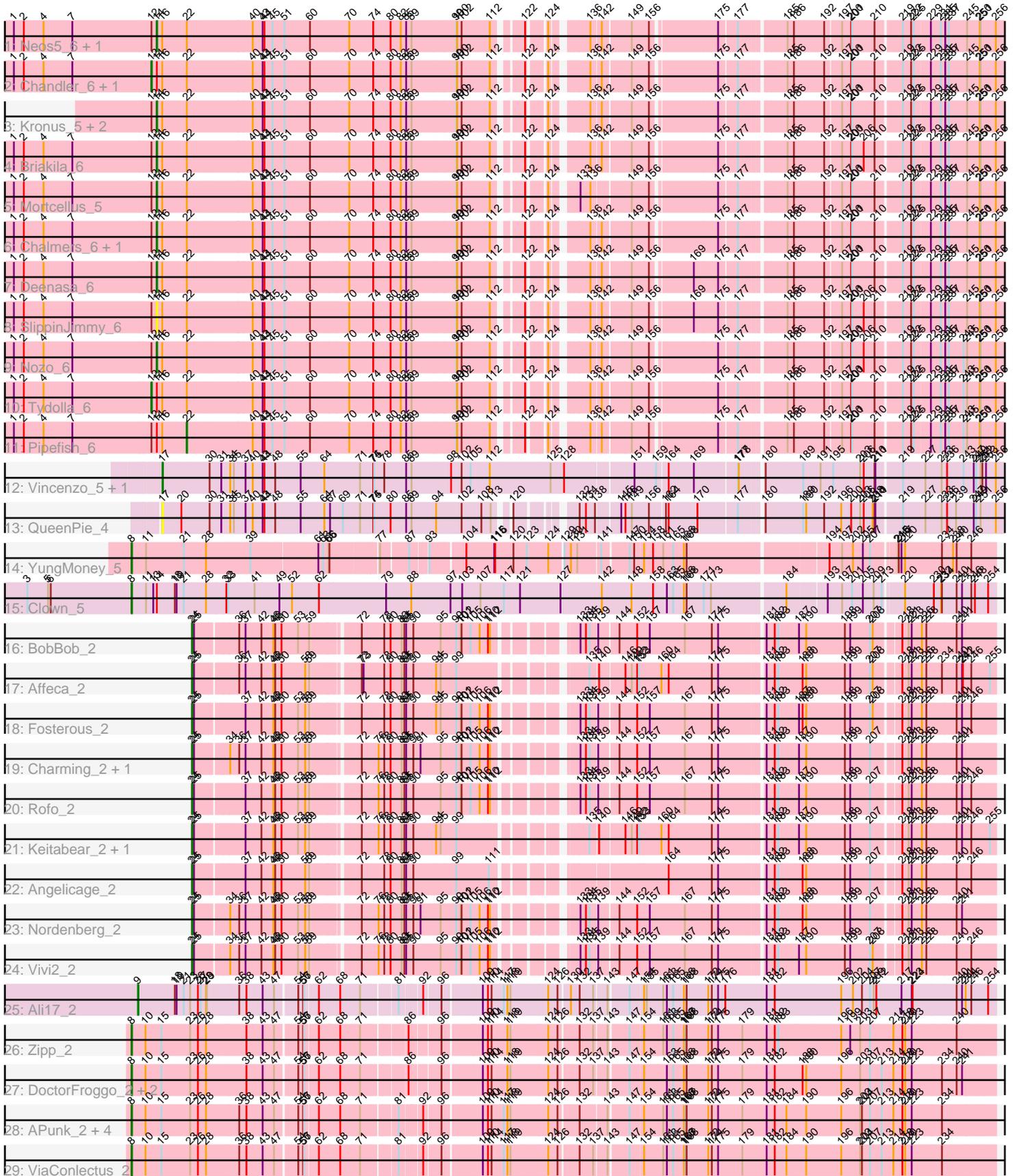# Pham 291303

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 291303 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291303 has 43 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Neos5_6, Phlyer_6
• Track 2 : Chandler_6, Athena_6
• Track 3 : Kronus_5, Marley1013_6, Morty007_6
• Track 4 : Briakila_6
• Track 5 : Mortcellus_5
• Track 6 : Chalmers_6, RomaT_6
• Track 7 : Deenasa_6
• Track 8 : SlippinJimmy_6
• Track 9 : Nozo_6
• Track 10 : Tydolla_6
• Track 11 : Pipefish_6
• Track 12 : Vincenzo_5, AlanGrant_5
• Track 13 : QueenPie_4
• Track 14 : YungMoney_5
• Track 15 : Clown_5
• Track 16 : BobBob_2
• Track 17 : Affeca_2
• Track 18 : Fosterous_2
• Track 19 : Charming_2, Tangent_2
• Track 20 : Rofo_2
• Track 21 : Keitabear_2, Sedona_2
• Track 22 : Angelicage_2
• Track 23 : Nordenberg_2
• Track 24 : Vivi2_2
• Track 25 : Ali17_2
• Track 26 : Zipp_2
• Track 27 : DoctorFroggo_2, Delrey21_2, Verity_2
• Track 28 : APunk_2, Sampson_2, Scioto_2, Natkenzie_2, Abblin_2
• Track 29 : ViaConlectus_2

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

The start number called the most often in the published annotations is 24, it was called in 11 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Affeca_2, Angelicage_2, BobBob_2, Charming_2, Fosterous_2, Keitabear_2, Nordenberg_2, Rofo_2, Sedona_2, Tangent_2, Vivi2_2,

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

Genes that do not have the "Most Annotated" start:
• APunk_2, Abblin_2, AlanGrant_5, Ali17_2, Athena_6, Briakila_6, Chalmers_6, Chandler_6, Clown_5, Deenasa_6, Delrey21_2, DoctorFroggo_2, Kronus_5, Marley1013_6, Mortcellus_5, Morty007_6, Natkenzie_2, Neos5_6, Nozo_6, Phlyer_6, Pipefish_6, QueenPie_4, RomaT_6, Sampson_2, Scioto_2, SlippinJimmy_6, Tydolla_6, Verity_2, ViaConlectus_2, Vincenzo_5, YungMoney_5, Zipp_2,

Summary by start number:

Start 8:
• Found in 12 of 43 (27.9%) of genes in pham
• Manual Annotations of this start: 9 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: APunk_2 (DE4), Abblin_2 (DE4), Clown_5 (DC2), Delrey21_2 (DE4), DoctorFroggo_2 (DE4), Natkenzie_2 (DE4), Sampson_2 (DE4), Scioto_2 (DE4), Verity_2 (DE4), ViaConlectus_2 (DE4), YungMoney_5 (DC1), Zipp_2 (DE4),

Start 9:
• Found in 1 of 43 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ali17_2 (DE2),

Start 12:
• Found in 16 of 43 (37.2%) of genes in pham
• Manual Annotations of this start: 3 of 38
• Called 18.8% of time when present
• Phage (with cluster) where this start called: Athena_6 (B3), Chandler_6 (B3), Tydolla_6 (B3),

Start 14:
• Found in 17 of 43 (39.5%) of genes in pham
• Manual Annotations of this start: 11 of 38
• Called 70.6% of time when present
• Phage (with cluster) where this start called: Briakila_6 (B3), Chalmers_6 (B3), Deenasa_6 (B3), Kronus_5 (B3), Marley1013_6 (B3), Mortcellus_5 (B3), Morty007_6 (B3), Neos5_6 (B3), Nozo_6 (B3), Phlyer_6 (B3), RomaT_6 (B3), SlippinJimmy_6 (B3),

Start 17:
• Found in 3 of 43 (7.0%) of genes in pham
• Manual Annotations of this start: 2 of 38
• Called 100.0% of time when present

• Phage (with cluster) where this start called: AlanGrant_5 (B4), QueenPie_4 (B4), Vincenzo_5 (B4),

Start 22:
• Found in 16 of 43 (37.2%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 6.2% of time when present
• Phage (with cluster) where this start called: Pipefish_6 (B3),

Start 24:
• Found in 11 of 43 (25.6%) of genes in pham
• Manual Annotations of this start: 11 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Affeca_2 (DE1), Angelicage_2 (DE1), BobBob_2 (DE1), Charming_2 (DE1), Fosterous_2 (DE1), Keitabear_2 (DE1), Nordenberg_2 (DE1), Rofo_2 (DE1), Sedona_2 (DE1), Tangent_2 (DE1), Vivi2_2 (DE1),

Summary by clusters:

There are 7 clusters represented in this pham: DE1, DE2, DE4, B4, B3, DC2, DC1,

Info for manual annotations of cluster B3:
•Start number 12 was manually annotated 3 times for cluster B3.
•Start number 14 was manually annotated 11 times for cluster B3.
•Start number 22 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster B4:
•Start number 17 was manually annotated 2 times for cluster B4.

Info for manual annotations of cluster DC1:
•Start number 8 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DC2:
•Start number 8 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:
•Start number 24 was manually annotated 11 times for cluster DE1.

Info for manual annotations of cluster DE2:
•Start number 9 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster DE4:
•Start number 8 was manually annotated 7 times for cluster DE4.

Gene Information:

Gene: APunk_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for APunk_2:
(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (36, 833), (38, 857), (43, 902), (47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (81, 1283),

(92, 1346), (96, 1397), (109, 1514), (110, 1529), (114, 1541), (117, 1580), (118, 1592), (119, 1598),
(124, 1721), (126, 1748), (132, 1805), (143, 1889), (147, 1949), (154, 1991), (161, 2051), (163, 2063),
(165, 2084), (166, 2120), (167, 2123), (168, 2129), (172, 2201), (174, 2213), (175, 2234), (179, 2315),
(181, 2396), (182, 2423), (184, 2462), (190, 2522), (196, 2636), (203, 2699), (204, 2705), (207, 2732),
(213, 2768), (214, 2807), (218, 2837), (220, 2846), (223, 2867), (234, 2963),

Gene: Abblin_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for Abblin_2:
(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (36, 833), (38, 857),
(43, 902), (47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (81, 1283),
(92, 1346), (96, 1397), (109, 1514), (110, 1529), (114, 1541), (117, 1580), (118, 1592), (119, 1598),
(124, 1721), (126, 1748), (132, 1805), (143, 1889), (147, 1949), (154, 1991), (161, 2051), (163, 2063),
(165, 2084), (166, 2120), (167, 2123), (168, 2129), (172, 2201), (174, 2213), (175, 2234), (179, 2315),
(181, 2396), (182, 2423), (184, 2462), (190, 2522), (196, 2636), (203, 2699), (204, 2705), (207, 2732),
(213, 2768), (214, 2807), (218, 2837), (220, 2846), (223, 2867), (234, 2963),

Gene: Affeca_2 Start: 514, Stop: 2901, Start Num: 24
Candidate Starts for Affeca_2:
(Start: 24 @514 has 11 MA's), (25, 520), (36, 652), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790),
(58, 865), (59, 877), (72, 1006), (73, 1012), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150),
(90, 1174), (94, 1249), (95, 1264), (99, 1312), (135, 1639), (140, 1663), (146, 1738), (149, 1759), (152,
1777), (153, 1783), (160, 1855), (164, 1879), (174, 2023), (175, 2044), (181, 2176), (182, 2203), (183,
2215), (188, 2296), (190, 2308), (198, 2434), (199, 2452), (207, 2518), (208, 2527), (218, 2599), (221,
2620), (223, 2629), (226, 2659), (228, 2674), (234, 2725), (240, 2773), (241, 2791), (242, 2794), (246,
2821), (255, 2881),

Gene: AlanGrant_5 Start: 3145, Stop: 5796, Start Num: 17
Candidate Starts for AlanGrant_5:
(Start: 17 @3145 has 2 MA's), (30, 3295), (31, 3334), (34, 3364), (35, 3376), (37, 3412), (40, 3436),
(43, 3469), (44, 3475), (48, 3511), (55, 3592), (64, 3667), (71, 3784), (74, 3826), (75, 3829), (78, 3862),
(85, 3934), (89, 3952), (98, 4081), (102, 4114), (105, 4144), (112, 4207), (125, 4408), (128, 4453),
(151, 4663), (159, 4735), (164, 4768), (169, 4852), (177, 4981), (178, 4984), (180, 5041), (189, 5155),
(191, 5212), (195, 5254), (203, 5344), (206, 5353), (210, 5389), (211, 5392), (219, 5464), (227, 5539),
(233, 5593), (236, 5611), (243, 5665), (247, 5698), (249, 5704), (251, 5719), (252, 5725), (253, 5737),
(256, 5770),

Gene: Ali17_2 Start: 534, Stop: 3170, Start Num: 9
Candidate Starts for Ali17_2:
(Start: 9 @534 has 1 MA's), (18, 657), (19, 663), (21, 687), (23, 708), (26, 732), (27, 741), (28, 759),
(29, 762), (36, 864), (38, 888), (43, 933), (47, 963), (54, 1020), (56, 1035), (57, 1038), (62, 1080), (68,
1149), (71, 1212), (81, 1314), (92, 1377), (96, 1428), (109, 1545), (110, 1560), (114, 1572), (117,
1611), (118, 1623), (119, 1629), (124, 1752), (126, 1779), (130, 1812), (132, 1836), (137, 1881), (143,
1920), (147, 1980), (154, 2022), (155, 2028), (161, 2082), (163, 2094), (165, 2115), (166, 2151), (168,
2160), (172, 2232), (174, 2244), (175, 2265), (176, 2289), (181, 2427), (182, 2454), (196, 2673), (202,
2712), (204, 2742), (207, 2769), (209, 2781), (212, 2787), (217, 2868), (223, 2901), (224, 2904), (240,
3045), (241, 3063), (244, 3075), (246, 3093), (254, 3144),

Gene: Angelicage_2 Start: 514, Stop: 2901, Start Num: 24
Candidate Starts for Angelicage_2:
(Start: 24 @514 has 11 MA's), (25, 520), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790), (58, 865),
(59, 877), (72, 1006), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150), (90, 1174), (99, 1312),
(111, 1420), (164, 1879), (174, 2023), (175, 2044), (181, 2176), (182, 2203), (183, 2215), (188, 2296),
(190, 2308), (198, 2434), (199, 2452), (207, 2518), (218, 2599), (221, 2620), (223, 2629), (226, 2659),

(228, 2674), (240, 2773), (246, 2821),

Gene: Athena_6 Start: 2696, Stop: 5236, Start Num: 12
Candidate Starts for Athena_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11
MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51,
3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683),
(100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124),
(156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751),
(201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036),
(237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: BobBob_2 Start: 514, Stop: 2907, Start Num: 24
Candidate Starts for BobBob_2:
(Start: 24 @514 has 11 MA's), (25, 520), (36, 652), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790),
(53, 841), (59, 877), (72, 1006), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150), (90, 1174),
(95, 1264), (99, 1312), (101, 1327), (102, 1330), (105, 1360), (106, 1390), (110, 1417), (112, 1423),
(133, 1615), (134, 1633), (135, 1645), (139, 1666), (144, 1726), (152, 1783), (157, 1822), (167, 1939),
(174, 2029), (175, 2050), (181, 2182), (182, 2209), (183, 2221), (187, 2290), (190, 2314), (198, 2440),
(199, 2458), (207, 2524), (208, 2533), (218, 2605), (221, 2626), (223, 2635), (226, 2665), (228, 2680),
(240, 2779), (241, 2797),

Gene: Briakila_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for Briakila_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11
MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51,
3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683),
(100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124),
(156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751),
(201, 4754), (206, 4790), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021),
(235, 5036), (237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Chalmers_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for Chalmers_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11
MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51,
3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683),
(100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124),
(156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751),
(201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036),
(237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Chandler_6 Start: 2696, Stop: 5236, Start Num: 12
Candidate Starts for Chandler_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11
MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51,
3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683),
(100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124),
(156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751),
(201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036),
(237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Charming_2 Start: 514, Stop: 2907, Start Num: 24

Candidate Starts for Charming_2:
(Start: 24 @514 has 11 MA's), (25, 520), (34, 622), (36, 652), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790), (53, 841), (58, 865), (59, 877), (72, 1006), (76, 1060), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150), (90, 1174), (91, 1198), (95, 1264), (99, 1312), (101, 1327), (102, 1330), (105, 1360), (106, 1390), (110, 1417), (112, 1423), (133, 1615), (134, 1633), (135, 1645), (139, 1666), (144, 1726), (152, 1783), (157, 1822), (167, 1939), (174, 2029), (175, 2050), (181, 2182), (182, 2209), (183, 2221), (187, 2290), (190, 2314), (198, 2440), (199, 2458), (207, 2524), (218, 2605), (221, 2626), (223, 2635), (226, 2665), (228, 2680), (240, 2779), (241, 2797),

Gene: Clown_5 Start: 1817, Stop: 4576, Start Num: 8
Candidate Starts for Clown_5:
(3, 1472), (5, 1541), (6, 1550), (Start: 8 @1817 has 9 MA's), (11, 1865), (13, 1889), (Start: 14 @1901 has 11 MA's), (18, 1961), (19, 1967), (21, 1988), (28, 2060), (32, 2126), (33, 2132), (41, 2219), (49, 2300), (52, 2342), (62, 2432), (79, 2654), (88, 2738), (97, 2867), (103, 2906), (107, 2966), (117, 3041), (121, 3095), (127, 3230), (142, 3356), (148, 3455), (158, 3524), (163, 3569), (165, 3590), (166, 3626), (168, 3635), (171, 3692), (173, 3716), (184, 3938), (193, 4058), (197, 4106), (201, 4139), (205, 4175), (209, 4211), (213, 4235), (220, 4289), (230, 4379), (232, 4403), (234, 4406), (240, 4454), (241, 4472), (246, 4502), (248, 4514), (254, 4550),

Gene: Deenasa_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for Deenasa_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11 MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51, 3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683), (100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124), (156, 4178), (169, 4301), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751), (201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036), (237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Delrey21_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for Delrey21_2:
(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (38, 857), (43, 902), (47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (86, 1307), (96, 1397), (109, 1514), (110, 1529), (114, 1541), (118, 1592), (119, 1598), (124, 1721), (126, 1748), (132, 1805), (137, 1850), (143, 1889), (147, 1949), (154, 1991), (163, 2063), (165, 2084), (166, 2120), (168, 2129), (172, 2201), (174, 2213), (175, 2234), (179, 2315), (181, 2396), (182, 2423), (188, 2510), (190, 2522), (196, 2636), (203, 2699), (207, 2732), (213, 2768), (214, 2807), (218, 2837), (220, 2846), (223, 2867), (234, 2963), (240, 3011), (241, 3029),

Gene: DoctorFroggo_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for DoctorFroggo_2:
(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (38, 857), (43, 902), (47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (86, 1307), (96, 1397), (109, 1514), (110, 1529), (114, 1541), (118, 1592), (119, 1598), (124, 1721), (126, 1748), (132, 1805), (137, 1850), (143, 1889), (147, 1949), (154, 1991), (163, 2063), (165, 2084), (166, 2120), (168, 2129), (172, 2201), (174, 2213), (175, 2234), (179, 2315), (181, 2396), (182, 2423), (188, 2510), (190, 2522), (196, 2636), (203, 2699), (207, 2732), (213, 2768), (214, 2807), (218, 2837), (220, 2846), (223, 2867), (234, 2963), (240, 3011), (241, 3029),

Gene: Fosterous_2 Start: 514, Stop: 2907, Start Num: 24
Candidate Starts for Fosterous_2:
(Start: 24 @514 has 11 MA's), (25, 520), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790), (53, 841), (58, 865), (59, 877), (72, 1006), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150), (90, 1174),

(94, 1249), (95, 1264), (99, 1312), (101, 1327), (102, 1330), (105, 1360), (106, 1390), (110, 1417), (112, 1423), (133, 1615), (134, 1633), (135, 1645), (139, 1666), (144, 1726), (152, 1783), (157, 1822), (167, 1939), (174, 2029), (175, 2050), (181, 2182), (182, 2209), (183, 2221), (187, 2290), (188, 2302), (190, 2314), (198, 2440), (199, 2458), (207, 2524), (208, 2533), (218, 2605), (221, 2626), (223, 2635), (226, 2665), (228, 2680), (240, 2779), (241, 2797), (246, 2827),

Gene: Keitabear_2 Start: 514, Stop: 2901, Start Num: 24
Candidate Starts for Keitabear_2:
(Start: 24 @514 has 11 MA's), (25, 520), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790), (53, 841), (58, 865), (59, 877), (72, 1006), (76, 1060), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150), (90, 1174), (94, 1249), (95, 1264), (99, 1312), (135, 1639), (140, 1663), (146, 1738), (149, 1759), (152, 1777), (153, 1783), (160, 1855), (164, 1879), (174, 2023), (175, 2044), (181, 2176), (182, 2203), (183, 2215), (187, 2284), (190, 2308), (198, 2434), (199, 2452), (207, 2518), (218, 2599), (221, 2620), (223, 2629), (226, 2659), (228, 2674), (240, 2773), (241, 2791), (246, 2821), (255, 2881),

Gene: Kronus_5 Start: 2562, Stop: 5084, Start Num: 14
Candidate Starts for Kronus_5:
(Start: 12 @2544 has 3 MA's), (Start: 14 @2562 has 11 MA's), (16, 2580), (Start: 22 @2661 has 1 MA's), (40, 2874), (43, 2904), (44, 2910), (45, 2937), (51, 2973), (60, 3057), (70, 3183), (74, 3261), (80, 3318), (82, 3351), (85, 3369), (89, 3387), (99, 3531), (100, 3534), (102, 3549), (112, 3642), (122, 3717), (124, 3762), (136, 3855), (142, 3885), (149, 3972), (156, 4026), (175, 4227), (177, 4281), (185, 4401), (186, 4422), (192, 4518), (197, 4569), (200, 4599), (201, 4602), (210, 4674), (219, 4749), (222, 4776), (225, 4785), (229, 4836), (231, 4869), (235, 4884), (237, 4896), (245, 4956), (250, 4995), (251, 4998), (256, 5049),

Gene: Marley1013_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for Marley1013_6:
(Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11 MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51, 3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683), (100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124), (156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751), (201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036), (237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Mortcellus_5 Start: 2562, Stop: 5084, Start Num: 14
Candidate Starts for Mortcellus_5:
(1, 2088), (2, 2121), (4, 2187), (7, 2283), (Start: 12 @2544 has 3 MA's), (Start: 14 @2562 has 11 MA's), (16, 2580), (Start: 22 @2661 has 1 MA's), (40, 2874), (43, 2904), (44, 2910), (45, 2937), (51, 2973), (60, 3057), (70, 3183), (74, 3261), (80, 3318), (82, 3351), (85, 3369), (89, 3387), (99, 3531), (100, 3534), (102, 3549), (112, 3642), (122, 3717), (124, 3762), (133, 3822), (136, 3855), (149, 3972), (156, 4026), (175, 4227), (177, 4281), (185, 4401), (186, 4422), (192, 4518), (197, 4569), (200, 4599), (201, 4602), (210, 4674), (219, 4749), (222, 4776), (225, 4785), (229, 4836), (231, 4869), (235, 4884), (237, 4896), (245, 4956), (250, 4995), (251, 4998), (256, 5049),

Gene: Morty007_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for Morty007_6:
(Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11 MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51, 3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683), (100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124), (156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751), (201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036), (237, 5048), (245, 5108), (250, 5147), (251,

5150), (256, 5201),

Gene: Natkenzie_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for Natkenzie_2:
(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (36, 833), (38, 857), (43, 902), (47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (81, 1283), (92, 1346), (96, 1397), (109, 1514), (110, 1529), (114, 1541), (117, 1580), (118, 1592), (119, 1598), (124, 1721), (126, 1748), (132, 1805), (143, 1889), (147, 1949), (154, 1991), (161, 2051), (163, 2063), (165, 2084), (166, 2120), (167, 2123), (168, 2129), (172, 2201), (174, 2213), (175, 2234), (179, 2315), (181, 2396), (182, 2423), (184, 2462), (190, 2522), (196, 2636), (203, 2699), (204, 2705), (207, 2732), (213, 2768), (214, 2807), (218, 2837), (220, 2846), (223, 2867), (234, 2963),

Gene: Neos5_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for Neos5_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11 MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51, 3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683), (100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124), (156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751), (201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036), (237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Nordenberg_2 Start: 514, Stop: 2907, Start Num: 24
Candidate Starts for Nordenberg_2:
(Start: 24 @514 has 11 MA's), (25, 520), (34, 622), (36, 652), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790), (53, 841), (58, 865), (59, 877), (72, 1006), (76, 1060), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150), (90, 1174), (91, 1198), (95, 1264), (99, 1312), (101, 1327), (102, 1330), (105, 1360), (106, 1390), (110, 1417), (112, 1423), (133, 1615), (134, 1633), (135, 1645), (139, 1666), (144, 1726), (152, 1783), (157, 1822), (167, 1939), (174, 2029), (175, 2050), (181, 2182), (182, 2209), (183, 2221), (188, 2302), (190, 2314), (198, 2440), (199, 2458), (207, 2524), (218, 2605), (221, 2626), (223, 2635), (226, 2665), (228, 2680), (240, 2779), (241, 2797),

Gene: Nozo_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for Nozo_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11 MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51, 3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683), (100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124), (156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751), (201, 4754), (206, 4790), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036), (237, 5048), (243, 5096), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Phlyer_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for Phlyer_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11 MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51, 3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683), (100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124), (156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751), (201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036), (237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Pipefish_6 Start: 2918, Stop: 5341, Start Num: 22

Candidate Starts for Pipefish_6:
(1, 2345), (2, 2378), (4, 2444), (7, 2540), (Start: 12 @2801 has 3 MA's), (Start: 14 @2819 has 11 MA's), (16, 2837), (Start: 22 @2918 has 1 MA's), (40, 3131), (43, 3161), (44, 3167), (45, 3194), (51, 3230), (60, 3314), (70, 3440), (74, 3518), (80, 3575), (82, 3608), (85, 3626), (89, 3644), (99, 3788), (100, 3791), (102, 3806), (112, 3899), (122, 3974), (124, 4019), (136, 4112), (142, 4142), (149, 4229), (156, 4283), (175, 4484), (177, 4538), (185, 4658), (186, 4679), (192, 4775), (197, 4826), (200, 4856), (201, 4859), (210, 4931), (219, 5006), (222, 5033), (225, 5042), (229, 5093), (231, 5126), (235, 5141), (237, 5153), (243, 5201), (245, 5213), (250, 5252), (251, 5255), (256, 5306),

Gene: QueenPie_4 Start: 2367, Stop: 4886, Start Num: 17
Candidate Starts for QueenPie_4:
(Start: 17 @2367 has 2 MA's), (20, 2427), (30, 2517), (31, 2556), (34, 2586), (35, 2598), (37, 2634), (40, 2658), (43, 2691), (44, 2697), (48, 2733), (55, 2814), (64, 2889), (67, 2907), (69, 2949), (71, 3006), (74, 3048), (75, 3051), (80, 3105), (85, 3156), (89, 3174), (94, 3255), (102, 3336), (108, 3399), (113, 3429), (120, 3459), (132, 3600), (134, 3621), (138, 3651), (145, 3720), (146, 3732), (149, 3753), (156, 3807), (162, 3855), (164, 3864), (170, 3960), (177, 4077), (180, 4137), (189, 4251), (190, 4260), (192, 4320), (196, 4374), (200, 4407), (203, 4437), (206, 4446), (208, 4476), (210, 4482), (211, 4485), (219, 4557), (227, 4632), (233, 4686), (236, 4704), (239, 4734), (247, 4791), (249, 4797), (251, 4812), (256, 4863),

Gene: Rofo_2 Start: 514, Stop: 2907, Start Num: 24
Candidate Starts for Rofo_2:
(Start: 24 @514 has 11 MA's), (25, 520), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790), (53, 841), (58, 865), (59, 877), (72, 1006), (76, 1060), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150), (90, 1174), (95, 1264), (99, 1312), (101, 1327), (102, 1330), (105, 1360), (106, 1390), (110, 1417), (112, 1423), (133, 1615), (134, 1633), (135, 1645), (139, 1666), (144, 1726), (152, 1783), (157, 1822), (167, 1939), (174, 2029), (175, 2050), (181, 2182), (182, 2209), (183, 2221), (187, 2290), (190, 2314), (198, 2440), (199, 2458), (207, 2524), (218, 2605), (221, 2626), (223, 2635), (226, 2665), (228, 2680), (240, 2779), (241, 2797), (246, 2827),

Gene: RomaT_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for RomaT_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11 MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51, 3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683), (100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124), (156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751), (201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036), (237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Sampson_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for Sampson_2:
(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (36, 833), (38, 857), (43, 902), (47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (81, 1283), (92, 1346), (96, 1397), (109, 1514), (110, 1529), (114, 1541), (117, 1580), (118, 1592), (119, 1598), (124, 1721), (126, 1748), (132, 1805), (143, 1889), (147, 1949), (154, 1991), (161, 2051), (163, 2063), (165, 2084), (166, 2120), (167, 2123), (168, 2129), (172, 2201), (174, 2213), (175, 2234), (179, 2315), (181, 2396), (182, 2423), (184, 2462), (190, 2522), (196, 2636), (203, 2699), (204, 2705), (207, 2732), (213, 2768), (214, 2807), (218, 2837), (220, 2846), (223, 2867), (234, 2963),

Gene: Scioto_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for Scioto_2:

(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (36, 833), (38, 857), (43, 902), (47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (81, 1283), (92, 1346), (96, 1397), (109, 1514), (110, 1529), (114, 1541), (117, 1580), (118, 1592), (119, 1598), (124, 1721), (126, 1748), (132, 1805), (143, 1889), (147, 1949), (154, 1991), (161, 2051), (163, 2063), (165, 2084), (166, 2120), (167, 2123), (168, 2129), (172, 2201), (174, 2213), (175, 2234), (179, 2315), (181, 2396), (182, 2423), (184, 2462), (190, 2522), (196, 2636), (203, 2699), (204, 2705), (207, 2732), (213, 2768), (214, 2807), (218, 2837), (220, 2846), (223, 2867), (234, 2963),

Gene: Sedona_2 Start: 514, Stop: 2901, Start Num: 24
Candidate Starts for Sedona_2:
(Start: 24 @514 has 11 MA's), (25, 520), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790), (53, 841), (58, 865), (59, 877), (72, 1006), (76, 1060), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150), (90, 1174), (94, 1249), (95, 1264), (99, 1312), (135, 1639), (140, 1663), (146, 1738), (149, 1759), (152, 1777), (153, 1783), (160, 1855), (164, 1879), (174, 2023), (175, 2044), (181, 2176), (182, 2203), (183, 2215), (187, 2284), (190, 2308), (198, 2434), (199, 2452), (207, 2518), (218, 2599), (221, 2620), (223, 2629), (226, 2659), (228, 2674), (240, 2773), (241, 2791), (246, 2821), (255, 2881),

Gene: SlippinJimmy_6 Start: 2714, Stop: 5236, Start Num: 14
Candidate Starts for SlippinJimmy_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11 MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51, 3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683), (100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124), (156, 4178), (169, 4301), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751), (201, 4754), (206, 4790), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036), (237, 5048), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Tangent_2 Start: 514, Stop: 2907, Start Num: 24
Candidate Starts for Tangent_2:
(Start: 24 @514 has 11 MA's), (25, 520), (34, 622), (36, 652), (37, 673), (42, 724), (46, 763), (48, 769), (50, 790), (53, 841), (58, 865), (59, 877), (72, 1006), (76, 1060), (78, 1078), (80, 1099), (83, 1135), (84, 1144), (85, 1150), (90, 1174), (91, 1198), (95, 1264), (99, 1312), (101, 1327), (102, 1330), (105, 1360), (106, 1390), (110, 1417), (112, 1423), (133, 1615), (134, 1633), (135, 1645), (139, 1666), (144, 1726), (152, 1783), (157, 1822), (167, 1939), (174, 2029), (175, 2050), (181, 2182), (182, 2209), (183, 2221), (187, 2290), (190, 2314), (198, 2440), (199, 2458), (207, 2524), (218, 2605), (221, 2626), (223, 2635), (226, 2665), (228, 2680), (240, 2779), (241, 2797),

Gene: Tydolla_6 Start: 2696, Stop: 5236, Start Num: 12
Candidate Starts for Tydolla_6:
(1, 2240), (2, 2273), (4, 2339), (7, 2435), (Start: 12 @2696 has 3 MA's), (Start: 14 @2714 has 11 MA's), (16, 2732), (Start: 22 @2813 has 1 MA's), (40, 3026), (43, 3056), (44, 3062), (45, 3089), (51, 3125), (60, 3209), (70, 3335), (74, 3413), (80, 3470), (82, 3503), (85, 3521), (89, 3539), (99, 3683), (100, 3686), (102, 3701), (112, 3794), (122, 3869), (124, 3914), (136, 4007), (142, 4037), (149, 4124), (156, 4178), (175, 4379), (177, 4433), (185, 4553), (186, 4574), (192, 4670), (197, 4721), (200, 4751), (201, 4754), (210, 4826), (219, 4901), (222, 4928), (225, 4937), (229, 4988), (231, 5021), (235, 5036), (237, 5048), (243, 5096), (245, 5108), (250, 5147), (251, 5150), (256, 5201),

Gene: Verity_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for Verity_2:
(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (38, 857), (43, 902), (47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (86, 1307), (96, 1397), (109, 1514), (110, 1529), (114, 1541), (118, 1592), (119, 1598), (124, 1721), (126, 1748), (132, 1805), (137, 1850), (143, 1889), (147, 1949), (154, 1991), (163, 2063), (165, 2084), (166, 2120), (168, 2129),

(172, 2201), (174, 2213), (175, 2234), (179, 2315), (181, 2396), (182, 2423), (188, 2510), (190, 2522),
(196, 2636), (203, 2699), (207, 2732), (213, 2768), (214, 2807), (218, 2837), (220, 2846), (223, 2867),
(234, 2963), (240, 3011), (241, 3029),

Gene: ViaConlectus_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for ViaConlectus_2:
(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (36, 833), (38, 857),
(43, 902), (47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (81, 1283),
(92, 1346), (96, 1397), (109, 1514), (110, 1529), (114, 1541), (117, 1580), (118, 1592), (119, 1598),
(124, 1721), (126, 1748), (132, 1805), (137, 1850), (143, 1889), (147, 1949), (154, 1991), (161, 2051),
(163, 2063), (165, 2084), (166, 2120), (167, 2123), (168, 2129), (172, 2201), (174, 2213), (175, 2234),
(179, 2315), (181, 2396), (182, 2423), (184, 2462), (190, 2522), (196, 2636), (203, 2699), (204, 2705),
(207, 2732), (213, 2768), (214, 2807), (218, 2837), (220, 2846), (223, 2867), (234, 2963),

Gene: Vincenzo_5 Start: 3145, Stop: 5796, Start Num: 17
Candidate Starts for Vincenzo_5:
(Start: 17 @3145 has 2 MA's), (30, 3295), (31, 3334), (34, 3364), (35, 3376), (37, 3412), (40, 3436),
(43, 3469), (44, 3475), (48, 3511), (55, 3592), (64, 3667), (71, 3784), (74, 3826), (75, 3829), (78, 3862),
(85, 3934), (89, 3952), (98, 4081), (102, 4114), (105, 4144), (112, 4207), (125, 4408), (128, 4453),
(151, 4663), (159, 4735), (164, 4768), (169, 4852), (177, 4981), (178, 4984), (180, 5041), (189, 5155),
(191, 5212), (195, 5254), (203, 5344), (206, 5353), (210, 5389), (211, 5392), (219, 5464), (227, 5539),
(233, 5593), (236, 5611), (243, 5665), (247, 5698), (249, 5704), (251, 5719), (252, 5725), (253, 5737),
(256, 5770),

Gene: Vivi2_2 Start: 514, Stop: 2907, Start Num: 24
Candidate Starts for Vivi2_2:
(Start: 24 @514 has 11 MA's), (25, 520), (34, 622), (36, 652), (37, 673), (42, 724), (46, 763), (48, 769),
(50, 790), (53, 841), (58, 865), (59, 877), (72, 1006), (76, 1060), (78, 1078), (80, 1099), (83, 1135), (84,
1144), (85, 1150), (90, 1174), (95, 1264), (99, 1312), (101, 1327), (102, 1330), (105, 1360), (106,
1390), (110, 1417), (112, 1423), (133, 1615), (134, 1633), (135, 1645), (139, 1666), (144, 1726), (152,
1783), (157, 1822), (167, 1939), (174, 2029), (175, 2050), (181, 2182), (182, 2209), (183, 2221), (187,
2290), (190, 2314), (198, 2440), (199, 2458), (207, 2524), (208, 2533), (218, 2605), (221, 2626), (223,
2635), (226, 2665), (228, 2680), (240, 2779), (246, 2827),

Gene: YungMoney_5 Start: 1791, Stop: 4376, Start Num: 8
Candidate Starts for YungMoney_5:
(Start: 8 @1791 has 9 MA's), (11, 1839), (21, 1962), (28, 2034), (39, 2169), (61, 2370), (63, 2385), (65,
2403), (66, 2406), (77, 2556), (87, 2640), (93, 2688), (104, 2778), (115, 2868), (116, 2871), (120,
2925), (123, 2967), (124, 3027), (129, 3066), (130, 3087), (131, 3105), (141, 3174), (147, 3255), (150,
3270), (154, 3297), (158, 3324), (161, 3357), (165, 3390), (166, 3426), (168, 3435), (194, 3864), (197,
3906), (202, 3942), (205, 3975), (207, 3999), (215, 4065), (216, 4068), (217, 4077), (220, 4089), (234,
4206), (238, 4242), (240, 4254), (246, 4302),

Gene: Zipp_2 Start: 491, Stop: 3136, Start Num: 8
Candidate Starts for Zipp_2:
(Start: 8 @491 has 9 MA's), (10, 530), (15, 581), (23, 677), (26, 701), (28, 728), (38, 857), (43, 902),
(47, 932), (54, 989), (56, 1004), (57, 1007), (62, 1049), (68, 1118), (71, 1181), (86, 1307), (96, 1397),
(109, 1514), (110, 1529), (114, 1541), (118, 1592), (119, 1598), (124, 1721), (126, 1748), (132, 1805),
(137, 1850), (143, 1889), (147, 1949), (154, 1991), (161, 2051), (163, 2063), (165, 2084), (166, 2120),
(167, 2123), (168, 2129), (172, 2201), (174, 2213), (175, 2234), (179, 2315), (181, 2396), (182, 2423),
(183, 2435), (196, 2636), (199, 2666), (203, 2699), (207, 2732), (214, 2807), (218, 2837), (220, 2846),
(223, 2867), (240, 3011),