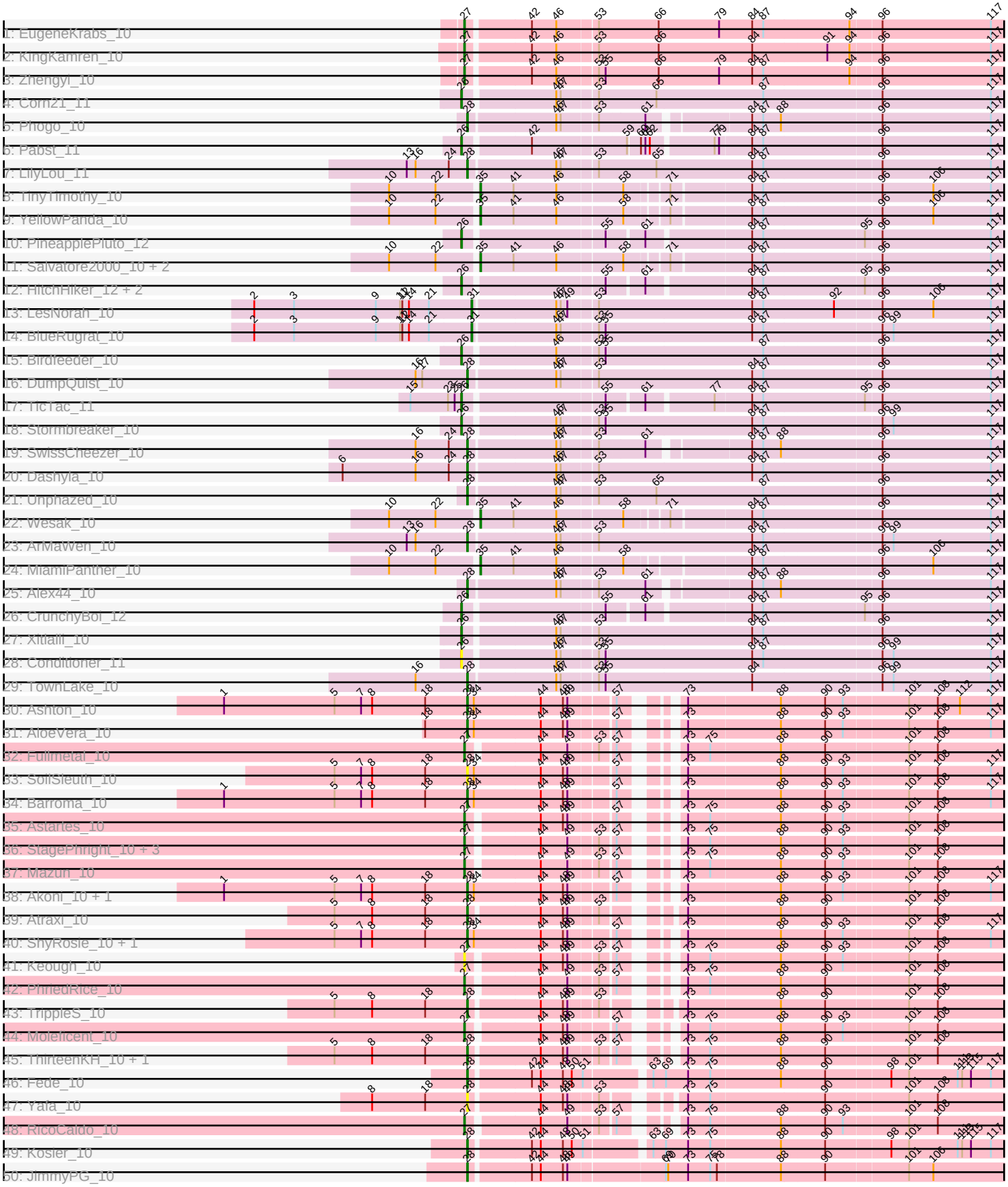
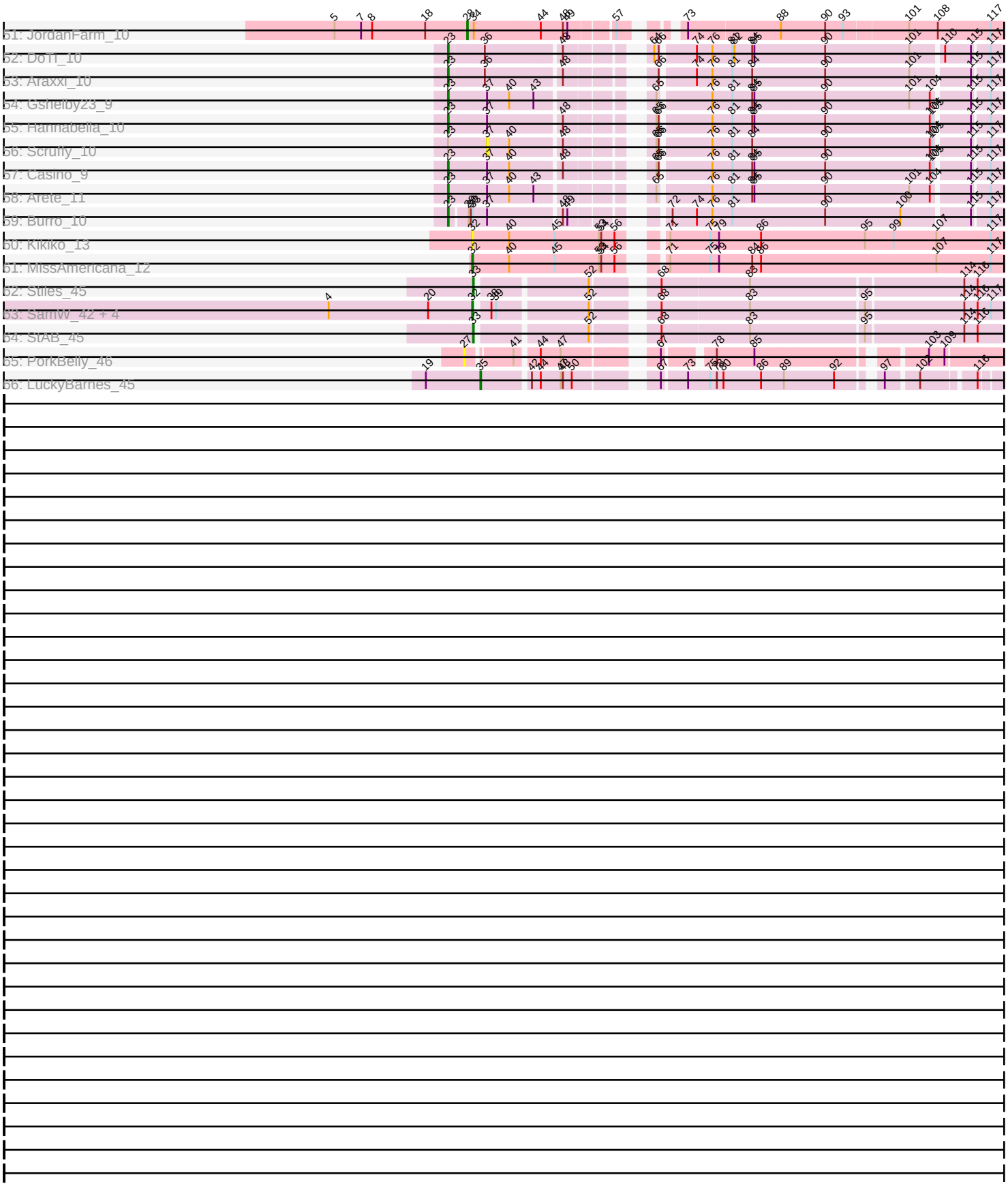
Zoomed Pham 347531



Zoomed Pham 347531



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 347531 Report

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

Pham number 347531 has 80 members, 11 are drafts.

Phages represented in each track:
- Track 1 : EugeneKrabs_10
- Track 2 : KingKamren_10
- Track 3 : Zhengyi_10
- Track 4 : Corn21_11
- Track 5 : Phogo_10
- Track 6 : Pabst_11
- Track 7 : LilyLou_11
- Track 8 : TinyTimothy_10
- Track 9 : YellowPanda_10
- Track 10 : PineapplePluto_12
- Track 11 : Salvatore2000_10, JessellCookie_10, Sorvannah_10
- Track 12 : HitchHiker_12, Oatly_11, Biozilla_11
- Track 13 : LesNorah_10
- Track 14 : BlueRugrat_10
- Track 15 : Birdfeeder_10
- Track 16 : DumpQuist_10
- Track 17 : TicTac_11
- Track 18 : Stormbreaker_10
- Track 19 : SwissCheezer_10
- Track 20 : Dashyla_10
- Track 21 : Unphazed_10
- Track 22 : Wesak_10
- Track 23 : ArMaWen_10
- Track 24 : MiamiPanther_10
- Track 25 : Alex44_10
- Track 26 : CrunchyBoi_12
- Track 27 : Xitlalli_10
- Track 28 : Conditioner_11
- Track 29 : TownLake_10
- Track 30 : Ashton_10
- Track 31 : AloeVera_10
- Track 32 : Fullmetal_10
- Track 33 : SoilSleuth_10
- Track 34 : Barroma_10
- Track 35 : Astartes_10
- Track 36 : StagePhright_10, Phedro_10, Phractured_10, Pharky_10
- Track 37 : Mazun_10

• Track 38 : Akoni_10, Waterlily_10
• Track 39 : Atraxi_10
• Track 40 : ShyRosie_10, Truong_10
• Track 41 : Keough_10
• Track 42 : PhriedRice_10
• Track 43 : TrippleS_10
• Track 44 : Moleficent_10
• Track 45 : ThirteenKH_10, Morrill_10
• Track 46 : Fede_10
• Track 47 : Yafa_10
• Track 48 : RicoCaldo_10
• Track 49 : Kosier_10
• Track 50 : JimmyPG_10
• Track 51 : JordanFarm_10
• Track 52 : DoTi_10
• Track 53 : Araxxi_10
• Track 54 : Gshelby23_9
• Track 55 : Hannabella_10
• Track 56 : Scruffy_10
• Track 57 : Casino_9
• Track 58 : Arete_11
• Track 59 : Burro_10
• Track 60 : Kikiko_13
• Track 61 : MissAmericana_12
• Track 62 : Stiles_45
• Track 63 : SamW_42, Dina_44, Lederberg_42, Adelaide_42, Troy_42
• Track 64 : StAB_45
• Track 65 : PorkBelly_46
• Track 66 : LuckyBarnes_45

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

The start number called the most often in the published annotations is 28, it was called in 22 of the 69 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akoni_10, Alex44_10, AloeVera_10, ArMaWen_10, Ashton_10, Atraxi_10, Barroma_10, Dashyla_10, DumpQuist_10, Fede_10, JimmyPG_10, JordanFarm_10, Kosier_10, LilyLou_11, Morrill_10, Phogo_10, ShyRosie_10, SoilSleuth_10, SwissCheezer_10, ThirteenKH_10, TownLake_10, TrippleS_10, Truong_10, Unphazed_10, Waterlily_10, Yafa_10,

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

Genes that do not have the "Most Annotated" start:
• Adelaide_42, Araxxi_10, Arete_11, Astartes_10, Biozilla_11, Birdfeeder_10, BlueRugrat_10, Burro_10, Casino_9, Conditioner_11, Corn21_11, CrunchyBoi_12, Dina_44, DoTi_10, EugeneKrabs_10, Fullmetal_10, Gshelby23_9, Hannabella_10, HitchHiker_12, JessellCookie_10, Keough_10, Kikiko_13, KingKamren_10,

Lederberg_42, LesNorah_10, LuckyBarnes_45, Mazun_10, MiamiPanther_10, MissAmericana_12, Moleficent_10, Oatly_11, Pabst_11, Pharky_10, Phedro_10, Phractured_10, PhriedRice_10, PineapplePluto_12, PorkBelly_46, RicoCaldo_10, Salvatore2000_10, SamW_42, Scruffy_10, Sorvannah_10, StAB_45, StagePhright_10, Stiles_45, Stormbreaker_10, TicTac_11, TinyTimothy_10, Troy_42, Wesak_10, Xitlalli_10, YellowPanda_10, Zhengyi_10,

Summary by start number:

Start 23:
• Found in 9 of 80 (11.2%) of genes in pham
• Manual Annotations of this start: 7 of 69
• Called 77.8% of time when present
• Phage (with cluster) where this start called: Araxxi_10 (EM1), Arete_11 (EM1), Burro_10 (EM1), Casino_9 (EM1), DoTi_10 (EM1), Gshelby23_9 (EM1), Hannabella_10 (EM1),

Start 26:
• Found in 12 of 80 (15.0%) of genes in pham
• Manual Annotations of this start: 11 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Biozilla_11 (EK1), Birdfeeder_10 (EK1), Conditioner_11 (EK1), Corn21_11 (EK1), CrunchyBoi_12 (EK1), HitchHiker_12 (EK1), Oatly_11 (EK1), Pabst_11 (EK1), PineapplePluto_12 (EK1), Stormbreaker_10 (EK1), TicTac_11 (EK1), Xitlalli_10 (EK1),

Start 27:
• Found in 15 of 80 (18.8%) of genes in pham
• Manual Annotations of this start: 13 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Astartes_10 (EK2), EugeneKrabs_10 (EK), Fullmetal_10 (EK2), Keough_10 (EK2), KingKamren_10 (EK), Mazun_10 (EK2), Moleficent_10 (EK2), Pharky_10 (EK2), Phedro_10 (EK2), Phractured_10 (EK2), PhriedRice_10 (EK2), PorkBelly_46 (FJ), RicoCaldo_10 (EK2), StagePhright_10 (EK2), Zhengyi_10 (EK),

Start 28:
• Found in 26 of 80 (32.5%) of genes in pham
• Manual Annotations of this start: 22 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Akoni_10 (EK2), Alex44_10 (EK1), AloeVera_10 (EK2), ArMaWen_10 (EK1), Ashton_10 (EK2), Atraxi_10 (EK2), Barroma_10 (EK2), Dashyla_10 (EK1), DumpQuist_10 (EK1), Fede_10 (EK2), JimmyPG_10 (EK2), JordanFarm_10 (EK2), Kosier_10 (EK2), LilyLou_11 (EK1), Morrill_10 (EK2), Phogo_10 (EK1), ShyRosie_10 (EK2), SoilSleuth_10 (EK2), SwissCheezer_10 (EK1), ThirteenKH_10 (EK2), TownLake_10 (EK1), TrippleS_10 (EK2), Truong_10 (EK2), Unphazed_10 (EK1), Waterlily_10 (EK2), Yafa_10 (EK2),

Start 31:
• Found in 2 of 80 (2.5%) of genes in pham
• Manual Annotations of this start: 2 of 69
• Called 100.0% of time when present

• Phage (with cluster) where this start called: BlueRugrat_10 (EK1), LesNorah_10 (EK1),

Start 32:
• Found in 7 of 80 (8.8%) of genes in pham
• Manual Annotations of this start: 6 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adelaide_42 (EP), Dina_44 (EP), Kikiko_13 (EM2), Lederberg_42 (EP), MissAmericana_12 (EM2), SamW_42 (EP), Troy_42 (EP),

Start 33:
• Found in 3 of 80 (3.8%) of genes in pham
• Manual Annotations of this start: 2 of 69
• Called 66.7% of time when present
• Phage (with cluster) where this start called: StAB_45 (EP), Stiles_45 (EP),

Start 35:
• Found in 8 of 80 (10.0%) of genes in pham
• Manual Annotations of this start: 6 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JessellCookie_10 (EK1), LuckyBarnes_45 (singleton), MiamiPanther_10 (EK1), Salvatore2000_10 (EK1), Sorvannah_10 (EK1), TinyTimothy_10 (EK1), Wesak_10 (EK1), YellowPanda_10 (EK1),

Start 37:
• Found in 6 of 80 (7.5%) of genes in pham
• No Manual Annotations of this start.
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Scruffy_10 (EM1),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, EK, EK2, EM1, EM2, FJ, EP, EK1,

Info for manual annotations of cluster EK:
•Start number 27 was manually annotated 3 times for cluster EK.

Info for manual annotations of cluster EK1:
•Start number 26 was manually annotated 11 times for cluster EK1.
•Start number 28 was manually annotated 9 times for cluster EK1.
•Start number 31 was manually annotated 2 times for cluster EK1.
•Start number 35 was manually annotated 5 times for cluster EK1.

Info for manual annotations of cluster EK2:
•Start number 27 was manually annotated 10 times for cluster EK2.
•Start number 28 was manually annotated 13 times for cluster EK2.

Info for manual annotations of cluster EM1:
•Start number 23 was manually annotated 7 times for cluster EM1.

Info for manual annotations of cluster EM2:
•Start number 32 was manually annotated 1 time for cluster EM2.

Info for manual annotations of cluster EP:
•Start number 32 was manually annotated 5 times for cluster EP.
•Start number 33 was manually annotated 2 times for cluster EP.

Gene Information:

Gene: Adelaide_42 Start: 32290, Stop: 34272, Start Num: 32
Candidate Starts for Adelaide_42:
(4, 32098), (20, 32233), (Start: 32 @32290 has 6 MA's), (38, 32305), (39, 32311), (52, 32425), (68, 32491), (83, 32608), (95, 32758), (114, 32887), (116, 32905), (117, 32923), (142, 33097), (146, 33112), (164, 33190), (169, 33223), (189, 33403), (195, 33472), (209, 33598), (217, 33700), (219, 33709), (221, 33724), (238, 33877), (254, 33973), (257, 33994), (268, 34093), (278, 34192),

Gene: Akoni_10 Start: 8355, Stop: 6106, Start Num: 28
Candidate Starts for Akoni_10:
(1, 8685), (5, 8535), (7, 8499), (8, 8484), (18, 8412), (Start: 28 @8355 has 22 MA's), (34, 8346), (44, 8256), (48, 8226), (49, 8220), (57, 8166), (73, 8115), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (117, 7716), (118, 7695), (121, 7680), (122, 7671), (135, 7578), (143, 7515), (154, 7383), (161, 7329), (175, 7230), (177, 7179), (191, 7095), (198, 7020), (200, 7005), (204, 6948), (219, 6810), (224, 6762), (225, 6759), (226, 6729), (242, 6609), (255, 6543), (278, 6333), (281, 6312), (290, 6270), (292, 6243), (298, 6198), (299, 6189), (300, 6177),

Gene: Alex44_10 Start: 8628, Stop: 6409, Start Num: 28
Candidate Starts for Alex44_10:
(Start: 28 @8628 has 22 MA's), (46, 8514), (47, 8508), (53, 8463), (61, 8403), (84, 8280), (87, 8265), (88, 8241), (96, 8112), (117, 7965), (118, 7944), (121, 7929), (129, 7869), (140, 7788), (144, 7749), (160, 7644), (177, 7491), (191, 7407), (196, 7350), (198, 7332), (206, 7251), (217, 7137), (219, 7125), (224, 7077), (231, 6999), (232, 6990), (245, 6900), (252, 6876), (258, 6846), (265, 6765), (280, 6627), (286, 6591), (288, 6582), (295, 6534), (299, 6495), (300, 6483),

Gene: AloeVera_10 Start: 8355, Stop: 6106, Start Num: 28
Candidate Starts for AloeVera_10:
(18, 8412), (Start: 28 @8355 has 22 MA's), (34, 8346), (44, 8256), (48, 8226), (49, 8220), (57, 8166), (73, 8115), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (117, 7716), (118, 7695), (121, 7680), (122, 7671), (135, 7578), (143, 7515), (154, 7383), (161, 7329), (175, 7230), (177, 7179), (191, 7095), (198, 7020), (204, 6948), (219, 6810), (224, 6762), (225, 6759), (226, 6729), (242, 6609), (255, 6543), (278, 6333), (281, 6312), (290, 6270), (292, 6243), (298, 6198), (299, 6189), (300, 6177),

Gene: ArMaWen_10 Start: 8652, Stop: 6409, Start Num: 28
Candidate Starts for ArMaWen_10:
(13, 8733), (16, 8721), (Start: 28 @8652 has 22 MA's), (46, 8538), (47, 8532), (53, 8487), (84, 8280), (87, 8265), (96, 8112), (99, 8097), (117, 7965), (118, 7944), (120, 7932), (129, 7869), (140, 7788), (144, 7749), (160, 7644), (177, 7491), (191, 7407), (196, 7350), (198, 7332), (206, 7251), (217, 7137), (219, 7125), (224, 7077), (231, 6999), (232, 6990), (245, 6900), (252, 6876), (258, 6846), (265, 6765), (280, 6627), (286, 6591), (288, 6582), (295, 6534), (297, 6507), (299, 6495), (300, 6483),

Gene: Araxxi_10 Start: 8232, Stop: 6055, Start Num: 23

Candidate Starts for Araxxi_10:
(Start: 23 @8232 has 7 MA's), (36, 8187), (48, 8091), (66, 8004), (74, 7962), (76, 7941), (81, 7914), (84, 7887), (90, 7791), (101, 7677), (115, 7605), (117, 7584), (118, 7563), (121, 7548), (122, 7539), (132, 7479), (138, 7419), (149, 7341), (153, 7320), (159, 7281), (175, 7173), (176, 7128), (184, 7089), (193, 7017), (198, 6963), (208, 6873), (220, 6750), (222, 6738), (224, 6711), (230, 6636), (244, 6534), (248, 6519), (255, 6486), (257, 6474), (259, 6456), (271, 6360), (276, 6318), (277, 6309), (278, 6297), (279, 6282), (282, 6273), (292, 6207), (293, 6192), (297, 6153), (299, 6144), (300, 6132),

Gene: Arete_11 Start: 8127, Stop: 5947, Start Num: 23
Candidate Starts for Arete_11:
(Start: 23 @8127 has 7 MA's), (37, 8076), (40, 8046), (43, 8013), (65, 7899), (76, 7833), (81, 7806), (84, 7779), (85, 7776), (90, 7683), (101, 7569), (104, 7542), (115, 7497), (117, 7476), (122, 7431), (132, 7371), (134, 7344), (138, 7311), (153, 7212), (159, 7173), (175, 7065), (176, 7020), (184, 6981), (185, 6975), (193, 6909), (198, 6855), (206, 6774), (208, 6765), (220, 6642), (222, 6630), (224, 6603), (237, 6504), (239, 6480), (248, 6411), (250, 6405), (255, 6378), (257, 6366), (259, 6348), (271, 6252), (277, 6201), (279, 6174), (282, 6165), (292, 6099), (297, 6045), (299, 6036), (300, 6024),

Gene: Ashton_10 Start: 8359, Stop: 6110, Start Num: 28
Candidate Starts for Ashton_10:
(1, 8689), (5, 8539), (7, 8503), (8, 8488), (18, 8416), (Start: 28 @8359 has 22 MA's), (34, 8350), (44, 8260), (48, 8230), (49, 8224), (57, 8170), (73, 8119), (88, 7996), (90, 7939), (93, 7915), (101, 7831), (108, 7792), (112, 7762), (117, 7720), (118, 7699), (121, 7684), (122, 7675), (135, 7582), (143, 7519), (154, 7387), (161, 7333), (175, 7234), (177, 7183), (191, 7099), (198, 7024), (204, 6952), (219, 6814), (224, 6766), (225, 6763), (226, 6733), (242, 6613), (255, 6547), (278, 6337), (281, 6316), (290, 6274), (292, 6247), (298, 6202), (299, 6193), (300, 6181),

Gene: Astartes_10 Start: 8385, Stop: 6187, Start Num: 27
Candidate Starts for Astartes_10:
(Start: 27 @8385 has 13 MA's), (44, 8295), (48, 8265), (49, 8259), (57, 8205), (73, 8154), (75, 8124), (88, 8031), (90, 7974), (93, 7950), (101, 7866), (108, 7827), (122, 7710), (135, 7617), (144, 7551), (151, 7506), (152, 7503), (163, 7419), (171, 7368), (175, 7335), (177, 7284), (179, 7260), (180, 7257), (191, 7176), (193, 7155), (219, 6891), (224, 6843), (225, 6840), (230, 6768), (233, 6753), (242, 6690), (248, 6660), (277, 6426), (278, 6414), (281, 6393), (288, 6357), (289, 6354), (292, 6324), (295, 6309), (298, 6279), (299, 6270), (300, 6258),

Gene: Atraxi_10 Start: 8354, Stop: 6150, Start Num: 28
Candidate Starts for Atraxi_10:
(5, 8534), (8, 8483), (18, 8411), (Start: 28 @8354 has 22 MA's), (44, 8264), (48, 8234), (49, 8228), (53, 8192), (73, 8117), (88, 7994), (90, 7937), (101, 7829), (108, 7790), (122, 7673), (135, 7580), (137, 7568), (144, 7514), (150, 7472), (155, 7439), (163, 7382), (171, 7331), (175, 7298), (177, 7247), (179, 7223), (180, 7220), (191, 7139), (193, 7118), (219, 6854), (224, 6806), (230, 6731), (233, 6716), (242, 6653), (248, 6623), (277, 6389), (278, 6377), (281, 6356), (288, 6320), (289, 6317), (292, 6287), (295, 6272), (298, 6242), (299, 6233), (300, 6221),

Gene: Barroma_10 Start: 8355, Stop: 6106, Start Num: 28
Candidate Starts for Barroma_10:
(1, 8685), (5, 8535), (7, 8499), (8, 8484), (18, 8412), (Start: 28 @8355 has 22 MA's), (34, 8346), (44, 8256), (48, 8226), (49, 8220), (57, 8166), (73, 8115), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (117, 7716), (118, 7695), (122, 7671), (135, 7578), (143, 7515), (154, 7383), (161, 7329), (175, 7230), (177, 7179), (191, 7095), (198, 7020), (200, 7005), (204, 6948), (219, 6810), (224, 6762), (225, 6759), (226, 6729), (242, 6609), (255, 6543), (278, 6333), (281, 6312), (290, 6270), (292, 6243), (298, 6198), (299, 6189), (300, 6177),

Gene: Biozilla_11 Start: 8829, Stop: 6580, Start Num: 26
Candidate Starts for Biozilla_11:
(Start: 26 @8829 has 11 MA's), (55, 8652), (61, 8607), (84, 8475), (87, 8460), (95, 8328), (96, 8307), (117, 8160), (118, 8139), (123, 8109), (140, 7983), (144, 7944), (160, 7839), (175, 7737), (177, 7686), (179, 7662), (180, 7659), (191, 7578), (198, 7503), (217, 7308), (219, 7296), (224, 7248), (226, 7215), (231, 7170), (232, 7161), (245, 7071), (252, 7047), (265, 6936), (280, 6798), (288, 6753), (297, 6678), (298, 6675), (299, 6666), (300, 6654), (304, 6615),

Gene: Birdfeeder_10 Start: 8667, Stop: 6421, Start Num: 26
Candidate Starts for Birdfeeder_10:
(Start: 26 @8667 has 11 MA's), (46, 8550), (53, 8499), (55, 8490), (87, 8277), (96, 8124), (117, 7977), (118, 7956), (121, 7941), (129, 7881), (140, 7800), (144, 7761), (160, 7656), (177, 7503), (191, 7419), (198, 7344), (217, 7149), (219, 7137), (224, 7089), (231, 7011), (232, 7002), (258, 6858), (265, 6777), (280, 6639), (286, 6603), (288, 6594), (295, 6546), (299, 6507), (300, 6495),

Gene: BlueRugrat_10 Start: 8837, Stop: 6600, Start Num: 31
Candidate Starts for BlueRugrat_10:
(2, 9131), (3, 9077), (9, 8966), (11, 8933), (12, 8930), (14, 8921), (21, 8894), (Start: 31 @8837 has 2 MA's), (46, 8729), (47, 8723), (53, 8678), (55, 8669), (84, 8471), (87, 8456), (96, 8303), (99, 8288), (117, 8156), (118, 8135), (121, 8120), (129, 8060), (140, 7979), (144, 7940), (160, 7835), (177, 7682), (191, 7598), (198, 7523), (217, 7328), (219, 7316), (224, 7268), (231, 7190), (232, 7181), (245, 7091), (252, 7067), (258, 7037), (265, 6956), (280, 6818), (286, 6782), (288, 6773), (295, 6725), (299, 6686), (300, 6674),

Gene: Burro_10 Start: 7919, Stop: 5745, Start Num: 23
Candidate Starts for Burro_10:
(Start: 23 @7919 has 7 MA's), (29, 7898), (30, 7895), (Start: 33 @7892 has 2 MA's), (37, 7874), (48, 7781), (49, 7775), (72, 7685), (74, 7652), (76, 7631), (81, 7604), (90, 7481), (100, 7379), (115, 7295), (117, 7274), (118, 7253), (121, 7238), (122, 7229), (138, 7109), (153, 7010), (161, 6962), (175, 6863), (176, 6818), (184, 6779), (188, 6752), (193, 6707), (202, 6614), (206, 6572), (218, 6458), (220, 6440), (222, 6428), (224, 6401), (226, 6368), (244, 6224), (248, 6209), (250, 6203), (255, 6176), (256, 6173), (257, 6164), (259, 6146), (271, 6050), (275, 6011), (276, 6008), (277, 5999), (279, 5972), (282, 5963), (287, 5933), (292, 5897), (297, 5843), (299, 5834), (300, 5822), (303, 5783),

Gene: Casino_9 Start: 7956, Stop: 5776, Start Num: 23
Candidate Starts for Casino_9:
(Start: 23 @7956 has 7 MA's), (37, 7905), (40, 7875), (48, 7812), (65, 7728), (66, 7725), (76, 7662), (81, 7635), (84, 7608), (85, 7605), (90, 7512), (104, 7371), (105, 7368), (115, 7326), (117, 7305), (122, 7260), (132, 7200), (134, 7173), (138, 7140), (153, 7041), (158, 7014), (159, 7002), (175, 6894), (176, 6849), (184, 6810), (185, 6804), (193, 6738), (198, 6684), (206, 6603), (208, 6594), (220, 6471), (222, 6459), (224, 6432), (237, 6333), (239, 6309), (248, 6240), (250, 6234), (255, 6207), (257, 6195), (259, 6177), (271, 6081), (276, 6039), (277, 6030), (292, 5928), (297, 5874), (299, 5865), (300, 5853),

Gene: Conditioner_11 Start: 9020, Stop: 6774, Start Num: 26
Candidate Starts for Conditioner_11:
(Start: 26 @9020 has 11 MA's), (46, 8903), (47, 8897), (53, 8852), (55, 8843), (84, 8645), (87, 8630), (96, 8477), (99, 8462), (117, 8330), (118, 8309), (121, 8294), (129, 8234), (140, 8153), (144, 8114), (160, 8009), (177, 7856), (191, 7772), (198, 7697), (214, 7535), (217, 7502), (219, 7490), (224, 7442), (231, 7364), (232, 7355), (245, 7265), (252, 7241), (258, 7211), (265, 7130), (280, 6992), (286, 6956), (288, 6947), (295, 6899), (297, 6872), (299, 6860), (300, 6848),

Gene: Corn21_11 Start: 9047, Stop: 6801, Start Num: 26
Candidate Starts for Corn21_11:

(Start: 26 @9047 has 11 MA's), (46, 8930), (47, 8924), (53, 8879), (65, 8801), (87, 8657), (96, 8504), (117, 8357), (118, 8336), (121, 8321), (129, 8261), (140, 8180), (144, 8141), (160, 8036), (177, 7883), (191, 7799), (198, 7724), (217, 7529), (219, 7517), (224, 7469), (231, 7391), (232, 7382), (245, 7292), (252, 7268), (258, 7238), (265, 7157), (280, 7019), (286, 6983), (288, 6974), (295, 6926), (299, 6887), (300, 6875),

Gene: CrunchyBoi_12 Start: 8964, Stop: 6715, Start Num: 26
Candidate Starts for CrunchyBoi_12:
(Start: 26 @8964 has 11 MA's), (55, 8787), (61, 8742), (84, 8610), (87, 8595), (95, 8463), (96, 8442), (117, 8295), (118, 8274), (123, 8244), (144, 8079), (160, 7974), (175, 7872), (177, 7821), (179, 7797), (180, 7794), (191, 7713), (198, 7638), (217, 7443), (219, 7431), (224, 7383), (226, 7350), (231, 7305), (232, 7296), (245, 7206), (252, 7182), (265, 7071), (280, 6933), (288, 6888), (297, 6813), (298, 6810), (299, 6801), (300, 6789), (304, 6750),

Gene: Dashyla_10 Start: 8658, Stop: 6415, Start Num: 28
Candidate Starts for Dashyla_10:
(6, 8826), (16, 8727), (24, 8682), (Start: 28 @8658 has 22 MA's), (46, 8544), (47, 8538), (53, 8493), (84, 8286), (87, 8271), (96, 8118), (117, 7971), (118, 7950), (121, 7935), (129, 7875), (140, 7794), (144, 7755), (160, 7650), (167, 7602), (177, 7497), (191, 7413), (196, 7356), (198, 7338), (206, 7257), (217, 7143), (219, 7131), (224, 7083), (231, 7005), (232, 6996), (245, 6906), (252, 6882), (258, 6852), (265, 6771), (280, 6633), (286, 6597), (288, 6588), (295, 6540), (297, 6513), (299, 6501), (300, 6489),

Gene: Dina_44 Start: 31366, Stop: 33348, Start Num: 32
Candidate Starts for Dina_44:
(4, 31174), (20, 31309), (Start: 32 @31366 has 6 MA's), (38, 31381), (39, 31387), (52, 31501), (68, 31567), (83, 31684), (95, 31834), (114, 31963), (116, 31981), (117, 31999), (142, 32173), (146, 32188), (164, 32266), (169, 32299), (189, 32479), (195, 32548), (209, 32674), (217, 32776), (219, 32785), (221, 32800), (238, 32953), (254, 33049), (257, 33070), (268, 33169), (278, 33268),

Gene: DoTi_10 Start: 8214, Stop: 6040, Start Num: 23
Candidate Starts for DoTi_10:
(Start: 23 @8214 has 7 MA's), (36, 8169), (48, 8073), (64, 7992), (66, 7986), (74, 7944), (76, 7923), (81, 7896), (82, 7893), (84, 7869), (85, 7866), (90, 7773), (101, 7659), (110, 7620), (115, 7587), (117, 7566), (118, 7545), (121, 7530), (122, 7521), (126, 7488), (132, 7461), (138, 7401), (149, 7323), (153, 7302), (159, 7263), (175, 7155), (176, 7110), (184, 7071), (193, 6999), (198, 6945), (208, 6855), (220, 6732), (222, 6720), (224, 6693), (230, 6618), (244, 6516), (248, 6501), (255, 6468), (257, 6456), (259, 6438), (271, 6342), (276, 6300), (277, 6291), (278, 6279), (279, 6264), (282, 6255), (294, 6168), (297, 6138), (299, 6129), (300, 6117),

Gene: DumpQuist_10 Start: 8655, Stop: 6412, Start Num: 28
Candidate Starts for DumpQuist_10:
(16, 8724), (17, 8715), (Start: 28 @8655 has 22 MA's), (46, 8541), (47, 8535), (53, 8490), (84, 8283), (87, 8268), (96, 8115), (117, 7968), (118, 7947), (121, 7932), (129, 7872), (140, 7791), (144, 7752), (160, 7647), (177, 7494), (191, 7410), (198, 7335), (217, 7140), (219, 7128), (224, 7080), (231, 7002), (232, 6993), (245, 6903), (248, 6897), (252, 6879), (258, 6849), (265, 6768), (280, 6630), (286, 6594), (288, 6585), (295, 6537), (297, 6510), (299, 6498), (300, 6486),

Gene: EugeneKrabs_10 Start: 8417, Stop: 6180, Start Num: 27
Candidate Starts for EugeneKrabs_10:
(Start: 27 @8417 has 13 MA's), (42, 8336), (46, 8303), (53, 8252), (66, 8171), (79, 8090), (84, 8045), (87, 8030), (94, 7916), (96, 7877), (117, 7730), (118, 7709), (121, 7694), (140, 7553), (160, 7409), (168, 7355), (175, 7307), (177, 7256), (191, 7172), (196, 7115), (206, 7016), (219, 6890), (224, 6842), (225, 6839), (228, 6791), (232, 6755), (245, 6665), (261, 6581), (264, 6539), (265, 6530), (266, 6527),

(280, 6392), (283, 6374), (288, 6353), (292, 6320), (295, 6305), (299, 6266), (300, 6254),

Gene: Fede_10 Start: 8646, Stop: 6427, Start Num: 28
Candidate Starts for Fede_10:
(Start: 28 @8646 has 22 MA's), (42, 8568), (44, 8556), (48, 8526), (50, 8514), (51, 8499), (63, 8421), (69, 8406), (73, 8376), (75, 8346), (88, 8253), (90, 8196), (98, 8112), (101, 8088), (111, 8022), (113, 8016), (115, 8004), (117, 7977), (122, 7932), (135, 7839), (144, 7773), (146, 7761), (157, 7683), (161, 7656), (173, 7575), (175, 7557), (177, 7506), (185, 7467), (191, 7422), (198, 7347), (204, 7275), (207, 7257), (219, 7137), (224, 7089), (225, 7086), (233, 6999), (242, 6936), (272, 6723), (274, 6696), (277, 6672), (278, 6660), (280, 6642), (290, 6597), (296, 6525), (299, 6510), (300, 6498),

Gene: Fullmetal_10 Start: 8382, Stop: 6184, Start Num: 27
Candidate Starts for Fullmetal_10:
(Start: 27 @8382 has 13 MA's), (44, 8292), (49, 8256), (53, 8220), (57, 8202), (73, 8151), (75, 8121), (88, 8028), (90, 7971), (101, 7863), (108, 7824), (122, 7707), (135, 7614), (137, 7602), (144, 7548), (151, 7503), (152, 7500), (163, 7416), (171, 7365), (175, 7332), (177, 7281), (179, 7257), (180, 7254), (191, 7173), (204, 7026), (219, 6888), (224, 6840), (225, 6837), (230, 6765), (233, 6750), (242, 6687), (248, 6657), (277, 6423), (278, 6411), (281, 6390), (288, 6354), (289, 6351), (292, 6321), (295, 6306), (298, 6276), (299, 6267), (300, 6255),

Gene: Gshelby23_9 Start: 8070, Stop: 5890, Start Num: 23
Candidate Starts for Gshelby23_9:
(Start: 23 @8070 has 7 MA's), (37, 8019), (40, 7989), (43, 7956), (65, 7842), (76, 7776), (81, 7749), (84, 7722), (85, 7719), (90, 7626), (101, 7512), (104, 7485), (115, 7440), (117, 7419), (122, 7374), (132, 7314), (134, 7287), (138, 7254), (153, 7155), (158, 7128), (159, 7116), (175, 7008), (176, 6963), (184, 6924), (185, 6918), (193, 6852), (198, 6798), (206, 6717), (208, 6708), (220, 6585), (222, 6573), (224, 6546), (237, 6447), (239, 6423), (248, 6354), (250, 6348), (255, 6321), (257, 6309), (259, 6291), (271, 6195), (277, 6144), (279, 6117), (282, 6108), (292, 6042), (297, 5988), (299, 5979), (300, 5967),

Gene: Hannabella_10 Start: 7950, Stop: 5773, Start Num: 23
Candidate Starts for Hannabella_10:
(Start: 23 @7950 has 7 MA's), (37, 7899), (48, 7806), (65, 7722), (66, 7719), (76, 7656), (81, 7629), (84, 7602), (85, 7599), (90, 7506), (104, 7365), (105, 7362), (115, 7320), (117, 7299), (122, 7254), (132, 7194), (134, 7167), (138, 7134), (153, 7035), (158, 7008), (159, 6996), (175, 6888), (176, 6843), (184, 6804), (185, 6798), (193, 6732), (198, 6678), (206, 6597), (208, 6588), (220, 6465), (222, 6453), (224, 6426), (237, 6327), (239, 6303), (248, 6234), (250, 6228), (255, 6201), (257, 6189), (259, 6171), (271, 6075), (277, 6024), (279, 5997), (282, 5988), (297, 5871), (299, 5862), (300, 5850),

Gene: HitchHiker_12 Start: 8829, Stop: 6580, Start Num: 26
Candidate Starts for HitchHiker_12:
(Start: 26 @8829 has 11 MA's), (55, 8652), (61, 8607), (84, 8475), (87, 8460), (95, 8328), (96, 8307), (117, 8160), (118, 8139), (123, 8109), (140, 7983), (144, 7944), (160, 7839), (175, 7737), (177, 7686), (179, 7662), (180, 7659), (191, 7578), (198, 7503), (217, 7308), (219, 7296), (224, 7248), (226, 7215), (231, 7170), (232, 7161), (245, 7071), (252, 7047), (265, 6936), (280, 6798), (288, 6753), (297, 6678), (298, 6675), (299, 6666), (300, 6654), (304, 6615),

Gene: JessellCookie_10 Start: 8474, Stop: 6273, Start Num: 35
Candidate Starts for JessellCookie_10:
(10, 8588), (22, 8525), (Start: 35 @8474 has 6 MA's), (41, 8429), (46, 8372), (58, 8288), (71, 8240), (84, 8138), (87, 8123), (96, 7970), (117, 7823), (118, 7802), (160, 7502), (168, 7448), (175, 7400), (176, 7355), (177, 7349), (191, 7265), (198, 7190), (217, 6995), (219, 6983), (224, 6935), (231, 6857), (232, 6848), (245, 6758), (265, 6623), (280, 6485), (299, 6359), (300, 6347), (301, 6338), (304, 6308),

Gene: JimmyPG_10 Start: 8410, Stop: 6164, Start Num: 28
Candidate Starts for JimmyPG_10:
(Start: 28 @8410 has 22 MA's), (42, 8332), (44, 8320), (48, 8290), (49, 8284), (69, 8161), (70, 8158), (73, 8131), (75, 8101), (78, 8092), (88, 8008), (90, 7951), (101, 7843), (106, 7810), (118, 7711), (122, 7687), (143, 7531), (144, 7528), (151, 7483), (152, 7480), (171, 7345), (175, 7312), (176, 7267), (177, 7261), (179, 7237), (180, 7234), (191, 7153), (198, 7078), (219, 6868), (224, 6820), (225, 6817), (226, 6787), (230, 6745), (233, 6730), (242, 6667), (248, 6637), (277, 6403), (278, 6391), (280, 6373), (288, 6334), (289, 6331), (292, 6301), (295, 6286), (297, 6259), (299, 6247), (300, 6235),

Gene: JordanFarm_10 Start: 8355, Stop: 6106, Start Num: 28
Candidate Starts for JordanFarm_10:
(5, 8535), (7, 8499), (8, 8484), (18, 8412), (Start: 28 @8355 has 22 MA's), (34, 8346), (44, 8256), (48, 8226), (49, 8220), (57, 8166), (73, 8115), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (117, 7716), (118, 7695), (121, 7680), (122, 7671), (135, 7578), (143, 7515), (154, 7383), (161, 7329), (175, 7230), (177, 7179), (191, 7095), (198, 7020), (200, 7005), (204, 6948), (219, 6810), (224, 6762), (225, 6759), (226, 6729), (242, 6609), (255, 6543), (278, 6333), (281, 6312), (290, 6270), (298, 6198), (299, 6189), (300, 6177),

Gene: Keough_10 Start: 8346, Stop: 6148, Start Num: 27
Candidate Starts for Keough_10:
(Start: 27 @8346 has 13 MA's), (44, 8256), (48, 8226), (49, 8220), (53, 8184), (57, 8166), (73, 8115), (75, 8085), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (122, 7671), (135, 7578), (144, 7512), (151, 7467), (152, 7464), (163, 7380), (171, 7329), (175, 7296), (177, 7245), (179, 7221), (180, 7218), (191, 7137), (204, 6990), (219, 6852), (224, 6804), (225, 6801), (230, 6729), (233, 6714), (242, 6651), (248, 6621), (277, 6387), (278, 6375), (281, 6354), (288, 6318), (289, 6315), (292, 6285), (295, 6270), (298, 6240), (299, 6231), (300, 6219),

Gene: Kikiko_13 Start: 9021, Stop: 6817, Start Num: 32
Candidate Starts for Kikiko_13:
(Start: 32 @9021 has 6 MA's), (40, 8973), (45, 8913), (53, 8853), (54, 8850), (56, 8832), (71, 8796), (75, 8742), (79, 8730), (86, 8673), (95, 8535), (99, 8496), (107, 8439), (117, 8367), (119, 8340), (121, 8331), (122, 8322), (125, 8298), (131, 8268), (136, 8232), (146, 8166), (147, 8157), (153, 8124), (164, 8055), (166, 8040), (177, 7926), (182, 7896), (185, 7884), (186, 7878), (188, 7863), (198, 7764), (216, 7578), (222, 7539), (246, 7323), (248, 7320), (257, 7266), (277, 7101), (278, 7089), (291, 7002), (292, 6999), (296, 6921), (299, 6906), (300, 6894),

Gene: KingKamren_10 Start: 8414, Stop: 6177, Start Num: 27
Candidate Starts for KingKamren_10:
(Start: 27 @8414 has 13 MA's), (42, 8333), (46, 8300), (53, 8249), (66, 8168), (84, 8042), (91, 7943), (94, 7913), (96, 7874), (117, 7727), (119, 7700), (121, 7691), (130, 7628), (140, 7550), (145, 7508), (160, 7406), (175, 7304), (177, 7253), (191, 7169), (196, 7112), (198, 7094), (217, 6899), (219, 6887), (224, 6839), (225, 6836), (232, 6752), (245, 6662), (251, 6641), (265, 6527), (266, 6524), (280, 6389), (283, 6371), (288, 6350), (292, 6317), (295, 6302), (299, 6263), (300, 6251), (301, 6242), (302, 6236),

Gene: Kosier_10 Start: 8646, Stop: 6427, Start Num: 28
Candidate Starts for Kosier_10:
(Start: 28 @8646 has 22 MA's), (42, 8568), (44, 8556), (48, 8526), (50, 8514), (51, 8499), (63, 8421), (69, 8406), (73, 8376), (75, 8346), (88, 8253), (90, 8196), (98, 8112), (101, 8088), (111, 8022), (113, 8016), (115, 8004), (117, 7977), (122, 7932), (135, 7839), (137, 7827), (144, 7773), (146, 7761), (157, 7683), (161, 7656), (173, 7575), (175, 7557), (177, 7506), (185, 7467), (191, 7422), (198, 7347), (204, 7275), (207, 7257), (219, 7137), (224, 7089), (225, 7086), (233, 6999), (242, 6936), (272, 6723), (274, 6696), (277, 6672), (278, 6660), (280, 6642), (290, 6597), (296, 6525), (299, 6510), (300, 6498),

Gene: Lederberg_42 Start: 32159, Stop: 34141, Start Num: 32
Candidate Starts for Lederberg_42:
(4, 31967), (20, 32102), (Start: 32 @32159 has 6 MA's), (38, 32174), (39, 32180), (52, 32294), (68, 32360), (83, 32477), (95, 32627), (114, 32756), (116, 32774), (117, 32792), (142, 32966), (146, 32981), (164, 33059), (169, 33092), (189, 33272), (195, 33341), (209, 33467), (217, 33569), (219, 33578), (221, 33593), (238, 33746), (254, 33842), (257, 33863), (268, 33962), (278, 34061),

Gene: LesNorah_10 Start: 8912, Stop: 6675, Start Num: 31
Candidate Starts for LesNorah_10:
(2, 9206), (3, 9152), (9, 9041), (11, 9008), (12, 9005), (14, 8996), (21, 8969), (Start: 31 @8912 has 2 MA's), (46, 8804), (47, 8798), (49, 8789), (53, 8753), (84, 8546), (87, 8531), (92, 8438), (96, 8378), (106, 8309), (117, 8231), (118, 8210), (121, 8195), (129, 8135), (140, 8054), (144, 8015), (160, 7910), (177, 7757), (191, 7673), (198, 7598), (206, 7517), (217, 7403), (219, 7391), (224, 7343), (231, 7265), (232, 7256), (245, 7166), (252, 7142), (258, 7112), (265, 7031), (280, 6893), (286, 6857), (288, 6848), (295, 6800), (297, 6773), (299, 6761), (300, 6749),

Gene: LilyLou_11 Start: 9029, Stop: 6786, Start Num: 28
Candidate Starts for LilyLou_11:
(13, 9110), (16, 9098), (24, 9053), (Start: 28 @9029 has 22 MA's), (46, 8915), (47, 8909), (53, 8864), (65, 8786), (84, 8657), (87, 8642), (96, 8489), (117, 8342), (121, 8306), (129, 8246), (140, 8165), (144, 8126), (160, 8021), (177, 7868), (191, 7784), (198, 7709), (217, 7514), (219, 7502), (224, 7454), (231, 7376), (232, 7367), (245, 7277), (248, 7271), (252, 7253), (258, 7223), (265, 7142), (280, 7004), (286, 6968), (288, 6959), (295, 6911), (297, 6884), (299, 6872), (300, 6860),

Gene: LuckyBarnes_45 Start: 38524, Stop: 36659, Start Num: 35
Candidate Starts for LuckyBarnes_45:
(19, 38590), (Start: 35 @38524 has 6 MA's), (42, 38464), (44, 38452), (47, 38425), (48, 38422), (50, 38410), (67, 38323), (73, 38296), (75, 38266), (78, 38257), (80, 38248), (86, 38197), (89, 38167), (92, 38101), (97, 38056), (102, 38017), (116, 37957), (122, 37903), (138, 37801), (139, 37798), (165, 37666), (176, 37555), (181, 37507), (183, 37501), (188, 37468), (190, 37462), (192, 37423), (194, 37414), (196, 37393), (197, 37390), (203, 37330), (205, 37297), (210, 37279), (213, 37249), (219, 37198), (224, 37159), (229, 37099), (233, 37069), (236, 37063), (244, 36997), (247, 36988), (249, 36985), (253, 36961), (260, 36910), (265, 36853), (267, 36835), (269, 36808), (277, 36751), (278, 36739), (287, 36682),

Gene: Mazun_10 Start: 8383, Stop: 6185, Start Num: 27
Candidate Starts for Mazun_10:
(Start: 27 @8383 has 13 MA's), (44, 8293), (49, 8257), (53, 8221), (57, 8203), (73, 8152), (75, 8122), (88, 8029), (90, 7972), (93, 7948), (101, 7864), (108, 7825), (122, 7708), (135, 7615), (144, 7549), (151, 7504), (163, 7417), (171, 7366), (175, 7333), (177, 7282), (179, 7258), (180, 7255), (191, 7174), (193, 7153), (219, 6889), (224, 6841), (225, 6838), (230, 6766), (233, 6751), (242, 6688), (248, 6658), (277, 6424), (278, 6412), (281, 6391), (288, 6355), (289, 6352), (292, 6322), (295, 6307), (298, 6277), (299, 6268), (300, 6256),

Gene: MiamiPanther_10 Start: 8474, Stop: 6273, Start Num: 35
Candidate Starts for MiamiPanther_10:
(10, 8588), (22, 8525), (Start: 35 @8474 has 6 MA's), (41, 8429), (46, 8372), (58, 8288), (84, 8138), (87, 8123), (96, 7970), (106, 7901), (117, 7823), (118, 7802), (160, 7502), (168, 7448), (175, 7400), (176, 7355), (177, 7349), (191, 7265), (198, 7190), (217, 6995), (219, 6983), (224, 6935), (231, 6857), (232, 6848), (245, 6758), (280, 6485), (299, 6359), (300, 6347), (301, 6338), (304, 6308),

Gene: MissAmericana_12 Start: 8648, Stop: 6444, Start Num: 32
Candidate Starts for MissAmericana_12:

(Start: 32 @8648 has 6 MA's), (40, 8600), (45, 8540), (53, 8480), (54, 8477), (56, 8459), (71, 8423), (75, 8369), (79, 8357), (84, 8312), (86, 8300), (107, 8066), (117, 7994), (119, 7967), (122, 7949), (125, 7925), (136, 7859), (141, 7835), (153, 7751), (156, 7742), (164, 7682), (166, 7667), (176, 7559), (177, 7553), (182, 7523), (185, 7511), (198, 7391), (201, 7367), (211, 7271), (217, 7199), (222, 7166), (226, 7106), (229, 7079), (243, 6980), (248, 6947), (256, 6902), (257, 6893), (277, 6728), (278, 6716), (291, 6629), (292, 6626), (296, 6548), (299, 6533), (300, 6521),

Gene: Moleficent_10 Start: 8379, Stop: 6181, Start Num: 27
Candidate Starts for Moleficent_10:
(Start: 27 @8379 has 13 MA's), (44, 8289), (48, 8259), (49, 8253), (57, 8199), (73, 8148), (75, 8118), (88, 8025), (90, 7968), (93, 7944), (101, 7860), (108, 7821), (122, 7704), (135, 7611), (137, 7599), (144, 7545), (151, 7500), (152, 7497), (163, 7413), (171, 7362), (175, 7329), (177, 7278), (179, 7254), (180, 7251), (191, 7170), (204, 7023), (219, 6885), (224, 6837), (225, 6834), (230, 6762), (233, 6747), (242, 6684), (248, 6654), (277, 6420), (278, 6408), (280, 6390), (289, 6348), (292, 6318), (298, 6273), (299, 6264), (300, 6252),

Gene: Morrill_10 Start: 8332, Stop: 6134, Start Num: 28
Candidate Starts for Morrill_10:
(5, 8512), (8, 8461), (18, 8389), (Start: 28 @8332 has 22 MA's), (44, 8242), (48, 8212), (49, 8206), (53, 8170), (57, 8152), (73, 8101), (75, 8071), (88, 7978), (90, 7921), (101, 7813), (108, 7774), (122, 7657), (135, 7564), (137, 7552), (144, 7498), (150, 7456), (155, 7423), (163, 7366), (171, 7315), (175, 7282), (177, 7231), (179, 7207), (180, 7204), (191, 7123), (193, 7102), (219, 6838), (224, 6790), (230, 6715), (233, 6700), (242, 6637), (248, 6607), (277, 6373), (278, 6361), (281, 6340), (288, 6304), (289, 6301), (292, 6271), (295, 6256), (298, 6226), (299, 6217), (300, 6205),

Gene: Oatly_11 Start: 8829, Stop: 6580, Start Num: 26
Candidate Starts for Oatly_11:
(Start: 26 @8829 has 11 MA's), (55, 8652), (61, 8607), (84, 8475), (87, 8460), (95, 8328), (96, 8307), (117, 8160), (118, 8139), (123, 8109), (140, 7983), (144, 7944), (160, 7839), (175, 7737), (177, 7686), (179, 7662), (180, 7659), (191, 7578), (198, 7503), (217, 7308), (219, 7296), (224, 7248), (226, 7215), (231, 7170), (232, 7161), (245, 7071), (252, 7047), (265, 6936), (280, 6798), (288, 6753), (297, 6678), (298, 6675), (299, 6666), (300, 6654), (304, 6615),

Gene: Pabst_11 Start: 8695, Stop: 6443, Start Num: 26
Candidate Starts for Pabst_11:
(Start: 26 @8695 has 11 MA's), (42, 8611), (59, 8491), (60, 8476), (61, 8470), (62, 8464), (77, 8386), (79, 8380), (84, 8338), (87, 8323), (96, 8170), (117, 8023), (118, 8002), (123, 7972), (160, 7702), (175, 7600), (177, 7549), (179, 7525), (180, 7522), (191, 7441), (198, 7366), (217, 7171), (219, 7159), (223, 7132), (224, 7111), (226, 7078), (227, 7063), (231, 7033), (232, 7024), (235, 7018), (238, 6994), (245, 6934), (252, 6910), (256, 6892), (265, 6799), (285, 6628), (288, 6616), (295, 6568), (297, 6541), (298, 6538), (299, 6529), (300, 6517), (304, 6478),

Gene: Pharky_10 Start: 8346, Stop: 6148, Start Num: 27
Candidate Starts for Pharky_10:
(Start: 27 @8346 has 13 MA's), (44, 8256), (49, 8220), (53, 8184), (57, 8166), (73, 8115), (75, 8085), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (122, 7671), (135, 7578), (144, 7512), (151, 7467), (152, 7464), (163, 7380), (171, 7329), (175, 7296), (177, 7245), (179, 7221), (180, 7218), (191, 7137), (204, 6990), (219, 6852), (224, 6804), (225, 6801), (230, 6729), (233, 6714), (242, 6651), (248, 6621), (277, 6387), (278, 6375), (280, 6357), (288, 6318), (289, 6315), (292, 6285), (297, 6243), (298, 6240), (299, 6231), (300, 6219),

Gene: Phedro_10 Start: 8346, Stop: 6148, Start Num: 27
Candidate Starts for Phedro_10:

(Start: 27 @8346 has 13 MA's), (44, 8256), (49, 8220), (53, 8184), (57, 8166), (73, 8115), (75, 8085), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (122, 7671), (135, 7578), (144, 7512), (151, 7467), (152, 7464), (163, 7380), (171, 7329), (175, 7296), (177, 7245), (179, 7221), (180, 7218), (191, 7137), (204, 6990), (219, 6852), (224, 6804), (225, 6801), (230, 6729), (233, 6714), (242, 6651), (248, 6621), (277, 6387), (278, 6375), (280, 6357), (288, 6318), (289, 6315), (292, 6285), (297, 6243), (298, 6240), (299, 6231), (300, 6219),

Gene: Phogo_10 Start: 8637, Stop: 6418, Start Num: 28
Candidate Starts for Phogo_10:
(Start: 28 @8637 has 22 MA's), (46, 8523), (47, 8517), (53, 8472), (61, 8412), (84, 8289), (87, 8274), (88, 8250), (96, 8121), (117, 7974), (118, 7953), (121, 7938), (129, 7878), (140, 7797), (144, 7758), (160, 7653), (177, 7500), (191, 7416), (196, 7359), (198, 7341), (206, 7260), (217, 7146), (219, 7134), (224, 7086), (231, 7008), (232, 6999), (245, 6909), (252, 6885), (258, 6855), (265, 6774), (280, 6636), (286, 6600), (288, 6591), (295, 6543), (297, 6516), (299, 6504), (300, 6492),

Gene: Phractured_10 Start: 8346, Stop: 6148, Start Num: 27
Candidate Starts for Phractured_10:
(Start: 27 @8346 has 13 MA's), (44, 8256), (49, 8220), (53, 8184), (57, 8166), (73, 8115), (75, 8085), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (122, 7671), (135, 7578), (144, 7512), (151, 7467), (152, 7464), (163, 7380), (171, 7329), (175, 7296), (177, 7245), (179, 7221), (180, 7218), (191, 7137), (204, 6990), (219, 6852), (224, 6804), (225, 6801), (230, 6729), (233, 6714), (242, 6651), (248, 6621), (277, 6387), (278, 6375), (280, 6357), (288, 6318), (289, 6315), (292, 6285), (297, 6243), (298, 6240), (299, 6231), (300, 6219),

Gene: PhriedRice_10 Start: 8346, Stop: 6148, Start Num: 27
Candidate Starts for PhriedRice_10:
(Start: 27 @8346 has 13 MA's), (44, 8256), (49, 8220), (53, 8184), (57, 8166), (73, 8115), (75, 8085), (88, 7992), (90, 7935), (101, 7827), (108, 7788), (122, 7671), (135, 7578), (137, 7566), (144, 7512), (151, 7467), (152, 7464), (163, 7380), (171, 7329), (175, 7296), (177, 7245), (179, 7221), (180, 7218), (191, 7137), (204, 6990), (219, 6852), (224, 6804), (225, 6801), (230, 6729), (233, 6714), (242, 6651), (248, 6621), (277, 6387), (278, 6375), (280, 6357), (288, 6318), (289, 6315), (292, 6285), (297, 6243), (298, 6240), (299, 6231), (300, 6219),

Gene: PineapplePluto_12 Start: 8973, Stop: 6724, Start Num: 26
Candidate Starts for PineapplePluto_12:
(Start: 26 @8973 has 11 MA's), (55, 8796), (61, 8751), (84, 8619), (87, 8604), (95, 8472), (96, 8451), (117, 8304), (118, 8283), (123, 8253), (140, 8127), (144, 8088), (160, 7983), (175, 7881), (177, 7830), (179, 7806), (180, 7803), (191, 7722), (198, 7647), (217, 7452), (219, 7440), (224, 7392), (226, 7359), (231, 7314), (232, 7305), (245, 7215), (252, 7191), (265, 7080), (280, 6942), (285, 6909), (288, 6897), (297, 6822), (298, 6819), (299, 6810), (300, 6798), (304, 6759),

Gene: PorkBelly_46 Start: 35155, Stop: 33269, Start Num: 27
Candidate Starts for PorkBelly_46:
(Start: 27 @35155 has 13 MA's), (41, 35101), (44, 35074), (47, 35047), (67, 34948), (78, 34897), (85, 34846), (103, 34648), (109, 34627), (122, 34528), (124, 34513), (127, 34489), (128, 34486), (133, 34453), (136, 34435), (138, 34426), (148, 34369), (162, 34297), (165, 34276), (171, 34240), (174, 34222), (176, 34165), (187, 34087), (192, 34036), (194, 34027), (196, 34006), (199, 33976), (203, 33943), (210, 33892), (212, 33880), (215, 33826), (219, 33808), (224, 33769), (228, 33718), (234, 33676), (240, 33646), (241, 33637), (262, 33487), (263, 33475), (266, 33460), (270, 33412), (272, 33406), (273, 33388), (278, 33349), (284, 33313),

Gene: RicoCaldo_10 Start: 8374, Stop: 6176, Start Num: 27
Candidate Starts for RicoCaldo_10:

(Start: 27 @8374 has 13 MA's), (44, 8284), (49, 8248), (53, 8212), (57, 8194), (73, 8143), (75, 8113), (88, 8020), (90, 7963), (93, 7939), (101, 7855), (108, 7816), (122, 7699), (135, 7606), (137, 7594), (144, 7540), (151, 7495), (152, 7492), (163, 7408), (171, 7357), (175, 7324), (177, 7273), (179, 7249), (180, 7246), (191, 7165), (204, 7018), (219, 6880), (224, 6832), (225, 6829), (230, 6757), (233, 6742), (242, 6679), (248, 6649), (277, 6415), (278, 6403), (281, 6382), (288, 6346), (289, 6343), (292, 6313), (295, 6298), (298, 6268), (299, 6259), (300, 6247),

Gene: Salvatore2000_10 Start: 8474, Stop: 6273, Start Num: 35
Candidate Starts for Salvatore2000_10:
(10, 8588), (22, 8525), (Start: 35 @8474 has 6 MA's), (41, 8429), (46, 8372), (58, 8288), (71, 8240), (84, 8138), (87, 8123), (96, 7970), (117, 7823), (118, 7802), (160, 7502), (168, 7448), (175, 7400), (176, 7355), (177, 7349), (191, 7265), (198, 7190), (217, 6995), (219, 6983), (224, 6935), (231, 6857), (232, 6848), (245, 6758), (265, 6623), (280, 6485), (299, 6359), (300, 6347), (301, 6338), (304, 6308),

Gene: SamW_42 Start: 31774, Stop: 33756, Start Num: 32
Candidate Starts for SamW_42:
(4, 31582), (20, 31717), (Start: 32 @31774 has 6 MA's), (38, 31789), (39, 31795), (52, 31909), (68, 31975), (83, 32092), (95, 32242), (114, 32371), (116, 32389), (117, 32407), (142, 32581), (146, 32596), (164, 32674), (169, 32707), (189, 32887), (195, 32956), (209, 33082), (217, 33184), (219, 33193), (221, 33208), (238, 33361), (254, 33457), (257, 33478), (268, 33577), (278, 33676),

Gene: Scruffy_10 Start: 8301, Stop: 6172, Start Num: 37
Candidate Starts for Scruffy_10:
(Start: 23 @8352 has 7 MA's), (37, 8301), (40, 8271), (48, 8208), (65, 8124), (66, 8121), (76, 8058), (81, 8031), (84, 8004), (90, 7908), (104, 7767), (105, 7764), (115, 7722), (117, 7701), (122, 7656), (132, 7596), (134, 7569), (138, 7536), (153, 7437), (158, 7410), (159, 7398), (175, 7290), (176, 7245), (184, 7206), (185, 7200), (193, 7134), (198, 7080), (206, 6999), (208, 6990), (217, 6888), (220, 6867), (222, 6855), (224, 6828), (237, 6729), (239, 6705), (248, 6636), (250, 6630), (255, 6603), (257, 6591), (259, 6573), (271, 6477), (277, 6426), (279, 6399), (282, 6390), (292, 6324), (297, 6270), (299, 6261), (300, 6249),

Gene: ShyRosie_10 Start: 8355, Stop: 6106, Start Num: 28
Candidate Starts for ShyRosie_10:
(5, 8535), (7, 8499), (8, 8484), (18, 8412), (Start: 28 @8355 has 22 MA's), (34, 8346), (44, 8256), (48, 8226), (49, 8220), (57, 8166), (73, 8115), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (117, 7716), (118, 7695), (121, 7680), (122, 7671), (135, 7578), (143, 7515), (154, 7383), (161, 7329), (175, 7230), (177, 7179), (191, 7095), (198, 7020), (200, 7005), (204, 6948), (219, 6810), (224, 6762), (225, 6759), (226, 6729), (242, 6609), (255, 6543), (278, 6333), (281, 6312), (290, 6270), (292, 6243), (298, 6198), (299, 6189), (300, 6177),

Gene: SoilSleuth_10 Start: 8355, Stop: 6106, Start Num: 28
Candidate Starts for SoilSleuth_10:
(5, 8535), (7, 8499), (8, 8484), (18, 8412), (Start: 28 @8355 has 22 MA's), (34, 8346), (44, 8256), (48, 8226), (49, 8220), (57, 8166), (73, 8115), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (117, 7716), (118, 7695), (121, 7680), (122, 7671), (135, 7578), (143, 7515), (154, 7383), (161, 7329), (175, 7230), (177, 7179), (191, 7095), (198, 7020), (200, 7005), (204, 6948), (219, 6810), (224, 6762), (225, 6759), (226, 6729), (242, 6609), (255, 6543), (278, 6333), (281, 6312), (292, 6243), (298, 6198), (299, 6189), (300, 6177),

Gene: Sorvannah_10 Start: 8474, Stop: 6273, Start Num: 35
Candidate Starts for Sorvannah_10:
(10, 8588), (22, 8525), (Start: 35 @8474 has 6 MA's), (41, 8429), (46, 8372), (58, 8288), (71, 8240), (84, 8138), (87, 8123), (96, 7970), (117, 7823), (118, 7802), (160, 7502), (168, 7448), (175, 7400),

(176, 7355), (177, 7349), (191, 7265), (198, 7190), (217, 6995), (219, 6983), (224, 6935), (231, 6857), (232, 6848), (245, 6758), (265, 6623), (280, 6485), (299, 6359), (300, 6347), (301, 6338), (304, 6308),

Gene: StAB_45 Start: 33835, Stop: 35820, Start Num: 33
Candidate Starts for StAB_45:
(Start: 33 @33835 has 2 MA's), (52, 33970), (68, 34036), (83, 34153), (95, 34303), (114, 34432), (116, 34450), (142, 34642), (146, 34657), (164, 34735), (169, 34768), (172, 34786), (177, 34864), (189, 34948), (195, 35017), (209, 35143), (217, 35245), (219, 35254), (221, 35269), (238, 35422), (254, 35518), (257, 35539), (268, 35638), (272, 35674), (278, 35737),

Gene: StagePhright_10 Start: 8346, Stop: 6148, Start Num: 27
Candidate Starts for StagePhright_10:
(Start: 27 @8346 has 13 MA's), (44, 8256), (49, 8220), (53, 8184), (57, 8166), (73, 8115), (75, 8085), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (122, 7671), (135, 7578), (144, 7512), (151, 7467), (152, 7464), (163, 7380), (171, 7329), (175, 7296), (177, 7245), (179, 7221), (180, 7218), (191, 7137), (204, 6990), (219, 6852), (224, 6804), (225, 6801), (230, 6729), (233, 6714), (242, 6651), (248, 6621), (277, 6387), (278, 6375), (280, 6357), (288, 6318), (289, 6315), (292, 6285), (297, 6243), (298, 6240), (299, 6231), (300, 6219),

Gene: Stiles_45 Start: 33290, Stop: 35275, Start Num: 33
Candidate Starts for Stiles_45:
(Start: 33 @33290 has 2 MA's), (52, 33425), (68, 33491), (83, 33608), (114, 33887), (116, 33905), (142, 34097), (146, 34112), (164, 34190), (169, 34223), (177, 34319), (189, 34403), (195, 34472), (209, 34598), (217, 34700), (219, 34709), (221, 34724), (238, 34877), (254, 34973), (257, 34994), (268, 35093), (278, 35192),

Gene: Stormbreaker_10 Start: 8646, Stop: 6400, Start Num: 26
Candidate Starts for Stormbreaker_10:
(Start: 26 @8646 has 11 MA's), (46, 8529), (47, 8523), (53, 8478), (55, 8469), (84, 8271), (87, 8256), (96, 8103), (99, 8088), (117, 7956), (118, 7935), (121, 7920), (129, 7860), (140, 7779), (144, 7740), (160, 7635), (177, 7482), (191, 7398), (196, 7341), (198, 7323), (206, 7242), (217, 7128), (219, 7116), (224, 7068), (231, 6990), (232, 6981), (245, 6891), (252, 6867), (258, 6837), (265, 6756), (280, 6618), (286, 6582), (288, 6573), (295, 6525), (299, 6486), (300, 6474),

Gene: SwissCheezer_10 Start: 8628, Stop: 6409, Start Num: 28
Candidate Starts for SwissCheezer_10:
(16, 8697), (24, 8652), (Start: 28 @8628 has 22 MA's), (46, 8514), (47, 8508), (53, 8463), (61, 8403), (84, 8280), (87, 8265), (88, 8241), (96, 8112), (117, 7965), (118, 7944), (121, 7929), (129, 7869), (140, 7788), (144, 7749), (160, 7644), (177, 7491), (191, 7407), (196, 7350), (198, 7332), (206, 7251), (217, 7137), (219, 7125), (224, 7077), (231, 6999), (232, 6990), (245, 6900), (252, 6876), (258, 6846), (265, 6765), (280, 6627), (286, 6591), (288, 6582), (295, 6534), (297, 6507), (299, 6495), (300, 6483),

Gene: ThirteenKH_10 Start: 8332, Stop: 6134, Start Num: 28
Candidate Starts for ThirteenKH_10:
(5, 8512), (8, 8461), (18, 8389), (Start: 28 @8332 has 22 MA's), (44, 8242), (48, 8212), (49, 8206), (53, 8170), (57, 8152), (73, 8101), (75, 8071), (88, 7978), (90, 7921), (101, 7813), (108, 7774), (122, 7657), (135, 7564), (137, 7552), (144, 7498), (150, 7456), (155, 7423), (163, 7366), (171, 7315), (175, 7282), (177, 7231), (179, 7207), (180, 7204), (191, 7123), (193, 7102), (219, 6838), (224, 6790), (230, 6715), (233, 6700), (242, 6637), (248, 6607), (277, 6373), (278, 6361), (281, 6340), (288, 6304), (289, 6301), (292, 6271), (295, 6256), (298, 6226), (299, 6217), (300, 6205),

Gene: TicTac_11 Start: 8838, Stop: 6589, Start Num: 26
Candidate Starts for TicTac_11:

(15, 8907), (Start: 23 @8856 has 7 MA's), (25, 8847), (Start: 26 @8838 has 11 MA's), (55, 8661), (61, 8616), (77, 8532), (84, 8484), (87, 8469), (95, 8337), (96, 8316), (117, 8169), (118, 8148), (123, 8118), (144, 7953), (160, 7848), (175, 7746), (177, 7695), (179, 7671), (180, 7668), (191, 7587), (198, 7512), (217, 7317), (219, 7305), (224, 7257), (226, 7224), (229, 7197), (231, 7179), (232, 7170), (245, 7080), (252, 7056), (265, 6945), (280, 6807), (285, 6774), (288, 6762), (298, 6684), (299, 6675), (300, 6663), (304, 6624),

Gene: TinyTimothy_10 Start: 8474, Stop: 6273, Start Num: 35
Candidate Starts for TinyTimothy_10:
(10, 8588), (22, 8525), (Start: 35 @8474 has 6 MA's), (41, 8429), (46, 8372), (58, 8288), (71, 8240), (84, 8138), (87, 8123), (96, 7970), (106, 7901), (117, 7823), (118, 7802), (160, 7502), (168, 7448), (175, 7400), (176, 7355), (177, 7349), (191, 7265), (198, 7190), (217, 6995), (219, 6983), (224, 6935), (227, 6887), (231, 6857), (232, 6848), (245, 6758), (280, 6485), (299, 6359), (300, 6347), (301, 6338), (304, 6308),

Gene: TownLake_10 Start: 8921, Stop: 6678, Start Num: 28
Candidate Starts for TownLake_10:
(16, 8990), (Start: 28 @8921 has 22 MA's), (46, 8807), (47, 8801), (53, 8756), (55, 8747), (84, 8549), (96, 8381), (99, 8366), (117, 8234), (118, 8213), (121, 8198), (129, 8138), (140, 8057), (144, 8018), (160, 7913), (177, 7760), (178, 7742), (191, 7676), (198, 7601), (206, 7520), (217, 7406), (219, 7394), (224, 7346), (231, 7268), (232, 7259), (245, 7169), (252, 7145), (258, 7115), (265, 7034), (280, 6896), (286, 6860), (288, 6851), (295, 6803), (297, 6776), (299, 6764), (300, 6752),

Gene: TrippleS_10 Start: 8338, Stop: 6134, Start Num: 28
Candidate Starts for TrippleS_10:
(5, 8518), (8, 8467), (18, 8395), (Start: 28 @8338 has 22 MA's), (44, 8248), (48, 8218), (49, 8212), (53, 8176), (73, 8101), (88, 7978), (90, 7921), (101, 7813), (108, 7774), (122, 7657), (135, 7564), (137, 7552), (144, 7498), (150, 7456), (155, 7423), (163, 7366), (171, 7315), (175, 7282), (177, 7231), (179, 7207), (180, 7204), (191, 7123), (193, 7102), (214, 6883), (219, 6838), (224, 6790), (230, 6715), (233, 6700), (242, 6637), (248, 6607), (277, 6373), (278, 6361), (281, 6340), (288, 6304), (289, 6301), (292, 6271), (295, 6256), (298, 6226), (299, 6217), (300, 6205),

Gene: Troy_42 Start: 31774, Stop: 33756, Start Num: 32
Candidate Starts for Troy_42:
(4, 31582), (20, 31717), (Start: 32 @31774 has 6 MA's), (38, 31789), (39, 31795), (52, 31909), (68, 31975), (83, 32092), (95, 32242), (114, 32371), (116, 32389), (117, 32407), (142, 32581), (146, 32596), (164, 32674), (169, 32707), (189, 32887), (195, 32956), (209, 33082), (217, 33184), (219, 33193), (221, 33208), (238, 33361), (254, 33457), (257, 33478), (268, 33577), (278, 33676),

Gene: Truong_10 Start: 8355, Stop: 6106, Start Num: 28
Candidate Starts for Truong_10:
(5, 8535), (7, 8499), (8, 8484), (18, 8412), (Start: 28 @8355 has 22 MA's), (34, 8346), (44, 8256), (48, 8226), (49, 8220), (57, 8166), (73, 8115), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (117, 7716), (118, 7695), (121, 7680), (122, 7671), (135, 7578), (143, 7515), (154, 7383), (161, 7329), (175, 7230), (177, 7179), (191, 7095), (198, 7020), (200, 7005), (204, 6948), (219, 6810), (224, 6762), (225, 6759), (226, 6729), (242, 6609), (255, 6543), (278, 6333), (281, 6312), (290, 6270), (292, 6243), (298, 6198), (299, 6189), (300, 6177),

Gene: Unphazed_10 Start: 8664, Stop: 6421, Start Num: 28
Candidate Starts for Unphazed_10:
(Start: 28 @8664 has 22 MA's), (46, 8550), (47, 8544), (53, 8499), (65, 8421), (87, 8277), (96, 8124), (117, 7977), (118, 7956), (121, 7941), (129, 7881), (140, 7800), (144, 7761), (160, 7656), (170, 7590), (177, 7503), (191, 7419), (196, 7362), (198, 7344), (206, 7263), (217, 7149), (219, 7137), (224, 7089),

(231, 7011), (232, 7002), (245, 6912), (252, 6888), (258, 6858), (265, 6777), (280, 6639), (286, 6603), (288, 6594), (295, 6546), (299, 6507), (300, 6495),

Gene: Waterlily_10 Start: 8355, Stop: 6106, Start Num: 28
Candidate Starts for Waterlily_10:
(1, 8685), (5, 8535), (7, 8499), (8, 8484), (18, 8412), (Start: 28 @8355 has 22 MA's), (34, 8346), (44, 8256), (48, 8226), (49, 8220), (57, 8166), (73, 8115), (88, 7992), (90, 7935), (93, 7911), (101, 7827), (108, 7788), (117, 7716), (118, 7695), (121, 7680), (122, 7671), (135, 7578), (143, 7515), (154, 7383), (161, 7329), (175, 7230), (177, 7179), (191, 7095), (198, 7020), (200, 7005), (204, 6948), (219, 6810), (224, 6762), (225, 6759), (226, 6729), (242, 6609), (255, 6543), (278, 6333), (281, 6312), (290, 6270), (292, 6243), (298, 6198), (299, 6189), (300, 6177),

Gene: Wesak_10 Start: 8474, Stop: 6273, Start Num: 35
Candidate Starts for Wesak_10:
(10, 8588), (22, 8525), (Start: 35 @8474 has 6 MA's), (41, 8429), (46, 8372), (58, 8288), (71, 8240), (84, 8138), (87, 8123), (96, 7970), (117, 7823), (118, 7802), (160, 7502), (168, 7448), (175, 7400), (176, 7355), (177, 7349), (191, 7265), (198, 7190), (217, 6995), (219, 6983), (224, 6935), (231, 6857), (232, 6848), (245, 6758), (264, 6632), (265, 6623), (280, 6485), (299, 6359), (300, 6347), (301, 6338), (304, 6308),

Gene: Xitlalli_10 Start: 8652, Stop: 6406, Start Num: 26
Candidate Starts for Xitlalli_10:
(Start: 26 @8652 has 11 MA's), (46, 8535), (47, 8529), (53, 8484), (84, 8277), (87, 8262), (96, 8109), (117, 7962), (118, 7941), (121, 7926), (129, 7866), (140, 7785), (144, 7746), (160, 7641), (177, 7488), (191, 7404), (198, 7329), (217, 7134), (219, 7122), (224, 7074), (231, 6996), (232, 6987), (245, 6897), (252, 6873), (258, 6843), (265, 6762), (280, 6624), (286, 6588), (288, 6579), (295, 6531), (297, 6504), (299, 6492), (300, 6480),

Gene: Yafa_10 Start: 8355, Stop: 6151, Start Num: 28
Candidate Starts for Yafa_10:
(8, 8484), (18, 8412), (Start: 28 @8355 has 22 MA's), (44, 8265), (48, 8235), (49, 8229), (53, 8193), (73, 8118), (75, 8088), (90, 7938), (101, 7830), (108, 7791), (122, 7674), (135, 7581), (137, 7569), (144, 7515), (146, 7503), (150, 7473), (155, 7440), (163, 7383), (175, 7299), (177, 7248), (179, 7224), (180, 7221), (191, 7140), (219, 6855), (224, 6807), (230, 6732), (233, 6717), (242, 6654), (248, 6624), (278, 6378), (280, 6360), (288, 6321), (289, 6318), (292, 6288), (297, 6246), (298, 6243), (299, 6234), (300, 6222),

Gene: YellowPanda_10 Start: 8474, Stop: 6273, Start Num: 35
Candidate Starts for YellowPanda_10:
(10, 8588), (22, 8525), (Start: 35 @8474 has 6 MA's), (41, 8429), (46, 8372), (58, 8288), (71, 8240), (84, 8138), (87, 8123), (96, 7970), (106, 7901), (117, 7823), (118, 7802), (120, 7790), (160, 7502), (168, 7448), (175, 7400), (176, 7355), (177, 7349), (191, 7265), (198, 7190), (217, 6995), (219, 6983), (224, 6935), (231, 6857), (232, 6848), (245, 6758), (280, 6485), (299, 6359), (300, 6347), (301, 6338), (304, 6308),

Gene: Zhengyi_10 Start: 8417, Stop: 6180, Start Num: 27
Candidate Starts for Zhengyi_10:
(Start: 27 @8417 has 13 MA's), (42, 8336), (46, 8303), (53, 8252), (55, 8243), (66, 8171), (79, 8090), (84, 8045), (87, 8030), (94, 7916), (96, 7877), (117, 7730), (118, 7709), (121, 7694), (140, 7553), (160, 7409), (168, 7355), (175, 7307), (177, 7256), (191, 7172), (196, 7115), (206, 7016), (219, 6890), (224, 6842), (225, 6839), (228, 6791), (232, 6755), (245, 6665), (261, 6581), (265, 6530), (266, 6527), (280, 6392), (283, 6374), (288, 6353), (292, 6320), (295, 6305), (299, 6266), (300, 6254),