

Pham 311604

1: EverythinBagel_37	0	10	11	20	26	30	34	40	48	58	64	70	76	80	82	88	92	100	108	110	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240		
2: FrankDeliGuy_35	0	10	11	20	26	30	34	40	48	58	64	70	76	80	82	88	92	100	108	110	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240		
3: Phabia_38 + 4	0	10	11	20	26	30	34	40	48	58	64	70	76	80	82	88	92	100	108	110	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240		
4: DonaldDuck_37 + 6	0	10	11	20	26	30	34	40	48	53	59	63	73	80	88	92	100	108	110	121	126	129	134	138	141	146	150	159	164	162	191	206	212	220	228	236	240	
5: BirdInFrench_37 + 1	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	129	134	138	141	146	150	159	164	162	191	206	212	220	228	236	240	
6: Romm_39 + 1	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	129	134	138	141	146	150	159	164	162	191	202	216	220	236	240		
7: Nike_38	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	129	134	138	141	146	150	159	164	162	191	204	216	220	236	240		
8: Quammi_36	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	129	134	138	141	146	150	159	164	162	191	204	216	220	236	240		
9: Namago_38 + 3	0	10	11	20	26	30	34	40	48	53	59	63	73	80	88	92	100	108	110	121	123	138	141	146	148	150	159	164	162	195	201	216	220	228	236	240		
10: Phinky_44	0	10	11	20	26	30	34	40	48	53	59	63	73	80	88	92	100	108	110	121	123	138	141	146	148	150	159	164	162	195	201	216	220	228	236	240		
11: Hyperion_37 + 2	0	10	11	20	26	30	34	40	48	53	59	61	66	72	76	80	88	92	100	108	119	119	138	146	148	150	159	164	162	195	201	212	220	228	236	240		
12: OneinaGillian_37	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	129	134	138	141	146	150	159	164	162	191	206	212	220	228	236	240	
13: Kelcole_36	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	129	134	138	141	146	150	159	164	162	191	206	212	220	228	236	240	
14: Fregley_38 + 2	0	10	11	20	26	30	34	40	48	56	62	72	76	80	88	92	100	108	110	116	126	126	138	141	146	148	150	159	164	162	191	201	216	220	221	236	240	
15: BabyDotz_37	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240			
16: Viceroy_36	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240			
17: MorilMayhem_38	0	10	11	20	26	30	34	40	48	53	59	63	73	80	88	92	100	108	110	119	126	126	138	141	146	148	150	159	164	162	190	206	210	216	220	221	236	240
18: Fizzles_38	0	10	11	20	26	30	34	40	48	53	59	63	73	80	88	92	100	108	110	121	126	129	134	138	141	146	150	159	164	162	191	202	216	220	228	236	240	
19: Squash_40	0	10	11	20	26	30	34	40	48	53	59	63	73	80	88	92	100	108	110	121	126	129	134	138	141	146	150	159	164	162	191	206	212	220	228	236	240	
20: Altheas_39	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240			
21: WheelerS25_43	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	119	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240		
22: Rudy_36	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240			
23: Judebell_40	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	119	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240		
24: Mashley_36	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	119	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240		
25: SlySloth_40	0	10	11	20	26	30	34	40	48	53	59	62	73	80	88	92	100	108	110	120	126	128	138	146	148	150	159	164	162	191	206	212	220	228	236	240		
26: Pepe25_36	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	119	121	126	127	134	138	146	150	159	164	162	191	206	212	220	228	236	240	
27: KillerQueen_38	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	127	134	138	146	150	159	164	162	201	216	220	221	236	240			
28: Mentos_42	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	119	121	126	127	138	141	147	157	171	188	201	212	220	221	236	240			
29: Marcie_42	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	127	138	141	147	157	171	188	201	216	220	221	236	240				
30: Zagie_37	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	127	138	141	148	150	159	164	162	193	202	216	220	221	236	240		
31: Blab_36	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	119	121	126	127	138	146	148	150	159	164	162	201	216	220	221	236	240		
32: Rowlf_34	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	119	121	126	127	138	146	148	150	159	164	162	201	216	220	221	236	240		
33: Gazebo_36	0	10	11	20	26	30	34	40	48	59	64	72	76	80	88	92	100	108	110	121	126	127	138	146	148	150	159	164	162	201	216	220	221	236	240			
34: Mila11_40	0	10	11	20	26	30	34	40	48	58	64	72	76	80	88	92	100	108	110	121	126	127	138	146	148	150	159	164	162	201	216	220	221	236	240			
35: Statler_39	0	11	11	22	30	34	40	48	51	57	68	75	83	88	98	106	117	122	126	130	136	137	140	151	151	166	171	181	195	206	218	226	233	240				
36: BaileyBlu_16	0	11	11	22	30	34	40	48	51	57	68	75	83	88	98	106	117	122	126	130	136	137	140	151	151	166	171	181	195	204	214	224	232	240				
37: CailinAllBarbz_16	0	11	11	22	30	34	40	48	51	57	68	75	83	88	98	106	117	122	126	130	136	137	140	151	151	166	171	181	195	206	214	224	232	240				
38: Jankie_16 + 1	0	18	22	30	34	40	48	52	58	68	75	83	89	99	106	117	122	126	130	136	137	140	151	151	166	171	181	195	208	218	228	230	238	240				
39: Elfy_15	0	11	11	22	30	34	40	48	51	57	68	75	83	88	98	106	117	122	126	130	136	137	140	151	151	166	171	181	195	204	214	224	232	240				
40: Hendrix_72	0	11	11	22	30	34	40	48	51	57	68	75	83	88	98	106	117	122	126	130	136	137	140	151	151	166	171	181	195	204	214	224	232	240				
41: Rasputia_73	0	11	11	22	30	34	40	48	51	57	68	75	83	88	98	106	117	122	126	130	136	137	140	151	151	166	171	181	195	204	214	224	232	240				

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 311604 Report

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

Pham number 311604 has 62 members, 7 are drafts.

Phages represented in each track:

- Track 1 : EverythinBagel_37
- Track 2 : FrankDeliGuy_35
- Track 3 : Phabia_38, Wayne3_39, Casend_39, Lonelysoil_37, Teehee_39
- Track 4 : DonaldDuck_37, SallyK_39, Jehoshaphat_40, Zhafia_40, Wheelie_37, Sillytadpoles_38, Llemily_37
- Track 5 : BirdInFrench_37, Wilca_37
- Track 6 : Romm_39, RobinRose_39
- Track 7 : Nike_38
- Track 8 : Quammi_36
- Track 9 : Namago_38, Tissue_38, Kyva_40, Grassboy_39
- Track 10 : Phinky_44
- Track 11 : Hyperion_37, StrawberryJamm_40, AluminumJesus_36
- Track 12 : OneinaGillian_37
- Track 13 : Kelcole_36
- Track 14 : Fregley_38, CandC_36, Tempo_37
- Track 15 : BabyDotz_37
- Track 16 : Viceroy_36
- Track 17 : MorillMayhem_38, BaconCheese_41
- Track 18 : Fizzles_38
- Track 19 : Squash_40
- Track 20 : Altheas_39
- Track 21 : WheelerS25_43
- Track 22 : Rudy_36
- Track 23 : Judebell_40
- Track 24 : Mashley_36
- Track 25 : SlySloth_40
- Track 26 : Pepe25_36
- Track 27 : KillerQueen_38
- Track 28 : Mentos_42
- Track 29 : Marcie_42
- Track 30 : Zagie_37
- Track 31 : Blab_36
- Track 32 : Rowlf_34
- Track 33 : Gazebo_36
- Track 34 : Mila11_40
- Track 35 : Statler_39
- Track 36 : BaileyBlu_16

- Track 37 : CallinAllBarbz_16
- Track 38 : Jankie_16, GrimEater_16
- Track 39 : Elfy_15
- Track 40 : Hendrix_72
- Track 41 : Rasputia_73

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

The start number called the most often in the published annotations is 6, it was called in 48 of the 55 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Altheas_39, AluminumJesus_36, BabyDotz_37, BaconCheese_41, BirdInFrench_37, Blab_36, CandC_36, Casend_39, DonaldDuck_37, EverythinBagel_37, Fizzles_38, FrankDeliGuy_35, Fregley_38, Gazebo_36, Grassboy_39, Hyperion_37, Jehoshaphat_40, Judebell_40, Kelcole_36, KillerQueen_38, Kyva_40, Llemily_37, Lonelysoil_37, Marcie_42, Mashley_36, Mentos_42, Mila11_40, MorillMayhem_38, Namago_38, Nike_38, OneinaGillian_37, Pepe25_36, Phabia_38, Phinky_44, Quammi_36, RobinRose_39, Romm_39, Rowlf_34, Rudy_36, SallyK_39, Sillytadpoles_38, SlySloth_40, Squash_40, Statler_39, StrawberryJamm_40, Teehee_39, Tempo_37, Tissue_38, Viceroy_36, Wayne3_39, WheelerS25_43, Wheelie_37, Wilca_37, Zagie_37, Zhafia_40,

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

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

- BaileyBlu_16, CallinAllBarbz_16, Elfy_15, GrimEater_16, Hendrix_72, Jankie_16, Rasputia_73,

Summary by start number:

Start 1:

- Found in 2 of 62 (3.2%) of genes in pham
- Manual Annotations of this start: 2 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hendrix_72 (GC), Rasputia_73 (GC),

Start 6:

- Found in 55 of 62 (88.7%) of genes in pham
- Manual Annotations of this start: 48 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altheas_39 (EG), AluminumJesus_36 (EG), BabyDotz_37 (EG), BaconCheese_41 (EG), BirdInFrench_37 (EG), Blab_36 (EG), CandC_36 (EG), Casend_39 (EG), DonaldDuck_37 (EG), EverythinBagel_37 (EG), Fizzles_38 (EG), FrankDeliGuy_35 (EG), Fregley_38 (EG), Gazebo_36 (EG), Grassboy_39 (EG), Hyperion_37 (EG), Jehoshaphat_40 (EG), Judebell_40 (EG), Kelcole_36 (EG), KillerQueen_38 (EG), Kyva_40 (EG), Llemily_37 (EG), Lonelysoil_37 (EG), Marcie_42 (EG), Mashley_36 (EG), Mentos_42 (EG), Mila11_40 (EG), MorillMayhem_38 (EG), Namago_38 (EG), Nike_38 (EG), OneinaGillian_37

(EG), Pepe25_36 (EG), Phabia_38 (EG), Phinky_44 (EG), Quammi_36 (EG), RobinRose_39 (EG), Romm_39 (EG), Rowlf_34 (EG), Rudy_36 (EG), SallyK_39 (EG), Sillytadpoles_38 (EG), SlySloth_40 (EG), Squash_40 (EG), Statler_39 (EG), StrawberryJamm_40 (EG), Teehee_39 (EG), Tempo_37 (EG), Tissue_38 (EG), Viceroy_36 (EG), Wayne3_39 (EG), WheelerS25_43 (EG), Wheelie_37 (EG), Wilca_37 (EG), Zagie_37 (EG), Zhafia_40 (EG),

Start 9:

- Found in 5 of 62 (8.1%) of genes in pham
- Manual Annotations of this start: 5 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu_16 (FP), CallinAllBarbz_16 (FP), Elfy_15 (FP), GrimEater_16 (FP), Jankie_16 (FP),

Summary by clusters:

There are 3 clusters represented in this pham: FP, EG, GC,

Info for manual annotations of cluster EG:

- Start number 6 was manually annotated 48 times for cluster EG.

Info for manual annotations of cluster FP:

- Start number 9 was manually annotated 5 times for cluster FP.

Info for manual annotations of cluster GC:

- Start number 1 was manually annotated 2 times for cluster GC.

Gene Information:

Gene: Altheas_39 Start: 28108, Stop: 31029, Start Num: 6

Candidate Starts for Altheas_39:

(Start: 6 @28108 has 48 MA's), (10, 28150), (33, 28477), (34, 28483), (41, 28648), (46, 28765), (48, 28801), (53, 28897), (62, 29026), (73, 29251), (80, 29308), (82, 29323), (85, 29356), (86, 29362), (110, 29608), (126, 29803), (129, 29878), (146, 30106), (147, 30127), (155, 30202), (158, 30232), (159, 30238), (172, 30322), (182, 30382), (189, 30457), (191, 30466), (199, 30511), (212, 30640), (216, 30661), (220, 30706), (227, 30757), (228, 30769), (235, 30841), (237, 30871), (243, 30991), (246, 31021), (247, 31024),

Gene: AluminumJesus_36 Start: 27705, Stop: 30626, Start Num: 6

Candidate Starts for AluminumJesus_36:

(Start: 6 @27705 has 48 MA's), (10, 27747), (17, 27855), (20, 27903), (21, 27921), (25, 27945), (30, 28008), (33, 28074), (34, 28080), (46, 28362), (48, 28398), (64, 28659), (67, 28710), (73, 28845), (78, 28887), (80, 28902), (86, 28956), (87, 28959), (93, 29010), (101, 29094), (102, 29106), (119, 29274), (138, 29583), (146, 29703), (159, 29835), (164, 29862), (171, 29910), (177, 29940), (182, 29979), (201, 30141), (216, 30258), (227, 30354), (236, 30450), (243, 30588), (246, 30618), (247, 30621),

Gene: BabyDotz_37 Start: 28469, Stop: 31396, Start Num: 6

Candidate Starts for BabyDotz_37:

(Start: 6 @28469 has 48 MA's), (10, 28511), (17, 28619), (20, 28667), (21, 28685), (25, 28709), (30, 28772), (33, 28838), (34, 28844), (46, 29126), (47, 29141), (48, 29162), (49, 29177), (56, 29300), (62, 29387), (80, 29669), (84, 29711), (86, 29723), (101, 29861), (102, 29873), (107, 29942), (116, 30023),

(126, 30164), (147, 30494), (148, 30509), (164, 30632), (167, 30644), (171, 30680), (177, 30710), (181, 30737), (182, 30749), (212, 31007), (216, 31028), (220, 31073), (222, 31079), (227, 31124), (242, 31331), (243, 31358), (246, 31388), (247, 31391),

Gene: BaconCheese_41 Start: 29094, Stop: 32018, Start Num: 6

Candidate Starts for BaconCheese_41:

(Start: 6 @29094 has 48 MA's), (10, 29136), (20, 29292), (25, 29334), (30, 29397), (33, 29463), (46, 29751), (47, 29766), (48, 29787), (64, 30048), (67, 30099), (77, 30267), (79, 30285), (80, 30291), (81, 30297), (86, 30345), (87, 30348), (92, 30396), (102, 30495), (121, 30699), (126, 30786), (127, 30846), (138, 30975), (146, 31095), (159, 31227), (164, 31254), (171, 31302), (177, 31332), (182, 31371), (200, 31512), (201, 31533), (216, 31650), (220, 31695), (227, 31746), (236, 31842), (243, 31980), (246, 32010), (247, 32013),

Gene: BaileyBlu_16 Start: 12247, Stop: 15129, Start Num: 9

Candidate Starts for BaileyBlu_16:

(8, 12241), (Start: 9 @12247 has 5 MA's), (11, 12295), (51, 12970), (57, 13057), (65, 13201), (83, 13441), (97, 13549), (98, 13564), (106, 13675), (117, 13768), (122, 13840), (125, 13885), (135, 14056), (136, 14062), (137, 14098), (151, 14296), (166, 14395), (175, 14455), (178, 14470), (180, 14494), (182, 14509), (184, 14530), (195, 14611), (205, 14707), (208, 14731), (218, 14800), (225, 14857), (226, 14866),

Gene: BirdInFrench_37 Start: 26282, Stop: 29203, Start Num: 6

Candidate Starts for BirdInFrench_37:

(Start: 6 @26282 has 48 MA's), (10, 26324), (31, 26600), (33, 26651), (34, 26657), (41, 26822), (44, 26888), (46, 26939), (48, 26975), (53, 27071), (62, 27200), (73, 27425), (80, 27482), (82, 27497), (85, 27530), (86, 27536), (110, 27782), (126, 27977), (129, 28052), (141, 28208), (146, 28280), (147, 28301), (155, 28376), (158, 28406), (159, 28412), (172, 28496), (182, 28556), (191, 28640), (196, 28673), (199, 28685), (212, 28814), (227, 28931), (228, 28943), (235, 29015), (243, 29165), (246, 29195), (247, 29198),

Gene: Blab_36 Start: 27627, Stop: 30539, Start Num: 6

Candidate Starts for Blab_36:

(Start: 6 @27627 has 48 MA's), (10, 27669), (17, 27777), (20, 27825), (25, 27867), (30, 27930), (33, 27996), (34, 28002), (45, 28260), (46, 28284), (48, 28320), (64, 28581), (79, 28818), (80, 28824), (81, 28830), (86, 28878), (87, 28881), (93, 28932), (101, 29016), (104, 29058), (105, 29085), (108, 29106), (121, 29232), (141, 29556), (150, 29676), (159, 29748), (174, 29835), (182, 29892), (193, 29994), (202, 30060), (216, 30171), (236, 30363), (243, 30501), (246, 30531), (247, 30534),

Gene: CallinAllBarbz_16 Start: 12374, Stop: 15277, Start Num: 9

Candidate Starts for CallinAllBarbz_16:

(8, 12368), (Start: 9 @12374 has 5 MA's), (11, 12422), (69, 13385), (83, 13571), (117, 13898), (125, 14015), (130, 14138), (135, 14186), (136, 14192), (139, 14249), (151, 14426), (158, 14483), (160, 14495), (166, 14525), (173, 14579), (175, 14585), (178, 14600), (180, 14624), (182, 14639), (185, 14666), (204, 14831), (211, 14888), (213, 14894), (214, 14900), (224, 14975), (232, 15041),

Gene: CandC_36 Start: 26607, Stop: 29528, Start Num: 6

Candidate Starts for CandC_36:

(Start: 6 @26607 has 48 MA's), (10, 26649), (17, 26757), (24, 26844), (25, 26847), (30, 26910), (33, 26976), (46, 27264), (48, 27300), (59, 27453), (72, 27711), (74, 27762), (80, 27804), (86, 27858), (87, 27861), (109, 28101), (119, 28176), (164, 28764), (168, 28785), (171, 28812), (182, 28881), (183, 28890), (212, 29139), (220, 29205), (235, 29340), (236, 29352), (239, 29391), (243, 29490), (244, 29493), (245, 29514), (247, 29523),

Gene: Casend_39 Start: 28251, Stop: 31178, Start Num: 6

Candidate Starts for Casend_39:

(Start: 6 @28251 has 48 MA's), (10, 28293), (17, 28401), (21, 28467), (25, 28491), (30, 28554), (33, 28620), (34, 28626), (46, 28908), (48, 28944), (64, 29205), (77, 29424), (79, 29442), (80, 29448), (81, 29454), (86, 29502), (87, 29505), (92, 29553), (101, 29640), (102, 29652), (103, 29664), (121, 29856), (126, 29943), (127, 30003), (134, 30075), (138, 30135), (146, 30255), (150, 30315), (159, 30387), (169, 30456), (171, 30462), (182, 30531), (200, 30672), (201, 30693), (216, 30810), (220, 30855), (227, 30906), (236, 31002), (243, 31140), (246, 31170), (247, 31173),

Gene: DonaldDuck_37 Start: 27600, Stop: 30527, Start Num: 6

Candidate Starts for DonaldDuck_37:

(Start: 6 @27600 has 48 MA's), (10, 27642), (17, 27750), (20, 27798), (25, 27840), (30, 27903), (33, 27969), (34, 27975), (46, 28257), (48, 28293), (58, 28443), (64, 28554), (77, 28773), (79, 28791), (80, 28797), (81, 28803), (86, 28851), (87, 28854), (92, 28902), (101, 28989), (102, 29001), (103, 29013), (121, 29205), (127, 29352), (134, 29424), (138, 29484), (146, 29604), (150, 29664), (159, 29736), (169, 29805), (171, 29811), (182, 29880), (216, 30159), (220, 30204), (227, 30255), (236, 30351), (243, 30489), (246, 30519), (247, 30522),

Gene: Elfy_15 Start: 11968, Stop: 14871, Start Num: 9

Candidate Starts for Elfy_15:

(Start: 9 @11968 has 5 MA's), (11, 12016), (13, 12022), (26, 12214), (27, 12235), (36, 12385), (37, 12415), (42, 12526), (52, 12697), (54, 12733), (55, 12760), (58, 12784), (68, 12961), (83, 13162), (90, 13228), (99, 13294), (106, 13396), (108, 13417), (111, 13453), (114, 13477), (115, 13483), (122, 13561), (124, 13570), (125, 13606), (128, 13699), (136, 13783), (142, 13888), (143, 13894), (147, 13972), (156, 14065), (163, 14104), (170, 14155), (176, 14185), (178, 14194), (180, 14218), (182, 14233), (186, 14266), (192, 14323), (198, 14356), (209, 14461), (219, 14545), (223, 14557), (224, 14569), (230, 14626), (238, 14734),

Gene: EverythinBagel_37 Start: 27988, Stop: 30915, Start Num: 6

Candidate Starts for EverythinBagel_37:

(Start: 6 @27988 has 48 MA's), (10, 28030), (17, 28138), (20, 28186), (21, 28204), (25, 28228), (30, 28291), (33, 28357), (34, 28363), (46, 28645), (48, 28681), (64, 28942), (77, 29161), (79, 29179), (80, 29185), (81, 29191), (86, 29239), (87, 29242), (92, 29290), (102, 29389), (103, 29401), (121, 29593), (126, 29680), (127, 29740), (134, 29812), (138, 29872), (146, 29992), (150, 30052), (159, 30124), (169, 30193), (171, 30199), (182, 30268), (216, 30547), (220, 30592), (227, 30643), (236, 30739), (243, 30877), (246, 30907), (247, 30910),

Gene: Fizzles_38 Start: 27219, Stop: 30158, Start Num: 6

Candidate Starts for Fizzles_38:

(Start: 6 @27219 has 48 MA's), (10, 27261), (23, 27459), (33, 27594), (35, 27651), (38, 27723), (40, 27738), (48, 27918), (49, 27933), (53, 28014), (62, 28143), (68, 28251), (80, 28425), (86, 28479), (91, 28527), (95, 28560), (101, 28617), (116, 28779), (119, 28800), (126, 28920), (138, 29112), (141, 29160), (144, 29196), (157, 29355), (159, 29367), (165, 29397), (182, 29511), (190, 29592), (195, 29625), (199, 29640), (210, 29751), (216, 29790), (220, 29835), (227, 29886), (234, 29958), (235, 29970), (236, 29982), (239, 30021), (243, 30120), (246, 30150), (247, 30153),

Gene: FrankDeliGuy_35 Start: 27557, Stop: 30484, Start Num: 6

Candidate Starts for FrankDeliGuy_35:

(Start: 6 @27557 has 48 MA's), (10, 27599), (17, 27707), (21, 27773), (25, 27797), (30, 27860), (33, 27926), (34, 27932), (46, 28214), (48, 28250), (64, 28511), (77, 28730), (79, 28748), (80, 28754), (81, 28760), (86, 28808), (87, 28811), (92, 28859), (101, 28946), (102, 28958), (103, 28970), (121, 29162), (126, 29249), (127, 29309), (134, 29381), (138, 29441), (146, 29561), (150, 29621), (159, 29693), (169, 29762), (171, 29768), (182, 29837), (200, 29978), (201, 29999), (216, 30116), (220, 30161),

(227, 30212), (236, 30308), (243, 30446), (245, 30470), (246, 30476), (247, 30479),

Gene: Fregley_38 Start: 27177, Stop: 30098, Start Num: 6

Candidate Starts for Fregley_38:

(Start: 6 @27177 has 48 MA's), (10, 27219), (17, 27327), (24, 27414), (25, 27417), (30, 27480), (33, 27546), (46, 27834), (48, 27870), (59, 28023), (72, 28281), (74, 28332), (80, 28374), (86, 28428), (87, 28431), (109, 28671), (119, 28746), (164, 29334), (168, 29355), (171, 29382), (182, 29451), (183, 29460), (212, 29709), (220, 29775), (235, 29910), (236, 29922), (239, 29961), (243, 30060), (244, 30063), (245, 30084), (247, 30093),

Gene: Gazebo_36 Start: 28168, Stop: 31089, Start Num: 6

Candidate Starts for Gazebo_36:

(Start: 6 @28168 has 48 MA's), (10, 28210), (17, 28318), (20, 28366), (21, 28384), (25, 28408), (30, 28471), (33, 28537), (34, 28543), (46, 28825), (48, 28861), (64, 29122), (67, 29173), (73, 29308), (78, 29350), (80, 29365), (86, 29419), (87, 29422), (93, 29473), (102, 29569), (119, 29737), (138, 30046), (146, 30166), (159, 30298), (164, 30325), (171, 30373), (177, 30403), (182, 30442), (201, 30604), (216, 30721), (227, 30817), (236, 30913), (243, 31051), (246, 31081), (247, 31084),

Gene: Grassboy_39 Start: 28229, Stop: 31141, Start Num: 6

Candidate Starts for Grassboy_39:

(Start: 6 @28229 has 48 MA's), (10, 28271), (17, 28379), (21, 28445), (25, 28469), (30, 28532), (33, 28598), (34, 28604), (46, 28886), (48, 28922), (64, 29183), (77, 29402), (79, 29420), (80, 29426), (81, 29432), (86, 29480), (87, 29483), (93, 29534), (101, 29618), (105, 29687), (108, 29708), (121, 29834), (131, 30026), (141, 30158), (150, 30278), (159, 30350), (182, 30494), (216, 30773), (236, 30965), (243, 31103), (246, 31133), (247, 31136),

Gene: GrimEater_16 Start: 12623, Stop: 15499, Start Num: 9

Candidate Starts for GrimEater_16:

(7, 12617), (Start: 9 @12623 has 5 MA's), (11, 12668), (22, 12827), (43, 13181), (69, 13631), (71, 13655), (75, 13748), (83, 13817), (96, 13922), (115, 14135), (121, 14192), (125, 14258), (136, 14432), (140, 14507), (151, 14666), (161, 14738), (166, 14765), (167, 14771), (180, 14864), (187, 14936), (188, 14951), (194, 14981), (203, 15053), (221, 15182), (231, 15257), (233, 15278),

Gene: Hendrix_72 Start: 46031, Stop: 49525, Start Num: 1

Candidate Starts for Hendrix_72:

(Start: 1 @46031 has 2 MA's), (2, 46073), (5, 46400), (12, 46625), (15, 46682), (16, 46688), (18, 46727), (19, 46742), (22, 46784), (28, 46865), (29, 46871), (50, 47342), (63, 47537), (70, 47645), (86, 47843), (92, 47894), (100, 47966), (102, 47993), (107, 48062), (110, 48089), (112, 48116), (116, 48143), (119, 48161), (126, 48281), (129, 48356), (132, 48398), (138, 48473), (141, 48521), (145, 48593), (148, 48632), (149, 48635), (150, 48656), (152, 48665), (154, 48677), (159, 48728), (162, 48740), (166, 48764), (171, 48806), (182, 48875), (206, 49085), (207, 49091), (215, 49154), (217, 49172), (220, 49202), (222, 49208), (229, 49268), (234, 49325), (236, 49349), (240, 49421), (243, 49487), (246, 49517), (247, 49520),

Gene: Hyperion_37 Start: 28124, Stop: 31045, Start Num: 6

Candidate Starts for Hyperion_37:

(Start: 6 @28124 has 48 MA's), (10, 28166), (17, 28274), (20, 28322), (21, 28340), (25, 28364), (30, 28427), (33, 28493), (34, 28499), (46, 28781), (48, 28817), (64, 29078), (67, 29129), (73, 29264), (78, 29306), (80, 29321), (86, 29375), (87, 29378), (93, 29429), (101, 29513), (102, 29525), (119, 29693), (138, 30002), (146, 30122), (159, 30254), (164, 30281), (171, 30329), (177, 30359), (182, 30398), (201, 30560), (216, 30677), (227, 30773), (236, 30869), (243, 31007), (246, 31037), (247, 31040),

Gene: Jankie_16 Start: 12622, Stop: 15498, Start Num: 9

Candidate Starts for Jankie_16:

(7, 12616), (Start: 9 @12622 has 5 MA's), (11, 12667), (22, 12826), (43, 13180), (69, 13630), (71, 13654), (75, 13747), (83, 13816), (96, 13921), (115, 14134), (121, 14191), (125, 14257), (136, 14431), (140, 14506), (151, 14665), (161, 14737), (166, 14764), (167, 14770), (180, 14863), (187, 14935), (188, 14950), (194, 14980), (203, 15052), (221, 15181), (231, 15256), (233, 15277),

Gene: Jehoshaphat_40 Start: 28519, Stop: 31446, Start Num: 6

Candidate Starts for Jehoshaphat_40:

(Start: 6 @28519 has 48 MA's), (10, 28561), (17, 28669), (20, 28717), (25, 28759), (30, 28822), (33, 28888), (34, 28894), (46, 29176), (48, 29212), (58, 29362), (64, 29473), (77, 29692), (79, 29710), (80, 29716), (81, 29722), (86, 29770), (87, 29773), (92, 29821), (101, 29908), (102, 29920), (103, 29932), (121, 30124), (127, 30271), (134, 30343), (138, 30403), (146, 30523), (150, 30583), (159, 30655), (169, 30724), (171, 30730), (182, 30799), (216, 31078), (220, 31123), (227, 31174), (236, 31270), (243, 31408), (246, 31438), (247, 31441),

Gene: Judebell_40 Start: 28022, Stop: 30949, Start Num: 6

Candidate Starts for Judebell_40:

(Start: 6 @28022 has 48 MA's), (10, 28064), (17, 28172), (21, 28238), (25, 28262), (30, 28325), (33, 28391), (34, 28397), (46, 28679), (48, 28715), (64, 28976), (77, 29195), (79, 29213), (80, 29219), (81, 29225), (86, 29273), (87, 29276), (92, 29324), (101, 29411), (102, 29423), (103, 29435), (121, 29627), (126, 29714), (127, 29774), (134, 29846), (138, 29906), (146, 30026), (150, 30086), (159, 30158), (169, 30227), (171, 30233), (182, 30302), (201, 30464), (216, 30581), (220, 30626), (227, 30677), (236, 30773), (243, 30911), (245, 30935), (246, 30941), (247, 30944),

Gene: Kelcole_36 Start: 27059, Stop: 29980, Start Num: 6

Candidate Starts for Kelcole_36:

(Start: 6 @27059 has 48 MA's), (10, 27101), (17, 27209), (24, 27296), (25, 27299), (30, 27362), (33, 27428), (46, 27716), (48, 27752), (59, 27905), (72, 28163), (74, 28214), (76, 28229), (80, 28256), (86, 28310), (87, 28313), (109, 28553), (164, 29216), (168, 29237), (171, 29264), (182, 29333), (183, 29342), (220, 29657), (235, 29792), (236, 29804), (239, 29843), (243, 29942), (244, 29945), (245, 29966), (247, 29975),

Gene: KillerQueen_38 Start: 26854, Stop: 29775, Start Num: 6

Candidate Starts for KillerQueen_38:

(Start: 6 @26854 has 48 MA's), (10, 26896), (17, 27004), (24, 27091), (25, 27094), (30, 27157), (33, 27223), (46, 27511), (48, 27547), (59, 27700), (72, 27958), (74, 28009), (76, 28024), (80, 28051), (86, 28105), (87, 28108), (109, 28348), (119, 28423), (164, 29011), (168, 29032), (171, 29059), (182, 29128), (183, 29137), (212, 29386), (220, 29452), (235, 29587), (236, 29599), (239, 29638), (243, 29737), (244, 29740), (245, 29761), (247, 29770),

Gene: Kyva_40 Start: 28264, Stop: 31176, Start Num: 6

Candidate Starts for Kyva_40:

(Start: 6 @28264 has 48 MA's), (10, 28306), (17, 28414), (21, 28480), (25, 28504), (30, 28567), (33, 28633), (34, 28639), (46, 28921), (48, 28957), (64, 29218), (77, 29437), (79, 29455), (80, 29461), (81, 29467), (86, 29515), (87, 29518), (93, 29569), (101, 29653), (105, 29722), (108, 29743), (121, 29869), (131, 30061), (141, 30193), (150, 30313), (159, 30385), (182, 30529), (216, 30808), (236, 31000), (243, 31138), (246, 31168), (247, 31171),

Gene: Llemily_37 Start: 27295, Stop: 30222, Start Num: 6

Candidate Starts for Llemily_37:

(Start: 6 @27295 has 48 MA's), (10, 27337), (17, 27445), (20, 27493), (25, 27535), (30, 27598), (33, 27664), (34, 27670), (46, 27952), (48, 27988), (58, 28138), (64, 28249), (77, 28468), (79, 28486), (80, 28492), (81, 28498), (86, 28546), (87, 28549), (92, 28597), (101, 28684), (102, 28696), (103, 28708),

(121, 28900), (127, 29047), (134, 29119), (138, 29179), (146, 29299), (150, 29359), (159, 29431), (169, 29500), (171, 29506), (182, 29575), (216, 29854), (220, 29899), (227, 29950), (236, 30046), (243, 30184), (246, 30214), (247, 30217),

Gene: Lonelysoil_37 Start: 27537, Stop: 30464, Start Num: 6

Candidate Starts for Lonelysoil_37:

(Start: 6 @27537 has 48 MA's), (10, 27579), (17, 27687), (21, 27753), (25, 27777), (30, 27840), (33, 27906), (34, 27912), (46, 28194), (48, 28230), (64, 28491), (77, 28710), (79, 28728), (80, 28734), (81, 28740), (86, 28788), (87, 28791), (92, 28839), (101, 28926), (102, 28938), (103, 28950), (121, 29142), (126, 29229), (127, 29289), (134, 29361), (138, 29421), (146, 29541), (150, 29601), (159, 29673), (169, 29742), (171, 29748), (182, 29817), (200, 29958), (201, 29979), (216, 30096), (220, 30141), (227, 30192), (236, 30288), (243, 30426), (246, 30456), (247, 30459),

Gene: Marcie_42 Start: 27715, Stop: 30639, Start Num: 6

Candidate Starts for Marcie_42:

(Start: 6 @27715 has 48 MA's), (10, 27757), (24, 27952), (25, 27955), (30, 28018), (33, 28084), (41, 28255), (46, 28372), (48, 28411), (59, 28564), (60, 28588), (72, 28822), (80, 28915), (82, 28930), (86, 28969), (109, 29212), (119, 29287), (141, 29647), (147, 29737), (157, 29836), (171, 29923), (182, 29992), (183, 30001), (212, 30250), (220, 30316), (234, 30439), (235, 30451), (236, 30463), (243, 30601), (244, 30604), (245, 30625), (247, 30634),

Gene: Mashley_36 Start: 27940, Stop: 30861, Start Num: 6

Candidate Starts for Mashley_36:

(Start: 6 @27940 has 48 MA's), (10, 27982), (17, 28090), (20, 28138), (21, 28156), (25, 28180), (30, 28243), (33, 28309), (34, 28315), (46, 28597), (48, 28633), (64, 28894), (67, 28945), (73, 29080), (78, 29122), (80, 29137), (86, 29191), (87, 29194), (93, 29245), (102, 29341), (119, 29509), (138, 29818), (146, 29938), (159, 30070), (164, 30097), (171, 30145), (177, 30175), (182, 30214), (200, 30355), (201, 30376), (216, 30493), (227, 30589), (236, 30685), (243, 30823), (246, 30853), (247, 30856),

Gene: Mentos_42 Start: 29030, Stop: 31954, Start Num: 6

Candidate Starts for Mentos_42:

(Start: 6 @29030 has 48 MA's), (10, 29072), (14, 29111), (17, 29180), (21, 29246), (25, 29270), (30, 29333), (33, 29399), (34, 29405), (46, 29687), (48, 29723), (64, 29984), (67, 30035), (77, 30203), (79, 30221), (80, 30227), (81, 30233), (86, 30281), (87, 30284), (92, 30332), (102, 30431), (103, 30443), (121, 30635), (126, 30722), (127, 30782), (138, 30911), (146, 31031), (159, 31163), (164, 31190), (171, 31238), (177, 31268), (182, 31307), (200, 31448), (201, 31469), (216, 31586), (220, 31631), (227, 31682), (236, 31778), (243, 31916), (246, 31946), (247, 31949),

Gene: Mila11_40 Start: 28912, Stop: 31836, Start Num: 6

Candidate Starts for Mila11_40:

(Start: 6 @28912 has 48 MA's), (10, 28954), (20, 29110), (25, 29152), (30, 29215), (33, 29281), (46, 29569), (48, 29605), (64, 29866), (67, 29917), (77, 30085), (79, 30103), (80, 30109), (81, 30115), (86, 30163), (87, 30166), (92, 30214), (102, 30313), (121, 30517), (126, 30604), (127, 30664), (138, 30793), (146, 30913), (159, 31045), (164, 31072), (171, 31120), (177, 31150), (182, 31189), (200, 31330), (201, 31351), (216, 31468), (220, 31513), (227, 31564), (236, 31660), (243, 31798), (246, 31828), (247, 31831),

Gene: MorillMayhem_38 Start: 27810, Stop: 30734, Start Num: 6

Candidate Starts for MorillMayhem_38:

(Start: 6 @27810 has 48 MA's), (10, 27852), (20, 28008), (25, 28050), (30, 28113), (33, 28179), (46, 28467), (47, 28482), (48, 28503), (64, 28764), (67, 28815), (77, 28983), (79, 29001), (80, 29007), (81, 29013), (86, 29061), (87, 29064), (92, 29112), (102, 29211), (121, 29415), (126, 29502), (127, 29562), (138, 29691), (146, 29811), (159, 29943), (164, 29970), (171, 30018), (177, 30048), (182, 30087),

(200, 30228), (201, 30249), (216, 30366), (220, 30411), (227, 30462), (236, 30558), (243, 30696), (246, 30726), (247, 30729),

Gene: Namago_38 Start: 27394, Stop: 30306, Start Num: 6

Candidate Starts for Namago_38:

(Start: 6 @27394 has 48 MA's), (10, 27436), (17, 27544), (21, 27610), (25, 27634), (30, 27697), (33, 27763), (34, 27769), (46, 28051), (48, 28087), (64, 28348), (77, 28567), (79, 28585), (80, 28591), (81, 28597), (86, 28645), (87, 28648), (93, 28699), (101, 28783), (105, 28852), (108, 28873), (121, 28999), (131, 29191), (141, 29323), (150, 29443), (159, 29515), (182, 29659), (216, 29938), (236, 30130), (243, 30268), (246, 30298), (247, 30301),

Gene: Nike_38 Start: 28349, Stop: 31261, Start Num: 6

Candidate Starts for Nike_38:

(Start: 6 @28349 has 48 MA's), (10, 28391), (17, 28499), (20, 28547), (25, 28589), (30, 28652), (33, 28718), (34, 28724), (46, 29006), (48, 29042), (64, 29303), (79, 29540), (80, 29546), (86, 29600), (87, 29603), (88, 29606), (93, 29654), (101, 29738), (104, 29780), (105, 29807), (107, 29819), (121, 29954), (141, 30278), (150, 30398), (159, 30470), (174, 30557), (182, 30614), (193, 30716), (202, 30782), (216, 30893), (236, 31085), (243, 31223), (246, 31253), (247, 31256),

Gene: OneinaGillian_37 Start: 26709, Stop: 29630, Start Num: 6

Candidate Starts for OneinaGillian_37:

(Start: 6 @26709 has 48 MA's), (10, 26751), (17, 26859), (24, 26946), (25, 26949), (30, 27012), (33, 27078), (39, 27210), (44, 27315), (46, 27366), (48, 27402), (61, 27621), (66, 27711), (72, 27813), (76, 27879), (80, 27906), (86, 27960), (87, 27963), (109, 28203), (119, 28278), (164, 28866), (168, 28887), (171, 28914), (182, 28983), (183, 28992), (212, 29241), (220, 29307), (235, 29442), (236, 29454), (239, 29493), (243, 29592), (244, 29595), (245, 29616), (247, 29625),

Gene: Pepe25_36 Start: 26299, Stop: 29229, Start Num: 6

Candidate Starts for Pepe25_36:

(Start: 6 @26299 has 48 MA's), (10, 26341), (33, 26668), (34, 26674), (41, 26839), (46, 26956), (48, 26992), (53, 27088), (62, 27217), (73, 27442), (80, 27499), (82, 27514), (86, 27553), (120, 27880), (127, 28054), (129, 28069), (138, 28186), (146, 28306), (153, 28381), (155, 28402), (159, 28438), (182, 28582), (191, 28666), (195, 28696), (197, 28705), (212, 28840), (220, 28906), (222, 28912), (227, 28957), (228, 28969), (235, 29041), (243, 29191), (246, 29221), (247, 29224),

Gene: Phabia_38 Start: 27710, Stop: 30637, Start Num: 6

Candidate Starts for Phabia_38:

(Start: 6 @27710 has 48 MA's), (10, 27752), (17, 27860), (21, 27926), (25, 27950), (30, 28013), (33, 28079), (34, 28085), (46, 28367), (48, 28403), (64, 28664), (77, 28883), (79, 28901), (80, 28907), (81, 28913), (86, 28961), (87, 28964), (92, 29012), (101, 29099), (102, 29111), (103, 29123), (121, 29315), (126, 29402), (127, 29462), (134, 29534), (138, 29594), (146, 29714), (150, 29774), (159, 29846), (169, 29915), (171, 29921), (182, 29990), (200, 30131), (201, 30152), (216, 30269), (220, 30314), (227, 30365), (236, 30461), (243, 30599), (246, 30629), (247, 30632),

Gene: Phinky_44 Start: 29522, Stop: 32449, Start Num: 6

Candidate Starts for Phinky_44:

(Start: 6 @29522 has 48 MA's), (10, 29564), (24, 29759), (30, 29825), (32, 29864), (33, 29891), (46, 30179), (47, 30194), (48, 30215), (49, 30230), (53, 30311), (62, 30440), (80, 30722), (86, 30776), (87, 30779), (94, 30854), (123, 31151), (138, 31406), (141, 31454), (148, 31562), (165, 31688), (169, 31727), (171, 31733), (182, 31802), (195, 31916), (212, 32060), (216, 32081), (220, 32126), (226, 32168), (227, 32177), (228, 32189), (235, 32261), (236, 32273), (243, 32411), (244, 32414), (245, 32435), (246, 32441), (247, 32444),

Gene: Quammi_36 Start: 27413, Stop: 30337, Start Num: 6

Candidate Starts for Quammi_36:

(Start: 6 @27413 has 48 MA's), (10, 27455), (17, 27563), (20, 27611), (21, 27629), (25, 27653), (30, 27716), (33, 27782), (34, 27788), (46, 28070), (48, 28106), (64, 28367), (67, 28418), (73, 28553), (78, 28595), (80, 28610), (86, 28664), (87, 28667), (93, 28718), (101, 28802), (102, 28814), (119, 28982), (134, 29234), (138, 29294), (146, 29414), (150, 29474), (159, 29546), (169, 29615), (171, 29621), (182, 29690), (200, 29831), (201, 29852), (216, 29969), (220, 30014), (227, 30065), (236, 30161), (243, 30299), (246, 30329), (247, 30332),

Gene: Rasputia_73 Start: 45991, Stop: 49482, Start Num: 1

Candidate Starts for Rasputia_73:

(Start: 1 @45991 has 2 MA's), (2, 46033), (3, 46210), (4, 46345), (5, 46360), (12, 46585), (15, 46642), (16, 46648), (19, 46702), (22, 46744), (28, 46825), (50, 47299), (63, 47494), (67, 47554), (70, 47602), (86, 47800), (92, 47851), (100, 47923), (101, 47938), (107, 48019), (109, 48043), (110, 48046), (111, 48064), (112, 48073), (113, 48088), (116, 48100), (118, 48103), (129, 48313), (132, 48355), (133, 48367), (138, 48430), (141, 48478), (145, 48550), (147, 48574), (149, 48592), (152, 48622), (154, 48634), (159, 48685), (166, 48721), (171, 48763), (179, 48814), (182, 48832), (189, 48910), (196, 48952), (206, 49042), (207, 49048), (215, 49111), (217, 49129), (220, 49159), (222, 49165), (229, 49225), (230, 49240), (236, 49306), (240, 49378), (241, 49393), (243, 49444), (246, 49474), (247, 49477),

Gene: RobinRose_39 Start: 27210, Stop: 30131, Start Num: 6

Candidate Starts for RobinRose_39:

(Start: 6 @27210 has 48 MA's), (10, 27252), (17, 27360), (24, 27447), (25, 27450), (30, 27513), (33, 27579), (46, 27867), (48, 27903), (59, 28056), (72, 28314), (74, 28365), (76, 28380), (80, 28407), (86, 28461), (87, 28464), (109, 28704), (164, 29367), (168, 29388), (171, 29415), (182, 29484), (183, 29493), (212, 29742), (220, 29808), (235, 29943), (236, 29955), (239, 29994), (243, 30093), (244, 30096), (245, 30117), (247, 30126),

Gene: Romm_39 Start: 27210, Stop: 30131, Start Num: 6

Candidate Starts for Romm_39:

(Start: 6 @27210 has 48 MA's), (10, 27252), (17, 27360), (24, 27447), (25, 27450), (30, 27513), (33, 27579), (46, 27867), (48, 27903), (59, 28056), (72, 28314), (74, 28365), (76, 28380), (80, 28407), (86, 28461), (87, 28464), (109, 28704), (164, 29367), (168, 29388), (171, 29415), (182, 29484), (183, 29493), (212, 29742), (220, 29808), (235, 29943), (236, 29955), (239, 29994), (243, 30093), (244, 30096), (245, 30117), (247, 30126),

Gene: Rowlf_34 Start: 27588, Stop: 30509, Start Num: 6

Candidate Starts for Rowlf_34:

(Start: 6 @27588 has 48 MA's), (10, 27630), (17, 27738), (20, 27786), (21, 27804), (25, 27828), (30, 27891), (33, 27957), (34, 27963), (46, 28245), (48, 28281), (64, 28542), (67, 28593), (73, 28728), (78, 28770), (80, 28785), (86, 28839), (87, 28842), (93, 28893), (101, 28977), (102, 28989), (119, 29157), (138, 29466), (146, 29586), (159, 29718), (164, 29745), (171, 29793), (177, 29823), (182, 29862), (227, 30237), (236, 30333), (243, 30471), (246, 30501), (247, 30504),

Gene: Rudy_36 Start: 27446, Stop: 30370, Start Num: 6

Candidate Starts for Rudy_36:

(Start: 6 @27446 has 48 MA's), (10, 27488), (17, 27596), (20, 27644), (21, 27662), (25, 27686), (30, 27749), (33, 27815), (34, 27821), (46, 28103), (48, 28139), (64, 28400), (67, 28451), (73, 28586), (78, 28628), (80, 28643), (86, 28697), (87, 28700), (93, 28751), (101, 28835), (102, 28847), (119, 29015), (121, 29048), (126, 29135), (127, 29195), (134, 29267), (138, 29327), (146, 29447), (150, 29507), (159, 29579), (169, 29648), (171, 29654), (182, 29723), (200, 29864), (201, 29885), (216, 30002), (220, 30047), (227, 30098), (236, 30194), (243, 30332), (246, 30362), (247, 30365),

Gene: SallyK_39 Start: 28393, Stop: 31320, Start Num: 6

Candidate Starts for SallyK_39:

(Start: 6 @28393 has 48 MA's), (10, 28435), (17, 28543), (20, 28591), (25, 28633), (30, 28696), (33, 28762), (34, 28768), (46, 29050), (48, 29086), (58, 29236), (64, 29347), (77, 29566), (79, 29584), (80, 29590), (81, 29596), (86, 29644), (87, 29647), (92, 29695), (101, 29782), (102, 29794), (103, 29806), (121, 29998), (127, 30145), (134, 30217), (138, 30277), (146, 30397), (150, 30457), (159, 30529), (169, 30598), (171, 30604), (182, 30673), (216, 30952), (220, 30997), (227, 31048), (236, 31144), (243, 31282), (246, 31312), (247, 31315),

Gene: Sillytadpoles_38 Start: 27283, Stop: 30210, Start Num: 6

Candidate Starts for Sillytadpoles_38:

(Start: 6 @27283 has 48 MA's), (10, 27325), (17, 27433), (20, 27481), (25, 27523), (30, 27586), (33, 27652), (34, 27658), (46, 27940), (48, 27976), (58, 28126), (64, 28237), (77, 28456), (79, 28474), (80, 28480), (81, 28486), (86, 28534), (87, 28537), (92, 28585), (101, 28672), (102, 28684), (103, 28696), (121, 28888), (127, 29035), (134, 29107), (138, 29167), (146, 29287), (150, 29347), (159, 29419), (169, 29488), (171, 29494), (182, 29563), (216, 29842), (220, 29887), (227, 29938), (236, 30034), (243, 30172), (246, 30202), (247, 30205),

Gene: SlySloth_40 Start: 28285, Stop: 31206, Start Num: 6

Candidate Starts for SlySloth_40:

(Start: 6 @28285 has 48 MA's), (10, 28327), (17, 28435), (20, 28483), (21, 28501), (25, 28525), (30, 28588), (33, 28654), (34, 28660), (46, 28942), (48, 28978), (64, 29239), (67, 29290), (73, 29425), (78, 29467), (80, 29482), (86, 29536), (87, 29539), (93, 29590), (102, 29686), (119, 29854), (121, 29887), (138, 30163), (146, 30283), (159, 30415), (164, 30442), (171, 30490), (177, 30520), (182, 30559), (201, 30721), (216, 30838), (227, 30934), (236, 31030), (243, 31168), (246, 31198), (247, 31201),

Gene: Squash_40 Start: 28360, Stop: 31272, Start Num: 6

Candidate Starts for Squash_40:

(Start: 6 @28360 has 48 MA's), (10, 28402), (17, 28510), (20, 28558), (25, 28600), (30, 28663), (33, 28729), (34, 28735), (46, 29017), (48, 29053), (64, 29314), (79, 29551), (80, 29557), (81, 29563), (86, 29611), (87, 29614), (89, 29650), (93, 29665), (101, 29749), (104, 29791), (105, 29818), (107, 29830), (108, 29839), (121, 29965), (141, 30289), (150, 30409), (159, 30481), (174, 30568), (182, 30625), (193, 30727), (202, 30793), (216, 30904), (236, 31096), (243, 31234), (246, 31264), (247, 31267),

Gene: Statler_39 Start: 28199, Stop: 31123, Start Num: 6

Candidate Starts for Statler_39:

(Start: 6 @28199 has 48 MA's), (10, 28241), (17, 28349), (20, 28397), (21, 28415), (25, 28439), (30, 28502), (33, 28568), (34, 28574), (46, 28856), (48, 28892), (58, 29042), (64, 29153), (77, 29372), (80, 29396), (81, 29402), (86, 29450), (87, 29453), (92, 29501), (102, 29600), (121, 29804), (126, 29891), (127, 29951), (138, 30080), (146, 30200), (159, 30332), (164, 30359), (171, 30407), (182, 30476), (201, 30638), (227, 30851), (236, 30947), (243, 31085), (246, 31115), (247, 31118),

Gene: StrawberryJamm_40 Start: 27650, Stop: 30571, Start Num: 6

Candidate Starts for StrawberryJamm_40:

(Start: 6 @27650 has 48 MA's), (10, 27692), (17, 27800), (20, 27848), (21, 27866), (25, 27890), (30, 27953), (33, 28019), (34, 28025), (46, 28307), (48, 28343), (64, 28604), (67, 28655), (73, 28790), (78, 28832), (80, 28847), (86, 28901), (87, 28904), (93, 28955), (101, 29039), (102, 29051), (119, 29219), (138, 29528), (146, 29648), (159, 29780), (164, 29807), (171, 29855), (177, 29885), (182, 29924), (201, 30086), (216, 30203), (227, 30299), (236, 30395), (243, 30533), (246, 30563), (247, 30566),

Gene: Teehee_39 Start: 28516, Stop: 31443, Start Num: 6

Candidate Starts for Teehee_39:

(Start: 6 @28516 has 48 MA's), (10, 28558), (17, 28666), (21, 28732), (25, 28756), (30, 28819), (33, 28885), (34, 28891), (46, 29173), (48, 29209), (64, 29470), (77, 29689), (79, 29707), (80, 29713), (81, 29719), (86, 29767), (87, 29770), (92, 29818), (101, 29905), (102, 29917), (103, 29929), (121, 30121), (126, 30208), (127, 30268), (134, 30340), (138, 30400), (146, 30520), (150, 30580), (159, 30652), (169, 30721), (171, 30727), (182, 30796), (200, 30937), (201, 30958), (216, 31075), (220, 31120), (227, 31171), (236, 31267), (243, 31405), (246, 31435), (247, 31438),

Gene: Tempo_37 Start: 27086, Stop: 30007, Start Num: 6

Candidate Starts for Tempo_37:

(Start: 6 @27086 has 48 MA's), (10, 27128), (17, 27236), (24, 27323), (25, 27326), (30, 27389), (33, 27455), (46, 27743), (48, 27779), (59, 27932), (72, 28190), (74, 28241), (80, 28283), (86, 28337), (87, 28340), (109, 28580), (119, 28655), (164, 29243), (168, 29264), (171, 29291), (182, 29360), (183, 29369), (212, 29618), (220, 29684), (235, 29819), (236, 29831), (239, 29870), (243, 29969), (244, 29972), (245, 29993), (247, 30002),

Gene: Tissue_38 Start: 28036, Stop: 30948, Start Num: 6

Candidate Starts for Tissue_38:

(Start: 6 @28036 has 48 MA's), (10, 28078), (17, 28186), (21, 28252), (25, 28276), (30, 28339), (33, 28405), (34, 28411), (46, 28693), (48, 28729), (64, 28990), (77, 29209), (79, 29227), (80, 29233), (81, 29239), (86, 29287), (87, 29290), (93, 29341), (101, 29425), (105, 29494), (108, 29515), (121, 29641), (131, 29833), (141, 29965), (150, 30085), (159, 30157), (182, 30301), (216, 30580), (236, 30772), (243, 30910), (246, 30940), (247, 30943),

Gene: Viceroy_36 Start: 27413, Stop: 30340, Start Num: 6

Candidate Starts for Viceroy_36:

(Start: 6 @27413 has 48 MA's), (10, 27455), (17, 27563), (20, 27611), (21, 27629), (25, 27653), (30, 27716), (33, 27782), (34, 27788), (46, 28070), (48, 28106), (64, 28367), (67, 28418), (73, 28553), (78, 28595), (80, 28610), (86, 28664), (87, 28667), (92, 28715), (101, 28802), (102, 28814), (103, 28826), (121, 29018), (126, 29105), (127, 29165), (134, 29237), (138, 29297), (146, 29417), (150, 29477), (159, 29549), (169, 29618), (171, 29624), (182, 29693), (200, 29834), (201, 29855), (216, 29972), (220, 30017), (227, 30068), (236, 30164), (243, 30302), (246, 30332), (247, 30335),

Gene: Wayne3_39 Start: 28279, Stop: 31206, Start Num: 6

Candidate Starts for Wayne3_39:

(Start: 6 @28279 has 48 MA's), (10, 28321), (17, 28429), (21, 28495), (25, 28519), (30, 28582), (33, 28648), (34, 28654), (46, 28936), (48, 28972), (64, 29233), (77, 29452), (79, 29470), (80, 29476), (81, 29482), (86, 29530), (87, 29533), (92, 29581), (101, 29668), (102, 29680), (103, 29692), (121, 29884), (126, 29971), (127, 30031), (134, 30103), (138, 30163), (146, 30283), (150, 30343), (159, 30415), (169, 30484), (171, 30490), (182, 30559), (200, 30700), (201, 30721), (216, 30838), (220, 30883), (227, 30934), (236, 31030), (243, 31168), (246, 31198), (247, 31201),

Gene: WheelerS25_43 Start: 29042, Stop: 31966, Start Num: 6

Candidate Starts for WheelerS25_43:

(Start: 6 @29042 has 48 MA's), (10, 29084), (17, 29192), (21, 29258), (25, 29282), (30, 29345), (33, 29411), (34, 29417), (46, 29699), (48, 29735), (64, 29996), (67, 30047), (73, 30182), (78, 30224), (80, 30239), (86, 30293), (87, 30296), (88, 30299), (92, 30344), (93, 30347), (101, 30431), (103, 30455), (121, 30647), (138, 30923), (146, 31043), (159, 31175), (164, 31202), (171, 31250), (177, 31280), (182, 31319), (216, 31598), (220, 31643), (227, 31694), (236, 31790), (243, 31928), (246, 31958), (247, 31961),

Gene: Wheelie_37 Start: 27600, Stop: 30527, Start Num: 6

Candidate Starts for Wheelie_37:

(Start: 6 @27600 has 48 MA's), (10, 27642), (17, 27750), (20, 27798), (25, 27840), (30, 27903), (33, 27969), (34, 27975), (46, 28257), (48, 28293), (58, 28443), (64, 28554), (77, 28773), (79, 28791), (80, 28797), (81, 28803), (86, 28851), (87, 28854), (92, 28902), (101, 28989), (102, 29001), (103, 29013), (121, 29205), (127, 29352), (134, 29424), (138, 29484), (146, 29604), (150, 29664), (159, 29736), (169, 29805), (171, 29811), (182, 29880), (216, 30159), (220, 30204), (227, 30255), (236, 30351), (243, 30489), (246, 30519), (247, 30522),

Gene: Wilca_37 Start: 26282, Stop: 29203, Start Num: 6

Candidate Starts for Wilca_37:

(Start: 6 @26282 has 48 MA's), (10, 26324), (31, 26600), (33, 26651), (34, 26657), (41, 26822), (44, 26888), (46, 26939), (48, 26975), (53, 27071), (62, 27200), (73, 27425), (80, 27482), (82, 27497), (85, 27530), (86, 27536), (110, 27782), (126, 27977), (129, 28052), (141, 28208), (146, 28280), (147, 28301), (155, 28376), (158, 28406), (159, 28412), (172, 28496), (182, 28556), (191, 28640), (196, 28673), (199, 28685), (212, 28814), (227, 28931), (228, 28943), (235, 29015), (243, 29165), (246, 29195), (247, 29198),

Gene: Zagie_37 Start: 27851, Stop: 30775, Start Num: 6

Candidate Starts for Zagie_37:

(Start: 6 @27851 has 48 MA's), (10, 27893), (17, 28001), (20, 28049), (21, 28067), (25, 28091), (30, 28154), (33, 28220), (34, 28226), (40, 28364), (46, 28508), (48, 28544), (64, 28805), (77, 29024), (79, 29042), (80, 29048), (81, 29054), (86, 29102), (87, 29105), (92, 29153), (101, 29240), (102, 29252), (121, 29456), (126, 29543), (127, 29603), (138, 29732), (159, 29984), (164, 30011), (171, 30059), (182, 30128), (201, 30290), (216, 30407), (227, 30503), (236, 30599), (243, 30737), (246, 30767), (247, 30770),

Gene: Zhafia_40 Start: 28078, Stop: 31005, Start Num: 6

Candidate Starts for Zhafia_40:

(Start: 6 @28078 has 48 MA's), (10, 28120), (17, 28228), (20, 28276), (25, 28318), (30, 28381), (33, 28447), (34, 28453), (46, 28735), (48, 28771), (58, 28921), (64, 29032), (77, 29251), (79, 29269), (80, 29275), (81, 29281), (86, 29329), (87, 29332), (92, 29380), (101, 29467), (102, 29479), (103, 29491), (121, 29683), (127, 29830), (134, 29902), (138, 29962), (146, 30082), (150, 30142), (159, 30214), (169, 30283), (171, 30289), (182, 30358), (216, 30637), (220, 30682), (227, 30733), (236, 30829), (243, 30967), (246, 30997), (247, 31000),