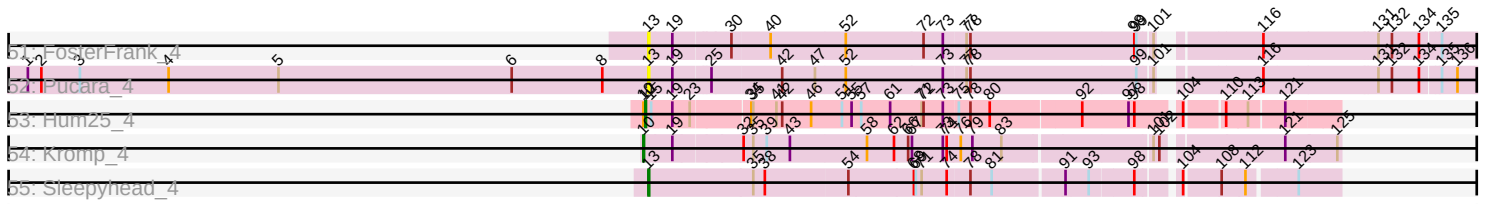


[illegible]

Pham 326973



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 326973 Report

This analysis was run 09/05/26 on database version 662.

Pham number 326973 has 78 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Sporco_5
- Track 2 : Auxilium_5, Richie_5, AdaS_5, BillyTP_5, Raphaella_5, CookieBear_5
- Track 3 : Bhageatrice_7
- Track 4 : Lasker_5, JellyBread_5, BasketStar_5
- Track 5 : MUWow_4
- Track 6 : LeBruni_5
- Track 7 : Ding_5
- Track 8 : Persistence_4
- Track 9 : Crescenzo_5, GumGum_5
- Track 10 : BlueShadow_5, MidnightRain_5, MaterMagnus_5, RadFad_5, Aikyam_5, SonDevVon_4, Hillester_5
- Track 11 : EvePickles_5
- Track 12 : CosmicBrownie_4
- Track 13 : Faja_5
- Track 14 : Isolde_5
- Track 15 : DarwinJr_8
- Track 16 : SpicyFrank_5
- Track 17 : BenchScraper_5
- Track 18 : Anekin_4
- Track 19 : NewKitty_6
- Track 20 : Gorpy_5, Sakai_5
- Track 21 : Satrap_5, Shukran_5
- Track 22 : Windest_5, Vopal_5
- Track 23 : MurphyJoseph_5
- Track 24 : Nyilah_4
- Track 25 : Globfish_5
- Track 26 : ThayneTheZag_5
- Track 27 : JakeTheSnake_5
- Track 28 : Phrank15_4
- Track 29 : Mapleville_4
- Track 30 : Kabloowy_5
- Track 31 : Lawnathon_5
- Track 32 : Sashimi_6
- Track 33 : Hestia_4
- Track 34 : Tiff81_6
- Track 35 : Seahorse_6
- Track 36 : YoungHarleezy_5

- Track 37 : Dubu_4
- Track 38 : Nesbitt_4
- Track 39 : Rowa_4
- Track 40 : AbbeyMikolon_4
- Track 41 : Eileen_4, Peas_4, HotPotato_4
- Track 42 : GlobiWarming_4
- Track 43 : KayMoney_4
- Track 44 : Karkharias_4, Henrique_4
- Track 45 : ChuckDuck_4, LittleRon_4
- Track 46 : PeggyLeg03_4, Judy_4, Constance_4
- Track 47 : LilyBell_4
- Track 48 : NidoQ_4
- Track 49 : NikkiHotWheels_4
- Track 50 : Bridgette_4
- Track 51 : FosterFrank_4
- Track 52 : Pucara_4
- Track 53 : Hum25_4
- Track 54 : Kromp_4
- Track 55 : Sleepyhead_4

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

The start number called the most often in the published annotations is 13, it was called in 56 of the 63 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS_5, Aikyam_5, Anekin_4, Auxilium_5, BasketStar_5, BenchScraper_5, Bhageatrice_7, BillyTP_5, BlueShadow_5, Bridgette_4, ChuckDuck_4, Constance_4, CookieBear_5, CosmicBrownie_4, Crescenzo_5, DarwinJr_8, Ding_5, Eileen_4, EvePickles_5, Faja_5, FosterFrank_4, Globfish_5, GlobiWarming_4, Gorpy_5, GumGum_5, Henrique_4, Hestia_4, Hillester_5, HotPotato_4, Isolde_5, JakeTheSnake_5, JellyBread_5, Judy_4, Kabloowy_5, Karkharias_4, KayMoney_4, Lasker_5, Lawnathon_5, LeBruni_5, LilyBell_4, LittleRon_4, MUWow_4, Mapleville_4, MaterMagnus_5, MidnightRain_5, MurphyJoseph_5, NewKitty_6, NidoQ_4, NikkiHotWheels_4, Nyilah_4, Peas_4, PeggyLeg03_4, Persistence_4, Phrank15_4, Pucara_4, RadFad_5, Raphaella_5, Richie_5, Sakai_5, Sashimi_6, Satrap_5, Shukran_5, Sleepyhead_4, SonDevVon_4, SpicyFrank_5, Sporco_5, ThayneTheZag_5, Tiff81_6, Vopal_5, Windest_5, YoungHarleezy_5,

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

- Seahorse_6,

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

- AbbeyMikolon_4, Dubu_4, Hum25_4, Kromp_4, Nesbitt_4, Rowa_4,

Summary by start number:

Start 9:

- Found in 2 of 78 (2.6%) of genes in pham
- Manual Annotations of this start: 2 of 63

- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon_4 (BL), Nesbitt_4 (BL),

Start 10:

- Found in 4 of 78 (5.1%) of genes in pham
- Manual Annotations of this start: 3 of 63
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Kromp_4 (singleton), Rowa_4 (BL), Seahorse_6 (AY),

Start 12:

- Found in 1 of 78 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25_4 (FQ1),

Start 13:

- Found in 72 of 78 (92.3%) of genes in pham
- Manual Annotations of this start: 56 of 63
- Called 98.6% of time when present
- Phage (with cluster) where this start called: AdaS_5 (AY), Aikyam_5 (AY), Anekin_4 (AY), Auxilium_5 (AY), BasketStar_5 (AY), BenchScraper_5 (AY), Bhageatrice_7 (AY), BillyTP_5 (AY), BlueShadow_5 (AY), Bridgette_4 (FA), ChuckDuck_4 (FA), Constance_4 (FA), CookieBear_5 (AY), CosmicBrownie_4 (AY), Crescenzo_5 (AY), DarwinJr_8 (AY), Ding_5 (AY), Eileen_4 (FA), EvePickles_5 (AY), Faja_5 (AY), FosterFrank_4 (FA), Globfish_5 (AY), GlobiWarming_4 (FA), Gorpy_5 (AY), GumGum_5 (AY), Henrique_4 (FA), Hestia_4 (AY), Hillester_5 (AY), HotPotato_4 (FA), Isolde_5 (AY), JakeTheSnake_5 (AY), JellyBread_5 (AY), Judy_4 (FA), Kabloowy_5 (AY), Karkharias_4 (FA), KayMoney_4 (FA), Lasker_5 (AY), Lawnathon_5 (AY), LeBruni_5 (AY), LilyBell_4 (FA), LittleRon_4 (FA), MUWow_4 (AY), Mapleville_4 (AY), MaterMagnus_5 (AY), MidnightRain_5 (AY), MurphyJoseph_5 (AY), NewKitty_6 (AY), NidoQ_4 (FA), NikkiHotWheels_4 (FA), Nyilah_4 (AY), Peas_4 (FA), PeggyLeg03_4 (FA), Persistence_4 (AY), Phrank15_4 (AY), Pucara_4 (FA), RadFad_5 (AY), Raphaella_5 (AY), Richie_5 (AY), Sakai_5 (AY), Sashimi_6 (AY), Satrap_5 (AY), Shukran_5 (AY), Sleepyhead_4 (singleton), SonDevVon_4 (AY), SpicyFrank_5 (AY), Sporco_5 (AY), ThayneTheZag_5 (AY), Tiff81_6 (AY), Vopal_5 (AY), Windest_5 (AY), YoungHarleezy_5 (AY),

Start 14:

- Found in 1 of 78 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dubu_4 (BJ),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, BL, BJ, FA, AY, FQ1,

Info for manual annotations of cluster AY:

- Start number 10 was manually annotated 1 time for cluster AY.
- Start number 13 was manually annotated 42 times for cluster AY.

Info for manual annotations of cluster BJ:

- Start number 14 was manually annotated 1 time for cluster BJ.

Info for manual annotations of cluster BL:

- Start number 9 was manually annotated 2 times for cluster BL.
- Start number 10 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster FA:

- Start number 13 was manually annotated 13 times for cluster FA.

Info for manual annotations of cluster FQ1:

- Start number 12 was manually annotated 1 time for cluster FQ1.

Gene Information:

Gene: AbbeyMikolon_4 Start: 3796, Stop: 4842, Start Num: 9

Candidate Starts for AbbeyMikolon_4:

(Start: 9 @3796 has 2 MA's), (29, 3976), (39, 4033), (43, 4069), (47, 4108), (60, 4216), (61, 4222), (63, 4231), (64, 4234), (66, 4249), (74, 4309), (76, 4330), (78, 4345), (79, 4348), (85, 4444), (88, 4453), (92, 4507), (95, 4549), (96, 4558), (97, 4576), (98, 4585), (100, 4594), (101, 4615), (102, 4624), (103, 4630), (107, 4651), (109, 4696), (118, 4735),

Gene: AdaS_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for AdaS_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (73, 4056), (77, 4089), (78, 4095), (82, 4131), (99, 4350), (101, 4368), (115, 4491), (124, 4602), (128, 4626), (131, 4671),

Gene: Aikyam_5 Start: 3608, Stop: 4822, Start Num: 13

Candidate Starts for Aikyam_5:

(Start: 13 @3608 has 56 MA's), (19, 3644), (21, 3665), (22, 3668), (24, 3686), (33, 3746), (35, 3758), (36, 3767), (37, 3773), (47, 3854), (59, 3956), (76, 4073), (78, 4088), (84, 4184), (86, 4190), (90, 4232), (92, 4262), (99, 4343), (101, 4361), (106, 4376), (131, 4664), (135, 4760),

Gene: Anekin_4 Start: 3683, Stop: 4900, Start Num: 13

Candidate Starts for Anekin_4:

(Start: 13 @3683 has 56 MA's), (17, 3701), (19, 3719), (20, 3728), (35, 3833), (36, 3842), (47, 3929), (49, 3953), (56, 3986), (59, 4031), (62, 4049), (72, 4094), (73, 4124), (78, 4163), (84, 4259), (90, 4307), (92, 4337), (98, 4415), (99, 4418), (101, 4436), (106, 4451), (129, 4712), (131, 4739), (132, 4760),

Gene: Auxilium_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for Auxilium_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (73, 4056), (77, 4089), (78, 4095), (82, 4131), (99, 4350), (101, 4368), (115, 4491), (124, 4602), (128, 4626), (131, 4671),

Gene: BasketStar_5 Start: 3609, Stop: 4823, Start Num: 13

Candidate Starts for BasketStar_5:

(Start: 13 @3609 has 56 MA's), (19, 3645), (21, 3666), (22, 3669), (24, 3687), (33, 3747), (35, 3759), (36, 3768), (37, 3774), (47, 3855), (59, 3957), (76, 4074), (78, 4089), (84, 4185), (90, 4233), (92, 4263), (99, 4344), (101, 4362), (107, 4380), (120, 4515), (124, 4596), (131, 4665),

Gene: BenchScraper_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for BenchScraper_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (73, 4056), (77, 4089), (78, 4095), (82, 4131), (99, 4350), (101, 4368), (115, 4491), (124, 4602), (127, 4623), (131, 4671),

Gene: Bhageatrice_7 Start: 4810, Stop: 6024, Start Num: 13

Candidate Starts for Bhageatrice_7:

(Start: 13 @4810 has 56 MA's), (19, 4846), (20, 4855), (24, 4888), (33, 4948), (35, 4960), (36, 4969), (44, 5032), (47, 5056), (48, 5068), (72, 5221), (78, 5290), (84, 5386), (86, 5392), (90, 5434), (92, 5464), (99, 5545), (101, 5563), (117, 5695), (124, 5797), (131, 5866), (133, 5917),

Gene: BillyTP_5 Start: 3609, Stop: 4823, Start Num: 13

Candidate Starts for BillyTP_5:

(Start: 13 @3609 has 56 MA's), (17, 3627), (19, 3645), (20, 3654), (35, 3759), (36, 3768), (47, 3855), (49, 3879), (56, 3912), (59, 3957), (73, 4050), (77, 4083), (78, 4089), (82, 4125), (99, 4344), (101, 4362), (115, 4485), (124, 4596), (128, 4620), (131, 4665),

Gene: BlueShadow_5 Start: 3608, Stop: 4822, Start Num: 13

Candidate Starts for BlueShadow_5:

(Start: 13 @3608 has 56 MA's), (19, 3644), (21, 3665), (22, 3668), (24, 3686), (33, 3746), (35, 3758), (36, 3767), (37, 3773), (47, 3854), (59, 3956), (76, 4073), (78, 4088), (84, 4184), (86, 4190), (90, 4232), (92, 4262), (99, 4343), (101, 4361), (106, 4376), (131, 4664), (135, 4760),

Gene: Bridgette_4 Start: 3744, Stop: 4985, Start Num: 13

Candidate Starts for Bridgette_4:

(Start: 13 @3744 has 56 MA's), (19, 3780), (60, 4098), (67, 4137), (70, 4149), (73, 4185), (77, 4218), (78, 4224), (101, 4497), (116, 4662), (131, 4833), (132, 4854), (134, 4896), (135, 4923), (136, 4947),

Gene: ChuckDuck_4 Start: 3747, Stop: 4946, Start Num: 13

Candidate Starts for ChuckDuck_4:

(Start: 13 @3747 has 56 MA's), (19, 3783), (25, 3837), (42, 3942), (47, 3993), (52, 4038), (73, 4188), (77, 4221), (78, 4227), (99, 4482), (101, 4500), (116, 4623), (131, 4794), (132, 4815), (134, 4857), (135, 4884), (136, 4908),

Gene: Constance_4 Start: 3745, Stop: 4986, Start Num: 13

Candidate Starts for Constance_4:

(Start: 13 @3745 has 56 MA's), (19, 3781), (30, 3865), (60, 4099), (67, 4138), (70, 4150), (73, 4186), (77, 4219), (78, 4225), (101, 4498), (116, 4663), (131, 4834), (132, 4855), (134, 4897), (135, 4924), (136, 4948),

Gene: CookieBear_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for CookieBear_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (73, 4056), (77, 4089), (78, 4095), (82, 4131), (99, 4350), (101, 4368), (115, 4491), (124, 4602), (128, 4626), (131, 4671),

Gene: CosmicBrownie_4 Start: 3687, Stop: 4901, Start Num: 13

Candidate Starts for CosmicBrownie_4:

(Start: 13 @3687 has 56 MA's), (17, 3705), (19, 3723), (21, 3744), (24, 3765), (33, 3825), (35, 3837), (36, 3846), (37, 3852), (44, 3909), (47, 3933), (59, 4035), (62, 4053), (78, 4167), (84, 4263), (92, 4341), (98, 4419), (99, 4422), (101, 4440), (106, 4455), (129, 4716), (131, 4743), (132, 4764),

Gene: Crescenzo_5 Start: 3611, Stop: 4828, Start Num: 13

Candidate Starts for Crescenzo_5:

(Start: 13 @3611 has 56 MA's), (19, 3647), (21, 3668), (24, 3689), (33, 3749), (35, 3761), (36, 3770), (37, 3776), (44, 3833), (47, 3857), (59, 3959), (62, 3977), (78, 4091), (84, 4187), (90, 4235), (92, 4265), (98, 4343), (99, 4346), (101, 4364), (106, 4379), (129, 4640), (131, 4667), (132, 4688),

Gene: DarwinJr_8 Start: 4917, Stop: 6131, Start Num: 13

Candidate Starts for DarwinJr_8:

(Start: 13 @4917 has 56 MA's), (17, 4935), (19, 4953), (20, 4962), (24, 4995), (33, 5055), (35, 5067), (36, 5076), (44, 5139), (47, 5163), (72, 5328), (78, 5397), (84, 5493), (90, 5541), (92, 5571), (98, 5649), (99, 5652), (101, 5670), (106, 5685), (129, 5946), (131, 5973), (132, 5994),

Gene: Ding_5 Start: 3605, Stop: 4819, Start Num: 13

Candidate Starts for Ding_5:

(Start: 13 @3605 has 56 MA's), (17, 3623), (19, 3641), (21, 3662), (22, 3665), (33, 3743), (35, 3755), (36, 3764), (37, 3770), (44, 3827), (47, 3851), (59, 3953), (62, 3971), (72, 4016), (78, 4085), (79, 4088), (84, 4181), (86, 4187), (87, 4202), (90, 4229), (92, 4259), (98, 4337), (99, 4340), (101, 4358), (115, 4481), (122, 4538), (126, 4610), (131, 4661), (132, 4682), (133, 4712),

Gene: Dubu_4 Start: 3635, Stop: 4543, Start Num: 14

Candidate Starts for Dubu_4:

(11, 3629), (Start: 14 @3635 has 1 MA's), (28, 3743), (42, 3833), (53, 3923), (62, 3995), (67, 4022), (72, 4040), (74, 4076), (77, 4106), (79, 4115), (85, 4211), (92, 4274), (99, 4355), (101, 4373), (103, 4388), (107, 4409), (121, 4460),

Gene: Eileen_4 Start: 3747, Stop: 4946, Start Num: 13

Candidate Starts for Eileen_4:

(Start: 13 @3747 has 56 MA's), (19, 3783), (30, 3867), (40, 3924), (52, 4038), (73, 4188), (77, 4221), (78, 4227), (99, 4482), (101, 4500), (116, 4623), (131, 4794), (132, 4815), (134, 4857), (135, 4884), (136, 4908),

Gene: EvePickles_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for EvePickles_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (73, 4056), (77, 4089), (78, 4095), (82, 4131), (99, 4350), (101, 4368), (115, 4491), (124, 4602), (131, 4671),

Gene: Faja_5 Start: 3608, Stop: 4822, Start Num: 13

Candidate Starts for Faja_5:

(Start: 13 @3608 has 56 MA's), (19, 3644), (21, 3665), (22, 3668), (24, 3686), (33, 3746), (35, 3758), (36, 3767), (37, 3773), (47, 3854), (59, 3956), (76, 4073), (78, 4088), (84, 4184), (86, 4190), (90, 4232), (92, 4262), (101, 4361), (106, 4376), (131, 4664), (135, 4760),

Gene: FosterFrank_4 Start: 3747, Stop: 4946, Start Num: 13

Candidate Starts for FosterFrank_4:

(Start: 13 @3747 has 56 MA's), (19, 3783), (30, 3867), (40, 3924), (52, 4038), (72, 4158), (73, 4188), (77, 4221), (78, 4227), (98, 4479), (99, 4482), (101, 4500), (116, 4623), (131, 4794), (132, 4815), (134, 4857), (135, 4884),

Gene: Globfish_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for Globfish_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (73, 4056), (77, 4089), (78, 4095), (82, 4131), (90, 4239), (99, 4350),

(101, 4368), (124, 4602), (131, 4671), (133, 4722),

Gene: GlobiWarming_4 Start: 3741, Stop: 4940, Start Num: 13

Candidate Starts for GlobiWarming_4:

(Start: 13 @3741 has 56 MA's), (19, 3777), (22, 3801), (25, 3831), (42, 3936), (52, 4032), (73, 4182), (77, 4215), (78, 4221), (99, 4476), (101, 4494), (131, 4788), (132, 4809), (134, 4851), (135, 4878), (136, 4902),

Gene: Gorpy_5 Start: 3609, Stop: 4823, Start Num: 13

Candidate Starts for Gorpy_5:

(Start: 13 @3609 has 56 MA's), (19, 3645), (21, 3666), (22, 3669), (24, 3687), (33, 3747), (35, 3759), (36, 3768), (37, 3774), (47, 3855), (59, 3957), (73, 4050), (77, 4083), (78, 4089), (94, 4287), (99, 4344), (101, 4362), (106, 4377), (113, 4467), (115, 4485), (124, 4596), (131, 4665), (133, 4716),

Gene: GumGum_5 Start: 3618, Stop: 4832, Start Num: 13

Candidate Starts for GumGum_5:

(Start: 13 @3618 has 56 MA's), (19, 3654), (21, 3675), (24, 3696), (33, 3756), (35, 3768), (36, 3777), (37, 3783), (44, 3840), (47, 3864), (59, 3966), (62, 3984), (78, 4098), (84, 4194), (90, 4242), (92, 4272), (98, 4350), (99, 4353), (101, 4371), (106, 4386), (129, 4647), (131, 4674), (132, 4695),

Gene: Henrique_4 Start: 3747, Stop: 4946, Start Num: 13

Candidate Starts for Henrique_4:

(7, 3627), (8, 3675), (Start: 13 @3747 has 56 MA's), (19, 3783), (25, 3837), (42, 3942), (52, 4038), (73, 4188), (77, 4221), (78, 4227), (99, 4482), (101, 4500), (116, 4623), (131, 4794), (132, 4815), (134, 4857), (135, 4884), (136, 4908),

Gene: Hestia_4 Start: 3687, Stop: 4901, Start Num: 13

Candidate Starts for Hestia_4:

(Start: 13 @3687 has 56 MA's), (17, 3705), (19, 3723), (20, 3732), (35, 3837), (36, 3846), (47, 3933), (49, 3957), (56, 3990), (59, 4035), (73, 4128), (77, 4161), (78, 4167), (90, 4311), (99, 4422), (101, 4440), (115, 4563), (124, 4674), (131, 4743),

Gene: Hillester_5 Start: 3608, Stop: 4822, Start Num: 13

Candidate Starts for Hillester_5:

(Start: 13 @3608 has 56 MA's), (19, 3644), (21, 3665), (22, 3668), (24, 3686), (33, 3746), (35, 3758), (36, 3767), (37, 3773), (47, 3854), (59, 3956), (76, 4073), (78, 4088), (84, 4184), (86, 4190), (90, 4232), (92, 4262), (99, 4343), (101, 4361), (106, 4376), (131, 4664), (135, 4760),

Gene: HotPotato_4 Start: 3747, Stop: 4946, Start Num: 13

Candidate Starts for HotPotato_4:

(Start: 13 @3747 has 56 MA's), (19, 3783), (30, 3867), (40, 3924), (52, 4038), (73, 4188), (77, 4221), (78, 4227), (99, 4482), (101, 4500), (116, 4623), (131, 4794), (132, 4815), (134, 4857), (135, 4884), (136, 4908),

Gene: Hum25_4 Start: 3436, Stop: 4440, Start Num: 12

Candidate Starts for Hum25_4:

(Start: 10 @3433 has 3 MA's), (Start: 12 @3436 has 1 MA's), (15, 3445), (19, 3475), (23, 3502), (34, 3586), (35, 3589), (41, 3625), (42, 3634), (46, 3679), (51, 3727), (55, 3742), (57, 3757), (61, 3802), (71, 3850), (72, 3853), (73, 3883), (75, 3904), (78, 3922), (80, 3952), (92, 4087), (97, 4159), (98, 4168), (104, 4228), (110, 4279), (113, 4312), (121, 4360),

Gene: Isolde_5 Start: 3614, Stop: 4828, Start Num: 13

Candidate Starts for Isolde_5:

(Start: 13 @3614 has 56 MA's), (19, 3650), (20, 3659), (21, 3671), (22, 3674), (24, 3692), (26, 3710), (33, 3752), (35, 3764), (36, 3773), (37, 3779), (47, 3860), (59, 3962), (78, 4094), (84, 4190), (89, 4235), (92, 4268), (98, 4346), (99, 4349), (101, 4367), (111, 4442), (120, 4520), (124, 4601), (131, 4670),

Gene: JakeTheSnake_5 Start: 3618, Stop: 4832, Start Num: 13

Candidate Starts for JakeTheSnake_5:

(Start: 13 @3618 has 56 MA's), (19, 3654), (21, 3675), (24, 3696), (26, 3714), (33, 3756), (35, 3768), (36, 3777), (44, 3840), (47, 3864), (59, 3966), (62, 3984), (76, 4083), (78, 4098), (86, 4200), (87, 4215), (90, 4242), (92, 4272), (98, 4350), (99, 4353), (101, 4371), (106, 4386), (129, 4647), (131, 4674), (132, 4695),

Gene: JellyBread_5 Start: 3608, Stop: 4822, Start Num: 13

Candidate Starts for JellyBread_5:

(Start: 13 @3608 has 56 MA's), (19, 3644), (21, 3665), (22, 3668), (24, 3686), (33, 3746), (35, 3758), (36, 3767), (37, 3773), (47, 3854), (59, 3956), (76, 4073), (78, 4088), (84, 4184), (90, 4232), (92, 4262), (99, 4343), (101, 4361), (107, 4379), (120, 4514), (124, 4595), (131, 4664),

Gene: Judy_4 Start: 3744, Stop: 4985, Start Num: 13

Candidate Starts for Judy_4:

(Start: 13 @3744 has 56 MA's), (19, 3780), (30, 3864), (60, 4098), (67, 4137), (70, 4149), (73, 4185), (77, 4218), (78, 4224), (101, 4497), (116, 4662), (131, 4833), (132, 4854), (134, 4896), (135, 4923), (136, 4947),

Gene: Kabloowy_5 Start: 3614, Stop: 4828, Start Num: 13

Candidate Starts for Kabloowy_5:

(Start: 13 @3614 has 56 MA's), (19, 3650), (21, 3671), (22, 3674), (24, 3692), (33, 3752), (35, 3764), (36, 3773), (37, 3779), (44, 3836), (47, 3860), (59, 3962), (76, 4079), (78, 4094), (84, 4190), (90, 4238), (92, 4268), (98, 4346), (99, 4349), (101, 4367), (124, 4601), (131, 4670),

Gene: Karkharias_4 Start: 3747, Stop: 4946, Start Num: 13

Candidate Starts for Karkharias_4:

(7, 3627), (8, 3675), (Start: 13 @3747 has 56 MA's), (19, 3783), (25, 3837), (42, 3942), (52, 4038), (73, 4188), (77, 4221), (78, 4227), (99, 4482), (101, 4500), (116, 4623), (131, 4794), (132, 4815), (134, 4857), (135, 4884), (136, 4908),

Gene: KayMoney_4 Start: 3747, Stop: 4946, Start Num: 13

Candidate Starts for KayMoney_4:

(Start: 13 @3747 has 56 MA's), (19, 3783), (25, 3837), (42, 3942), (47, 3993), (52, 4038), (72, 4158), (73, 4188), (77, 4221), (78, 4227), (99, 4482), (101, 4500), (116, 4623), (131, 4794), (132, 4815), (134, 4857), (135, 4884),

Gene: Kromp_4 Start: 3866, Stop: 4882, Start Num: 10

Candidate Starts for Kromp_4:

(Start: 10 @3866 has 3 MA's), (19, 3908), (32, 4010), (35, 4025), (39, 4046), (43, 4082), (58, 4199), (62, 4241), (66, 4262), (67, 4268), (73, 4316), (74, 4322), (76, 4343), (79, 4361), (83, 4406), (101, 4619), (102, 4628), (121, 4799), (125, 4877),

Gene: Lasker_5 Start: 3608, Stop: 4822, Start Num: 13

Candidate Starts for Lasker_5:

(Start: 13 @3608 has 56 MA's), (19, 3644), (21, 3665), (22, 3668), (24, 3686), (33, 3746), (35, 3758), (36, 3767), (37, 3773), (47, 3854), (59, 3956), (76, 4073), (78, 4088), (84, 4184), (90, 4232), (92, 4262), (99, 4343), (101, 4361), (107, 4379), (120, 4514), (124, 4595), (131, 4664),

Gene: Lawnathon_5 Start: 3616, Stop: 4830, Start Num: 13

Candidate Starts for Lawnathon_5:

(Start: 13 @3616 has 56 MA's), (17, 3634), (19, 3652), (20, 3661), (35, 3766), (36, 3775), (47, 3862), (49, 3886), (56, 3919), (59, 3964), (73, 4057), (77, 4090), (78, 4096), (82, 4132), (90, 4240), (99, 4351), (101, 4369), (124, 4603), (131, 4672),

Gene: LeBruni_5 Start: 3613, Stop: 4827, Start Num: 13

Candidate Starts for LeBruni_5:

(Start: 13 @3613 has 56 MA's), (19, 3649), (21, 3670), (24, 3691), (33, 3751), (35, 3763), (36, 3772), (37, 3778), (44, 3835), (47, 3859), (59, 3961), (77, 4087), (78, 4093), (84, 4189), (90, 4237), (92, 4267), (99, 4348), (101, 4366), (124, 4600), (131, 4669),

Gene: LilyBell_4 Start: 3762, Stop: 4961, Start Num: 13

Candidate Starts for LilyBell_4:

(Start: 13 @3762 has 56 MA's), (19, 3798), (25, 3852), (42, 3957), (52, 4053), (73, 4203), (77, 4236), (78, 4242), (99, 4497), (101, 4515), (116, 4638), (131, 4809), (132, 4830), (134, 4872), (135, 4899), (136, 4923),

Gene: LittleRon_4 Start: 3747, Stop: 4946, Start Num: 13

Candidate Starts for LittleRon_4:

(Start: 13 @3747 has 56 MA's), (19, 3783), (25, 3837), (42, 3942), (47, 3993), (52, 4038), (73, 4188), (77, 4221), (78, 4227), (99, 4482), (101, 4500), (116, 4623), (131, 4794), (132, 4815), (134, 4857), (135, 4884), (136, 4908),

Gene: MUWow_4 Start: 3687, Stop: 4901, Start Num: 13

Candidate Starts for MUWow_4:

(Start: 13 @3687 has 56 MA's), (19, 3723), (20, 3732), (24, 3765), (33, 3825), (35, 3837), (36, 3846), (47, 3933), (59, 4035), (76, 4152), (78, 4167), (84, 4263), (90, 4311), (92, 4341), (99, 4422), (101, 4440), (107, 4458), (111, 4515), (120, 4593), (124, 4674), (131, 4743),

Gene: Mapleville_4 Start: 3686, Stop: 4900, Start Num: 13

Candidate Starts for Mapleville_4:

(Start: 13 @3686 has 56 MA's), (17, 3704), (19, 3722), (20, 3731), (35, 3836), (36, 3845), (47, 3932), (49, 3956), (56, 3989), (59, 4034), (77, 4160), (78, 4166), (90, 4310), (99, 4421), (101, 4439), (124, 4673), (131, 4742),

Gene: MaterMagnus_5 Start: 3608, Stop: 4822, Start Num: 13

Candidate Starts for MaterMagnus_5:

(Start: 13 @3608 has 56 MA's), (19, 3644), (21, 3665), (22, 3668), (24, 3686), (33, 3746), (35, 3758), (36, 3767), (37, 3773), (47, 3854), (59, 3956), (76, 4073), (78, 4088), (84, 4184), (86, 4190), (90, 4232), (92, 4262), (99, 4343), (101, 4361), (106, 4376), (131, 4664), (135, 4760),

Gene: MidnightRain_5 Start: 3608, Stop: 4822, Start Num: 13

Candidate Starts for MidnightRain_5:

(Start: 13 @3608 has 56 MA's), (19, 3644), (21, 3665), (22, 3668), (24, 3686), (33, 3746), (35, 3758), (36, 3767), (37, 3773), (47, 3854), (59, 3956), (76, 4073), (78, 4088), (84, 4184), (86, 4190), (90, 4232), (92, 4262), (99, 4343), (101, 4361), (106, 4376), (131, 4664), (135, 4760),

Gene: MurphyJoseph_5 Start: 3612, Stop: 4826, Start Num: 13

Candidate Starts for MurphyJoseph_5:

(Start: 13 @3612 has 56 MA's), (19, 3648), (20, 3657), (24, 3690), (33, 3750), (35, 3762), (36, 3771), (44, 3834), (47, 3858), (72, 4023), (78, 4092), (84, 4188), (86, 4194), (90, 4236), (92, 4266), (99, 4347), (101, 4365), (117, 4497), (124, 4599), (131, 4668), (133, 4719),

Gene: Nesbitt_4 Start: 3796, Stop: 4842, Start Num: 9

Candidate Starts for Nesbitt_4:

(Start: 9 @3796 has 2 MA's), (29, 3976), (39, 4033), (43, 4069), (47, 4108), (60, 4216), (61, 4222), (63, 4231), (64, 4234), (66, 4249), (74, 4309), (76, 4330), (78, 4345), (79, 4348), (85, 4444), (88, 4453), (92, 4507), (95, 4549), (96, 4558), (97, 4576), (100, 4594), (101, 4615), (102, 4624), (103, 4630), (107, 4651), (109, 4696),

Gene: NewKitty_6 Start: 3782, Stop: 4996, Start Num: 13

Candidate Starts for NewKitty_6:

(Start: 13 @3782 has 56 MA's), (17, 3800), (19, 3818), (20, 3827), (35, 3932), (36, 3941), (47, 4028), (49, 4052), (56, 4085), (59, 4130), (73, 4223), (77, 4256), (78, 4262), (82, 4298), (99, 4517), (101, 4535), (115, 4658), (124, 4769), (127, 4790), (131, 4838), (136, 4958),

Gene: NidoQ_4 Start: 3762, Stop: 5003, Start Num: 13

Candidate Starts for NidoQ_4:

(Start: 13 @3762 has 56 MA's), (19, 3798), (30, 3882), (60, 4116), (67, 4155), (70, 4167), (73, 4203), (77, 4236), (78, 4242), (101, 4515), (116, 4680), (131, 4851), (132, 4872), (134, 4914), (135, 4941), (136, 4965),

Gene: NikkiHotWheels_4 Start: 3744, Stop: 4943, Start Num: 13

Candidate Starts for NikkiHotWheels_4:

(Start: 13 @3744 has 56 MA's), (19, 3780), (25, 3834), (42, 3939), (47, 3990), (52, 4035), (73, 4185), (77, 4218), (78, 4224), (99, 4479), (101, 4497), (116, 4620), (131, 4791), (132, 4812), (134, 4854), (135, 4881), (136, 4905),

Gene: Nyilah_4 Start: 3685, Stop: 4899, Start Num: 13

Candidate Starts for Nyilah_4:

(Start: 13 @3685 has 56 MA's), (19, 3721), (21, 3742), (22, 3745), (24, 3763), (33, 3823), (35, 3835), (36, 3844), (37, 3850), (47, 3931), (72, 4096), (78, 4165), (82, 4201), (84, 4261), (86, 4267), (90, 4309), (92, 4339), (99, 4420), (101, 4438), (117, 4570), (124, 4672), (130, 4729), (131, 4741),

Gene: Peas_4 Start: 3747, Stop: 4946, Start Num: 13

Candidate Starts for Peas_4:

(Start: 13 @3747 has 56 MA's), (19, 3783), (30, 3867), (40, 3924), (52, 4038), (73, 4188), (77, 4221), (78, 4227), (99, 4482), (101, 4500), (116, 4623), (131, 4794), (132, 4815), (134, 4857), (135, 4884), (136, 4908),

Gene: PeggyLeg03_4 Start: 3745, Stop: 4986, Start Num: 13

Candidate Starts for PeggyLeg03_4:

(Start: 13 @3745 has 56 MA's), (19, 3781), (30, 3865), (60, 4099), (67, 4138), (70, 4150), (73, 4186), (77, 4219), (78, 4225), (101, 4498), (116, 4663), (131, 4834), (132, 4855), (134, 4897), (135, 4924), (136, 4948),

Gene: Persistence_4 Start: 3686, Stop: 4900, Start Num: 13

Candidate Starts for Persistence_4:

(Start: 13 @3686 has 56 MA's), (17, 3704), (19, 3722), (21, 3743), (22, 3746), (24, 3764), (33, 3824), (35, 3836), (36, 3845), (37, 3851), (44, 3908), (47, 3932), (59, 4034), (62, 4052), (72, 4097), (78, 4166), (84, 4262), (90, 4310), (92, 4340), (98, 4418), (99, 4421), (101, 4439), (106, 4454), (129, 4715), (131, 4742), (132, 4763),

Gene: Phrank15_4 Start: 3687, Stop: 4901, Start Num: 13

Candidate Starts for Phrank15_4:

(Start: 13 @3687 has 56 MA's), (17, 3705), (19, 3723), (20, 3732), (35, 3837), (36, 3846), (47, 3933), (49, 3957), (56, 3990), (59, 4035), (77, 4161), (78, 4167), (86, 4269), (90, 4311), (92, 4341), (99, 4422), (101, 4440), (113, 4545), (115, 4563), (124, 4674), (131, 4743), (132, 4764),

Gene: Pucara_4 Start: 3749, Stop: 4948, Start Num: 13

Candidate Starts for Pucara_4:

(1, 2786), (2, 2807), (3, 2867), (4, 3005), (5, 3176), (6, 3539), (8, 3680), (Start: 13 @3749 has 56 MA's), (19, 3785), (25, 3839), (42, 3944), (47, 3995), (52, 4040), (73, 4190), (77, 4223), (78, 4229), (99, 4484), (101, 4502), (116, 4625), (131, 4796), (132, 4817), (134, 4859), (135, 4886), (136, 4910),

Gene: RadFad_5 Start: 3608, Stop: 4822, Start Num: 13

Candidate Starts for RadFad_5:

(Start: 13 @3608 has 56 MA's), (19, 3644), (21, 3665), (22, 3668), (24, 3686), (33, 3746), (35, 3758), (36, 3767), (37, 3773), (47, 3854), (59, 3956), (76, 4073), (78, 4088), (84, 4184), (86, 4190), (90, 4232), (92, 4262), (99, 4343), (101, 4361), (106, 4376), (131, 4664), (135, 4760),

Gene: Raphaella_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for Raphaella_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (73, 4056), (77, 4089), (78, 4095), (82, 4131), (99, 4350), (101, 4368), (115, 4491), (124, 4602), (128, 4626), (131, 4671),

Gene: Richie_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for Richie_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (73, 4056), (77, 4089), (78, 4095), (82, 4131), (99, 4350), (101, 4368), (115, 4491), (124, 4602), (128, 4626), (131, 4671),

Gene: Rowa_4 Start: 3720, Stop: 4694, Start Num: 10

Candidate Starts for Rowa_4:

(Start: 10 @3720 has 3 MA's), (16, 3738), (18, 3759), (19, 3762), (25, 3816), (35, 3879), (42, 3924), (43, 3936), (45, 3966), (47, 3975), (49, 3999), (50, 4005), (59, 4077), (65, 4107), (66, 4116), (74, 4176), (76, 4197), (77, 4206), (78, 4212), (85, 4311), (88, 4320), (92, 4374), (98, 4452), (101, 4473), (105, 4500), (114, 4563), (119, 4593), (121, 4611),

Gene: Sakai_5 Start: 3609, Stop: 4823, Start Num: 13

Candidate Starts for Sakai_5:

(Start: 13 @3609 has 56 MA's), (19, 3645), (21, 3666), (22, 3669), (24, 3687), (33, 3747), (35, 3759), (36, 3768), (37, 3774), (47, 3855), (59, 3957), (73, 4050), (77, 4083), (78, 4089), (94, 4287), (99, 4344), (101, 4362), (106, 4377), (113, 4467), (115, 4485), (124, 4596), (131, 4665), (133, 4716),

Gene: Sashimi_6 Start: 3777, Stop: 4991, Start Num: 13

Candidate Starts for Sashimi_6:

(Start: 13 @3777 has 56 MA's), (17, 3795), (19, 3813), (20, 3822), (35, 3927), (36, 3936), (47, 4023), (49, 4047), (56, 4080), (59, 4125), (73, 4218), (77, 4251), (78, 4257), (82, 4293), (90, 4401), (92, 4431), (99, 4512), (101, 4530), (115, 4653), (124, 4764), (131, 4833),

Gene: Satrap_5 Start: 3614, Stop: 4828, Start Num: 13

Candidate Starts for Satrap_5:

(Start: 13 @3614 has 56 MA's), (17, 3632), (19, 3650), (35, 3764), (36, 3773), (47, 3860), (49, 3884), (56, 3917), (59, 3962), (73, 4055), (77, 4088), (78, 4094), (90, 4238), (99, 4349), (101, 4367), (115, 4490), (124, 4601), (127, 4622), (131, 4670),

Gene: Seahorse_6 Start: 3775, Stop: 4995, Start Num: 10

Candidate Starts for Seahorse_6:

(Start: 10 @3775 has 3 MA's), (Start: 13 @3781 has 56 MA's), (17, 3799), (19, 3817), (24, 3859), (25, 3871), (31, 3910), (32, 3916), (36, 3940), (44, 4003), (47, 4027), (56, 4084), (59, 4129), (62, 4147), (76, 4246), (77, 4255), (78, 4261), (79, 4264), (86, 4363), (87, 4378), (90, 4405), (96, 4486), (99, 4516), (101, 4534), (107, 4552), (113, 4639), (117, 4666), (120, 4687), (129, 4810), (131, 4837),

Gene: Shukran_5 Start: 3614, Stop: 4828, Start Num: 13

Candidate Starts for Shukran_5:

(Start: 13 @3614 has 56 MA's), (17, 3632), (19, 3650), (35, 3764), (36, 3773), (47, 3860), (49, 3884), (56, 3917), (59, 3962), (73, 4055), (77, 4088), (78, 4094), (90, 4238), (99, 4349), (101, 4367), (115, 4490), (124, 4601), (127, 4622), (131, 4670),

Gene: Sleepyhead_4 Start: 3350, Stop: 4345, Start Num: 13

Candidate Starts for Sleepyhead_4:

(Start: 13 @3350 has 56 MA's), (35, 3512), (38, 3530), (54, 3656), (68, 3755), (69, 3758), (71, 3767), (74, 3806), (78, 3839), (81, 3872), (91, 3977), (93, 4010), (98, 4073), (104, 4124), (108, 4175), (112, 4211), (123, 4280),

Gene: SonDevVon_4 Start: 3609, Stop: 4823, Start Num: 13

Candidate Starts for SonDevVon_4:

(Start: 13 @3609 has 56 MA's), (19, 3645), (21, 3666), (22, 3669), (24, 3687), (33, 3747), (35, 3759), (36, 3768), (37, 3774), (47, 3855), (59, 3957), (76, 4074), (78, 4089), (84, 4185), (86, 4191), (90, 4233), (92, 4263), (99, 4344), (101, 4362), (106, 4377), (131, 4665), (135, 4761),

Gene: SpicyFrank_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for SpicyFrank_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (73, 4056), (77, 4089), (78, 4095), (82, 4131), (90, 4239), (99, 4350), (101, 4368), (115, 4491), (124, 4602), (131, 4671),

Gene: Sporco_5 Start: 3615, Stop: 4829, Start Num: 13

Candidate Starts for Sporco_5:

(Start: 13 @3615 has 56 MA's), (17, 3633), (19, 3651), (20, 3660), (35, 3765), (36, 3774), (37, 3780), (47, 3861), (49, 3885), (56, 3918), (59, 3963), (77, 4089), (78, 4095), (82, 4131), (99, 4350), (101, 4368), (106, 4383), (124, 4602), (126, 4620), (131, 4671),

Gene: ThayneTheZag_5 Start: 3612, Stop: 4826, Start Num: 13

Candidate Starts for ThayneTheZag_5:

(Start: 13 @3612 has 56 MA's), (19, 3648), (20, 3657), (22, 3672), (24, 3690), (27, 3717), (33, 3750), (35, 3762), (36, 3771), (44, 3834), (47, 3858), (69, 4011), (78, 4092), (79, 4095), (84, 4188), (90, 4236), (92, 4266), (99, 4347), (101, 4365), (107, 4383), (117, 4497), (124, 4599), (131, 4668),

Gene: Tiff81_6 Start: 3773, Stop: 4987, Start Num: 13

Candidate Starts for Tiff81_6:

(Start: 13 @3773 has 56 MA's), (17, 3791), (19, 3809), (20, 3818), (24, 3851), (33, 3911), (35, 3923), (36, 3932), (44, 3995), (47, 4019), (72, 4184), (78, 4253), (84, 4349), (86, 4355), (90, 4397), (92, 4427), (99, 4508), (101, 4526), (117, 4658), (124, 4760), (130, 4817), (131, 4829),

Gene: Vopal_5 Start: 3614, Stop: 4828, Start Num: 13

Candidate Starts for Vopal_5:

(Start: 13 @3614 has 56 MA's), (19, 3650), (21, 3671), (22, 3674), (24, 3692), (33, 3752), (35, 3764), (36, 3773), (37, 3779), (47, 3860), (59, 3962), (78, 4094), (84, 4190), (89, 4235), (90, 4238), (92, 4268),

(98, 4346), (99, 4349), (101, 4367), (120, 4520), (124, 4601), (131, 4670),

Gene: Windest_5 Start: 3614, Stop: 4828, Start Num: 13

Candidate Starts for Windest_5:

(Start: 13 @3614 has 56 MA's), (19, 3650), (21, 3671), (22, 3674), (24, 3692), (33, 3752), (35, 3764), (36, 3773), (37, 3779), (47, 3860), (59, 3962), (78, 4094), (84, 4190), (89, 4235), (90, 4238), (92, 4268), (98, 4346), (99, 4349), (101, 4367), (120, 4520), (124, 4601), (131, 4670),

Gene: YoungHarleezy_5 Start: 3613, Stop: 4827, Start Num: 13

Candidate Starts for YoungHarleezy_5:

(Start: 13 @3613 has 56 MA's), (19, 3649), (20, 3658), (24, 3691), (33, 3751), (35, 3763), (36, 3772), (44, 3835), (47, 3859), (48, 3871), (72, 4024), (78, 4093), (84, 4189), (86, 4195), (90, 4237), (92, 4267), (99, 4348), (101, 4366), (117, 4498), (124, 4600), (131, 4669),