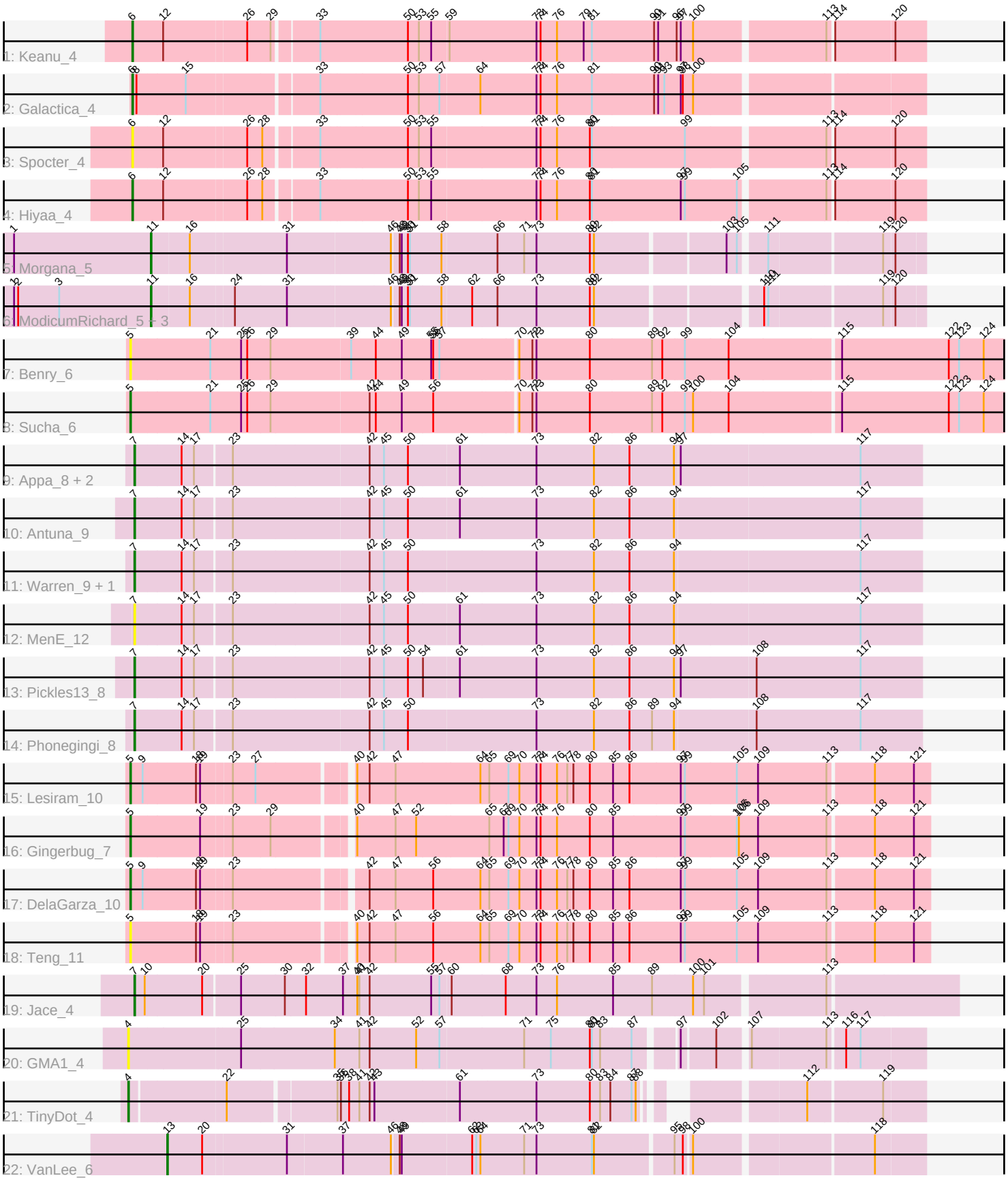
Pham 166909


1: Keanu_4
2: Galactica_4
3: Spocter_4
4: Hiyaa_4
5: Morgana_5
6: ModicumRichard_5 + 3
7: Benry_6
8: Sucha_6
9: Appa_8 + 2
10: Antuna_9
11: Warren_9 + 1
12: MenE_12
13: Pickles13_8
14: Phonegingi_8
15: Lesiram_10
16: Gingerbug_7
17: DelaGarza_10
18: Teng_11
19: Jace_4
20: GMA1_4
21: TinyDot_4
22: VanLee_6

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 166909 Report

This analysis was run 07/09/24 on database version 566.

Pham number 166909 has 28 members, 6 are drafts.

Phages represented in each track:
- Track 1 : Keanu_4
- Track 2 : Galactica_4
- Track 3 : Spocter_4
- Track 4 : Hiyaa_4
- Track 5 : Morgana_5
- Track 6 : ModicumRichard_5, Cafasso_5, ObLaDi_5, Aleemily_5
- Track 7 : Benry_6
- Track 8 : Sucha_6
- Track 9 : Appa_8, Dropshot_8, Bush_9
- Track 10 : Antuna_9
- Track 11 : Warren_9, Blett_9
- Track 12 : MenE_12
- Track 13 : Pickles13_8
- Track 14 : Phonegingi_8
- Track 15 : Lesiram_10
- Track 16 : Gingerbug_7
- Track 17 : DelaGarza_10
- Track 18 : Teng_11
- Track 19 : Jace_4
- Track 20 : GMA1_4
- Track 21 : TinyDot_4
- Track 22 : VanLee_6

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

The start number called the most often in the published annotations is 7, it was called in 9 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Antuna_9, Appa_8, Blett_9, Bush_9, Dropshot_8, Jace_4, MenE_12, Phonegingi_8, Pickles13_8, Warren_9,

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

Genes that do not have the "Most Annotated" start:
• Aleemily_5, Benry_6, Cafasso_5, DelaGarza_10, GMA1_4, Galactica_4, Gingerbug_7, Hiyaa_4, Keanu_4, Lesiram_10, ModicumRichard_5, Morgana_5, ObLaDi_5, Spocter_4, Sucha_6, Teng_11, TinyDot_4, VanLee_6,

Summary by start number:

Start 4:
• Found in 2 of 28 (7.1%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA1_4 (singleton), TinyDot_4 (singleton),

Start 5:
• Found in 6 of 28 (21.4%) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Benry_6 (EJ), DelaGarza_10 (GF), Gingerbug_7 (GF), Lesiram_10 (GF), Sucha_6 (EJ), Teng_11 (GF),

Start 6:
• Found in 4 of 28 (14.3%) of genes in pham
• Manual Annotations of this start: 3 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Galactica_4 (BQ), Hiyaa_4 (BQ), Keanu_4 (BQ), Spocter_4 (BQ),

Start 7:
• Found in 10 of 28 (35.7%) of genes in pham
• Manual Annotations of this start: 9 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antuna_9 (GA), Appa_8 (GA), Blett_9 (GA), Bush_9 (GA), Dropshot_8 (GA), Jace_4 (singleton), MenE_12 (GA), Phonegingi_8 (GA), Pickles13_8 (GA), Warren_9 (GA),

Start 11:
• Found in 5 of 28 (17.9%) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aleemily_5 (DZ), Cafasso_5 (DZ), ModicumRichard_5 (DZ), Morgana_5 (DZ), ObLaDi_5 (DZ),

Start 13:
• Found in 1 of 28 (3.6%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: VanLee_6 (singleton),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, EJ, GF, DZ, BQ, GA,

Info for manual annotations of cluster BQ:
•Start number 6 was manually annotated 3 times for cluster BQ.

Info for manual annotations of cluster DZ:
•Start number 11 was manually annotated 4 times for cluster DZ.

Info for manual annotations of cluster EJ:
•Start number 5 was manually annotated 1 time for cluster EJ.

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

Info for manual annotations of cluster GF:
•Start number 5 was manually annotated 3 times for cluster GF.

Gene Information:

Gene: Aleemily_5 Start: 3924, Stop: 4982, Start Num: 11
Candidate Starts for Aleemily_5:
(1, 3726), (2, 3732), (3, 3792), (Start: 11 @3924 has 4 MA's), (16, 3978), (24, 4038), (31, 4113), (46, 4257), (48, 4266), (49, 4269), (50, 4278), (51, 4281), (58, 4326), (62, 4368), (66, 4404), (73, 4461), (80, 4539), (82, 4545), (110, 4764), (111, 4770), (119, 4926), (120, 4941),

Gene: Antuna_9 Start: 4517, Stop: 5632, Start Num: 7
Candidate Starts for Antuna_9:
(Start: 7 @4517 has 9 MA's), (14, 4583), (17, 4601), (23, 4652), (42, 4847), (45, 4868), (50, 4901), (61, 4973), (73, 5084), (82, 5168), (86, 5219), (94, 5282), (117, 5543),

Gene: Appa_8 Start: 4382, Stop: 5497, Start Num: 7
Candidate Starts for Appa_8:
(Start: 7 @4382 has 9 MA's), (14, 4448), (17, 4466), (23, 4517), (42, 4712), (45, 4733), (50, 4766), (61, 4838), (73, 4949), (82, 5033), (86, 5084), (94, 5147), (97, 5153), (117, 5408),

Gene: Benry_6 Start: 4437, Stop: 5699, Start Num: 5
Candidate Starts for Benry_6:
(Start: 5 @4437 has 4 MA's), (21, 4548), (25, 4593), (26, 4602), (29, 4635), (39, 4749), (44, 4785), (49, 4821), (55, 4863), (56, 4866), (57, 4875), (70, 4980), (72, 4998), (73, 5004), (80, 5082), (89, 5172), (92, 5187), (99, 5217), (104, 5280), (115, 5436), (122, 5592), (123, 5607), (124, 5643),

Gene: Blett_9 Start: 4534, Stop: 5649, Start Num: 7
Candidate Starts for Blett_9:
(Start: 7 @4534 has 9 MA's), (14, 4600), (17, 4618), (23, 4669), (42, 4864), (45, 4885), (50, 4918), (73, 5101), (82, 5185), (86, 5236), (94, 5299), (117, 5560),

Gene: Bush_9 Start: 4537, Stop: 5652, Start Num: 7
Candidate Starts for Bush_9:
(Start: 7 @4537 has 9 MA's), (14, 4603), (17, 4621), (23, 4672), (42, 4867), (45, 4888), (50, 4921), (61, 4993), (73, 5104), (82, 5188), (86, 5239), (94, 5302), (97, 5308), (117, 5563),

Gene: Cafasso_5 Start: 3924, Stop: 4982, Start Num: 11

Candidate Starts for Cafasso_5:
(1, 3726), (2, 3732), (3, 3792), (Start: 11 @3924 has 4 MA's), (16, 3978), (24, 4038), (31, 4113), (46, 4257), (48, 4266), (49, 4269), (50, 4278), (51, 4281), (58, 4326), (62, 4368), (66, 4404), (73, 4461), (80, 4539), (82, 4545), (110, 4764), (111, 4770), (119, 4926), (120, 4941),

Gene: DelaGarza_10 Start: 5267, Stop: 6370, Start Num: 5
Candidate Starts for DelaGarza_10:
(Start: 5 @5267 has 4 MA's), (9, 5282), (18, 5357), (19, 5363), (23, 5405), (42, 5579), (47, 5615), (56, 5669), (64, 5735), (65, 5747), (69, 5774), (70, 5789), (73, 5813), (74, 5819), (76, 5843), (77, 5858), (78, 5867), (80, 5891), (85, 5924), (86, 5948), (97, 6020), (99, 6026), (105, 6101), (109, 6128), (113, 6227), (118, 6290), (121, 6347),

Gene: Dropshot_8 Start: 4382, Stop: 5497, Start Num: 7
Candidate Starts for Dropshot_8:
(Start: 7 @4382 has 9 MA's), (14, 4448), (17, 4466), (23, 4517), (42, 4712), (45, 4733), (50, 4766), (61, 4838), (73, 4949), (82, 5033), (86, 5084), (94, 5147), (97, 5153), (117, 5408),

Gene: GMA1_4 Start: 3255, Stop: 4343, Start Num: 4
Candidate Starts for GMA1_4:
(Start: 4 @3255 has 1 MA's), (25, 3411), (34, 3546), (41, 3579), (42, 3594), (52, 3660), (57, 3693), (71, 3813), (75, 3852), (80, 3909), (81, 3912), (83, 3924), (87, 3969), (97, 4020), (102, 4065), (107, 4104), (113, 4209), (116, 4230), (117, 4251),

Gene: Galactica_4 Start: 3574, Stop: 4671, Start Num: 6
Candidate Starts for Galactica_4:
(Start: 6 @3574 has 3 MA's), (8, 3580), (15, 3649), (33, 3826), (50, 3946), (53, 3961), (57, 3991), (64, 4048), (73, 4129), (74, 4135), (76, 4159), (81, 4210), (90, 4300), (91, 4306), (93, 4315), (97, 4339), (98, 4342), (100, 4357),

Gene: Gingerbug_7 Start: 4424, Stop: 5527, Start Num: 5
Candidate Starts for Gingerbug_7:
(Start: 5 @4424 has 4 MA's), (19, 4520), (23, 4562), (29, 4616), (40, 4718), (47, 4772), (52, 4802), (65, 4904), (67, 4925), (69, 4931), (70, 4946), (73, 4970), (74, 4976), (76, 5000), (80, 5048), (85, 5081), (97, 5177), (99, 5183), (105, 5258), (106, 5261), (109, 5285), (113, 5384), (118, 5447), (121, 5504),

Gene: Hiyaa_4 Start: 3595, Stop: 4692, Start Num: 6
Candidate Starts for Hiyaa_4:
(Start: 6 @3595 has 3 MA's), (12, 3637), (26, 3754), (28, 3775), (33, 3847), (50, 3967), (53, 3982), (55, 4000), (73, 4150), (74, 4156), (76, 4180), (80, 4228), (81, 4231), (97, 4360), (99, 4366), (105, 4441), (113, 4558), (114, 4564), (120, 4648),

Gene: Jace_4 Start: 3614, Stop: 4768, Start Num: 7
Candidate Starts for Jace_4:
(Start: 7 @3614 has 9 MA's), (10, 3629), (20, 3710), (25, 3761), (30, 3824), (32, 3854), (37, 3908), (40, 3929), (41, 3932), (42, 3947), (55, 4034), (57, 4046), (60, 4061), (68, 4139), (73, 4184), (76, 4214), (85, 4295), (89, 4352), (100, 4409), (101, 4424), (113, 4586),

Gene: Keanu_4 Start: 3634, Stop: 4731, Start Num: 6
Candidate Starts for Keanu_4:
(Start: 6 @3634 has 3 MA's), (12, 3676), (26, 3793), (29, 3826), (33, 3886), (50, 4006), (53, 4021), (55, 4039), (59, 4063), (73, 4189), (74, 4195), (76, 4219), (79, 4258), (81, 4270), (90, 4360), (91, 4366), (96, 4393), (97, 4399), (100, 4417), (113, 4597), (114, 4603), (120, 4687),

Gene: Lesiram_10 Start: 5243, Stop: 6346, Start Num: 5
Candidate Starts for Lesiram_10:
(Start: 5 @5243 has 4 MA's), (9, 5258), (18, 5333), (19, 5339), (23, 5381), (27, 5414), (40, 5537), (42, 5555), (47, 5591), (64, 5711), (65, 5723), (69, 5750), (70, 5765), (73, 5789), (74, 5795), (76, 5819), (77, 5834), (78, 5843), (80, 5867), (85, 5900), (86, 5924), (97, 5996), (99, 6002), (105, 6077), (109, 6104), (113, 6203), (118, 6266), (121, 6323),

Gene: MenE_12 Start: 4648, Stop: 5763, Start Num: 7
Candidate Starts for MenE_12:
(Start: 7 @4648 has 9 MA's), (14, 4714), (17, 4732), (23, 4783), (42, 4978), (45, 4999), (50, 5032), (61, 5104), (73, 5215), (82, 5299), (86, 5350), (94, 5413), (117, 5674),

Gene: ModicumRichard_5 Start: 3924, Stop: 4982, Start Num: 11
Candidate Starts for ModicumRichard_5:
(1, 3726), (2, 3732), (3, 3792), (Start: 11 @3924 has 4 MA's), (16, 3978), (24, 4038), (31, 4113), (46, 4257), (48, 4266), (49, 4269), (50, 4278), (51, 4281), (58, 4326), (62, 4368), (66, 4404), (73, 4461), (80, 4539), (82, 4545), (110, 4764), (111, 4770), (119, 4926), (120, 4941),

Gene: Morgana_5 Start: 3929, Stop: 4987, Start Num: 11
Candidate Starts for Morgana_5:
(1, 3731), (Start: 11 @3929 has 4 MA's), (16, 3983), (31, 4118), (46, 4262), (48, 4271), (49, 4274), (50, 4283), (51, 4286), (58, 4331), (66, 4409), (71, 4448), (73, 4466), (80, 4544), (82, 4550), (103, 4727), (105, 4742), (111, 4775), (119, 4931), (120, 4946),

Gene: ObLaDi_5 Start: 3924, Stop: 4982, Start Num: 11
Candidate Starts for ObLaDi_5:
(1, 3726), (2, 3732), (3, 3792), (Start: 11 @3924 has 4 MA's), (16, 3978), (24, 4038), (31, 4113), (46, 4257), (48, 4266), (49, 4269), (50, 4278), (51, 4281), (58, 4326), (62, 4368), (66, 4404), (73, 4461), (80, 4539), (82, 4545), (110, 4764), (111, 4770), (119, 4926), (120, 4941),

Gene: Phonegingi_8 Start: 4371, Stop: 5486, Start Num: 7
Candidate Starts for Phonegingi_8:
(Start: 7 @4371 has 9 MA's), (14, 4437), (17, 4455), (23, 4506), (42, 4701), (45, 4722), (50, 4755), (73, 4938), (82, 5022), (86, 5073), (89, 5106), (94, 5136), (108, 5247), (117, 5397),

Gene: Pickles13_8 Start: 4519, Stop: 5634, Start Num: 7
Candidate Starts for Pickles13_8:
(Start: 7 @4519 has 9 MA's), (14, 4585), (17, 4603), (23, 4654), (42, 4849), (45, 4870), (50, 4903), (54, 4924), (61, 4975), (73, 5086), (82, 5170), (86, 5221), (94, 5284), (97, 5290), (108, 5395), (117, 5545),

Gene: Spocter_4 Start: 3595, Stop: 4692, Start Num: 6
Candidate Starts for Spocter_4:
(Start: 6 @3595 has 3 MA's), (12, 3637), (26, 3754), (28, 3775), (33, 3847), (50, 3967), (53, 3982), (55, 4000), (73, 4150), (74, 4156), (76, 4180), (80, 4228), (81, 4231), (99, 4366), (113, 4558), (114, 4564), (120, 4648),

Gene: Sucha_6 Start: 4437, Stop: 5699, Start Num: 5
Candidate Starts for Sucha_6:
(Start: 5 @4437 has 4 MA's), (21, 4548), (25, 4593), (26, 4602), (29, 4635), (42, 4776), (44, 4785), (49, 4821), (56, 4866), (70, 4980), (72, 4998), (73, 5004), (80, 5082), (89, 5172), (92, 5187), (99, 5217), (100, 5229), (104, 5280), (115, 5436), (122, 5592), (123, 5607), (124, 5643),

Gene: Teng_11 Start: 5267, Stop: 6370, Start Num: 5

Candidate Starts for Teng_11:
(Start: 5 @5267 has 4 MA's), (18, 5357), (19, 5363), (23, 5405), (40, 5561), (42, 5579), (47, 5615), (56, 5669), (64, 5735), (65, 5747), (69, 5774), (70, 5789), (73, 5813), (74, 5819), (76, 5843), (77, 5858), (78, 5867), (80, 5891), (85, 5924), (86, 5948), (97, 6020), (99, 6026), (105, 6101), (109, 6128), (113, 6227), (118, 6290), (121, 6347),

Gene: TinyDot_4 Start: 3461, Stop: 4501, Start Num: 4
Candidate Starts for TinyDot_4:
(Start: 4 @3461 has 1 MA's), (22, 3593), (35, 3737), (36, 3740), (38, 3752), (41, 3767), (42, 3782), (43, 3788), (61, 3908), (73, 4019), (80, 4097), (83, 4112), (84, 4127), (87, 4157), (88, 4163), (112, 4340), (119, 4442),

Gene: VanLee_6 Start: 3943, Stop: 4983, Start Num: 13
Candidate Starts for VanLee_6:
(Start: 13 @3943 has 1 MA's), (20, 3994), (31, 4111), (37, 4186), (46, 4255), (48, 4264), (49, 4267), (62, 4366), (63, 4372), (64, 4378), (71, 4441), (73, 4459), (81, 4540), (82, 4543), (95, 4651), (98, 4663), (100, 4672), (118, 4912),

Gene: Warren_9 Start: 4561, Stop: 5676, Start Num: 7
Candidate Starts for Warren_9:
(Start: 7 @4561 has 9 MA's), (14, 4627), (17, 4645), (23, 4696), (42, 4891), (45, 4912), (50, 4945), (73, 5128), (82, 5212), (86, 5263), (94, 5326), (117, 5587),