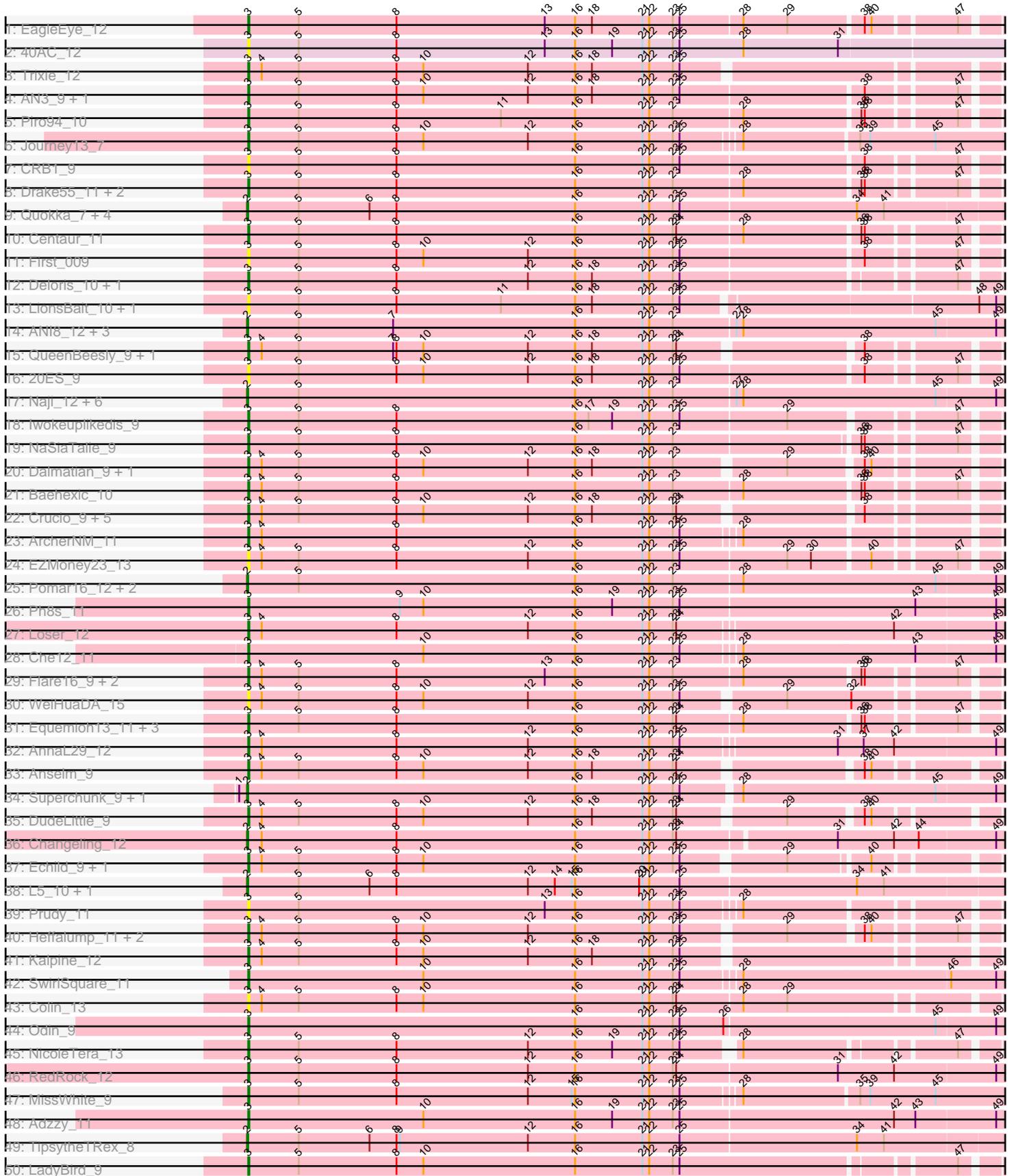
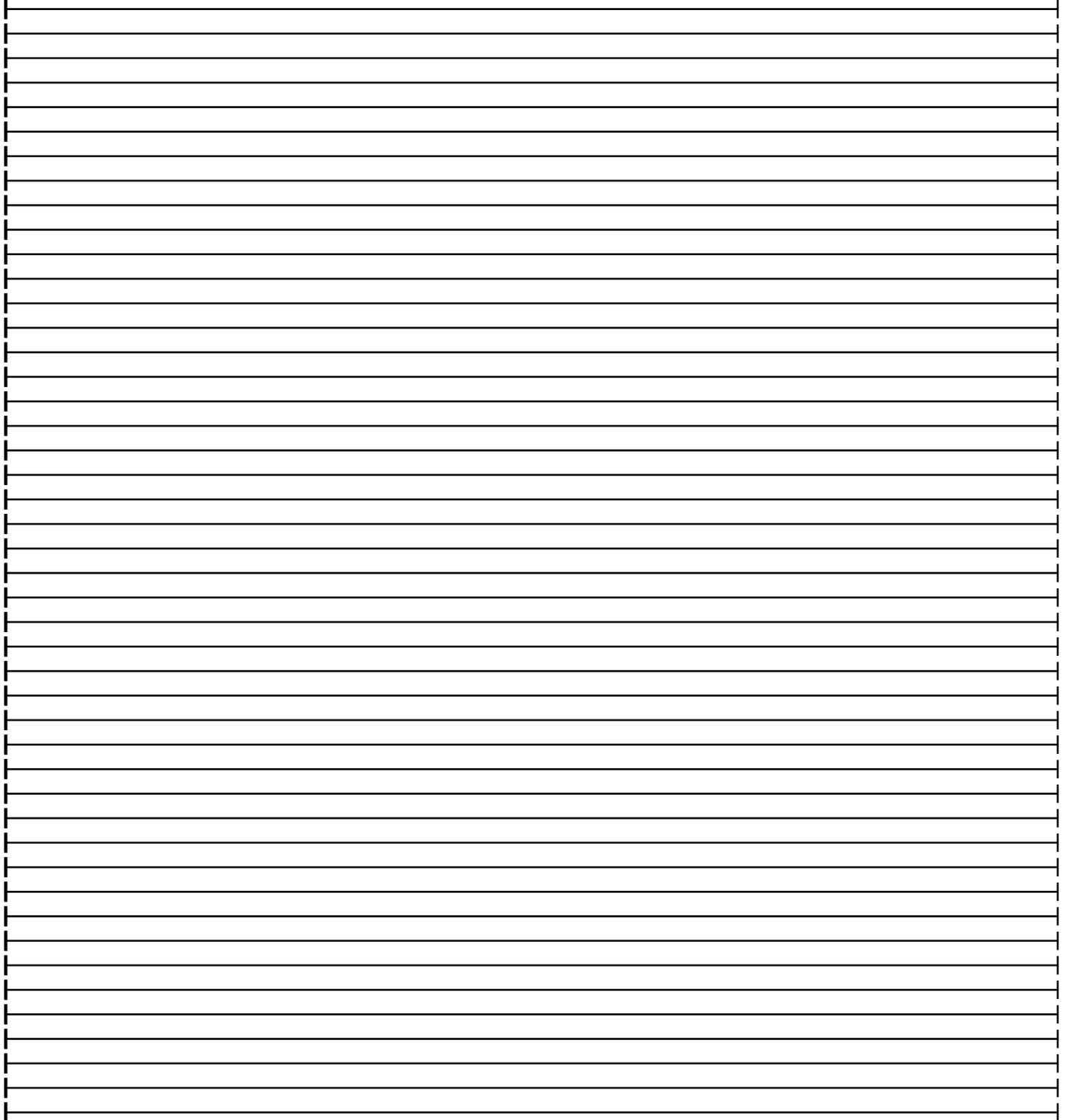
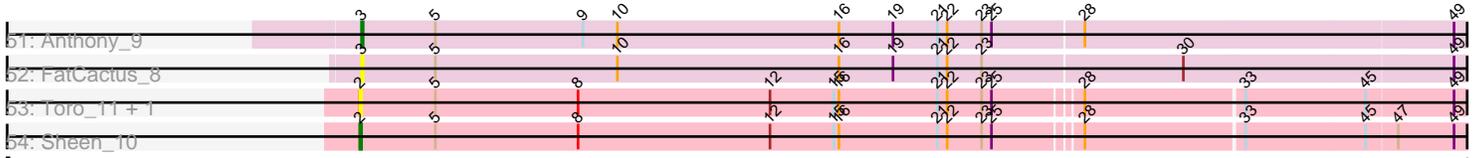


Zoomed Pham 291036



Zoomed Pham 291036



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 291036 Report

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

Pham number 291036 has 92 members, 20 are drafts.

Phages represented in each track:

- Track 1 : EagleEye_12
- Track 2 : 40AC_12
- Track 3 : Trixie_12
- Track 4 : AN3_9, VA6_9
- Track 5 : Piro94_10
- Track 6 : Journey13_7
- Track 7 : CRB1_9
- Track 8 : Drake55_11, HarryHoudini_11, Terrific_13
- Track 9 : Quokka_7, MajorMajor_8, Bradman_8, Serenity_8, Jsquared_8
- Track 10 : Centaur_11
- Track 11 : First_009
- Track 12 : Deloris_10, BengiVuitton_10
- Track 13 : LionsBait_10, HippoHollow_10
- Track 14 : ANI8_12, AN9_12, VC3_12, C3_07
- Track 15 : QueenBeesly_9, FiringLine_9
- Track 16 : 20ES_9
- Track 17 : Naji_12, Duplo_12, D29_10, D32_12, StarStuff_12, Travvers_12, Tomathan_12
- Track 18 : Iwokeuplikedis_9
- Track 19 : NaSiaTalie_9
- Track 20 : Dalmatian_9, Retro23_9
- Track 21 : Baehexic_10
- Track 22 : Crucio_9, SnapTap_9, SweetiePie_9, SemperFi_11, Georgie2_9, Power_9
- Track 23 : ArcherNM_11
- Track 24 : EZMoney23_13
- Track 25 : Pomar16_12, Kerberos_12, DBQu4n_12
- Track 26 : Ph8s_11
- Track 27 : Loser_12
- Track 28 : Che12_11
- Track 29 : Flare16_9, MiculUcigas_9, Sknot_9
- Track 30 : WeiHuaDA_15
- Track 31 : Equemioh13_11, WideWale_11, Gratitude_10, Updawg_11
- Track 32 : AnnaL29_12
- Track 33 : Anselm_9
- Track 34 : Superchunk_9, Caraxes_9
- Track 35 : DudeLittle_9

- Track 36 : Changeling_12
- Track 37 : Echild_9, Benvolio_9
- Track 38 : L5_10, Koduck_10
- Track 39 : Prudy_11
- Track 40 : Heffalump_11, Fameo_9, QueenB2_9
- Track 41 : Kalpine_12
- Track 42 : SwirlSquare_11
- Track 43 : Colin_13
- Track 44 : Odin_9
- Track 45 : NicoleTera_13
- Track 46 : RedRock_12
- Track 47 : MissWhite_9
- Track 48 : Adzzy_11
- Track 49 : TipsytheTRex_8
- Track 50 : LadyBird_9
- Track 51 : Anthony_9
- Track 52 : FatCactus_8
- Track 53 : Toro_11, FlyCatcher_12
- Track 54 : Sheen_10

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

The start number called the most often in the published annotations is 3, it was called in 51 of the 72 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 20ES_9, 40AC_12, AN3_9, Adzzy_11, AnnaL29_12, Anselm_9, Anthony_9, ArcherNM_11, Baehexic_10, BengiVuitton_10, Benvolio_9, CRB1_9, Centaur_11, Che12_11, Colin_13, Crucio_9, Dalmatian_9, Deloris_10, Drake55_11, DudeLittle_9, EZMoney23_13, EagleEye_12, Echild_9, Equemioh13_11, Fameo_9, FatCactus_8, FiringLine_9, First_009, Flare16_9, Georgie2_9, Gratitude_10, HarryHoudini_11, Heffalump_11, HippoHollow_10, Iwokeuplikedis_9, Journey13_7, Kalpine_12, LadyBird_9, LionsBait_10, Loser_12, MiculUcigas_9, MissWhite_9, NaSiaTalie_9, NicoleTera_13, Odin_9, Ph8s_11, Piro94_10, Power_9, Prudy_11, QueenB2_9, QueenBeesly_9, RedRock_12, Retro23_9, SemperFi_11, Sknot_9, SnapTap_9, SweetiePie_9, SwirlSquare_11, Terrific_13, Trixie_12, Updawg_11, VA6_9, WeiHuaDA_15, WideWale_11,

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

-

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

- AN9_12, ANI8_12, Bradman_8, C3_07, Caraxes_9, Changeling_12, D29_10, D32_12, DBQu4n_12, Duplo_12, FlyCatcher_12, Jsquared_8, Kerberos_12, Koduck_10, L5_10, MajorMajor_8, Naji_12, Pomar16_12, Quokka_7, Serenity_8, Sheen_10, StarStuff_12, Superchunk_9, TipsytheTRex_8, Tomathan_12, Toro_11, Travvers_12, VC3_12,

Summary by start number:

Start 2:

- Found in 28 of 92 (30.4%) of genes in pham
- Manual Annotations of this start: 21 of 72
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AN9_12 (A2), ANI8_12 (A2), Bradman_8 (A2), C3_07 (A2), Caraxes_9 (A2), Changeling_12 (A2), D29_10 (A2), D32_12 (A2), DBQu4n_12 (A2), Duplo_12 (A2), FlyCatcher_12 (A7), Jsquared_8 (A2), Kerberos_12 (A2), Koduck_10 (A2), L5_10 (A2), MajorMajor_8 (A2), Naji_12 (A2), Pomar16_12 (A2), Quokka_7 (A2), Serenity_8 (A2), Sheen_10 (A7), StarStuff_12 (A2), Superchunk_9 (A2), TipsytheTRex_8 (A2), Tomathan_12 (A2), Toro_11 (A7), Travvers_12 (A2), VC3_12 (A2),

Start 3:

- Found in 64 of 92 (69.6%) of genes in pham
- Manual Annotations of this start: 51 of 72
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 20ES_9 (A2), 40AC_12 (A17), AN3_9 (A2), Adzzy_11 (A2), AnnaL29_12 (A2), Anselm_9 (A2), Anthony_9 (A20), ArcherNM_11 (A2), Baehexic_10 (A2), BengiVuitton_10 (A2), Benvolio_9 (A2), CRB1_9 (A2), Centaur_11 (A2), Che12_11 (A2), Colin_13 (A2), Crucio_9 (A2), Dalmatian_9 (A2), Deloris_10 (A2), Drake55_11 (A2), DudeLittle_9 (A2), EZMoney23_13 (A2), EagleEye_12 (A16), Echild_9 (A2), Equemioh13_11 (A2), Fameo_9 (A2), FatCactus_8 (A20), FiringLine_9 (A2), First_009 (A2), Flare16_9 (A2), Georgie2_9 (A2), Gratitude_10 (A2), HarryHoudini_11 (A2), Heffalump_11 (A2), HippoHollow_10 (A2), Iwokeuplikedis_9 (A2), Journey13_7 (A2), Kalpine_12 (A2), LadyBird_9 (A2), LionsBait_10 (A2), Loser_12 (A2), MiculUcigas_9 (A2), MissWhite_9 (A2), NaSiaTalie_9 (A2), NicoleTera_13 (A2), Odin_9 (A2), Ph8s_11 (A2), Piro94_10 (A2), Power_9 (A2), Prudy_11 (A2), QueenB2_9 (A2), QueenBeesly_9 (A2), RedRock_12 (A2), Retro23_9 (A2), SemperFi_11 (A2), Sknot_9 (A2), SnapTap_9 (A2), SweetiePie_9 (A2), SwirlSquare_11 (A2), Terrific_13 (A2), Trixie_12 (A2), Updawg_11 (A2), VA6_9 (A2), WeiHuaDA_15 (A2), WideWale_11 (A2),

Summary by clusters:

There are 5 clusters represented in this pham: A20, A17, A2, A16, A7,

Info for manual annotations of cluster A16:

- Start number 3 was manually annotated 1 time for cluster A16.

Info for manual annotations of cluster A2:

- Start number 2 was manually annotated 20 times for cluster A2.
- Start number 3 was manually annotated 49 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 3 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A7:

- Start number 2 was manually annotated 1 time for cluster A7.

Gene Information:

Gene: 20ES_9 Start: 4690, Stop: 5988, Start Num: 3

Candidate Starts for 20ES_9:

(Start: 3 @4690 has 51 MA's), (5, 4735), (8, 4822), (10, 4846), (12, 4939), (16, 4981), (18, 4996), (21, 5041), (22, 5047), (23, 5068), (25, 5074), (38, 5230), (47, 5302), (54, 5350), (76, 5569), (80, 5602), (90, 5707),

Gene: 40AC_12 Start: 6575, Stop: 8080, Start Num: 3

Candidate Starts for 40AC_12:

(Start: 3 @6575 has 51 MA's), (5, 6620), (8, 6707), (13, 6839), (16, 6866), (19, 6899), (21, 6926), (22, 6932), (23, 6953), (25, 6959), (28, 7016), (31, 7100), (62, 7397), (65, 7421), (70, 7496), (74, 7637), (80, 7688), (85, 7733), (90, 7793), (94, 7829), (97, 7841), (104, 7901), (105, 7919), (115, 8009), (116, 8021),

Gene: AN3_9 Start: 4672, Stop: 5973, Start Num: 3

Candidate Starts for AN3_9:

(Start: 3 @4672 has 51 MA's), (5, 4717), (8, 4804), (10, 4828), (12, 4921), (16, 4963), (18, 4978), (21, 5023), (22, 5029), (23, 5050), (25, 5056), (38, 5212), (47, 5284), (54, 5332), (68, 5455), (76, 5551), (80, 5584), (90, 5689), (94, 5725), (105, 5815), (116, 5917),

Gene: AN9_12 Start: 4696, Stop: 6177, Start Num: 2

Candidate Starts for AN9_12:

(Start: 2 @4696 has 21 MA's), (5, 4741), (7, 4825), (16, 4987), (21, 5047), (22, 5053), (23, 5074), (27, 5128), (28, 5134), (45, 5302), (49, 5353), (60, 5503), (64, 5584), (79, 5815), (88, 5878), (99, 5977), (115, 6106),

Gene: ANI8_12 Start: 4696, Stop: 6177, Start Num: 2

Candidate Starts for ANI8_12:

(Start: 2 @4696 has 21 MA's), (5, 4741), (7, 4825), (16, 4987), (21, 5047), (22, 5053), (23, 5074), (27, 5128), (28, 5134), (45, 5302), (49, 5353), (60, 5503), (64, 5584), (79, 5815), (88, 5878), (99, 5977), (115, 6106),

Gene: Adzzy_11 Start: 4473, Stop: 5846, Start Num: 3

Candidate Starts for Adzzy_11:

(Start: 3 @4473 has 51 MA's), (10, 4629), (16, 4764), (19, 4797), (21, 4824), (22, 4830), (23, 4851), (25, 4857), (42, 5043), (43, 5061), (49, 5130), (62, 5292), (67, 5340), (71, 5403), (82, 5565), (83, 5568), (94, 5631), (95, 5634), (105, 5721),

Gene: AnnaL29_12 Start: 6416, Stop: 7891, Start Num: 3

Candidate Starts for AnnaL29_12:

(Start: 3 @6416 has 51 MA's), (4, 6428), (8, 6548), (12, 6665), (16, 6707), (21, 6767), (22, 6773), (23, 6794), (25, 6800), (31, 6932), (37, 6953), (42, 6980), (49, 7067), (58, 7214), (60, 7217), (64, 7298), (75, 7487), (79, 7529), (81, 7547), (82, 7553), (85, 7577), (99, 7691), (102, 7700), (115, 7820), (117, 7853),

Gene: Anselm_9 Start: 4805, Stop: 6097, Start Num: 3

Candidate Starts for Anselm_9:

(Start: 3 @4805 has 51 MA's), (4, 4817), (5, 4850), (8, 4937), (10, 4961), (12, 5054), (16, 5096), (18, 5111), (21, 5156), (22, 5162), (23, 5183), (24, 5186), (38, 5333), (40, 5339), (54, 5453), (76, 5672), (80, 5705), (85, 5750), (90, 5810), (105, 5936), (116, 6038),

Gene: Anthony_9 Start: 3885, Stop: 5264, Start Num: 3

Candidate Starts for Anthony_9:

(Start: 3 @3885 has 51 MA's), (5, 3930), (9, 4020), (10, 4041), (16, 4176), (19, 4209), (21, 4236), (22, 4242), (23, 4263), (25, 4269), (28, 4323), (49, 4542), (52, 4572), (62, 4704), (67, 4752), (83, 4983), (84, 4986), (94, 5046), (95, 5049),

Gene: ArcherNM_11 Start: 6513, Stop: 7808, Start Num: 3

Candidate Starts for ArcherNM_11:

(Start: 3 @6513 has 51 MA's), (4, 6525), (8, 6645), (16, 6804), (21, 6864), (22, 6870), (23, 6891), (25, 6897), (28, 6945), (54, 7167), (76, 7386), (80, 7419), (90, 7524), (96, 7569), (105, 7650), (115, 7740), (116, 7752),

Gene: Baehexic_10 Start: 5209, Stop: 6513, Start Num: 3

Candidate Starts for Baehexic_10:

(Start: 3 @5209 has 51 MA's), (4, 5221), (5, 5254), (8, 5341), (16, 5500), (21, 5560), (22, 5566), (23, 5587), (28, 5647), (36, 5746), (38, 5749), (47, 5821), (76, 6088), (80, 6121), (87, 6175), (90, 6226), (96, 6271), (100, 6289), (111, 6406),

Gene: BengiVuitton_10 Start: 5133, Stop: 6422, Start Num: 3

Candidate Starts for BengiVuitton_10:

(Start: 3 @5133 has 51 MA's), (5, 5178), (8, 5265), (12, 5382), (16, 5424), (18, 5439), (21, 5484), (22, 5490), (23, 5511), (25, 5517), (47, 5742), (54, 5790), (76, 6009), (80, 6042), (90, 6147), (106, 6276),

Gene: Benvolio_9 Start: 4797, Stop: 6086, Start Num: 3

Candidate Starts for Benvolio_9:

(Start: 3 @4797 has 51 MA's), (4, 4809), (5, 4842), (8, 4929), (10, 4953), (16, 5088), (21, 5148), (22, 5154), (23, 5175), (25, 5181), (29, 5265), (40, 5331), (54, 5445), (76, 5664), (80, 5697), (90, 5802), (94, 5838), (105, 5928), (116, 6030),

Gene: Bradman_8 Start: 4332, Stop: 5210, Start Num: 2

Candidate Starts for Bradman_8:

(Start: 2 @4332 has 21 MA's), (5, 4377), (6, 4440), (8, 4464), (16, 4623), (21, 4683), (22, 4689), (23, 4710), (25, 4716), (34, 4869), (41, 4893), (50, 5010), (55, 5076), (56, 5079), (57, 5094), (59, 5100), (61, 5115), (63, 5172),

Gene: C3_07 Start: 4696, Stop: 6177, Start Num: 2

Candidate Starts for C3_07:

(Start: 2 @4696 has 21 MA's), (5, 4741), (7, 4825), (16, 4987), (21, 5047), (22, 5053), (23, 5074), (27, 5128), (28, 5134), (45, 5302), (49, 5353), (60, 5503), (64, 5584), (79, 5815), (88, 5878), (99, 5977), (115, 6106),

Gene: CRB1_9 Start: 4679, Stop: 5974, Start Num: 3

Candidate Starts for CRB1_9:

(Start: 3 @4679 has 51 MA's), (5, 4724), (8, 4811), (16, 4970), (21, 5030), (22, 5036), (23, 5057), (25, 5063), (38, 5219), (47, 5291), (54, 5339), (76, 5558), (80, 5591), (90, 5696), (97, 5744),

Gene: Caraxes_9 Start: 4337, Stop: 5746, Start Num: 2

Candidate Starts for Caraxes_9:

(1, 4331), (Start: 2 @4337 has 21 MA's), (16, 4628), (21, 4688), (22, 4694), (23, 4715), (25, 4721), (28, 4769), (45, 4937), (49, 4988), (77, 5417), (83, 5468), (84, 5471), (94, 5531), (95, 5534), (117, 5717),

Gene: Centaur_11 Start: 5188, Stop: 6492, Start Num: 3

Candidate Starts for Centaur_11:

(Start: 3 @5188 has 51 MA's), (5, 5233), (8, 5320), (16, 5479), (21, 5539), (22, 5545), (23, 5566), (24, 5569), (28, 5626), (36, 5725), (38, 5728), (47, 5800), (54, 5848), (76, 6067), (80, 6100), (87, 6154), (90,

6205), (96, 6250), (100, 6268),

Gene: Changeling_12 Start: 6426, Stop: 7901, Start Num: 2

Candidate Starts for Changeling_12:

(Start: 2 @6426 has 21 MA's), (4, 6438), (8, 6558), (16, 6717), (21, 6777), (22, 6783), (23, 6804), (24, 6807), (31, 6942), (42, 6990), (44, 7011), (49, 7077), (58, 7224), (60, 7227), (64, 7308), (75, 7497), (79, 7539), (85, 7587), (88, 7602), (99, 7701), (105, 7764), (115, 7830),

Gene: Che12_11 Start: 4473, Stop: 5840, Start Num: 3

Candidate Starts for Che12_11:

(Start: 3 @4473 has 51 MA's), (10, 4629), (16, 4764), (21, 4824), (22, 4830), (23, 4851), (25, 4857), (28, 4905), (43, 5055), (49, 5124), (62, 5286), (67, 5334), (71, 5397), (82, 5559), (83, 5562), (94, 5625), (95, 5628), (105, 5715),

Gene: Colin_13 Start: 6391, Stop: 7695, Start Num: 3

Candidate Starts for Colin_13:

(Start: 3 @6391 has 51 MA's), (4, 6403), (5, 6436), (8, 6523), (10, 6547), (16, 6682), (21, 6742), (22, 6748), (23, 6769), (24, 6772), (28, 6829), (29, 6868), (54, 7057), (76, 7276), (80, 7303), (85, 7348), (90, 7408), (105, 7534), (115, 7624), (116, 7636), (118, 7672),

Gene: Crucio_9 Start: 4694, Stop: 5941, Start Num: 3

Candidate Starts for Crucio_9:

(Start: 3 @4694 has 51 MA's), (4, 4706), (5, 4739), (8, 4826), (10, 4850), (12, 4943), (16, 4985), (18, 5000), (21, 5045), (22, 5051), (23, 5072), (24, 5075), (38, 5222), (54, 5342), (76, 5561), (79, 5591), (82, 5615), (85, 5639), (98, 5738), (106, 5804), (108, 5810), (115, 5867),

Gene: D29_10 Start: 4697, Stop: 6178, Start Num: 2

Candidate Starts for D29_10:

(Start: 2 @4697 has 21 MA's), (5, 4742), (16, 4988), (21, 5048), (22, 5054), (23, 5075), (27, 5129), (28, 5135), (45, 5303), (49, 5354), (60, 5504), (64, 5585), (75, 5774), (79, 5816), (88, 5879), (99, 5978), (115, 6107),

Gene: D32_12 Start: 4697, Stop: 6178, Start Num: 2

Candidate Starts for D32_12:

(Start: 2 @4697 has 21 MA's), (5, 4742), (16, 4988), (21, 5048), (22, 5054), (23, 5075), (27, 5129), (28, 5135), (45, 5303), (49, 5354), (60, 5504), (64, 5585), (75, 5774), (79, 5816), (88, 5879), (99, 5978), (115, 6107),

Gene: DBQu4n_12 Start: 4697, Stop: 6178, Start Num: 2

Candidate Starts for DBQu4n_12:

(Start: 2 @4697 has 21 MA's), (5, 4742), (16, 4988), (21, 5048), (22, 5054), (23, 5075), (28, 5135), (45, 5303), (49, 5354), (60, 5504), (64, 5585), (75, 5774), (79, 5816), (88, 5879), (99, 5978), (115, 6107),

Gene: Dalmatian_9 Start: 4796, Stop: 6088, Start Num: 3

Candidate Starts for Dalmatian_9:

(Start: 3 @4796 has 51 MA's), (4, 4808), (5, 4841), (8, 4928), (10, 4952), (12, 5045), (16, 5087), (18, 5102), (21, 5147), (22, 5153), (23, 5174), (29, 5264), (38, 5324), (40, 5330), (54, 5444), (76, 5663), (80, 5696), (85, 5741), (90, 5801), (96, 5846), (105, 5927), (116, 6029),

Gene: Deloris_10 Start: 5133, Stop: 6422, Start Num: 3

Candidate Starts for Deloris_10:

(Start: 3 @5133 has 51 MA's), (5, 5178), (8, 5265), (12, 5382), (16, 5424), (18, 5439), (21, 5484), (22, 5490), (23, 5511), (25, 5517), (47, 5742), (54, 5790), (76, 6009), (80, 6042), (90, 6147), (106, 6276),

Gene: Drake55_11 Start: 5205, Stop: 6509, Start Num: 3

Candidate Starts for Drake55_11:

(Start: 3 @5205 has 51 MA's), (5, 5250), (8, 5337), (16, 5496), (21, 5556), (22, 5562), (23, 5583), (28, 5643), (36, 5742), (38, 5745), (47, 5817), (76, 6084), (80, 6117), (87, 6171), (90, 6222), (96, 6267), (100, 6285),

Gene: DudeLittle_9 Start: 4798, Stop: 6090, Start Num: 3

Candidate Starts for DudeLittle_9:

(Start: 3 @4798 has 51 MA's), (4, 4810), (5, 4843), (8, 4930), (10, 4954), (12, 5047), (16, 5089), (18, 5104), (21, 5149), (22, 5155), (23, 5176), (24, 5179), (29, 5266), (38, 5326), (40, 5332), (54, 5446), (76, 5665), (80, 5698), (85, 5743), (90, 5803), (96, 5848), (105, 5929), (116, 6031),

Gene: Duplo_12 Start: 4738, Stop: 6219, Start Num: 2

Candidate Starts for Duplo_12:

(Start: 2 @4738 has 21 MA's), (5, 4783), (16, 5029), (21, 5089), (22, 5095), (23, 5116), (27, 5170), (28, 5176), (45, 5344), (49, 5395), (60, 5545), (64, 5626), (75, 5815), (79, 5857), (88, 5920), (99, 6019), (115, 6148),

Gene: EZMoney23_13 Start: 6684, Stop: 7985, Start Num: 3

Candidate Starts for EZMoney23_13:

(Start: 3 @6684 has 51 MA's), (4, 6696), (5, 6729), (8, 6816), (12, 6933), (16, 6975), (21, 7035), (22, 7041), (23, 7062), (25, 7068), (29, 7161), (30, 7182), (40, 7230), (47, 7296), (76, 7563), (80, 7596), (90, 7701), (96, 7746), (105, 7827), (116, 7929),

Gene: EagleEye_12 Start: 5895, Stop: 7142, Start Num: 3

Candidate Starts for EagleEye_12:

(Start: 3 @5895 has 51 MA's), (5, 5940), (8, 6027), (13, 6159), (16, 6186), (18, 6201), (21, 6246), (22, 6252), (23, 6273), (25, 6279), (28, 6333), (29, 6372), (38, 6435), (40, 6441), (47, 6507), (54, 6555), (76, 6774), (79, 6801), (82, 6825), (86, 6849), (98, 6942), (106, 7008), (109, 7026),

Gene: Echild_9 Start: 4797, Stop: 6086, Start Num: 3

Candidate Starts for Echild_9:

(Start: 3 @4797 has 51 MA's), (4, 4809), (5, 4842), (8, 4929), (10, 4953), (16, 5088), (21, 5148), (22, 5154), (23, 5175), (25, 5181), (29, 5265), (40, 5331), (54, 5445), (76, 5664), (80, 5697), (90, 5802), (94, 5838), (105, 5928), (116, 6030),

Gene: Equemioh13_11 Start: 5191, Stop: 6495, Start Num: 3

Candidate Starts for Equemioh13_11:

(Start: 3 @5191 has 51 MA's), (5, 5236), (8, 5323), (16, 5482), (21, 5542), (22, 5548), (23, 5569), (24, 5572), (28, 5629), (36, 5728), (38, 5731), (47, 5803), (54, 5851), (76, 6070), (80, 6103), (87, 6157), (90, 6208), (96, 6253), (100, 6271), (111, 6388),

Gene: Fameo_9 Start: 4800, Stop: 6035, Start Num: 3

Candidate Starts for Fameo_9:

(Start: 3 @4800 has 51 MA's), (4, 4812), (5, 4845), (8, 4932), (10, 4956), (12, 5049), (16, 5091), (21, 5151), (22, 5157), (23, 5178), (25, 5184), (29, 5268), (38, 5328), (40, 5334), (47, 5400), (54, 5448), (76, 5667), (79, 5697), (82, 5721), (98, 5835), (106, 5901), (110, 5925),

Gene: FatCactus_8 Start: 3796, Stop: 5175, Start Num: 3

Candidate Starts for FatCactus_8:

(Start: 3 @3796 has 51 MA's), (5, 3841), (10, 3952), (16, 4087), (19, 4120), (21, 4147), (22, 4153), (23, 4174), (30, 4294), (49, 4453), (62, 4615), (69, 4702), (83, 4894), (84, 4897), (94, 4957), (95, 4960),

Gene: FiringLine_9 Start: 4694, Stop: 5941, Start Num: 3

Candidate Starts for FiringLine_9:

(Start: 3 @4694 has 51 MA's), (4, 4706), (5, 4739), (7, 4823), (8, 4826), (10, 4850), (12, 4943), (16, 4985), (18, 5000), (21, 5045), (22, 5051), (23, 5072), (24, 5075), (38, 5222), (54, 5342), (76, 5561), (79, 5591), (82, 5615), (85, 5639), (98, 5738), (106, 5804), (108, 5810), (115, 5867),

Gene: First_009 Start: 4690, Stop: 5988, Start Num: 3

Candidate Starts for First_009:

(Start: 3 @4690 has 51 MA's), (5, 4735), (8, 4822), (10, 4846), (12, 4939), (16, 4981), (21, 5041), (22, 5047), (23, 5068), (25, 5074), (38, 5230), (47, 5302), (54, 5350), (76, 5569), (80, 5602), (90, 5707),

Gene: Flare16_9 Start: 4749, Stop: 6053, Start Num: 3

Candidate Starts for Flare16_9:

(Start: 3 @4749 has 51 MA's), (4, 4761), (5, 4794), (8, 4881), (13, 5013), (16, 5040), (21, 5100), (22, 5106), (23, 5127), (28, 5187), (36, 5286), (38, 5289), (47, 5361), (54, 5409), (76, 5628), (80, 5661), (87, 5715), (90, 5766), (96, 5811), (100, 5829),

Gene: FlyCatcher_12 Start: 5649, Stop: 7097, Start Num: 2

Candidate Starts for FlyCatcher_12:

(Start: 2 @5649 has 21 MA's), (5, 5694), (8, 5781), (12, 5898), (15, 5937), (16, 5940), (21, 6000), (22, 6006), (23, 6027), (25, 6033), (28, 6081), (33, 6174), (45, 6246), (49, 6297), (60, 6447), (62, 6507), (64, 6528), (71, 6618), (73, 6645), (77, 6732), (79, 6759), (82, 6780), (85, 6804), (92, 6864), (93, 6867), (99, 6897), (103, 6921), (106, 6963), (107, 6966), (112, 7002), (114, 7008), (119, 7080),

Gene: Georgie2_9 Start: 4695, Stop: 5942, Start Num: 3

Candidate Starts for Georgie2_9:

(Start: 3 @4695 has 51 MA's), (4, 4707), (5, 4740), (8, 4827), (10, 4851), (12, 4944), (16, 4986), (18, 5001), (21, 5046), (22, 5052), (23, 5073), (24, 5076), (38, 5223), (54, 5343), (76, 5562), (79, 5592), (82, 5616), (85, 5640), (98, 5739), (106, 5805), (108, 5811), (115, 5868),

Gene: Gratitude_10 Start: 5191, Stop: 6495, Start Num: 3

Candidate Starts for Gratitude_10:

(Start: 3 @5191 has 51 MA's), (5, 5236), (8, 5323), (16, 5482), (21, 5542), (22, 5548), (23, 5569), (24, 5572), (28, 5629), (36, 5728), (38, 5731), (47, 5803), (54, 5851), (76, 6070), (80, 6103), (87, 6157), (90, 6208), (96, 6253), (100, 6271), (111, 6388),

Gene: HarryHoudini_11 Start: 5205, Stop: 6509, Start Num: 3

Candidate Starts for HarryHoudini_11:

(Start: 3 @5205 has 51 MA's), (5, 5250), (8, 5337), (16, 5496), (21, 5556), (22, 5562), (23, 5583), (28, 5643), (36, 5742), (38, 5745), (47, 5817), (76, 6084), (80, 6117), (87, 6171), (90, 6222), (96, 6267), (100, 6285),

Gene: Heffalump_11 Start: 6599, Stop: 7834, Start Num: 3

Candidate Starts for Heffalump_11:

(Start: 3 @6599 has 51 MA's), (4, 6611), (5, 6644), (8, 6731), (10, 6755), (12, 6848), (16, 6890), (21, 6950), (22, 6956), (23, 6977), (25, 6983), (29, 7067), (38, 7127), (40, 7133), (47, 7199), (54, 7247), (76, 7466), (79, 7496), (82, 7520), (98, 7634), (106, 7700), (110, 7724),

Gene: HippoHollow_10 Start: 6245, Stop: 7762, Start Num: 3

Candidate Starts for HippoHollow_10:

(Start: 3 @6245 has 51 MA's), (5, 6290), (8, 6377), (11, 6470), (16, 6536), (18, 6551), (21, 6596), (22, 6602), (23, 6623), (25, 6629), (48, 6878), (49, 6893), (67, 7151), (72, 7241), (80, 7370), (90, 7475), (96,

7520), (100, 7538), (105, 7601),

Gene: Iwokeuplikedis_9 Start: 4489, Stop: 5760, Start Num: 3

Candidate Starts for Iwokeuplikedis_9:

(Start: 3 @4489 has 51 MA's), (5, 4534), (8, 4621), (16, 4780), (17, 4792), (19, 4813), (21, 4840), (22, 4846), (23, 4867), (25, 4873), (29, 4966), (47, 5098), (54, 5146), (76, 5365), (79, 5398), (82, 5422), (98, 5560), (101, 5569),

Gene: Journey13_7 Start: 4346, Stop: 5233, Start Num: 3

Candidate Starts for Journey13_7:

(Start: 3 @4346 has 51 MA's), (5, 4391), (8, 4478), (10, 4502), (12, 4595), (16, 4637), (21, 4697), (22, 4703), (23, 4724), (25, 4730), (28, 4778), (35, 4877), (39, 4886), (45, 4943), (51, 5024), (53, 5033), (60, 5099),

Gene: Jsquared_8 Start: 4286, Stop: 5164, Start Num: 2

Candidate Starts for Jsquared_8:

(Start: 2 @4286 has 21 MA's), (5, 4331), (6, 4394), (8, 4418), (16, 4577), (21, 4637), (22, 4643), (23, 4664), (25, 4670), (34, 4823), (41, 4847), (50, 4964), (55, 5030), (56, 5033), (57, 5048), (59, 5054), (61, 5069), (63, 5126),

Gene: Kalpine_12 Start: 6504, Stop: 7799, Start Num: 3

Candidate Starts for Kalpine_12:

(Start: 3 @6504 has 51 MA's), (4, 6516), (5, 6549), (8, 6636), (10, 6660), (12, 6753), (16, 6795), (18, 6810), (21, 6855), (22, 6861), (23, 6882), (25, 6888), (54, 7161), (76, 7380), (80, 7407), (85, 7452), (89, 7494), (90, 7512), (96, 7557), (105, 7638), (115, 7728), (116, 7740),

Gene: Kerberos_12 Start: 4697, Stop: 6178, Start Num: 2

Candidate Starts for Kerberos_12:

(Start: 2 @4697 has 21 MA's), (5, 4742), (16, 4988), (21, 5048), (22, 5054), (23, 5075), (28, 5135), (45, 5303), (49, 5354), (60, 5504), (64, 5585), (75, 5774), (79, 5816), (88, 5879), (99, 5978), (115, 6107),

Gene: Koduck_10 Start: 4573, Stop: 5451, Start Num: 2

Candidate Starts for Koduck_10:

(Start: 2 @4573 has 21 MA's), (5, 4618), (6, 4681), (8, 4705), (12, 4822), (14, 4846), (15, 4861), (16, 4864), (20, 4921), (21, 4924), (22, 4930), (25, 4957), (34, 5110), (41, 5134), (50, 5251), (55, 5317), (56, 5320), (57, 5335), (59, 5341), (61, 5356),

Gene: L5_10 Start: 4581, Stop: 5459, Start Num: 2

Candidate Starts for L5_10:

(Start: 2 @4581 has 21 MA's), (5, 4626), (6, 4689), (8, 4713), (12, 4830), (14, 4854), (15, 4869), (16, 4872), (20, 4929), (21, 4932), (22, 4938), (25, 4965), (34, 5118), (41, 5142), (50, 5259), (55, 5325), (56, 5328), (57, 5343), (59, 5349), (61, 5364),

Gene: LadyBird_9 Start: 4681, Stop: 5976, Start Num: 3

Candidate Starts for LadyBird_9:

(Start: 3 @4681 has 51 MA's), (5, 4726), (8, 4813), (10, 4837), (16, 4972), (21, 5032), (22, 5038), (23, 5059), (25, 5065), (47, 5293), (54, 5341), (76, 5560), (80, 5593), (90, 5698), (97, 5746),

Gene: LionsBait_10 Start: 6239, Stop: 7756, Start Num: 3

Candidate Starts for LionsBait_10:

(Start: 3 @6239 has 51 MA's), (5, 6284), (8, 6371), (11, 6464), (16, 6530), (18, 6545), (21, 6590), (22, 6596), (23, 6617), (25, 6623), (48, 6872), (49, 6887), (67, 7145), (72, 7235), (80, 7364), (90, 7469), (96, 7514), (100, 7532), (105, 7595),

Gene: Loser_12 Start: 6404, Stop: 7858, Start Num: 3

Candidate Starts for Loser_12:

(Start: 3 @6404 has 51 MA's), (4, 6416), (8, 6536), (12, 6653), (16, 6695), (21, 6755), (22, 6761), (23, 6782), (24, 6785), (42, 6968), (49, 7055), (58, 7202), (60, 7205), (64, 7286), (75, 7475), (79, 7517), (81, 7535), (82, 7541), (99, 7658), (106, 7724), (113, 7763),

Gene: MajorMajor_8 Start: 4332, Stop: 5210, Start Num: 2

Candidate Starts for MajorMajor_8:

(Start: 2 @4332 has 21 MA's), (5, 4377), (6, 4440), (8, 4464), (16, 4623), (21, 4683), (22, 4689), (23, 4710), (25, 4716), (34, 4869), (41, 4893), (50, 5010), (55, 5076), (56, 5079), (57, 5094), (59, 5100), (61, 5115), (63, 5172),

Gene: MiculUcigas_9 Start: 4749, Stop: 6053, Start Num: 3

Candidate Starts for MiculUcigas_9:

(Start: 3 @4749 has 51 MA's), (4, 4761), (5, 4794), (8, 4881), (13, 5013), (16, 5040), (21, 5100), (22, 5106), (23, 5127), (28, 5187), (36, 5286), (38, 5289), (47, 5361), (54, 5409), (76, 5628), (80, 5661), (87, 5715), (90, 5766), (96, 5811), (100, 5829),

Gene: MissWhite_9 Start: 4390, Stop: 5277, Start Num: 3

Candidate Starts for MissWhite_9:

(Start: 3 @4390 has 51 MA's), (5, 4435), (8, 4522), (12, 4639), (15, 4678), (16, 4681), (21, 4741), (22, 4747), (23, 4768), (25, 4774), (28, 4822), (35, 4921), (39, 4930), (45, 4987), (51, 5068), (53, 5077),

Gene: NaSiaTalie_9 Start: 4749, Stop: 6050, Start Num: 3

Candidate Starts for NaSiaTalie_9:

(Start: 3 @4749 has 51 MA's), (5, 4794), (8, 4881), (16, 5040), (21, 5100), (22, 5106), (23, 5127), (36, 5283), (38, 5286), (47, 5358), (54, 5406), (76, 5625), (80, 5658), (87, 5712), (90, 5763), (96, 5808), (100, 5826),

Gene: Naji_12 Start: 4697, Stop: 6178, Start Num: 2

Candidate Starts for Naji_12:

(Start: 2 @4697 has 21 MA's), (5, 4742), (16, 4988), (21, 5048), (22, 5054), (23, 5075), (27, 5129), (28, 5135), (45, 5303), (49, 5354), (60, 5504), (64, 5585), (75, 5774), (79, 5816), (88, 5879), (99, 5978), (115, 6107),

Gene: NicoleTera_13 Start: 6467, Stop: 7756, Start Num: 3

Candidate Starts for NicoleTera_13:

(Start: 3 @6467 has 51 MA's), (5, 6512), (8, 6599), (12, 6716), (16, 6758), (19, 6791), (21, 6818), (22, 6824), (23, 6845), (25, 6851), (28, 6893), (47, 7064), (54, 7112), (76, 7331), (80, 7364), (90, 7469), (94, 7505), (97, 7517), (104, 7577), (105, 7595), (116, 7697),

Gene: Odin_9 Start: 4473, Stop: 5888, Start Num: 3

Candidate Starts for Odin_9:

(Start: 3 @4473 has 51 MA's), (16, 4764), (21, 4824), (22, 4830), (23, 4851), (25, 4857), (26, 4896), (45, 5079), (49, 5130), (77, 5559), (83, 5610), (84, 5613), (94, 5673), (95, 5676),

Gene: Ph8s_11 Start: 4474, Stop: 5847, Start Num: 3

Candidate Starts for Ph8s_11:

(Start: 3 @4474 has 51 MA's), (9, 4609), (10, 4630), (16, 4765), (19, 4798), (21, 4825), (22, 4831), (23, 4852), (25, 4858), (43, 5062), (49, 5131), (67, 5341), (71, 5404), (82, 5566), (83, 5569), (94, 5632), (95, 5635), (105, 5722),

Gene: Piro94_10 Start: 5206, Stop: 6510, Start Num: 3

Candidate Starts for Piro94_10:

(Start: 3 @5206 has 51 MA's), (5, 5251), (8, 5338), (11, 5431), (16, 5497), (21, 5557), (22, 5563), (23, 5584), (28, 5644), (36, 5743), (38, 5746), (47, 5818), (76, 6085), (80, 6118), (87, 6172), (90, 6223), (96, 6268), (100, 6286),

Gene: Pomar16_12 Start: 4738, Stop: 6219, Start Num: 2

Candidate Starts for Pomar16_12:

(Start: 2 @4738 has 21 MA's), (5, 4783), (16, 5029), (21, 5089), (22, 5095), (23, 5116), (28, 5176), (45, 5344), (49, 5395), (60, 5545), (64, 5626), (75, 5815), (79, 5857), (88, 5920), (99, 6019), (115, 6148),

Gene: Power_9 Start: 4694, Stop: 5941, Start Num: 3

Candidate Starts for Power_9:

(Start: 3 @4694 has 51 MA's), (4, 4706), (5, 4739), (8, 4826), (10, 4850), (12, 4943), (16, 4985), (18, 5000), (21, 5045), (22, 5051), (23, 5072), (24, 5075), (38, 5222), (54, 5342), (76, 5561), (79, 5591), (82, 5615), (85, 5639), (98, 5738), (106, 5804), (108, 5810), (115, 5867),

Gene: Prudy_11 Start: 6526, Stop: 7824, Start Num: 3

Candidate Starts for Prudy_11:

(Start: 3 @6526 has 51 MA's), (5, 6571), (13, 6790), (16, 6817), (21, 6877), (22, 6883), (23, 6904), (25, 6910), (28, 6958), (54, 7180), (76, 7399), (80, 7432), (90, 7537), (91, 7555), (94, 7573), (97, 7585), (105, 7663), (115, 7753), (116, 7765),

Gene: QueenB2_9 Start: 4800, Stop: 6035, Start Num: 3

Candidate Starts for QueenB2_9:

(Start: 3 @4800 has 51 MA's), (4, 4812), (5, 4845), (8, 4932), (10, 4956), (12, 5049), (16, 5091), (21, 5151), (22, 5157), (23, 5178), (25, 5184), (29, 5268), (38, 5328), (40, 5334), (47, 5400), (54, 5448), (76, 5667), (79, 5697), (82, 5721), (98, 5835), (106, 5901), (110, 5925),

Gene: QueenBeesly_9 Start: 4694, Stop: 5941, Start Num: 3

Candidate Starts for QueenBeesly_9:

(Start: 3 @4694 has 51 MA's), (4, 4706), (5, 4739), (7, 4823), (8, 4826), (10, 4850), (12, 4943), (16, 4985), (18, 5000), (21, 5045), (22, 5051), (23, 5072), (24, 5075), (38, 5222), (54, 5342), (76, 5561), (79, 5591), (82, 5615), (85, 5639), (98, 5738), (106, 5804), (108, 5810), (115, 5867),

Gene: Quokka_7 Start: 4332, Stop: 5210, Start Num: 2

Candidate Starts for Quokka_7:

(Start: 2 @4332 has 21 MA's), (5, 4377), (6, 4440), (8, 4464), (16, 4623), (21, 4683), (22, 4689), (23, 4710), (25, 4716), (34, 4869), (41, 4893), (50, 5010), (55, 5076), (56, 5079), (57, 5094), (59, 5100), (61, 5115), (63, 5172),

Gene: RedRock_12 Start: 6487, Stop: 7968, Start Num: 3

Candidate Starts for RedRock_12:

(Start: 3 @6487 has 51 MA's), (5, 6532), (8, 6619), (12, 6736), (16, 6778), (21, 6838), (22, 6844), (23, 6865), (24, 6868), (31, 7009), (42, 7057), (49, 7144), (58, 7291), (60, 7294), (64, 7375), (75, 7564), (79, 7606), (81, 7624), (82, 7630), (85, 7654), (99, 7768), (102, 7777), (115, 7897),

Gene: Retro23_9 Start: 4797, Stop: 6089, Start Num: 3

Candidate Starts for Retro23_9:

(Start: 3 @4797 has 51 MA's), (4, 4809), (5, 4842), (8, 4929), (10, 4953), (12, 5046), (16, 5088), (18, 5103), (21, 5148), (22, 5154), (23, 5175), (29, 5265), (38, 5325), (40, 5331), (54, 5445), (76, 5664), (80, 5697), (85, 5742), (90, 5802), (96, 5847), (105, 5928), (116, 6030),

Gene: SemperFi_11 Start: 5122, Stop: 6369, Start Num: 3

Candidate Starts for SemperFi_11:

(Start: 3 @5122 has 51 MA's), (4, 5134), (5, 5167), (8, 5254), (10, 5278), (12, 5371), (16, 5413), (18, 5428), (21, 5473), (22, 5479), (23, 5500), (24, 5503), (38, 5650), (54, 5770), (76, 5989), (79, 6019), (82, 6043), (85, 6067), (98, 6166), (106, 6232), (108, 6238), (115, 6295),

Gene: Serenity_8 Start: 4332, Stop: 5210, Start Num: 2

Candidate Starts for Serenity_8:

(Start: 2 @4332 has 21 MA's), (5, 4377), (6, 4440), (8, 4464), (16, 4623), (21, 4683), (22, 4689), (23, 4710), (25, 4716), (34, 4869), (41, 4893), (50, 5010), (55, 5076), (56, 5079), (57, 5094), (59, 5100), (61, 5115), (63, 5172),

Gene: Sheen_10 Start: 5731, Stop: 7155, Start Num: 2

Candidate Starts for Sheen_10:

(Start: 2 @5731 has 21 MA's), (5, 5776), (8, 5863), (12, 5980), (15, 6019), (16, 6022), (21, 6082), (22, 6088), (23, 6109), (25, 6115), (28, 6163), (33, 6256), (45, 6328), (47, 6346), (49, 6379), (62, 6550), (66, 6589), (77, 6790), (79, 6817), (82, 6838), (85, 6862), (92, 6922), (93, 6925), (99, 6955), (103, 6979), (106, 7021), (107, 7024), (112, 7060), (114, 7066), (119, 7138),

Gene: Sknot_9 Start: 4749, Stop: 6053, Start Num: 3

Candidate Starts for Sknot_9:

(Start: 3 @4749 has 51 MA's), (4, 4761), (5, 4794), (8, 4881), (13, 5013), (16, 5040), (21, 5100), (22, 5106), (23, 5127), (28, 5187), (36, 5286), (38, 5289), (47, 5361), (54, 5409), (76, 5628), (80, 5661), (87, 5715), (90, 5766), (96, 5811), (100, 5829),

Gene: SnapTap_9 Start: 4694, Stop: 5941, Start Num: 3

Candidate Starts for SnapTap_9:

(Start: 3 @4694 has 51 MA's), (4, 4706), (5, 4739), (8, 4826), (10, 4850), (12, 4943), (16, 4985), (18, 5000), (21, 5045), (22, 5051), (23, 5072), (24, 5075), (38, 5222), (54, 5342), (76, 5561), (79, 5591), (82, 5615), (85, 5639), (98, 5738), (106, 5804), (108, 5810), (115, 5867),

Gene: StarStuff_12 Start: 4697, Stop: 6178, Start Num: 2

Candidate Starts for StarStuff_12:

(Start: 2 @4697 has 21 MA's), (5, 4742), (16, 4988), (21, 5048), (22, 5054), (23, 5075), (27, 5129), (28, 5135), (45, 5303), (49, 5354), (60, 5504), (64, 5585), (75, 5774), (79, 5816), (88, 5879), (99, 5978), (115, 6107),

Gene: Superchunk_9 Start: 4337, Stop: 5746, Start Num: 2

Candidate Starts for Superchunk_9:

(1, 4331), (Start: 2 @4337 has 21 MA's), (16, 4628), (21, 4688), (22, 4694), (23, 4715), (25, 4721), (28, 4769), (45, 4937), (49, 4988), (77, 5417), (83, 5468), (84, 5471), (94, 5531), (95, 5534), (117, 5717),

Gene: SweetiePie_9 Start: 4694, Stop: 5941, Start Num: 3

Candidate Starts for SweetiePie_9:

(Start: 3 @4694 has 51 MA's), (4, 4706), (5, 4739), (8, 4826), (10, 4850), (12, 4943), (16, 4985), (18, 5000), (21, 5045), (22, 5051), (23, 5072), (24, 5075), (38, 5222), (54, 5342), (76, 5561), (79, 5591), (82, 5615), (85, 5639), (98, 5738), (106, 5804), (108, 5810), (115, 5867),

Gene: SwirlSquare_11 Start: 4508, Stop: 5878, Start Num: 3

Candidate Starts for SwirlSquare_11:

(Start: 3 @4508 has 51 MA's), (10, 4664), (16, 4799), (21, 4859), (22, 4865), (23, 4886), (25, 4892), (28, 4940), (46, 5120), (49, 5159), (62, 5321), (69, 5408), (78, 5555), (83, 5600), (84, 5603), (94, 5663), (95, 5666), (117, 5849),

Gene: Terrific_13 Start: 5203, Stop: 6507, Start Num: 3

Candidate Starts for Terrific_13:

(Start: 3 @5203 has 51 MA's), (5, 5248), (8, 5335), (16, 5494), (21, 5554), (22, 5560), (23, 5581), (28, 5641), (36, 5740), (38, 5743), (47, 5815), (76, 6082), (80, 6115), (87, 6169), (90, 6220), (96, 6265), (100, 6283),

Gene: TopsytheTRex_8 Start: 4285, Stop: 5163, Start Num: 2

Candidate Starts for TopsytheTRex_8:

(Start: 2 @4285 has 21 MA's), (5, 4330), (6, 4393), (8, 4417), (9, 4420), (12, 4534), (16, 4576), (21, 4636), (22, 4642), (25, 4669), (34, 4822), (41, 4846), (50, 4963), (55, 5029), (57, 5047), (59, 5053), (61, 5068), (63, 5125),

Gene: Tomathan_12 Start: 4697, Stop: 6178, Start Num: 2

Candidate Starts for Tomathan_12:

(Start: 2 @4697 has 21 MA's), (5, 4742), (16, 4988), (21, 5048), (22, 5054), (23, 5075), (27, 5129), (28, 5135), (45, 5303), (49, 5354), (60, 5504), (64, 5585), (75, 5774), (79, 5816), (88, 5879), (99, 5978), (115, 6107),

Gene: Toro_11 Start: 5649, Stop: 7097, Start Num: 2

Candidate Starts for Toro_11:

(Start: 2 @5649 has 21 MA's), (5, 5694), (8, 5781), (12, 5898), (15, 5937), (16, 5940), (21, 6000), (22, 6006), (23, 6027), (25, 6033), (28, 6081), (33, 6174), (45, 6246), (49, 6297), (60, 6447), (62, 6507), (64, 6528), (71, 6618), (73, 6645), (77, 6732), (79, 6759), (82, 6780), (85, 6804), (92, 6864), (93, 6867), (99, 6897), (103, 6921), (106, 6963), (107, 6966), (112, 7002), (114, 7008), (119, 7080),

Gene: Travvers_12 Start: 4697, Stop: 6178, Start Num: 2

Candidate Starts for Travvers_12:

(Start: 2 @4697 has 21 MA's), (5, 4742), (16, 4988), (21, 5048), (22, 5054), (23, 5075), (27, 5129), (28, 5135), (45, 5303), (49, 5354), (60, 5504), (64, 5585), (75, 5774), (79, 5816), (88, 5879), (99, 5978), (115, 6107),

Gene: Trixie_12 Start: 6376, Stop: 7671, Start Num: 3

Candidate Starts for Trixie_12:

(Start: 3 @6376 has 51 MA's), (4, 6388), (5, 6421), (8, 6508), (10, 6532), (12, 6625), (16, 6667), (18, 6682), (21, 6727), (22, 6733), (23, 6754), (25, 6760), (54, 7033), (76, 7252), (80, 7279), (85, 7324), (90, 7384), (105, 7510), (115, 7600), (116, 7612),

Gene: Updawg_11 Start: 5191, Stop: 6495, Start Num: 3

Candidate Starts for Updawg_11:

(Start: 3 @5191 has 51 MA's), (5, 5236), (8, 5323), (16, 5482), (21, 5542), (22, 5548), (23, 5569), (24, 5572), (28, 5629), (36, 5728), (38, 5731), (47, 5803), (54, 5851), (76, 6070), (80, 6103), (87, 6157), (90, 6208), (96, 6253), (100, 6271), (111, 6388),

Gene: VA6_9 Start: 4672, Stop: 5973, Start Num: 3

Candidate Starts for VA6_9:

(Start: 3 @4672 has 51 MA's), (5, 4717), (8, 4804), (10, 4828), (12, 4921), (16, 4963), (18, 4978), (21, 5023), (22, 5029), (23, 5050), (25, 5056), (38, 5212), (47, 5284), (54, 5332), (68, 5455), (76, 5551), (80, 5584), (90, 5689), (94, 5725), (105, 5815), (116, 5917),

Gene: VC3_12 Start: 4696, Stop: 6177, Start Num: 2

Candidate Starts for VC3_12:

(Start: 2 @4696 has 21 MA's), (5, 4741), (7, 4825), (16, 4987), (21, 5047), (22, 5053), (23, 5074), (27, 5128), (28, 5134), (45, 5302), (49, 5353), (60, 5503), (64, 5584), (79, 5815), (88, 5878), (99, 5977), (115, 6106),

Gene: WeiHuaDA_15 Start: 6986, Stop: 8281, Start Num: 3

Candidate Starts for WeiHuaDA_15:

(Start: 3 @6986 has 51 MA's), (4, 6998), (5, 7031), (8, 7118), (10, 7142), (12, 7235), (16, 7277), (21, 7337), (22, 7343), (23, 7364), (25, 7370), (29, 7454), (32, 7511), (54, 7643), (76, 7862), (80, 7889), (85, 7934), (89, 7976), (90, 7994), (96, 8039), (105, 8120), (114, 8192), (116, 8222),

Gene: WideWale_11 Start: 5191, Stop: 6495, Start Num: 3

Candidate Starts for WideWale_11:

(Start: 3 @5191 has 51 MA's), (5, 5236), (8, 5323), (16, 5482), (21, 5542), (22, 5548), (23, 5569), (24, 5572), (28, 5629), (36, 5728), (38, 5731), (47, 5803), (54, 5851), (76, 6070), (80, 6103), (87, 6157), (90, 6208), (96, 6253), (100, 6271), (111, 6388),