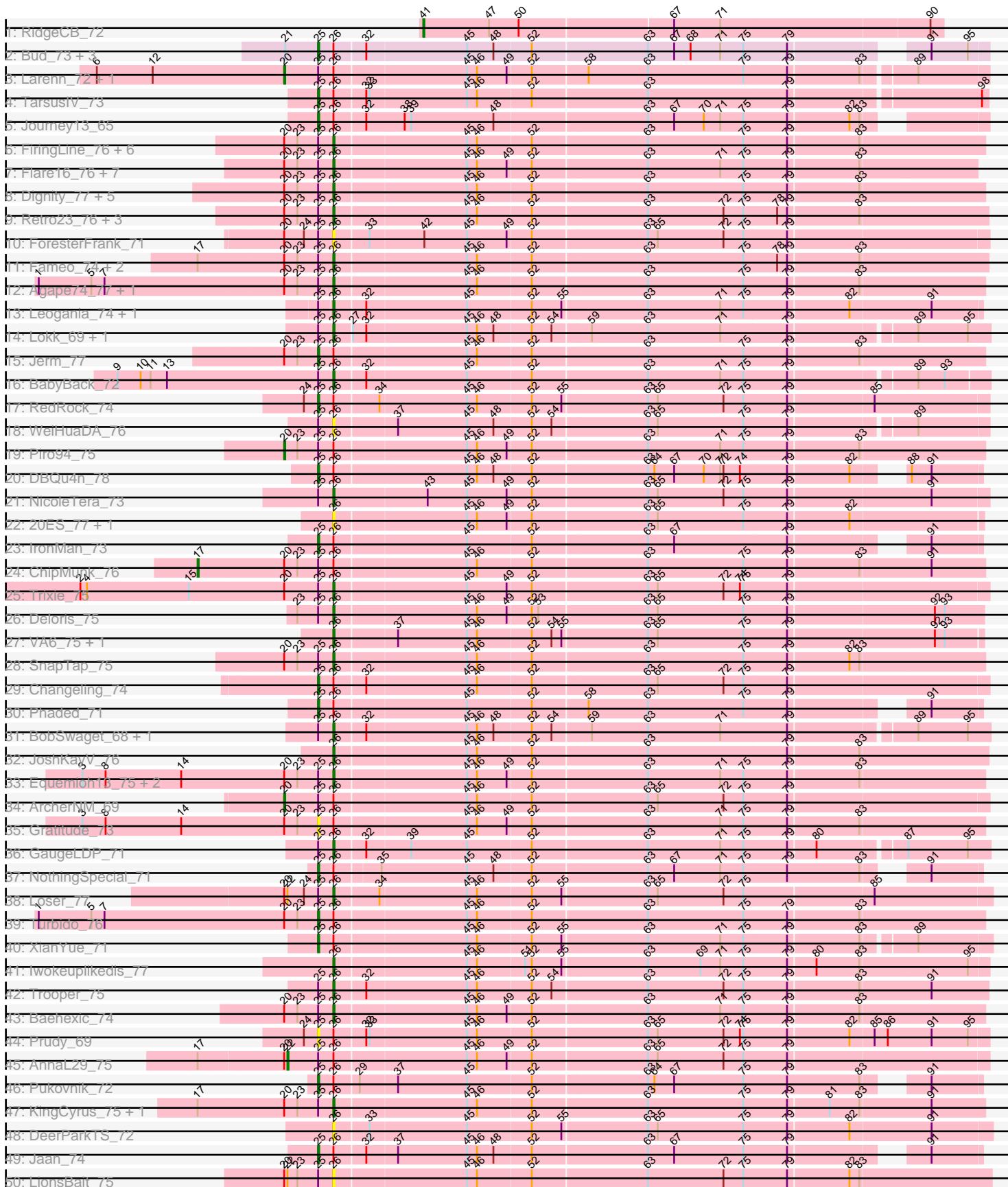


Pham 296449



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 296449 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296449 has 91 members, 11 are drafts.

Phages represented in each track:

- Track 1 : RidgeCB_72
- Track 2 : Bud_73, Mulciber_76, Fibonacci_77, Munch_78
- Track 3 : Larenn_72, Malec_73
- Track 4 : TarsusIV_73
- Track 5 : Journey13_65
- Track 6 : FiringLine_76, Power_75, SemperFi_76, SweetiePie_75, QueenBeesly_76, Crucio_76, Georgie2_77
- Track 7 : Flare16_76, Centaur_76, Terrific_76, HarryHoudini_76, NaSiaTalie_76, Sknot_76, Drake55_77, MiculUcigas_76
- Track 8 : Dignity_77, Leviathan_77, Smeagan_78, LilTurb_76, Buggy_77, Whabigail7_76
- Track 9 : Retro23_76, Dalmatian_76, DudeLittle_74, Anselm_77
- Track 10 : ForesterFrank_71
- Track 11 : Fameo_74, Heffalump_73, QueenB2_73
- Track 12 : Agape74_77, AbbyPaige_77
- Track 13 : Leogania_74, BiancaTri92_74
- Track 14 : Lokk_69, Rachaly_71
- Track 15 : Jerm_77
- Track 16 : BabyBack_72
- Track 17 : RedRock_74
- Track 18 : WeiHuaDA_76
- Track 19 : Piro94_75
- Track 20 : DBQu4n_78
- Track 21 : NicoleTera_73
- Track 22 : 20ES_77, First_0076
- Track 23 : IronMan_73
- Track 24 : ChipMunk_76
- Track 25 : Trixie_75
- Track 26 : Deloris_75
- Track 27 : VA6_75, AN3_77
- Track 28 : SnapTap_75
- Track 29 : Changeling_74
- Track 30 : Phaded_71
- Track 31 : BobSwaget_68, Miko_69
- Track 32 : JoshKayV_76
- Track 33 : Equemioh13_75, WideWale_76, Updawg_76
- Track 34 : ArcherNM_69

- Track 35 : Gratitude_73
- Track 36 : GaugeLDP_71
- Track 37 : NothingSpecial_71
- Track 38 : Loser_77
- Track 39 : Turbido_76
- Track 40 : XianYue_71
- Track 41 : Iwokeuplikedis_77
- Track 42 : Trooper_75
- Track 43 : Baehexic_74
- Track 44 : Prudy_69
- Track 45 : AnnaL29_75
- Track 46 : Pukovnik_72
- Track 47 : KingCyrus_75, EvilGenius_75
- Track 48 : DeerParkTS_72
- Track 49 : Jaan_74
- Track 50 : LionsBait_75
- Track 51 : Kalpine_75
- Track 52 : Colin_75
- Track 53 : Taquito_84
- Track 54 : Aminay_81
- Track 55 : Tailonex_62

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

The start number called the most often in the published annotations is 26, it was called in 54 of the 80 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 20ES_77, AN3_77, AbbyPaige_77, Agape74_77, Anselm_77, BabyBack_72, Baehexic_74, BiancaTri92_74, BobSwaget_68, Buggy_77, Centaur_76, Colin_75, Crucio_76, Dalmatian_76, DeerParkTS_72, Deloris_75, Dignity_77, Drake55_77, DudeLittle_74, Equemioh13_75, EvilGenius_75, Fameo_74, FiringLine_76, First_0076, Flare16_76, ForesterFrank_71, GaugeLDP_71, Georgie2_77, HarryHoudini_76, Heffalump_73, Iwokeuplikedis_77, JoshKayV_76, Kalpine_75, KingCyrus_75, Leogania_74, Leviathan_77, LilTurb_76, LionsBait_75, Lokk_69, Loser_77, MiculUcigas_76, Miko_69, NaSiaTalie_76, NicoleTera_73, Power_75, QueenB2_73, QueenBeesly_76, Rachaly_71, Retro23_76, SemperFi_76, Sknot_76, Smeagan_78, SnapTap_75, SweetiePie_75, Terrific_76, Trixie_75, Trooper_75, Updawg_76, VA6_75, WeiHuaDA_76, Whabigail7_76, WideWale_76,

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

- AnnaL29_75, ArcherNM_69, Bud_73, Changeling_74, ChipMunk_76, DBQu4n_78, Fibonacci_77, Gratitude_73, IronMan_73, Jaan_74, Jerm_77, Journey13_65, Larenn_72, Malec_73, Mulciber_76, Munch_78, NothingSpecial_71, Phaded_71, Piro94_75, Prudy_69, Pukovnik_72, RedRock_74, TarsusIV_73, Turbido_76, XianYue_71,

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

- Aminay_81, RidgeCB_72, Tailonex_62, Taquito_84,

Summary by start number:

Start 17:

- Found in 7 of 91 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 80
- Called 14.3% of time when present
- Phage (with cluster) where this start called: ChipMunk_76 (A2),

Start 18:

- Found in 2 of 91 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 80
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Taquito_84 (K4),

Start 20:

- Found in 52 of 91 (57.1%) of genes in pham
- Manual Annotations of this start: 4 of 80
- Called 7.7% of time when present
- Phage (with cluster) where this start called: ArcherNM_69 (A2), Larenn_72 (A2), Malec_73 (A2), Piro94_75 (A2),

Start 22:

- Found in 3 of 91 (3.3%) of genes in pham
- Manual Annotations of this start: 1 of 80
- Called 33.3% of time when present
- Phage (with cluster) where this start called: AnnaL29_75 (A2),

Start 25:

- Found in 80 of 91 (87.9%) of genes in pham
- Manual Annotations of this start: 17 of 80
- Called 23.8% of time when present
- Phage (with cluster) where this start called: Bud_73 (A11), Changeling_74 (A2), DBQu4n_78 (A2), Fibonacci_77 (A11), Gratitude_73 (A2), IronMan_73 (A2), Jaan_74 (A2), Jerm_77 (A2), Journey13_65 (A2), Mulciber_76 (A11), Munch_78 (A11), NothingSpecial_71 (A2), Phaded_71 (A2), Prudy_69 (A2), Pukovnik_72 (A2), RedRock_74 (A2), TarsusIV_73 (A2), Turbido_76 (A2), XianYue_71 (A2),

Start 26:

- Found in 87 of 91 (95.6%) of genes in pham
- Manual Annotations of this start: 54 of 80
- Called 71.3% of time when present
- Phage (with cluster) where this start called: 20ES_77 (A2), AN3_77 (A2), AbbyPaige_77 (A2), Agape74_77 (A2), Anselm_77 (A2), BabyBack_72 (A2), Baehexic_74 (A2), BiancaTri92_74 (A2), BobSwaget_68 (A2), Buggy_77 (A2), Centaur_76 (A2), Colin_75 (A2), Crucio_76 (A2), Dalmatian_76 (A2), DeerParkTS_72 (A2), Deloris_75 (A2), Dignity_77 (A2), Drake55_77 (A2), DudeLittle_74 (A2), Equemioh13_75 (A2), EvilGenius_75 (A2), Fameo_74 (A2), FiringLine_76 (A2), First_0076 (A2), Flare16_76 (A2), ForesterFrank_71 (A2), GaugeLDP_71 (A2), Georgie2_77 (A2), HarryHoudini_76 (A2), Heffalump_73 (A2), Iwokeuplikedis_77 (A2), JoshKayV_76 (A2), Kalpine_75 (A2), KingCyrus_75 (A2), Leogania_74 (A2), Leviathan_77 (A2), LilTurb_76 (A2), LionsBait_75 (A2), Lokk_69 (A2), Loser_77 (A2), MiculUcigas_76 (A2), Miko_69 (A2), NaSiaTalie_76 (A2), NicoleTera_73 (A2), Power_75 (A2), QueenB2_73 (A2), QueenBeesly_76 (A2), Rachaly_71 (A2),

Retro23_76 (A2), SemperFi_76 (A2), Sknot_76 (A2), Smeagan_78 (A2), SnapTap_75 (A2), SweetiePie_75 (A2), Terrific_76 (A2), Trixie_75 (A2), Trooper_75 (A2), Updawg_76 (A2), VA6_75 (A2), WeiHuaDA_76 (A2), Whabigail7_76 (A2), WideWale_76 (A2),

Start 28:

- Found in 1 of 91 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 80
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay_81 (K7),

Start 36:

- Found in 1 of 91 (1.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tailonex_62 (singleton),

Start 41:

- Found in 1 of 91 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 80
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RidgeCB_72 (A1),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, A11, A1, A2, K7, K4,

Info for manual annotations of cluster A1:

- Start number 41 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A11:

- Start number 25 was manually annotated 4 times for cluster A11.

Info for manual annotations of cluster A2:

- Start number 17 was manually annotated 1 time for cluster A2.
- Start number 20 was manually annotated 4 times for cluster A2.
- Start number 22 was manually annotated 1 time for cluster A2.
- Start number 25 was manually annotated 13 times for cluster A2.
- Start number 26 was manually annotated 54 times for cluster A2.

Info for manual annotations of cluster K4:

- Start number 18 was manually annotated 1 time for cluster K4.

Info for manual annotations of cluster K7:

- Start number 28 was manually annotated 1 time for cluster K7.

Gene Information:

Gene: 20ES_77 Start: 45500, Stop: 44928, Start Num: 26

Candidate Starts for 20ES_77:

(Start: 26 @45500 has 54 MA's), (45, 45383), (46, 45374), (49, 45347), (52, 45326), (63, 45224), (65, 45215), (75, 45137), (79, 45098), (82, 45044),

Gene: AN3_77 Start: 44285, Stop: 43713, Start Num: 26

Candidate Starts for AN3_77:

(Start: 26 @44285 has 54 MA's), (37, 44231), (45, 44168), (46, 44159), (52, 44111), (54, 44093), (55, 44084), (63, 44009), (65, 44000), (75, 43922), (79, 43883), (92, 43754), (93, 43745),

Gene: AbbyPaige_77 Start: 45770, Stop: 45195, Start Num: 26

Candidate Starts for AbbyPaige_77:

(1, 46034), (5, 45986), (7, 45974), (Start: 20 @45812 has 4 MA's), (23, 45800), (Start: 25 @45782 has 17 MA's), (Start: 26 @45770 has 54 MA's), (45, 45653), (46, 45644), (52, 45596), (63, 45494), (75, 45407), (79, 45368), (83, 45305),

Gene: Agape74_77 Start: 45765, Stop: 45190, Start Num: 26

Candidate Starts for Agape74_77:

(1, 46029), (5, 45981), (7, 45969), (Start: 20 @45807 has 4 MA's), (23, 45795), (Start: 25 @45777 has 17 MA's), (Start: 26 @45765 has 54 MA's), (45, 45648), (46, 45639), (52, 45591), (63, 45489), (75, 45402), (79, 45363), (83, 45300),

Gene: Aminay_81 Start: 51706, Stop: 52278, Start Num: 28

Candidate Starts for Aminay_81:

(Start: 18 @51604 has 1 MA's), (Start: 28 @51706 has 1 MA's), (31, 51715), (42, 51769), (46, 51817), (48, 51832), (49, 51844), (56, 51907), (61, 51946), (66, 51985), (73, 52036), (78, 52075), (83, 52147), (94, 52228), (96, 52243), (97, 52246),

Gene: AnnaL29_75 Start: 45761, Stop: 45144, Start Num: 22

Candidate Starts for AnnaL29_75:

(Start: 17 @45839 has 1 MA's), (Start: 20 @45764 has 4 MA's), (Start: 22 @45761 has 1 MA's), (Start: 25 @45734 has 17 MA's), (Start: 26 @45722 has 54 MA's), (45, 45605), (46, 45596), (49, 45569), (52, 45548), (63, 45446), (65, 45437), (72, 45377), (75, 45359), (79, 45320),

Gene: Anselm_77 Start: 45836, Stop: 45258, Start Num: 26

Candidate Starts for Anselm_77:

(Start: 20 @45878 has 4 MA's), (23, 45866), (Start: 25 @45848 has 17 MA's), (Start: 26 @45836 has 54 MA's), (45, 45719), (46, 45710), (52, 45662), (63, 45560), (72, 45491), (75, 45473), (78, 45443), (79, 45434), (83, 45371),

Gene: ArcherNM_69 Start: 45032, Stop: 44412, Start Num: 20

Candidate Starts for ArcherNM_69:

(Start: 20 @45032 has 4 MA's), (Start: 25 @45002 has 17 MA's), (Start: 26 @44990 has 54 MA's), (45, 44873), (46, 44864), (52, 44816), (63, 44714), (65, 44705), (72, 44645), (75, 44627), (79, 44588),

Gene: BabyBack_72 Start: 45412, Stop: 44843, Start Num: 26

Candidate Starts for BabyBack_72:

(9, 45607), (10, 45586), (11, 45577), (13, 45562), (Start: 25 @45424 has 17 MA's), (Start: 26 @45412 has 54 MA's), (32, 45385), (45, 45295), (52, 45238), (63, 45136), (71, 45070), (75, 45049), (79, 45010), (89, 44905), (93, 44881),

Gene: Baehexic_74 Start: 45162, Stop: 44587, Start Num: 26

Candidate Starts for Baehexic_74:

(Start: 20 @45204 has 4 MA's), (23, 45192), (Start: 25 @45174 has 17 MA's), (Start: 26 @45162 has 54 MA's), (45, 45045), (46, 45036), (49, 45009), (52, 44988), (63, 44886), (71, 44820), (75, 44799),

(79, 44760), (83, 44697),

Gene: BiancaTri92_74 Start: 45410, Stop: 44838, Start Num: 26

Candidate Starts for BiancaTri92_74:

(Start: 25 @45422 has 17 MA's), (Start: 26 @45410 has 54 MA's), (32, 45383), (45, 45293), (52, 45236), (55, 45209), (63, 45134), (71, 45068), (75, 45047), (79, 45008), (82, 44954), (91, 44882),

Gene: BobSwaget_68 Start: 43285, Stop: 42713, Start Num: 26

Candidate Starts for BobSwaget_68:

(Start: 25 @43297 has 17 MA's), (Start: 26 @43285 has 54 MA's), (32, 43258), (45, 43168), (46, 43159), (48, 43144), (52, 43111), (54, 43093), (59, 43060), (63, 43009), (71, 42943), (79, 42883), (89, 42778), (95, 42733),

Gene: Bud_73 Start: 43799, Stop: 43236, Start Num: 25

Candidate Starts for Bud_73:

(21, 43829), (Start: 25 @43799 has 17 MA's), (Start: 26 @43787 has 54 MA's), (32, 43760), (45, 43670), (48, 43646), (52, 43613), (63, 43511), (67, 43487), (68, 43472), (71, 43445), (75, 43424), (79, 43385), (91, 43286), (95, 43253),

Gene: Buggy_77 Start: 45815, Stop: 45240, Start Num: 26

Candidate Starts for Buggy_77:

(Start: 20 @45857 has 4 MA's), (23, 45845), (Start: 25 @45827 has 17 MA's), (Start: 26 @45815 has 54 MA's), (45, 45698), (46, 45689), (52, 45641), (63, 45539), (75, 45452), (79, 45413), (83, 45350),

Gene: Centaur_76 Start: 45368, Stop: 44799, Start Num: 26

Candidate Starts for Centaur_76:

(Start: 20 @45410 has 4 MA's), (23, 45398), (Start: 25 @45380 has 17 MA's), (Start: 26 @45368 has 54 MA's), (45, 45251), (46, 45242), (49, 45215), (52, 45194), (63, 45092), (71, 45026), (75, 45005), (79, 44966), (83, 44903),

Gene: Changeling_74 Start: 45726, Stop: 45136, Start Num: 25

Candidate Starts for Changeling_74:

(Start: 25 @45726 has 17 MA's), (Start: 26 @45714 has 54 MA's), (32, 45687), (45, 45597), (46, 45588), (52, 45540), (63, 45438), (65, 45429), (72, 45369), (75, 45351), (79, 45312),

Gene: ChipMunk_76 Start: 46976, Stop: 46281, Start Num: 17

Candidate Starts for ChipMunk_76:

(Start: 17 @46976 has 1 MA's), (Start: 20 @46898 has 4 MA's), (23, 46886), (Start: 25 @46868 has 17 MA's), (Start: 26 @46856 has 54 MA's), (45, 46739), (46, 46730), (52, 46682), (63, 46580), (75, 46493), (79, 46454), (83, 46391), (91, 46328),

Gene: Colin_75 Start: 46429, Stop: 45851, Start Num: 26

Candidate Starts for Colin_75:

(16, 46552), (Start: 20 @46471 has 4 MA's), (Start: 25 @46441 has 17 MA's), (Start: 26 @46429 has 54 MA's), (45, 46312), (52, 46255), (55, 46228), (60, 46186), (63, 46153), (65, 46144), (72, 46084), (75, 46066), (79, 46027), (91, 45901),

Gene: Crucio_76 Start: 45736, Stop: 45161, Start Num: 26

Candidate Starts for Crucio_76:

(Start: 20 @45778 has 4 MA's), (23, 45766), (Start: 25 @45748 has 17 MA's), (Start: 26 @45736 has 54 MA's), (45, 45619), (46, 45610), (52, 45562), (63, 45460), (75, 45373), (79, 45334), (83, 45271),

Gene: DBQu4n_78 Start: 45869, Stop: 45312, Start Num: 25

Candidate Starts for DBQu4n_78:

(Start: 25 @45869 has 17 MA's), (Start: 26 @45857 has 54 MA's), (45, 45740), (46, 45731), (48, 45716), (52, 45683), (63, 45581), (64, 45575), (67, 45557), (70, 45530), (71, 45515), (72, 45512), (74, 45497), (79, 45455), (82, 45401), (88, 45374), (91, 45356),

Gene: Dalmatian_76 Start: 45555, Stop: 44977, Start Num: 26

Candidate Starts for Dalmatian_76:

(Start: 20 @45597 has 4 MA's), (23, 45585), (Start: 25 @45567 has 17 MA's), (Start: 26 @45555 has 54 MA's), (45, 45438), (46, 45429), (52, 45381), (63, 45279), (72, 45210), (75, 45192), (78, 45162), (79, 45153), (83, 45090),

Gene: DeerParkTS_72 Start: 44448, Stop: 43867, Start Num: 26

Candidate Starts for DeerParkTS_72:

(Start: 26 @44448 has 54 MA's), (33, 44418), (45, 44331), (52, 44274), (55, 44247), (63, 44172), (65, 44163), (75, 44085), (79, 44046), (82, 43992), (91, 43920),

Gene: Deloris_75 Start: 45154, Stop: 44579, Start Num: 26

Candidate Starts for Deloris_75:

(23, 45184), (Start: 25 @45166 has 17 MA's), (Start: 26 @45154 has 54 MA's), (45, 45037), (46, 45028), (49, 45001), (52, 44980), (53, 44974), (63, 44878), (65, 44869), (75, 44791), (79, 44752), (92, 44623), (93, 44614),

Gene: Dignity_77 Start: 45853, Stop: 45278, Start Num: 26

Candidate Starts for Dignity_77:

(Start: 20 @45895 has 4 MA's), (23, 45883), (Start: 25 @45865 has 17 MA's), (Start: 26 @45853 has 54 MA's), (45, 45736), (46, 45727), (52, 45679), (63, 45577), (75, 45490), (79, 45451), (83, 45388),

Gene: Drake55_77 Start: 45449, Stop: 44874, Start Num: 26

Candidate Starts for Drake55_77:

(Start: 20 @45491 has 4 MA's), (23, 45479), (Start: 25 @45461 has 17 MA's), (Start: 26 @45449 has 54 MA's), (45, 45332), (46, 45323), (49, 45296), (52, 45275), (63, 45173), (71, 45107), (75, 45086), (79, 45047), (83, 44984),

Gene: DudeLittle_74 Start: 45321, Stop: 44743, Start Num: 26

Candidate Starts for DudeLittle_74:

(Start: 20 @45363 has 4 MA's), (23, 45351), (Start: 25 @45333 has 17 MA's), (Start: 26 @45321 has 54 MA's), (45, 45204), (46, 45195), (52, 45147), (63, 45045), (72, 44976), (75, 44958), (78, 44928), (79, 44919), (83, 44856),

Gene: Equemioh13_75 Start: 45271, Stop: 44696, Start Num: 26

Candidate Starts for Equemioh13_75:

(3, 45496), (8, 45475), (14, 45406), (Start: 20 @45313 has 4 MA's), (23, 45301), (Start: 25 @45283 has 17 MA's), (Start: 26 @45271 has 54 MA's), (45, 45154), (46, 45145), (49, 45118), (52, 45097), (63, 44995), (71, 44929), (75, 44908), (79, 44869), (83, 44806),

Gene: EvilGenius_75 Start: 46857, Stop: 46282, Start Num: 26

Candidate Starts for EvilGenius_75:

(Start: 17 @46977 has 1 MA's), (Start: 20 @46899 has 4 MA's), (23, 46887), (Start: 25 @46869 has 17 MA's), (Start: 26 @46857 has 54 MA's), (45, 46740), (46, 46731), (52, 46683), (63, 46581), (75, 46494), (79, 46455), (81, 46419), (83, 46392), (91, 46329),

Gene: Fameo_74 Start: 45363, Stop: 44785, Start Num: 26

Candidate Starts for Fameo_74:

(Start: 17 @45483 has 1 MA's), (Start: 20 @45405 has 4 MA's), (23, 45393), (Start: 25 @45375 has 17 MA's), (Start: 26 @45363 has 54 MA's), (45, 45246), (46, 45237), (52, 45189), (63, 45087), (75, 45000), (78, 44970), (79, 44961), (83, 44898),

Gene: Fibonacci_77 Start: 44902, Stop: 44339, Start Num: 25

Candidate Starts for Fibonacci_77:

(21, 44932), (Start: 25 @44902 has 17 MA's), (Start: 26 @44890 has 54 MA's), (32, 44863), (45, 44773), (48, 44749), (52, 44716), (63, 44614), (67, 44590), (68, 44575), (71, 44548), (75, 44527), (79, 44488), (91, 44389), (95, 44356),

Gene: FiringLine_76 Start: 45718, Stop: 45143, Start Num: 26

Candidate Starts for FiringLine_76:

(Start: 20 @45760 has 4 MA's), (23, 45748), (Start: 25 @45730 has 17 MA's), (Start: 26 @45718 has 54 MA's), (45, 45601), (46, 45592), (52, 45544), (63, 45442), (75, 45355), (79, 45316), (83, 45253),

Gene: First_0076 Start: 45400, Stop: 44828, Start Num: 26

Candidate Starts for First_0076:

(Start: 26 @45400 has 54 MA's), (45, 45283), (46, 45274), (49, 45247), (52, 45226), (63, 45124), (65, 45115), (75, 45037), (79, 44998), (82, 44944),

Gene: Flare16_76 Start: 45412, Stop: 44843, Start Num: 26

Candidate Starts for Flare16_76:

(Start: 20 @45454 has 4 MA's), (23, 45442), (Start: 25 @45424 has 17 MA's), (Start: 26 @45412 has 54 MA's), (45, 45295), (46, 45286), (49, 45259), (52, 45238), (63, 45136), (71, 45070), (75, 45049), (79, 45010), (83, 44947),

Gene: ForesterFrank_71 Start: 45516, Stop: 44938, Start Num: 26

Candidate Starts for ForesterFrank_71:

(Start: 20 @45558 has 4 MA's), (24, 45540), (Start: 25 @45528 has 17 MA's), (Start: 26 @45516 has 54 MA's), (33, 45486), (42, 45438), (45, 45399), (49, 45363), (52, 45342), (63, 45240), (65, 45231), (72, 45171), (75, 45153), (79, 45114),

Gene: GaugeLDP_71 Start: 44968, Stop: 44396, Start Num: 26

Candidate Starts for GaugeLDP_71:

(Start: 25 @44980 has 17 MA's), (Start: 26 @44968 has 54 MA's), (32, 44941), (39, 44902), (45, 44851), (52, 44794), (63, 44692), (71, 44626), (75, 44605), (79, 44566), (80, 44542), (87, 44470), (95, 44416),

Gene: Georgie2_77 Start: 45763, Stop: 45188, Start Num: 26

Candidate Starts for Georgie2_77:

(Start: 20 @45805 has 4 MA's), (23, 45793), (Start: 25 @45775 has 17 MA's), (Start: 26 @45763 has 54 MA's), (45, 45646), (46, 45637), (52, 45589), (63, 45487), (75, 45400), (79, 45361), (83, 45298),

Gene: Gratitude_73 Start: 45283, Stop: 44696, Start Num: 25

Candidate Starts for Gratitude_73:

(3, 45496), (8, 45475), (14, 45406), (Start: 20 @45313 has 4 MA's), (23, 45301), (Start: 25 @45283 has 17 MA's), (Start: 26 @45271 has 54 MA's), (45, 45154), (46, 45145), (49, 45118), (52, 45097), (63, 44995), (71, 44929), (75, 44908), (79, 44869), (83, 44806),

Gene: HarryHoudini_76 Start: 45446, Stop: 44871, Start Num: 26

Candidate Starts for HarryHoudini_76:

(Start: 20 @45488 has 4 MA's), (23, 45476), (Start: 25 @45458 has 17 MA's), (Start: 26 @45446 has 54 MA's), (45, 45329), (46, 45320), (49, 45293), (52, 45272), (63, 45170), (71, 45104), (75, 45083),

(79, 45044), (83, 44981),

Gene: Heffalump_73 Start: 45831, Stop: 45253, Start Num: 26

Candidate Starts for Heffalump_73:

(Start: 17 @45951 has 1 MA's), (Start: 20 @45873 has 4 MA's), (23, 45861), (Start: 25 @45843 has 17 MA's), (Start: 26 @45831 has 54 MA's), (45, 45714), (46, 45705), (52, 45657), (63, 45555), (75, 45468), (78, 45438), (79, 45429), (83, 45366),

Gene: IronMan_73 Start: 46531, Stop: 45974, Start Num: 25

Candidate Starts for IronMan_73:

(Start: 25 @46531 has 17 MA's), (Start: 26 @46519 has 54 MA's), (45, 46402), (52, 46345), (63, 46243), (67, 46219), (79, 46117), (91, 46018),

Gene: Iwokeuplikedis_77 Start: 45892, Stop: 45314, Start Num: 26

Candidate Starts for Iwokeuplikedis_77:

(Start: 26 @45892 has 54 MA's), (45, 45775), (46, 45766), (51, 45724), (52, 45718), (55, 45691), (63, 45616), (69, 45568), (71, 45550), (75, 45529), (79, 45490), (80, 45466), (83, 45427), (95, 45331),

Gene: Jaan_74 Start: 46696, Stop: 46139, Start Num: 25

Candidate Starts for Jaan_74:

(Start: 25 @46696 has 17 MA's), (Start: 26 @46684 has 54 MA's), (32, 46657), (37, 46630), (45, 46567), (46, 46558), (48, 46543), (52, 46510), (63, 46408), (67, 46384), (75, 46321), (79, 46282), (91, 46183),

Gene: Jerm_77 Start: 45848, Stop: 45261, Start Num: 25

Candidate Starts for Jerm_77:

(Start: 20 @45878 has 4 MA's), (23, 45866), (Start: 25 @45848 has 17 MA's), (Start: 26 @45836 has 54 MA's), (45, 45719), (46, 45710), (52, 45662), (63, 45560), (75, 45473), (79, 45434), (83, 45371),

Gene: JoshKayV_76 Start: 45870, Stop: 45292, Start Num: 26

Candidate Starts for JoshKayV_76:

(Start: 26 @45870 has 54 MA's), (45, 45753), (46, 45744), (52, 45696), (63, 45594), (79, 45468), (83, 45405),

Gene: Journey13_65 Start: 42021, Stop: 41458, Start Num: 25

Candidate Starts for Journey13_65:

(Start: 25 @42021 has 17 MA's), (Start: 26 @42009 has 54 MA's), (32, 41982), (38, 41949), (39, 41943), (48, 41868), (63, 41733), (67, 41709), (70, 41682), (71, 41667), (75, 41646), (79, 41607), (82, 41553), (83, 41544),

Gene: Kalpine_75 Start: 45776, Stop: 45198, Start Num: 26

Candidate Starts for Kalpine_75:

(Start: 20 @45818 has 4 MA's), (Start: 25 @45788 has 17 MA's), (Start: 26 @45776 has 54 MA's), (45, 45659), (46, 45650), (49, 45623), (52, 45602), (60, 45533), (63, 45500), (65, 45491), (72, 45431), (75, 45413), (79, 45374),

Gene: KingCyrus_75 Start: 46852, Stop: 46277, Start Num: 26

Candidate Starts for KingCyrus_75:

(Start: 17 @46972 has 1 MA's), (Start: 20 @46894 has 4 MA's), (23, 46882), (Start: 25 @46864 has 17 MA's), (Start: 26 @46852 has 54 MA's), (45, 46735), (46, 46726), (52, 46678), (63, 46576), (75, 46489), (79, 46450), (81, 46414), (83, 46387), (91, 46324),

Gene: Larenn_72 Start: 45147, Stop: 44536, Start Num: 20

Candidate Starts for Larenn_72:

(6, 45318), (12, 45267), (Start: 20 @45147 has 4 MA's), (Start: 25 @45117 has 17 MA's), (Start: 26 @45105 has 54 MA's), (45, 44988), (46, 44979), (49, 44952), (52, 44931), (58, 44883), (63, 44829), (75, 44742), (79, 44703), (83, 44640), (89, 44598),

Gene: Leogania_74 Start: 45788, Stop: 45216, Start Num: 26

Candidate Starts for Leogania_74:

(Start: 25 @45800 has 17 MA's), (Start: 26 @45788 has 54 MA's), (32, 45761), (45, 45671), (52, 45614), (55, 45587), (63, 45512), (71, 45446), (75, 45425), (79, 45386), (82, 45332), (91, 45260),

Gene: Leviathan_77 Start: 45902, Stop: 45327, Start Num: 26

Candidate Starts for Leviathan_77:

(Start: 20 @45944 has 4 MA's), (23, 45932), (Start: 25 @45914 has 17 MA's), (Start: 26 @45902 has 54 MA's), (45, 45785), (46, 45776), (52, 45728), (63, 45626), (75, 45539), (79, 45500), (83, 45437),

Gene: LilTurb_76 Start: 45716, Stop: 45141, Start Num: 26

Candidate Starts for LilTurb_76:

(Start: 20 @45758 has 4 MA's), (23, 45746), (Start: 25 @45728 has 17 MA's), (Start: 26 @45716 has 54 MA's), (45, 45599), (46, 45590), (52, 45542), (63, 45440), (75, 45353), (79, 45314), (83, 45251),

Gene: LionsBait_75 Start: 46541, Stop: 45960, Start Num: 26

Candidate Starts for LionsBait_75:

(Start: 20 @46583 has 4 MA's), (Start: 22 @46580 has 1 MA's), (23, 46571), (Start: 25 @46553 has 17 MA's), (Start: 26 @46541 has 54 MA's), (45, 46424), (46, 46415), (52, 46367), (63, 46265), (72, 46196), (75, 46178), (79, 46139), (82, 46085), (83, 46076),

Gene: Lokk_69 Start: 43909, Stop: 43337, Start Num: 26

Candidate Starts for Lokk_69:

(Start: 25 @43921 has 17 MA's), (Start: 26 @43909 has 54 MA's), (27, 43894), (32, 43882), (45, 43792), (46, 43783), (48, 43768), (52, 43735), (54, 43717), (59, 43684), (63, 43633), (71, 43567), (79, 43507), (89, 43402), (95, 43357),

Gene: Loser_77 Start: 45980, Stop: 45399, Start Num: 26

Candidate Starts for Loser_77:

(Start: 20 @46022 has 4 MA's), (Start: 22 @46019 has 1 MA's), (24, 46004), (Start: 25 @45992 has 17 MA's), (Start: 26 @45980 has 54 MA's), (34, 45941), (45, 45863), (46, 45854), (52, 45806), (55, 45779), (63, 45704), (65, 45695), (72, 45635), (75, 45617), (85, 45503),

Gene: Malec_73 Start: 45714, Stop: 45103, Start Num: 20

Candidate Starts for Malec_73:

(6, 45885), (12, 45834), (Start: 20 @45714 has 4 MA's), (Start: 25 @45684 has 17 MA's), (Start: 26 @45672 has 54 MA's), (45, 45555), (46, 45546), (49, 45519), (52, 45498), (58, 45450), (63, 45396), (75, 45309), (79, 45270), (83, 45207), (89, 45165),

Gene: MiculUcigas_76 Start: 45315, Stop: 44746, Start Num: 26

Candidate Starts for MiculUcigas_76:

(Start: 20 @45357 has 4 MA's), (23, 45345), (Start: 25 @45327 has 17 MA's), (Start: 26 @45315 has 54 MA's), (45, 45198), (46, 45189), (49, 45162), (52, 45141), (63, 45039), (71, 44973), (75, 44952), (79, 44913), (83, 44850),

Gene: Miko_69 Start: 44687, Stop: 44115, Start Num: 26

Candidate Starts for Miko_69:

(Start: 25 @44699 has 17 MA's), (Start: 26 @44687 has 54 MA's), (32, 44660), (45, 44570), (46, 44561), (48, 44546), (52, 44513), (54, 44495), (59, 44462), (63, 44411), (71, 44345), (79, 44285), (89, 44180), (95, 44135),

Gene: Mulciber_76 Start: 44899, Stop: 44336, Start Num: 25

Candidate Starts for Mulciber_76:

(21, 44929), (Start: 25 @44899 has 17 MA's), (Start: 26 @44887 has 54 MA's), (32, 44860), (45, 44770), (48, 44746), (52, 44713), (63, 44611), (67, 44587), (68, 44572), (71, 44545), (75, 44524), (79, 44485), (91, 44386), (95, 44353),

Gene: Munch_78 Start: 45362, Stop: 44799, Start Num: 25

Candidate Starts for Munch_78:

(21, 45392), (Start: 25 @45362 has 17 MA's), (Start: 26 @45350 has 54 MA's), (32, 45323), (45, 45233), (48, 45209), (52, 45176), (63, 45074), (67, 45050), (68, 45035), (71, 45008), (75, 44987), (79, 44948), (91, 44849), (95, 44816),

Gene: NaSiaTalie_76 Start: 45409, Stop: 44840, Start Num: 26

Candidate Starts for NaSiaTalie_76:

(Start: 20 @45451 has 4 MA's), (23, 45439), (Start: 25 @45421 has 17 MA's), (Start: 26 @45409 has 54 MA's), (45, 45292), (46, 45283), (49, 45256), (52, 45235), (63, 45133), (71, 45067), (75, 45046), (79, 45007), (83, 44944),

Gene: NicoleTera_73 Start: 45439, Stop: 44858, Start Num: 26

Candidate Starts for NicoleTera_73:

(Start: 25 @45451 has 17 MA's), (Start: 26 @45439 has 54 MA's), (43, 45355), (45, 45319), (49, 45283), (52, 45262), (63, 45160), (65, 45151), (72, 45091), (75, 45073), (79, 45034), (91, 44908),

Gene: NothingSpecial_71 Start: 45368, Stop: 44808, Start Num: 25

Candidate Starts for NothingSpecial_71:

(Start: 25 @45368 has 17 MA's), (Start: 26 @45356 has 54 MA's), (35, 45317), (45, 45239), (48, 45215), (52, 45182), (63, 45080), (67, 45056), (71, 45014), (75, 44993), (79, 44954), (83, 44888), (91, 44852),

Gene: Phaded_71 Start: 46578, Stop: 46021, Start Num: 25

Candidate Starts for Phaded_71:

(Start: 25 @46578 has 17 MA's), (Start: 26 @46566 has 54 MA's), (45, 46449), (52, 46392), (58, 46344), (63, 46290), (75, 46203), (79, 46164), (91, 46065),

Gene: Piro94_75 Start: 45423, Stop: 44806, Start Num: 20

Candidate Starts for Piro94_75:

(Start: 20 @45423 has 4 MA's), (23, 45411), (Start: 25 @45393 has 17 MA's), (Start: 26 @45381 has 54 MA's), (45, 45264), (46, 45255), (49, 45228), (52, 45207), (63, 45105), (71, 45039), (75, 45018), (79, 44979), (83, 44916),

Gene: Power_75 Start: 45761, Stop: 45186, Start Num: 26

Candidate Starts for Power_75:

(Start: 20 @45803 has 4 MA's), (23, 45791), (Start: 25 @45773 has 17 MA's), (Start: 26 @45761 has 54 MA's), (45, 45644), (46, 45635), (52, 45587), (63, 45485), (75, 45398), (79, 45359), (83, 45296),

Gene: Prudy_69 Start: 45527, Stop: 44937, Start Num: 25

Candidate Starts for Prudy_69:

(24, 45539), (Start: 25 @45527 has 17 MA's), (Start: 26 @45515 has 54 MA's), (32, 45488), (33, 45485), (45, 45398), (46, 45389), (52, 45341), (63, 45239), (65, 45230), (72, 45170), (74, 45155), (75,

45152), (79, 45113), (82, 45059), (85, 45038), (86, 45026), (91, 44987), (95, 44954),

Gene: Pukovnik_72 Start: 46197, Stop: 45637, Start Num: 25

Candidate Starts for Pukovnik_72:

(Start: 25 @46197 has 17 MA's), (Start: 26 @46185 has 54 MA's), (29, 46164), (37, 46131), (45, 46068), (52, 46011), (63, 45909), (64, 45903), (67, 45885), (75, 45822), (79, 45783), (83, 45717), (91, 45681),

Gene: QueenB2_73 Start: 45044, Stop: 44466, Start Num: 26

Candidate Starts for QueenB2_73:

(Start: 17 @45164 has 1 MA's), (Start: 20 @45086 has 4 MA's), (23, 45074), (Start: 25 @45056 has 17 MA's), (Start: 26 @45044 has 54 MA's), (45, 44927), (46, 44918), (52, 44870), (63, 44768), (75, 44681), (78, 44651), (79, 44642), (83, 44579),

Gene: QueenBeesly_76 Start: 45718, Stop: 45143, Start Num: 26

Candidate Starts for QueenBeesly_76:

(Start: 20 @45760 has 4 MA's), (23, 45748), (Start: 25 @45730 has 17 MA's), (Start: 26 @45718 has 54 MA's), (45, 45601), (46, 45592), (52, 45544), (63, 45442), (75, 45355), (79, 45316), (83, 45253),

Gene: Rachaly_71 Start: 44832, Stop: 44260, Start Num: 26

Candidate Starts for Rachaly_71:

(Start: 25 @44844 has 17 MA's), (Start: 26 @44832 has 54 MA's), (27, 44817), (32, 44805), (45, 44715), (46, 44706), (48, 44691), (52, 44658), (54, 44640), (59, 44607), (63, 44556), (71, 44490), (79, 44430), (89, 44325), (95, 44280),

Gene: RedRock_74 Start: 45760, Stop: 45170, Start Num: 25

Candidate Starts for RedRock_74:

(24, 45772), (Start: 25 @45760 has 17 MA's), (Start: 26 @45748 has 54 MA's), (34, 45709), (45, 45631), (46, 45622), (52, 45574), (55, 45547), (63, 45472), (65, 45463), (72, 45403), (75, 45385), (79, 45346), (85, 45271),

Gene: Retro23_76 Start: 45449, Stop: 44871, Start Num: 26

Candidate Starts for Retro23_76:

(Start: 20 @45491 has 4 MA's), (23, 45479), (Start: 25 @45461 has 17 MA's), (Start: 26 @45449 has 54 MA's), (45, 45332), (46, 45323), (52, 45275), (63, 45173), (72, 45104), (75, 45086), (78, 45056), (79, 45047), (83, 44984),

Gene: RidgeCB_72 Start: 45253, Stop: 44792, Start Num: 41

Candidate Starts for RidgeCB_72:

(Start: 41 @45253 has 1 MA's), (47, 45193), (50, 45166), (67, 45031), (71, 44989), (90, 44803),

Gene: SemperFi_76 Start: 45606, Stop: 45031, Start Num: 26

Candidate Starts for SemperFi_76:

(Start: 20 @45648 has 4 MA's), (23, 45636), (Start: 25 @45618 has 17 MA's), (Start: 26 @45606 has 54 MA's), (45, 45489), (46, 45480), (52, 45432), (63, 45330), (75, 45243), (79, 45204), (83, 45141),

Gene: Sknot_76 Start: 45409, Stop: 44840, Start Num: 26

Candidate Starts for Sknot_76:

(Start: 20 @45451 has 4 MA's), (23, 45439), (Start: 25 @45421 has 17 MA's), (Start: 26 @45409 has 54 MA's), (45, 45292), (46, 45283), (49, 45256), (52, 45235), (63, 45133), (71, 45067), (75, 45046), (79, 45007), (83, 44944),

Gene: Smeagan_78 Start: 45993, Stop: 45418, Start Num: 26

Candidate Starts for Smeagan_78:

(Start: 20 @46035 has 4 MA's), (23, 46023), (Start: 25 @46005 has 17 MA's), (Start: 26 @45993 has 54 MA's), (45, 45876), (46, 45867), (52, 45819), (63, 45717), (75, 45630), (79, 45591), (83, 45528),

Gene: SnapTap_75 Start: 45417, Stop: 44842, Start Num: 26

Candidate Starts for SnapTap_75:

(Start: 20 @45459 has 4 MA's), (23, 45447), (Start: 25 @45429 has 17 MA's), (Start: 26 @45417 has 54 MA's), (45, 45300), (46, 45291), (52, 45243), (63, 45141), (75, 45054), (79, 45015), (82, 44961), (83, 44952),

Gene: SweetiePie_75 Start: 45549, Stop: 44974, Start Num: 26

Candidate Starts for SweetiePie_75:

(Start: 20 @45591 has 4 MA's), (23, 45579), (Start: 25 @45561 has 17 MA's), (Start: 26 @45549 has 54 MA's), (45, 45432), (46, 45423), (52, 45375), (63, 45273), (75, 45186), (79, 45147), (83, 45084),

Gene: Tailonex_62 Start: 42988, Stop: 42500, Start Num: 36

Candidate Starts for Tailonex_62:

(36, 42988), (40, 42967), (43, 42955), (44, 42943), (57, 42814), (62, 42772), (76, 42664), (82, 42577), (84, 42556),

Gene: Taquito_84 Start: 52547, Stop: 53173, Start Num: 18

Candidate Starts for Taquito_84:

(Start: 18 @52547 has 1 MA's), (19, 52583), (30, 52667), (39, 52712), (46, 52772), (48, 52787), (54, 52838), (68, 52961), (69, 52970), (77, 53030), (79, 53048), (82, 53105),

Gene: TarsusIV_73 Start: 45469, Stop: 44888, Start Num: 25

Candidate Starts for TarsusIV_73:

(Start: 25 @45469 has 17 MA's), (Start: 26 @45457 has 54 MA's), (32, 45430), (33, 45427), (45, 45340), (46, 45331), (52, 45283), (63, 45181), (79, 45055), (98, 44893),

Gene: Terrific_76 Start: 45383, Stop: 44814, Start Num: 26

Candidate Starts for Terrific_76:

(Start: 20 @45425 has 4 MA's), (23, 45413), (Start: 25 @45395 has 17 MA's), (Start: 26 @45383 has 54 MA's), (45, 45266), (46, 45257), (49, 45230), (52, 45209), (63, 45107), (71, 45041), (75, 45020), (79, 44981), (83, 44918),

Gene: Trixie_75 Start: 46174, Stop: 45596, Start Num: 26

Candidate Starts for Trixie_75:

(2, 46402), (4, 46396), (15, 46303), (Start: 20 @46216 has 4 MA's), (Start: 25 @46186 has 17 MA's), (Start: 26 @46174 has 54 MA's), (45, 46057), (49, 46021), (52, 46000), (63, 45898), (65, 45889), (72, 45829), (74, 45814), (75, 45811), (79, 45772),

Gene: Trooper_75 Start: 45436, Stop: 44858, Start Num: 26

Candidate Starts for Trooper_75:

(Start: 25 @45448 has 17 MA's), (Start: 26 @45436 has 54 MA's), (32, 45409), (45, 45319), (46, 45310), (52, 45262), (54, 45244), (63, 45160), (72, 45091), (75, 45073), (79, 45034), (83, 44971), (91, 44908),

Gene: Turbido_76 Start: 45726, Stop: 45139, Start Num: 25

Candidate Starts for Turbido_76:

(1, 45978), (5, 45930), (7, 45918), (Start: 20 @45756 has 4 MA's), (23, 45744), (Start: 25 @45726 has 17 MA's), (Start: 26 @45714 has 54 MA's), (45, 45597), (46, 45588), (52, 45540), (63, 45438), (75, 45351), (79, 45312), (83, 45249),

Gene: Updawg_76 Start: 45271, Stop: 44696, Start Num: 26

Candidate Starts for Updawg_76:

(3, 45496), (8, 45475), (14, 45406), (Start: 20 @45313 has 4 MA's), (23, 45301), (Start: 25 @45283 has 17 MA's), (Start: 26 @45271 has 54 MA's), (45, 45154), (46, 45145), (49, 45118), (52, 45097), (63, 44995), (71, 44929), (75, 44908), (79, 44869), (83, 44806),

Gene: VA6_75 Start: 45463, Stop: 44891, Start Num: 26

Candidate Starts for VA6_75:

(Start: 26 @45463 has 54 MA's), (37, 45409), (45, 45346), (46, 45337), (52, 45289), (54, 45271), (55, 45262), (63, 45187), (65, 45178), (75, 45100), (79, 45061), (92, 44932), (93, 44923),

Gene: WeiHuaDA_76 Start: 46220, Stop: 45651, Start Num: 26

Candidate Starts for WeiHuaDA_76:

(Start: 25 @46232 has 17 MA's), (Start: 26 @46220 has 54 MA's), (37, 46166), (45, 46103), (48, 46079), (52, 46046), (54, 46028), (63, 45944), (65, 45935), (75, 45857), (79, 45818), (89, 45713),

Gene: Whabigail7_76 Start: 45712, Stop: 45137, Start Num: 26

Candidate Starts for Whabigail7_76:

(Start: 20 @45754 has 4 MA's), (23, 45742), (Start: 25 @45724 has 17 MA's), (Start: 26 @45712 has 54 MA's), (45, 45595), (46, 45586), (52, 45538), (63, 45436), (75, 45349), (79, 45310), (83, 45247),

Gene: WideWale_76 Start: 45271, Stop: 44696, Start Num: 26

Candidate Starts for WideWale_76:

(3, 45496), (8, 45475), (14, 45406), (Start: 20 @45313 has 4 MA's), (23, 45301), (Start: 25 @45283 has 17 MA's), (Start: 26 @45271 has 54 MA's), (45, 45154), (46, 45145), (49, 45118), (52, 45097), (63, 44995), (71, 44929), (75, 44908), (79, 44869), (83, 44806),

Gene: XianYue_71 Start: 45222, Stop: 44638, Start Num: 25

Candidate Starts for XianYue_71:

(Start: 25 @45222 has 17 MA's), (Start: 26 @45210 has 54 MA's), (45, 45093), (46, 45084), (52, 45036), (55, 45009), (63, 44934), (71, 44868), (75, 44847), (79, 44808), (83, 44745), (89, 44703),