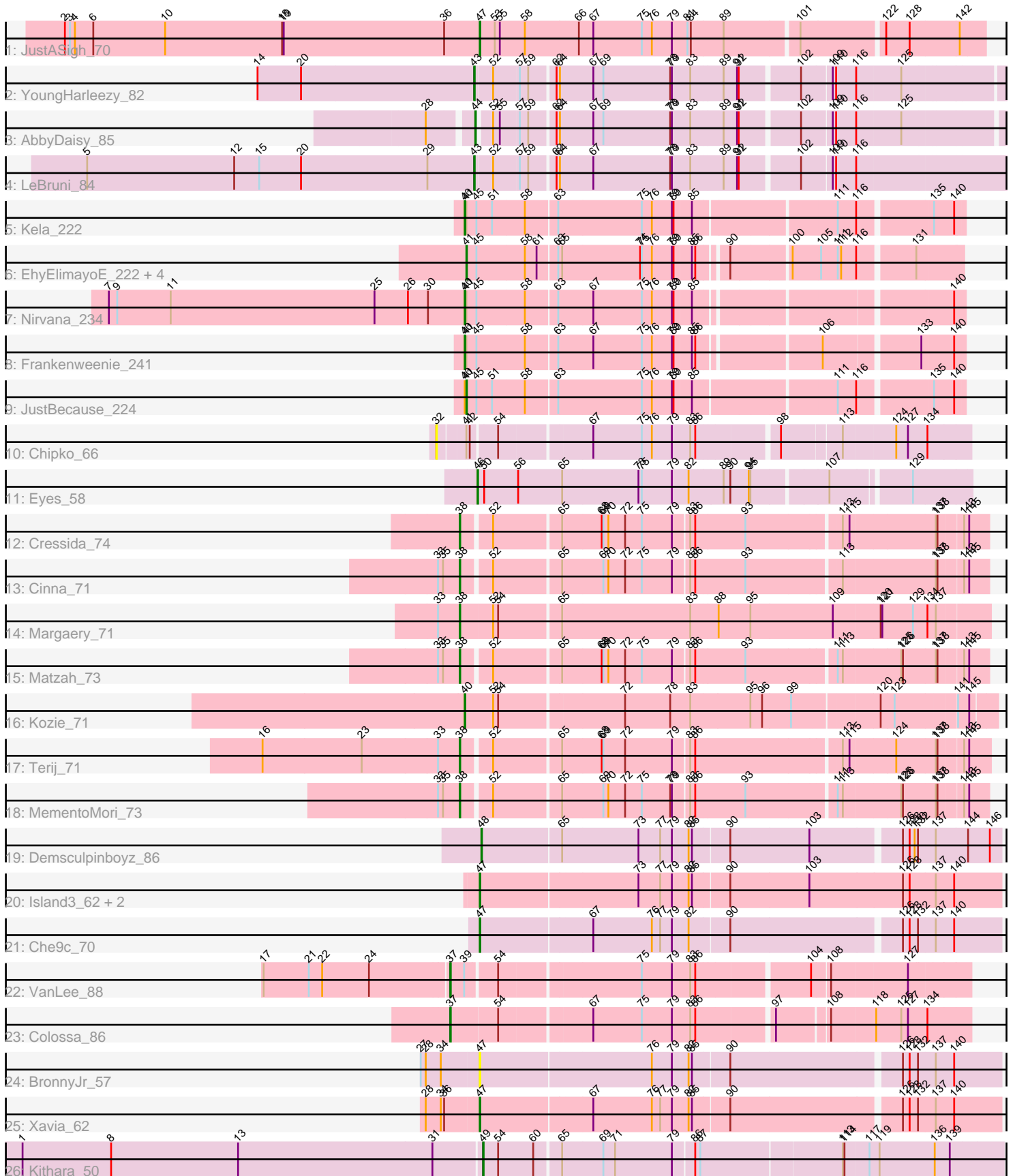


Pham 309010



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 309010 Report

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

Pham number 309010 has 32 members, 2 are drafts.

Phages represented in each track:

- Track 1 : JustASigh_70
- Track 2 : YoungHarleezy_82
- Track 3 : AbbyDaisy_85
- Track 4 : LeBruni_84
- Track 5 : Kela_222
- Track 6 : EhyElimayoE_222, Sarkar_219, Satis_219, Kradal_221, Quantum_218
- Track 7 : Nirvana_234
- Track 8 : Frankenweenie_241
- Track 9 : JustBecause_224
- Track 10 : Chipko_66
- Track 11 : Eyes_58
- Track 12 : Cressida_74
- Track 13 : Cinna_71
- Track 14 : Margaery_71
- Track 15 : Matzah_73
- Track 16 : Kozie_71
- Track 17 : Terij_71
- Track 18 : MementoMori_73
- Track 19 : Demsculpinboyz_86
- Track 20 : Island3_62, EleanorGeorge_75, Brujita_61
- Track 21 : Che9c_70
- Track 22 : VanLee_88
- Track 23 : Colossa_86
- Track 24 : BronnyJr_57
- Track 25 : Xavia_62
- Track 26 : Kithara_50

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

The start number called the most often in the published annotations is 41, it was called in 6 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- EhyElimayoE_222, JustBecause_224, Kradal_221, Quantum_218, Sarkar_219, Satis_219,

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

- Chipko_66, Frankenweenie_241, Kela_222, Nirvana_234,

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

- AbbyDaisy_85, BronnyJr_57, Brujita_61, Che9c_70, Cinna_71, Colossa_86, Cressida_74, Demsculpinboyz_86, EleanorGeorge_75, Eyes_58, Island3_62, JustASigh_70, Kithara_50, Kozie_71, LeBruni_84, Margaery_71, Matzah_73, MementoMori_73, Terij_71, VanLee_88, Xavia_62, YoungHarleezy_82,

Summary by start number:

Start 32:

- Found in 1 of 32 (3.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chipko_66 (DB),

Start 37:

- Found in 2 of 32 (6.2%) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colossa_86 (KA), VanLee_88 (KA),

Start 38:

- Found in 6 of 32 (18.8%) of genes in pham
- Manual Annotations of this start: 6 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cinna_71 (EI), Cressida_74 (EI), Margaery_71 (EI), Matzah_73 (EI), MementoMori_73 (EI), Terij_71 (EI),

Start 40:

- Found in 5 of 32 (15.6%) of genes in pham
- Manual Annotations of this start: 4 of 30
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Frankenweenie_241 (BM), Kela_222 (BM), Kozie_71 (EI), Nirvana_234 (BM),

Start 41:

- Found in 10 of 32 (31.2%) of genes in pham
- Manual Annotations of this start: 6 of 30
- Called 60.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_222 (BM), JustBecause_224 (BM), Kradal_221 (BM), Quantum_218 (BM), Sarkar_219 (BM), Satis_219 (BM),

Start 43:

- Found in 2 of 32 (6.2%) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 100.0% of time when present

- Phage (with cluster) where this start called: LeBruni_84 (AY), YoungHarleezy_82 (AY),

Start 44:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_85 (AY),

Start 46:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Eyes_58 (DB),

Start 47:

- Found in 7 of 32 (21.9%) of genes in pham
- Manual Annotations of this start: 6 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BronnyJr_57 (P1), Brujita_61 (I1), Che9c_70 (I2), EleanorGeorge_75 (F1), Island3_62 (I1), JustASigh_70 (AH), Xavia_62 (P3),

Start 48:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Demsculpinboyz_86 (F2),

Start 49:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kithara_50 (singleton),

Summary by clusters:

There are 13 clusters represented in this pham: P3, KA, P1, EI, F1, I1, BM, I2, DB, F2, AH, AY, singleton,

Info for manual annotations of cluster AH:

- Start number 47 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster AY:

- Start number 43 was manually annotated 2 times for cluster AY.
- Start number 44 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster BM:

- Start number 40 was manually annotated 3 times for cluster BM.
- Start number 41 was manually annotated 6 times for cluster BM.

Info for manual annotations of cluster DB:

- Start number 46 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster EI:

- Start number 38 was manually annotated 6 times for cluster EI.
- Start number 40 was manually annotated 1 time for cluster EI.

Info for manual annotations of cluster F1:

- Start number 47 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 48 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster I1:

- Start number 47 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 47 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster KA:

- Start number 37 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster P3:

- Start number 47 was manually annotated 1 time for cluster P3.

Gene Information:

Gene: AbbyDaisy_85 Start: 48805, Stop: 49686, Start Num: 44

Candidate Starts for AbbyDaisy_85:

(28, 48733), (Start: 44 @48805 has 1 MA's), (52, 48826), (55, 48838), (57, 48871), (59, 48886), (62, 48928), (64, 48934), (67, 48994), (69, 49012), (78, 49132), (79, 49135), (83, 49168), (89, 49225), (91, 49246), (92, 49249), (102, 49348), (109, 49399), (110, 49405), (116, 49441), (125, 49519),

Gene: BronnyJr_57 Start: 39586, Stop: 40479, Start Num: 47

Candidate Starts for BronnyJr_57:

(27, 39484), (28, 39493), (34, 39520), (Start: 47 @39586 has 6 MA's), (76, 39883), (79, 39919), (82, 39946), (85, 39952), (90, 40015), (126, 40306), (128, 40318), (132, 40333), (137, 40363), (140, 40396),

Gene: Brujita_61 Start: 39754, Stop: 40662, Start Num: 47

Candidate Starts for Brujita_61:

(Start: 47 @39754 has 6 MA's), (73, 40027), (77, 40066), (79, 40087), (82, 40114), (85, 40120), (90, 40183), (103, 40324), (126, 40489), (128, 40501), (137, 40546), (140, 40579),

Gene: Che9c_70 Start: 49481, Stop: 50374, Start Num: 47

Candidate Starts for Che9c_70:

(Start: 47 @49481 has 6 MA's), (67, 49673), (76, 49778), (77, 49793), (79, 49814), (82, 49841), (90, 49910), (126, 50201), (128, 50213), (132, 50228), (137, 50258), (140, 50291),

Gene: Chipko_66 Start: 42997, Stop: 43869, Start Num: 32

Candidate Starts for Chipko_66:

(32, 42997), (Start: 41 @43039 has 6 MA's), (42, 43045), (54, 43087), (67, 43240), (75, 43327), (76, 43345), (79, 43381), (83, 43414), (86, 43423), (98, 43555), (113, 43657), (124, 43744), (127, 43765), (134, 43795),

Gene: Cinna_71 Start: 45361, Stop: 46236, Start Num: 38

Candidate Starts for Cinna_71:

(33, 45322), (35, 45331), (Start: 38 @45361 has 6 MA's), (52, 45409), (65, 45523), (69, 45592), (70, 45601), (72, 45631), (75, 45661), (79, 45715), (83, 45742), (86, 45751), (93, 45838), (113, 45997), (137, 46150), (138, 46153), (143, 46192), (145, 46201),

Gene: Colossa_86 Start: 47987, Stop: 48844, Start Num: 37

Candidate Starts for Colossa_86:

(Start: 37 @47987 has 2 MA's), (54, 48065), (67, 48218), (75, 48305), (79, 48359), (83, 48392), (86, 48401), (97, 48524), (108, 48611), (118, 48686), (125, 48728), (127, 48740), (134, 48770),

Gene: Cressida_74 Start: 44976, Stop: 45851, Start Num: 38

Candidate Starts for Cressida_74:

(Start: 38 @44976 has 6 MA's), (52, 45024), (65, 45138), (68, 45204), (69, 45207), (70, 45216), (72, 45246), (75, 45276), (79, 45330), (83, 45357), (86, 45366), (93, 45453), (113, 45612), (115, 45624), (137, 45765), (138, 45768), (143, 45807), (145, 45816),

Gene: Demsculpinboyz_86 Start: 45706, Stop: 46596, Start Num: 48

Candidate Starts for Demsculpinboyz_86:

(Start: 48 @45706 has 1 MA's), (65, 45844), (73, 45976), (77, 46015), (79, 46036), (82, 46063), (85, 46069), (90, 46132), (103, 46273), (126, 46423), (128, 46435), (130, 46444), (132, 46450), (137, 46480), (144, 46537), (146, 46576),

Gene: EhyElimayoE_222 Start: 132406, Stop: 133221, Start Num: 41

Candidate Starts for EhyElimayoE_222:

(Start: 41 @132406 has 6 MA's), (45, 132424), (58, 132508), (61, 132529), (63, 132559), (65, 132565), (74, 132703), (75, 132706), (76, 132724), (79, 132760), (80, 132763), (85, 132793), (86, 132799), (90, 132844), (100, 132943), (105, 132991), (111, 133021), (112, 133027), (116, 133054), (131, 133144),

Gene: EleanorGeorge_75 Start: 46457, Stop: 47365, Start Num: 47

Candidate Starts for EleanorGeorge_75:

(Start: 47 @46457 has 6 MA's), (73, 46730), (77, 46769), (79, 46790), (82, 46817), (85, 46823), (90, 46886), (103, 47027), (126, 47192), (128, 47204), (137, 47249), (140, 47282),

Gene: Eyes_58 Start: 41523, Stop: 42362, Start Num: 46

Candidate Starts for Eyes_58:

(Start: 46 @41523 has 1 MA's), (50, 41535), (56, 41595), (65, 41673), (73, 41805), (75, 41811), (79, 41865), (82, 41895), (89, 41955), (90, 41967), (94, 42000), (95, 42003), (107, 42132), (129, 42264),

Gene: Frankenweenie_241 Start: 143612, Stop: 144436, Start Num: 40

Candidate Starts for Frankenweenie_241:

(Start: 40 @143612 has 4 MA's), (Start: 41 @143615 has 6 MA's), (45, 143633), (58, 143717), (63, 143771), (67, 143831), (75, 143918), (76, 143936), (79, 143972), (80, 143975), (85, 144005), (86, 144011), (106, 144206), (133, 144365), (140, 144419),

Gene: Island3_62 Start: 39754, Stop: 40662, Start Num: 47

Candidate Starts for Island3_62:

(Start: 47 @39754 has 6 MA's), (73, 40027), (77, 40066), (79, 40087), (82, 40114), (85, 40120), (90, 40183), (103, 40324), (126, 40489), (128, 40501), (137, 40546), (140, 40579),

Gene: JustASigh_70 Start: 45511, Stop: 46377, Start Num: 47

Candidate Starts for JustASigh_70:

(2, 44767), (3, 44776), (4, 44785), (6, 44818), (10, 44947), (18, 45157), (19, 45160), (36, 45448), (Start: 47 @45511 has 6 MA's), (53, 45538), (55, 45547), (58, 45592), (66, 45685), (67, 45709), (75, 45796), (76, 45814), (79, 45850), (81, 45877), (84, 45883), (89, 45940), (101, 46066), (122, 46207), (128, 46249), (142, 46333),

Gene: JustBecause_224 Start: 131333, Stop: 132160, Start Num: 41

Candidate Starts for JustBecause_224:

(Start: 40 @131330 has 4 MA's), (Start: 41 @131333 has 6 MA's), (45, 131351), (51, 131378), (58, 131435), (63, 131489), (75, 131636), (76, 131654), (79, 131690), (80, 131693), (85, 131723), (111, 131960), (116, 131993), (135, 132110), (140, 132146),

Gene: Kela_222 Start: 131175, Stop: 132005, Start Num: 40

Candidate Starts for Kela_222:

(Start: 40 @131175 has 4 MA's), (Start: 41 @131178 has 6 MA's), (45, 131196), (51, 131223), (58, 131280), (63, 131334), (75, 131481), (76, 131499), (79, 131535), (80, 131538), (85, 131568), (111, 131805), (116, 131838), (135, 131955), (140, 131991),

Gene: Kithara_50 Start: 40288, Stop: 39392, Start Num: 49

Candidate Starts for Kithara_50:

(1, 41107), (8, 40948), (13, 40720), (31, 40372), (Start: 49 @40288 has 1 MA's), (54, 40261), (60, 40198), (65, 40156), (69, 40087), (71, 40066), (79, 39964), (86, 39928), (87, 39919), (113, 39673), (114, 39670), (117, 39628), (119, 39610), (136, 39511), (139, 39484),

Gene: Kozie_71 Start: 44697, Stop: 45593, Start Num: 40

Candidate Starts for Kozie_71:

(Start: 40 @44697 has 4 MA's), (52, 44748), (54, 44757), (72, 44970), (78, 45051), (83, 45087), (95, 45192), (96, 45213), (99, 45264), (120, 45408), (123, 45432), (141, 45531), (145, 45549),

Gene: Kradal_221 Start: 132403, Stop: 133218, Start Num: 41

Candidate Starts for Kradal_221:

(Start: 41 @132403 has 6 MA's), (45, 132421), (58, 132505), (61, 132526), (63, 132556), (65, 132562), (74, 132700), (75, 132703), (76, 132721), (79, 132757), (80, 132760), (85, 132790), (86, 132796), (90, 132841), (100, 132940), (105, 132988), (111, 133018), (112, 133024), (116, 133051), (131, 133141),

Gene: LeBruni_84 Start: 46812, Stop: 47714, Start Num: 43

Candidate Starts for LeBruni_84:

(5, 46119), (12, 46383), (15, 46428), (20, 46503), (29, 46728), (Start: 43 @46812 has 2 MA's), (52, 46842), (57, 46887), (59, 46902), (62, 46944), (64, 46950), (67, 47010), (78, 47148), (79, 47151), (83, 47184), (89, 47241), (91, 47262), (92, 47265), (102, 47364), (109, 47415), (110, 47421), (116, 47457),

Gene: Margaery_71 Start: 44860, Stop: 45768, Start Num: 38

Candidate Starts for Margaery_71:

(33, 44821), (Start: 38 @44860 has 6 MA's), (52, 44917), (54, 44926), (65, 45031), (83, 45256), (88, 45304), (95, 45361), (109, 45508), (120, 45586), (121, 45589), (129, 45643), (134, 45667), (137, 45679),

Gene: Matzah_73 Start: 45428, Stop: 46303, Start Num: 38

Candidate Starts for Matzah_73:

(33, 45389), (35, 45398), (Start: 38 @45428 has 6 MA's), (52, 45476), (65, 45590), (68, 45656), (69, 45659), (70, 45668), (72, 45698), (75, 45728), (79, 45782), (83, 45809), (86, 45818), (93, 45905), (111,

46055), (113, 46064), (125, 46160), (126, 46163), (137, 46217), (138, 46220), (143, 46259), (145, 46268),

Gene: MementoMori_73 Start: 45316, Stop: 46191, Start Num: 38

Candidate Starts for MementoMori_73:

(33, 45277), (35, 45286), (Start: 38 @45316 has 6 MA's), (52, 45364), (65, 45478), (69, 45547), (70, 45556), (72, 45586), (75, 45616), (78, 45667), (79, 45670), (83, 45697), (86, 45706), (93, 45793), (111, 45943), (113, 45952), (125, 46048), (126, 46051), (137, 46105), (138, 46108), (143, 46147), (145, 46156),

Gene: Nirvana_234 Start: 141859, Stop: 142683, Start Num: 40

Candidate Starts for Nirvana_234:

(7, 141220), (9, 141235), (11, 141331), (25, 141697), (26, 141757), (30, 141793), (Start: 40 @141859 has 4 MA's), (Start: 41 @141862 has 6 MA's), (45, 141880), (58, 141964), (63, 142018), (67, 142078), (75, 142165), (76, 142183), (79, 142219), (80, 142222), (85, 142252), (140, 142666),

Gene: Quantum_218 Start: 132397, Stop: 133212, Start Num: 41

Candidate Starts for Quantum_218:

(Start: 41 @132397 has 6 MA's), (45, 132415), (58, 132499), (61, 132520), (63, 132550), (65, 132556), (74, 132694), (75, 132697), (76, 132715), (79, 132751), (80, 132754), (85, 132784), (86, 132790), (90, 132835), (100, 132934), (105, 132982), (111, 133012), (112, 133018), (116, 133045), (131, 133135),

Gene: Sarkar_219 Start: 132427, Stop: 133242, Start Num: 41

Candidate Starts for Sarkar_219:

(Start: 41 @132427 has 6 MA's), (45, 132445), (58, 132529), (61, 132550), (63, 132580), (65, 132586), (74, 132724), (75, 132727), (76, 132745), (79, 132781), (80, 132784), (85, 132814), (86, 132820), (90, 132865), (100, 132964), (105, 133012), (111, 133042), (112, 133048), (116, 133075), (131, 133165),

Gene: Satis_219 Start: 132740, Stop: 133555, Start Num: 41

Candidate Starts for Satis_219:

(Start: 41 @132740 has 6 MA's), (45, 132758), (58, 132842), (61, 132863), (63, 132893), (65, 132899), (74, 133037), (75, 133040), (76, 133058), (79, 133094), (80, 133097), (85, 133127), (86, 133133), (90, 133178), (100, 133277), (105, 133325), (111, 133355), (112, 133361), (116, 133388), (131, 133478),

Gene: Terij_71 Start: 43915, Stop: 44793, Start Num: 38

Candidate Starts for Terij_71:

(16, 43564), (23, 43741), (33, 43876), (Start: 38 @43915 has 6 MA's), (52, 43963), (65, 44077), (68, 44143), (69, 44146), (72, 44185), (79, 44269), (83, 44296), (86, 44305), (113, 44551), (115, 44563), (124, 44638), (137, 44704), (138, 44707), (143, 44746), (145, 44755),

Gene: VanLee_88 Start: 48644, Stop: 49501, Start Num: 37

Candidate Starts for VanLee_88:

(17, 48320), (21, 48401), (22, 48425), (24, 48509), (Start: 37 @48644 has 2 MA's), (39, 48665), (54, 48716), (75, 48956), (79, 49010), (83, 49043), (86, 49052), (104, 49238), (108, 49268), (127, 49397),

Gene: Xavia_62 Start: 44650, Stop: 45543, Start Num: 47

Candidate Starts for Xavia_62:

(28, 44557), (34, 44584), (36, 44590), (Start: 47 @44650 has 6 MA's), (67, 44842), (76, 44947), (77, 44962), (79, 44983), (82, 45010), (85, 45016), (90, 45079), (126, 45370), (128, 45382), (132, 45397), (137, 45427), (140, 45460),

Gene: YoungHarleezy_82 Start: 46570, Stop: 47463, Start Num: 43

Candidate Starts for YoungHarleezy_82:

(14, 46183), (20, 46261), (Start: 43 @46570 has 2 MA's), (52, 46600), (57, 46645), (59, 46660), (62, 46702), (64, 46708), (67, 46768), (69, 46786), (78, 46906), (79, 46909), (83, 46942), (89, 46999), (91, 47020), (92, 47023), (102, 47122), (109, 47173), (110, 47179), (116, 47215), (125, 47293),