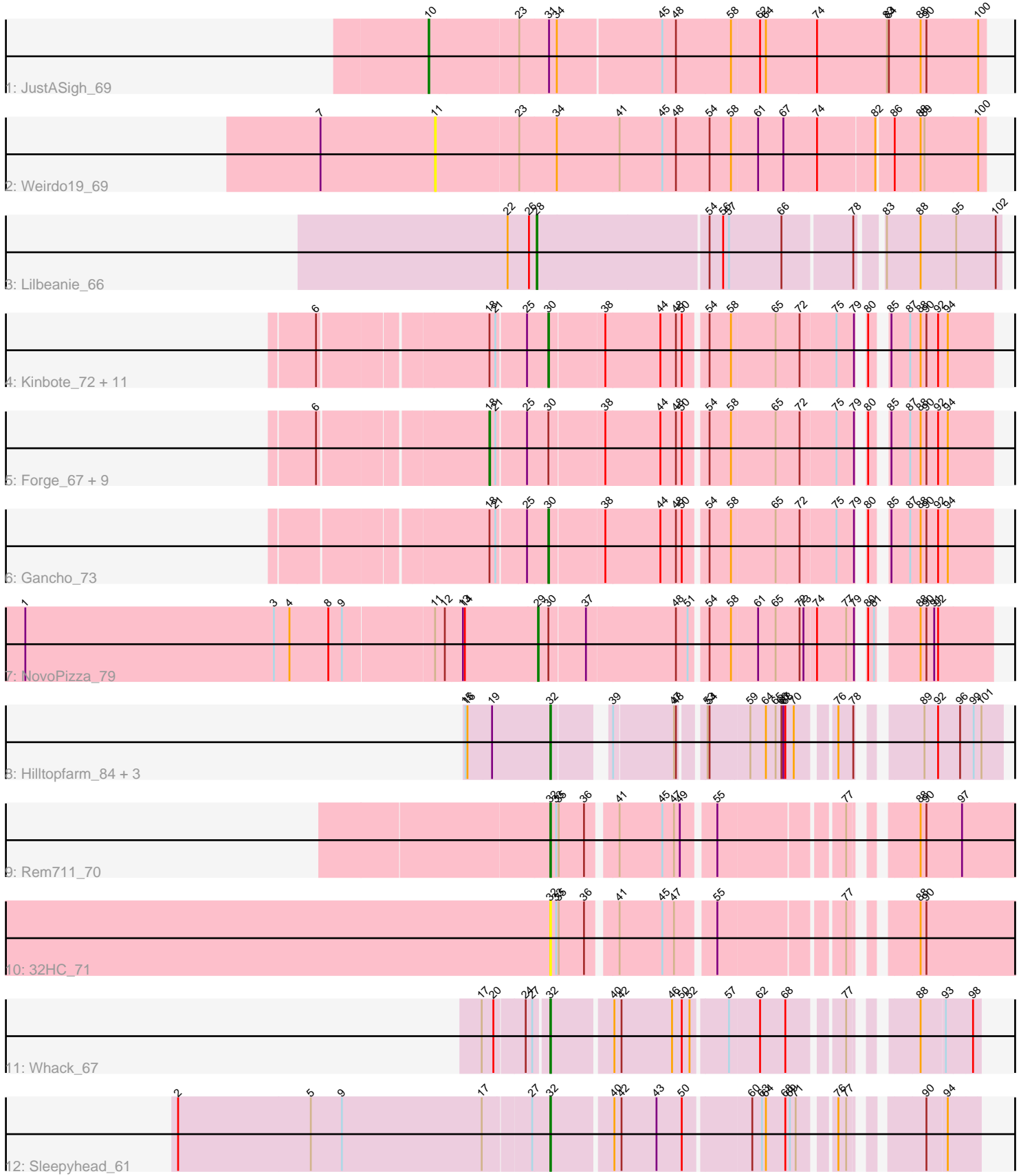


Pham 305176



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 305176 Report

This analysis was run 06/08/26 on database version 649.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 305176 has 35 members, 4 are drafts.

Phages represented in each track:

- Track 1 : JustASigh_69
- Track 2 : Weirido19_69
- Track 3 : Lilbeanie_66
- Track 4 : Kinbote_72, Ubuntu_74, BloominB_74, Evanesce_73, LilHazelNut_74, Webster2_74, Amymech_74, Ein37_74, OBUpride_73, DeepSoil15_74, HH92_73, Amochick_75
- Track 5 : Forge_67, Wishmaker_67, Hadrien_71, Dewey_67, Luna22_67, Hail_67, Luke_71, Gravaillia_68, Daegal_76, Giles_67
- Track 6 : Gancho_73
- Track 7 : NovoPizza_79
- Track 8 : Hilltopfarm_84, Faiyaz_85, Typha_83, AuntGwenStacy_83
- Track 9 : Rem711_70
- Track 10 : 32HC_71
- Track 11 : Whack_67
- Track 12 : Sleepyhead_61

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

The start number called the most often in the published annotations is 30, it was called in 12 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amochick_75, Amymech_74, BloominB_74, DeepSoil15_74, Ein37_74, Evanesce_73, Gancho_73, HH92_73, Kinbote_72, LilHazelNut_74, OBUpride_73, Ubuntu_74, Webster2_74,

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

- Daegal_76, Dewey_67, Forge_67, Giles_67, Gravaillia_68, Hadrien_71, Hail_67, Luke_71, Luna22_67, NovoPizza_79, Wishmaker_67,

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

- 32HC_71, AuntGwenStacy_83, Faiyaz_85, Hilltopfarm_84, JustASigh_69, Lilbeanie_66, Rem711_70, Sleepyhead_61, Typha_83, Weirdo19_69, Whack_67,

Summary by start number:

Start 10:

- Found in 1 of 35 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JustASigh_69 (AH),

Start 11:

- Found in 2 of 35 (5.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Weirdo19_69 (AH),

Start 18:

- Found in 23 of 35 (65.7%) of genes in pham
- Manual Annotations of this start: 10 of 31
- Called 43.5% of time when present
- Phage (with cluster) where this start called: Daegal_76 (Q), Dewey_67 (Q), Forge_67 (Q), Giles_67 (Q), Gravaillia_68 (Q), Hadrien_71 (Q), Hail_67 (Q), Luke_71 (Q), Luna22_67 (Q), Wishmaker_67 (Q),

Start 28:

- Found in 1 of 35 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lilbeanie_66 (DE5),

Start 29:

- Found in 1 of 35 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NovoPizza_79 (Q),

Start 30:

- Found in 24 of 35 (68.6%) of genes in pham
- Manual Annotations of this start: 12 of 31
- Called 54.2% of time when present
- Phage (with cluster) where this start called: Amochick_75 (Q), Amymech_74 (Q), BloominB_74 (Q), DeepSoil15_74 (Q), Ein37_74 (Q), Evanesce_73 (Q), Gancho_73 (Q), HH92_73 (Q), Kinbote_72 (Q), LilHazelNut_74 (Q), OBUpride_73 (Q), Ubuntu_74 (Q), Webster2_74 (Q),

Start 32:

- Found in 8 of 35 (22.9%) of genes in pham
- Manual Annotations of this start: 6 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 32HC_71 (Z), AuntGwenStacy_83 (Y), Faiyaz_85 (Y), Hilltopfarm_84 (Y), Rem711_70 (Z), Sleepyhead_61 (singleton),

Typha_83 (Y), Whack_67 (singleton),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, AH, DE5, Q, Y, Z,

Info for manual annotations of cluster AH:

- Start number 10 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster DE5:

- Start number 28 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster Q:

- Start number 18 was manually annotated 10 times for cluster Q.
- Start number 29 was manually annotated 1 time for cluster Q.
- Start number 30 was manually annotated 12 times for cluster Q.

Info for manual annotations of cluster Y:

- Start number 32 was manually annotated 3 times for cluster Y.

Info for manual annotations of cluster Z:

- Start number 32 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 32HC_71 Start: 43501, Stop: 44121, Start Num: 32

Candidate Starts for 32HC_71:

(Start: 32 @43501 has 6 MA's), (33, 43510), (35, 43513), (36, 43552), (41, 43591), (45, 43657), (47, 43675), (55, 43726), (77, 43900), (88, 43969), (90, 43978),

Gene: Amochick_75 Start: 48792, Stop: 49403, Start Num: 30

Candidate Starts for Amochick_75:

(6, 48474), (Start: 18 @48711 has 10 MA's), (21, 48720), (25, 48762), (Start: 30 @48792 has 12 MA's), (38, 48873), (44, 48957), (48, 48981), (50, 48990), (54, 49020), (58, 49053), (65, 49119), (72, 49155), (75, 49209), (79, 49233), (80, 49236), (85, 49251), (87, 49278), (88, 49293), (90, 49302), (92, 49320), (94, 49335),

Gene: Amymech_74 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for Amymech_74:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: AuntGwenStacy_83 Start: 54897, Stop: 55466, Start Num: 32

Candidate Starts for AuntGwenStacy_83:

(15, 54768), (16, 54771), (19, 54807), (Start: 32 @54897 has 6 MA's), (39, 54963), (47, 55053), (48, 55056), (53, 55086), (54, 55089), (59, 55146), (64, 55170), (65, 55185), (66, 55194), (67, 55197), (68, 55200), (70, 55212), (76, 55260), (78, 55281), (89, 55347), (92, 55368), (96, 55401), (99, 55422), (101, 55434),

Gene: BloominB_74 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for BloominB_74:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Daegal_76 Start: 49270, Stop: 49962, Start Num: 18

Candidate Starts for Daegal_76:

(6, 49033), (Start: 18 @49270 has 10 MA's), (21, 49279), (25, 49321), (Start: 30 @49351 has 12 MA's), (38, 49432), (44, 49516), (48, 49540), (50, 49549), (54, 49579), (58, 49612), (65, 49678), (72, 49714), (75, 49768), (79, 49792), (80, 49795), (85, 49810), (87, 49837), (88, 49852), (90, 49861), (92, 49879), (94, 49894),

Gene: DeepSoil15_74 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for DeepSoil15_74:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Dewey_67 Start: 48164, Stop: 48856, Start Num: 18

Candidate Starts for Dewey_67:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Ein37_74 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for Ein37_74:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Evanesce_73 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for Evanesce_73:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Faiyaz_85 Start: 54903, Stop: 55472, Start Num: 32

Candidate Starts for Faiyaz_85:

(15, 54774), (16, 54777), (19, 54813), (Start: 32 @54903 has 6 MA's), (39, 54969), (47, 55059), (48, 55062), (53, 55092), (54, 55095), (59, 55152), (64, 55176), (65, 55191), (66, 55200), (67, 55203), (68, 55206), (70, 55218), (76, 55266), (78, 55287), (89, 55353), (92, 55374), (96, 55407), (99, 55428), (101, 55440),

Gene: Forge_67 Start: 48164, Stop: 48856, Start Num: 18

Candidate Starts for Forge_67:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608),

(75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Gancho_73 Start: 48020, Stop: 48631, Start Num: 30

Candidate Starts for Gancho_73:

(Start: 18 @47939 has 10 MA's), (21, 47948), (25, 47990), (Start: 30 @48020 has 12 MA's), (38, 48101), (44, 48185), (48, 48209), (50, 48218), (54, 48248), (58, 48281), (65, 48347), (72, 48383), (75, 48437), (79, 48461), (80, 48464), (85, 48479), (87, 48506), (88, 48521), (90, 48530), (92, 48548), (94, 48563),

Gene: Giles_67 Start: 48164, Stop: 48856, Start Num: 18

Candidate Starts for Giles_67:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Gravaillia_68 Start: 48220, Stop: 48912, Start Num: 18

Candidate Starts for Gravaillia_68:

(6, 47983), (Start: 18 @48220 has 10 MA's), (21, 48229), (25, 48271), (Start: 30 @48301 has 12 MA's), (38, 48382), (44, 48466), (48, 48490), (50, 48499), (54, 48529), (58, 48562), (65, 48628), (72, 48664), (75, 48718), (79, 48742), (80, 48745), (85, 48760), (87, 48787), (88, 48802), (90, 48811), (92, 48829), (94, 48844),

Gene: HH92_73 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for HH92_73:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Hadrien_71 Start: 48164, Stop: 48856, Start Num: 18

Candidate Starts for Hadrien_71:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Hail_67 Start: 48164, Stop: 48856, Start Num: 18

Candidate Starts for Hail_67:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Hilltopfarm_84 Start: 54597, Stop: 55166, Start Num: 32

Candidate Starts for Hilltopfarm_84:

(15, 54468), (16, 54471), (19, 54507), (Start: 32 @54597 has 6 MA's), (39, 54663), (47, 54753), (48, 54756), (53, 54786), (54, 54789), (59, 54846), (64, 54870), (65, 54885), (66, 54894), (67, 54897), (68, 54900), (70, 54912), (76, 54960), (78, 54981), (89, 55047), (92, 55068), (96, 55101), (99, 55122), (101, 55134),

Gene: JustASigh_69 Start: 44678, Stop: 45514, Start Num: 10

Candidate Starts for JustASigh_69:

(Start: 10 @44678 has 1 MA's), (23, 44810), (31, 44855), (34, 44867), (45, 45023), (48, 45044), (58, 45128), (62, 45170), (64, 45179), (74, 45257), (83, 45365), (84, 45368), (88, 45416), (90, 45425), (100, 45503),

Gene: Kinbote_72 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for Kinbote_72:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: LilHazelnut_74 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for LilHazelnut_74:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Lilbeanie_66 Start: 45819, Stop: 46490, Start Num: 28

Candidate Starts for Lilbeanie_66:

(22, 45774), (26, 45807), (Start: 28 @45819 has 1 MA's), (54, 46077), (56, 46098), (57, 46107), (66, 46188), (78, 46287), (83, 46317), (88, 46368), (95, 46422), (102, 46482),

Gene: Luke_71 Start: 48119, Stop: 48811, Start Num: 18

Candidate Starts for Luke_71:

(6, 47882), (Start: 18 @48119 has 10 MA's), (21, 48128), (25, 48170), (Start: 30 @48200 has 12 MA's), (38, 48281), (44, 48365), (48, 48389), (50, 48398), (54, 48428), (58, 48461), (65, 48527), (72, 48563), (75, 48617), (79, 48641), (80, 48644), (85, 48659), (87, 48686), (88, 48701), (90, 48710), (92, 48728), (94, 48743),

Gene: Luna22_67 Start: 48148, Stop: 48840, Start Num: 18

Candidate Starts for Luna22_67:

(6, 47911), (Start: 18 @48148 has 10 MA's), (21, 48157), (25, 48199), (Start: 30 @48229 has 12 MA's), (38, 48310), (44, 48394), (48, 48418), (50, 48427), (54, 48457), (58, 48490), (65, 48556), (72, 48592), (75, 48646), (79, 48670), (80, 48673), (85, 48688), (87, 48715), (88, 48730), (90, 48739), (92, 48757), (94, 48772),

Gene: NovoPizza_79 Start: 50384, Stop: 51010, Start Num: 29

Candidate Starts for NovoPizza_79:

(1, 49607), (3, 49991), (4, 50015), (8, 50075), (9, 50096), (11, 50231), (12, 50246), (13, 50273), (14, 50276), (Start: 29 @50384 has 1 MA's), (Start: 30 @50399 has 12 MA's), (37, 50453), (48, 50588), (51, 50606), (54, 50627), (58, 50660), (61, 50699), (65, 50726), (72, 50762), (73, 50768), (74, 50786), (77, 50831), (79, 50840), (80, 50843), (81, 50852), (88, 50900), (90, 50909), (91, 50921), (92, 50927),

Gene: OBUpride_73 Start: 48289, Stop: 48900, Start Num: 30

Candidate Starts for OBUpride_73:

(6, 47971), (Start: 18 @48208 has 10 MA's), (21, 48217), (25, 48259), (Start: 30 @48289 has 12 MA's), (38, 48370), (44, 48454), (48, 48478), (50, 48487), (54, 48517), (58, 48550), (65, 48616), (72, 48652), (75, 48706), (79, 48730), (80, 48733), (85, 48748), (87, 48775), (88, 48790), (90, 48799), (92, 48817), (94, 48832),

Gene: Rem711_70 Start: 43454, Stop: 44074, Start Num: 32

Candidate Starts for Rem711_70:

(Start: 32 @43454 has 6 MA's), (33, 43463), (35, 43466), (36, 43505), (41, 43544), (45, 43610), (47, 43628), (49, 43637), (55, 43679), (77, 43853), (88, 43922), (90, 43931), (97, 43985),

Gene: Sleepyhead_61 Start: 40018, Stop: 40581, Start Num: 32

Candidate Starts for Sleepyhead_61:

(2, 39454), (5, 39658), (9, 39706), (17, 39922), (27, 39991), (Start: 32 @40018 has 6 MA's), (40, 40105), (42, 40114), (43, 40168), (50, 40207), (60, 40303), (63, 40318), (64, 40324), (68, 40354), (69, 40360), (71, 40369), (76, 40414), (77, 40426), (90, 40507), (94, 40537),

Gene: Typha_83 Start: 54897, Stop: 55466, Start Num: 32

Candidate Starts for Typha_83:

(15, 54768), (16, 54771), (19, 54807), (Start: 32 @54897 has 6 MA's), (39, 54963), (47, 55053), (48, 55056), (53, 55086), (54, 55089), (59, 55146), (64, 55170), (65, 55185), (66, 55194), (67, 55197), (68, 55200), (70, 55212), (76, 55260), (78, 55281), (89, 55347), (92, 55368), (96, 55401), (99, 55422), (101, 55434),

Gene: Ubuntu_74 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for Ubuntu_74:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Webster2_74 Start: 48245, Stop: 48856, Start Num: 30

Candidate Starts for Webster2_74:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),

Gene: Weirido19_69 Start: 44467, Stop: 45291, Start Num: 11

Candidate Starts for Weirido19_69:

(7, 44290), (11, 44467), (23, 44593), (34, 44650), (41, 44746), (45, 44812), (48, 44833), (54, 44884), (58, 44917), (61, 44956), (67, 44995), (74, 45046), (82, 45130), (86, 45154), (88, 45193), (89, 45199), (100, 45280),

Gene: Whack_67 Start: 43772, Stop: 44335, Start Num: 32

Candidate Starts for Whack_67:

(17, 43679), (20, 43697), (24, 43742), (27, 43751), (Start: 32 @43772 has 6 MA's), (40, 43859), (42, 43868), (46, 43946), (50, 43961), (52, 43973), (57, 44024), (62, 44069), (68, 44108), (77, 44180), (88, 44249), (93, 44285), (98, 44324),

Gene: Wishmaker_67 Start: 48164, Stop: 48856, Start Num: 18

Candidate Starts for Wishmaker_67:

(6, 47927), (Start: 18 @48164 has 10 MA's), (21, 48173), (25, 48215), (Start: 30 @48245 has 12 MA's), (38, 48326), (44, 48410), (48, 48434), (50, 48443), (54, 48473), (58, 48506), (65, 48572), (72, 48608), (75, 48662), (79, 48686), (80, 48689), (85, 48704), (87, 48731), (88, 48746), (90, 48755), (92, 48773), (94, 48788),