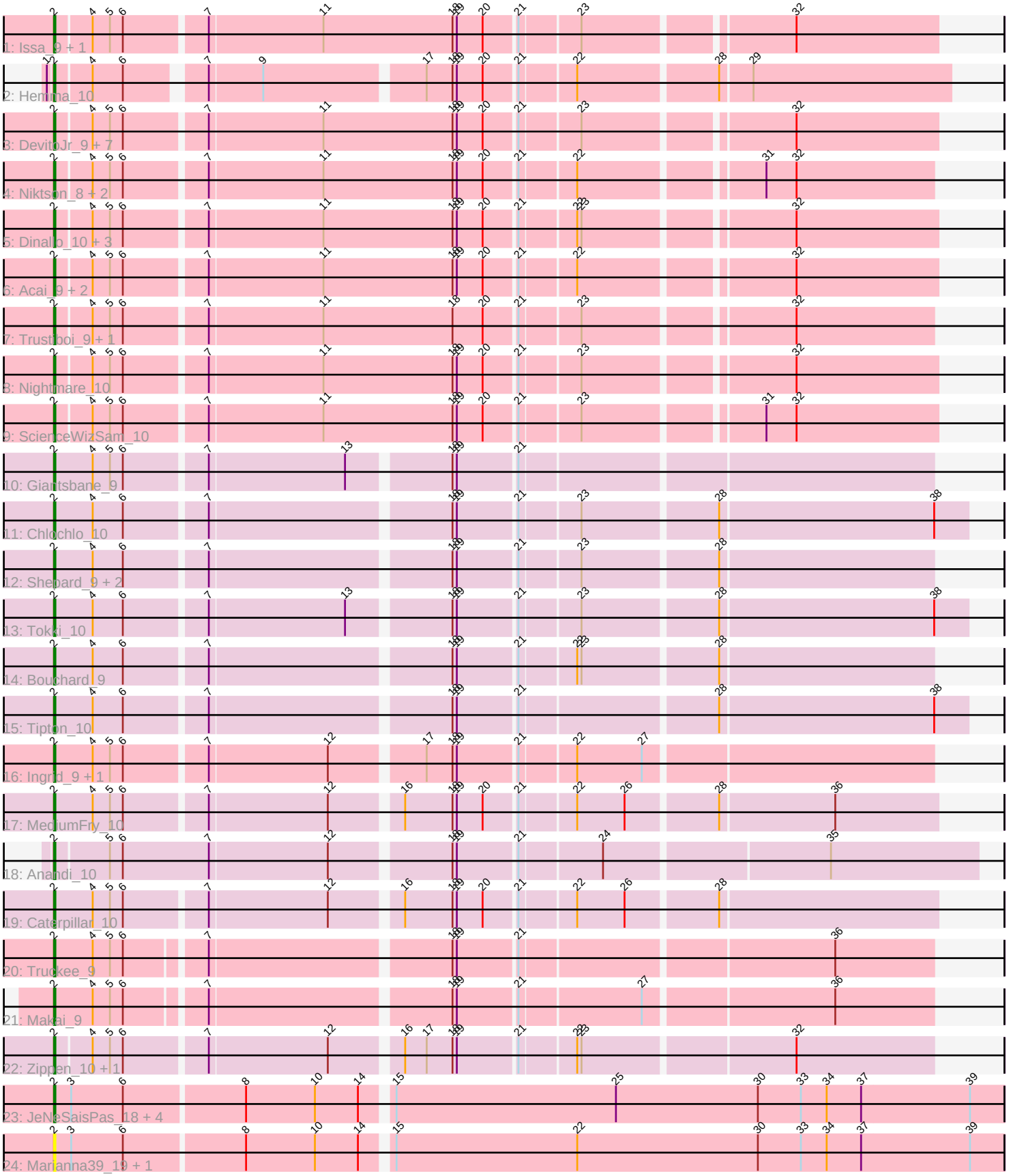
Pham 347731


1: Issa_9 + 1
2: Hemma_10
3: DevitoJr_9 + 7
4: Niktson_8 + 2
5: Dinallo_10 + 3
6: Acai_9 + 2
7: Trustboi_9 + 1
8: Nightmare_10
9: ScienceWizSam_10
10: Giantsbane_9
11: Chlochlo_10
12: Shepard_9 + 2
13: Tokki_10
14: Bouchard_9
15: Tipton_10
16: Ingrid_9 + 1
17: MediumFry_10
18: Anandi_10
19: Caterpillar_10
20: Truckee_9
21: Makai_9
22: Zippen_10 + 1
23: JeNeSaisPas_18 + 4
24: Marianna39_19 + 1

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 347731 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347731 has 49 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Issa_9, LucySwiss_9
• Track 2 : Hemma_10
• Track 3 : DevitoJr_9, AreFloNak_9, Gordon_9, Westerlin_9, Darby_9, Nivinsha_9, Tatanka_8, Synepsis_8
• Track 4 : Niktson_8, ElephantMan_8, Brunswick_9
• Track 5 : Dinallo_10, CapnMurica_9, MiniBagel_9, Tenno_10
• Track 6 : Acai_9, Breylor17_9, Teacup_9
• Track 7 : Trustiboi_9, CastorTray_10
• Track 8 : Nightmare_10
• Track 9 : ScienceWizSam_10
• Track 10 : Giantsbane_9
• Track 11 : Chlochlo_10
• Track 12 : Shepard_9, Phaby_9, LilHuddy_9
• Track 13 : Tokki_10
• Track 14 : Bouchard_9
• Track 15 : Tipton_10
• Track 16 : Ingrid_9, Loretta_9
• Track 17 : MediumFry_10
• Track 18 : Anandi_10
• Track 19 : Caterpillar_10
• Track 20 : Truckee_9
• Track 21 : Makai_9
• Track 22 : Zippen_10, Inked_10
• Track 23 : JeNeSaisPas_18, Elver_19, Qui_19, Paella_19, Kureo_20
• Track 24 : Marianna39_19, Gandionco_18

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

The start number called the most often in the published annotations is 2, it was called in 42 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acai_9, Anandi_10, AreFloNak_9, Bouchard_9, Breylor17_9, Brunswick_9, CapnMurica_9, CastorTray_10, Caterpillar_10, Chlochlo_10, Darby_9, DevitoJr_9,

Dinallo_10, ElephantMan_8, Elver_19, Gandionco_18, Giantsbane_9, Gordon_9, Hemma_10, Ingrid_9, Inked_10, Issa_9, JeNeSaisPas_18, Kureo_20, LilHuddy_9, Loretta_9, LucySwiss_9, Makai_9, Marianna39_19, MediumFry_10, MiniBagel_9, Nightmare_10, Niktson_8, Nivinsha_9, Paella_19, Phaby_9, Qui_19, ScienceWizSam_10, Shepard_9, Synepsis_8, Tatanka_8, Teacup_9, Tenno_10, Tipton_10, Tokki_10, Truckee_9, Trustiboi_9, Westerlin_9, Zippen_10,

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

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

Summary by start number:

Start 2:
• Found in 49 of 49 (100.0%) of genes in pham
• Manual Annotations of this start: 42 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acai_9 (AU1), Anandi_10 (AU4), AreFloNak_9 (AU1), Bouchard_9 (AU2), Breylor17_9 (AU1), Brunswick_9 (AU1), CapnMurica_9 (AU1), CastorTray_10 (AU1), Caterpillar_10 (AU4), Chlochlo_10 (AU2), Darby_9 (AU1), DevitoJr_9 (AU1), Dinallo_10 (AU1), ElephantMan_8 (AU1), Elver_19 (FK), Gandionco_18 (FK), Giantsbane_9 (AU2), Gordon_9 (AU1), Hemma_10 (AU1), Ingrid_9 (AU3), Inked_10 (AU7), Issa_9 (AU1), JeNeSaisPas_18 (FK), Kureo_20 (FK), LilHuddy_9 (AU2), Loretta_9 (AU3), LucySwiss_9 (AU1), Makai_9 (AU5), Marianna39_19 (FK), MediumFry_10 (AU4), MiniBagel_9 (AU1), Nightmare_10 (AU1), Niktson_8 (AU1), Nivinsha_9 (AU1), Paella_19 (FK), Phaby_9 (AU2), Qui_19 (FK), ScienceWizSam_10 (AU1), Shepard_9 (AU2), Synepsis_8 (AU1), Tatanka_8 (AU1), Teacup_9 (AU1), Tenno_10 (AU1), Tipton_10 (AU2), Tokki_10 (AU2), Truckee_9 (AU5), Trustiboi_9 (AU1), Westerlin_9 (AU1), Zippen_10 (AU7),

Summary by clusters:

There are 7 clusters represented in this pham: AU1, AU3, AU2, AU5, AU4, AU7, FK,

Info for manual annotations of cluster AU1:
•Start number 2 was manually annotated 21 times for cluster AU1.

Info for manual annotations of cluster AU2:
•Start number 2 was manually annotated 8 times for cluster AU2.

Info for manual annotations of cluster AU3:
•Start number 2 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:
•Start number 2 was manually annotated 3 times for cluster AU4.

Info for manual annotations of cluster AU5:
•Start number 2 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU7:

•Start number 2 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster FK:
•Start number 2 was manually annotated 4 times for cluster FK.

Gene Information:

Gene: Acai_9 Start: 6291, Stop: 6872, Start Num: 2
Candidate Starts for Acai_9:
(Start: 2 @6291 has 42 MA's), (4, 6315), (5, 6327), (6, 6336), (7, 6390), (11, 6468), (18, 6558), (19, 6561), (20, 6579), (21, 6600), (22, 6636), (32, 6774),

Gene: Anandi_10 Start: 6358, Stop: 6969, Start Num: 2
Candidate Starts for Anandi_10:
(Start: 2 @6358 has 42 MA's), (5, 6394), (6, 6403), (7, 6463), (12, 6544), (18, 6622), (19, 6625), (21, 6664), (24, 6718), (35, 6868),

Gene: AreFloNak_9 Start: 6175, Stop: 6756, Start Num: 2
Candidate Starts for AreFloNak_9:
(Start: 2 @6175 has 42 MA's), (4, 6199), (5, 6211), (6, 6220), (7, 6274), (11, 6352), (18, 6442), (19, 6445), (20, 6463), (21, 6484), (23, 6523), (32, 6658),

Gene: Bouchard_9 Start: 6108, Stop: 6686, Start Num: 2
Candidate Starts for Bouchard_9:
(Start: 2 @6108 has 42 MA's), (4, 6135), (6, 6156), (7, 6210), (18, 6369), (19, 6372), (21, 6411), (22, 6447), (23, 6450), (28, 6540),

Gene: Breylor17_9 Start: 6300, Stop: 6878, Start Num: 2
Candidate Starts for Breylor17_9:
(Start: 2 @6300 has 42 MA's), (4, 6324), (5, 6336), (6, 6345), (7, 6399), (11, 6477), (18, 6567), (19, 6570), (20, 6588), (21, 6609), (22, 6645), (32, 6783),

Gene: Brunswick_9 Start: 6288, Stop: 6869, Start Num: 2
Candidate Starts for Brunswick_9:
(Start: 2 @6288 has 42 MA's), (4, 6312), (5, 6324), (6, 6333), (7, 6387), (11, 6465), (18, 6555), (19, 6558), (20, 6576), (21, 6597), (22, 6633), (31, 6750), (32, 6771),

Gene: CapnMurica_9 Start: 7384, Stop: 7965, Start Num: 2
Candidate Starts for CapnMurica_9:
(Start: 2 @7384 has 42 MA's), (4, 7408), (5, 7420), (6, 7429), (7, 7483), (11, 7561), (18, 7651), (19, 7654), (20, 7672), (21, 7693), (22, 7729), (23, 7732), (32, 7867),

Gene: CastorTray_10 Start: 6154, Stop: 6732, Start Num: 2
Candidate Starts for CastorTray_10:
(Start: 2 @6154 has 42 MA's), (4, 6178), (5, 6190), (6, 6199), (7, 6253), (11, 6331), (18, 6421), (20, 6442), (21, 6463), (23, 6502), (32, 6637),

Gene: Caterpillar_10 Start: 6396, Stop: 6977, Start Num: 2
Candidate Starts for Caterpillar_10:
(Start: 2 @6396 has 42 MA's), (4, 6423), (5, 6435), (6, 6444), (7, 6498), (12, 6579), (16, 6624), (18, 6657), (19, 6660), (20, 6678), (21, 6699), (22, 6735), (26, 6768), (28, 6828),

Gene: Chlochlo_10 Start: 6713, Stop: 7315, Start Num: 2
Candidate Starts for Chlochlo_10:
(Start: 2 @6713 has 42 MA's), (4, 6740), (6, 6761), (7, 6815), (18, 6974), (19, 6977), (21, 7016), (23, 7055), (28, 7145), (38, 7292),

Gene: Darby_9 Start: 6157, Stop: 6738, Start Num: 2
Candidate Starts for Darby_9:
(Start: 2 @6157 has 42 MA's), (4, 6181), (5, 6193), (6, 6202), (7, 6256), (11, 6334), (18, 6424), (19, 6427), (20, 6445), (21, 6466), (23, 6505), (32, 6640),

Gene: DevitoJr_9 Start: 6299, Stop: 6880, Start Num: 2
Candidate Starts for DevitoJr_9:
(Start: 2 @6299 has 42 MA's), (4, 6323), (5, 6335), (6, 6344), (7, 6398), (11, 6476), (18, 6566), (19, 6569), (20, 6587), (21, 6608), (23, 6647), (32, 6782),

Gene: Dinallo_10 Start: 7384, Stop: 7965, Start Num: 2
Candidate Starts for Dinallo_10:
(Start: 2 @7384 has 42 MA's), (4, 7408), (5, 7420), (6, 7429), (7, 7483), (11, 7561), (18, 7651), (19, 7654), (20, 7672), (21, 7693), (22, 7729), (23, 7732), (32, 7867),

Gene: ElephantMan_8 Start: 6318, Stop: 6896, Start Num: 2
Candidate Starts for ElephantMan_8:
(Start: 2 @6318 has 42 MA's), (4, 6342), (5, 6354), (6, 6363), (7, 6417), (11, 6495), (18, 6585), (19, 6588), (20, 6606), (21, 6627), (22, 6663), (31, 6780), (32, 6801),

Gene: Elver_19 Start: 10704, Stop: 11348, Start Num: 2
Candidate Starts for Elver_19:
(Start: 2 @10704 has 42 MA's), (3, 10716), (6, 10752), (8, 10830), (10, 10878), (14, 10908), (15, 10926), (25, 11079), (30, 11178), (33, 11208), (34, 11226), (37, 11250), (39, 11325),

Gene: Gandionco_18 Start: 10664, Stop: 11311, Start Num: 2
Candidate Starts for Gandionco_18:
(Start: 2 @10664 has 42 MA's), (3, 10676), (6, 10712), (8, 10793), (10, 10841), (14, 10871), (15, 10889), (22, 11015), (30, 11141), (33, 11171), (34, 11189), (37, 11213), (39, 11288),

Gene: Giantsbane_9 Start: 6121, Stop: 6699, Start Num: 2
Candidate Starts for Giantsbane_9:
(Start: 2 @6121 has 42 MA's), (4, 6148), (5, 6160), (6, 6169), (7, 6223), (13, 6316), (18, 6382), (19, 6385), (21, 6424),

Gene: Gordon_9 Start: 7423, Stop: 8004, Start Num: 2
Candidate Starts for Gordon_9:
(Start: 2 @7423 has 42 MA's), (4, 7447), (5, 7459), (6, 7468), (7, 7522), (11, 7600), (18, 7690), (19, 7693), (20, 7711), (21, 7732), (23, 7771), (32, 7906),

Gene: Hemma_10 Start: 5939, Stop: 6520, Start Num: 2
Candidate Starts for Hemma_10:
(1, 5936), (Start: 2 @5939 has 42 MA's), (4, 5963), (6, 5984), (7, 6032), (9, 6068), (17, 6173), (18, 6191), (19, 6194), (20, 6212), (21, 6233), (22, 6269), (28, 6362), (29, 6383),

Gene: Ingrid_9 Start: 6201, Stop: 6779, Start Num: 2
Candidate Starts for Ingrid_9:

(Start: 2 @6201 has 42 MA's), (4, 6228), (5, 6240), (6, 6249), (7, 6303), (12, 6384), (17, 6444), (18, 6462), (19, 6465), (21, 6504), (22, 6540), (27, 6585),

Gene: Inked_10 Start: 6378, Stop: 6953, Start Num: 2
Candidate Starts for Inked_10:
(Start: 2 @6378 has 42 MA's), (4, 6402), (5, 6414), (6, 6423), (7, 6477), (12, 6558), (16, 6603), (17, 6618), (18, 6636), (19, 6639), (21, 6678), (22, 6714), (23, 6717), (32, 6858),

Gene: Issa_9 Start: 6130, Stop: 6711, Start Num: 2
Candidate Starts for Issa_9:
(Start: 2 @6130 has 42 MA's), (4, 6154), (5, 6166), (6, 6175), (7, 6229), (11, 6307), (18, 6397), (19, 6400), (20, 6418), (21, 6439), (23, 6478), (32, 6613),

Gene: JeNeSaisPas_18 Start: 11236, Stop: 11883, Start Num: 2
Candidate Starts for JeNeSaisPas_18:
(Start: 2 @11236 has 42 MA's), (3, 11248), (6, 11284), (8, 11365), (10, 11413), (14, 11443), (15, 11461), (25, 11614), (30, 11713), (33, 11743), (34, 11761), (37, 11785), (39, 11860),

Gene: Kureo_20 Start: 11068, Stop: 11715, Start Num: 2
Candidate Starts for Kureo_20:
(Start: 2 @11068 has 42 MA's), (3, 11080), (6, 11116), (8, 11197), (10, 11245), (14, 11275), (15, 11293), (25, 11446), (30, 11545), (33, 11575), (34, 11593), (37, 11617), (39, 11692),

Gene: LilHuddy_9 Start: 6115, Stop: 6693, Start Num: 2
Candidate Starts for LilHuddy_9:
(Start: 2 @6115 has 42 MA's), (4, 6142), (6, 6163), (7, 6217), (18, 6376), (19, 6379), (21, 6418), (23, 6457), (28, 6547),

Gene: Loretta_9 Start: 6201, Stop: 6779, Start Num: 2
Candidate Starts for Loretta_9:
(Start: 2 @6201 has 42 MA's), (4, 6228), (5, 6240), (6, 6249), (7, 6303), (12, 6384), (17, 6444), (18, 6462), (19, 6465), (21, 6504), (22, 6540), (27, 6585),

Gene: LucySwiss_9 Start: 6149, Stop: 6730, Start Num: 2
Candidate Starts for LucySwiss_9:
(Start: 2 @6149 has 42 MA's), (4, 6173), (5, 6185), (6, 6194), (7, 6248), (11, 6326), (18, 6416), (19, 6419), (20, 6437), (21, 6458), (23, 6497), (32, 6632),

Gene: Makai_9 Start: 6244, Stop: 6819, Start Num: 2
Candidate Starts for Makai_9:
(Start: 2 @6244 has 42 MA's), (4, 6271), (5, 6283), (6, 6292), (7, 6343), (18, 6502), (19, 6505), (21, 6544), (27, 6625), (36, 6751),

Gene: Marianna39_19 Start: 10664, Stop: 11311, Start Num: 2
Candidate Starts for Marianna39_19:
(Start: 2 @10664 has 42 MA's), (3, 10676), (6, 10712), (8, 10793), (10, 10841), (14, 10871), (15, 10889), (22, 11015), (30, 11141), (33, 11171), (34, 11189), (37, 11213), (39, 11288),

Gene: MediumFry_10 Start: 6425, Stop: 7006, Start Num: 2
Candidate Starts for MediumFry_10:
(Start: 2 @6425 has 42 MA's), (4, 6452), (5, 6464), (6, 6473), (7, 6527), (12, 6608), (16, 6653), (18, 6686), (19, 6689), (20, 6707), (21, 6728), (22, 6764), (26, 6797), (28, 6857), (36, 6935),

Gene: MiniBagel_9 Start: 7384, Stop: 7956, Start Num: 2
Candidate Starts for MiniBagel_9:
(Start: 2 @7384 has 42 MA's), (4, 7408), (5, 7420), (6, 7429), (7, 7483), (11, 7561), (18, 7651), (19, 7654), (20, 7672), (21, 7693), (22, 7720), (23, 7723), (32, 7858),

Gene: Nightmare_10 Start: 6757, Stop: 7338, Start Num: 2
Candidate Starts for Nightmare_10:
(Start: 2 @6757 has 42 MA's), (4, 6781), (5, 6793), (6, 6802), (7, 6856), (11, 6934), (18, 7024), (19, 7027), (20, 7045), (21, 7066), (23, 7105), (32, 7240),

Gene: Niktson_8 Start: 6318, Stop: 6896, Start Num: 2
Candidate Starts for Niktson_8:
(Start: 2 @6318 has 42 MA's), (4, 6342), (5, 6354), (6, 6363), (7, 6417), (11, 6495), (18, 6585), (19, 6588), (20, 6606), (21, 6627), (22, 6663), (31, 6780), (32, 6801),

Gene: Nivinsha_9 Start: 6175, Stop: 6756, Start Num: 2
Candidate Starts for Nivinsha_9:
(Start: 2 @6175 has 42 MA's), (4, 6199), (5, 6211), (6, 6220), (7, 6274), (11, 6352), (18, 6442), (19, 6445), (20, 6463), (21, 6484), (23, 6523), (32, 6658),

Gene: Paella_19 Start: 10703, Stop: 11350, Start Num: 2
Candidate Starts for Paella_19:
(Start: 2 @10703 has 42 MA's), (3, 10715), (6, 10751), (8, 10832), (10, 10880), (14, 10910), (15, 10928), (25, 11081), (30, 11180), (33, 11210), (34, 11228), (37, 11252), (39, 11327),

Gene: Phaby_9 Start: 6105, Stop: 6683, Start Num: 2
Candidate Starts for Phaby_9:
(Start: 2 @6105 has 42 MA's), (4, 6132), (6, 6153), (7, 6207), (18, 6366), (19, 6369), (21, 6408), (23, 6447), (28, 6537),

Gene: Qui_19 Start: 10703, Stop: 11350, Start Num: 2
Candidate Starts for Qui_19:
(Start: 2 @10703 has 42 MA's), (3, 10715), (6, 10751), (8, 10832), (10, 10880), (14, 10910), (15, 10928), (25, 11081), (30, 11180), (33, 11210), (34, 11228), (37, 11252), (39, 11327),

Gene: ScienceWizSam_10 Start: 6130, Stop: 6711, Start Num: 2
Candidate Starts for ScienceWizSam_10:
(Start: 2 @6130 has 42 MA's), (4, 6154), (5, 6166), (6, 6175), (7, 6229), (11, 6307), (18, 6397), (19, 6400), (20, 6418), (21, 6439), (23, 6478), (31, 6592), (32, 6613),

Gene: Shepard_9 Start: 6115, Stop: 6693, Start Num: 2
Candidate Starts for Shepard_9:
(Start: 2 @6115 has 42 MA's), (4, 6142), (6, 6163), (7, 6217), (18, 6376), (19, 6379), (21, 6418), (23, 6457), (28, 6547),

Gene: Synepsis_8 Start: 6295, Stop: 6876, Start Num: 2
Candidate Starts for Synepsis_8:
(Start: 2 @6295 has 42 MA's), (4, 6319), (5, 6331), (6, 6340), (7, 6394), (11, 6472), (18, 6562), (19, 6565), (20, 6583), (21, 6604), (23, 6643), (32, 6778),

Gene: Tatanka_8 Start: 6235, Stop: 6816, Start Num: 2
Candidate Starts for Tatanka_8:

(Start: 2 @6235 has 42 MA's), (4, 6259), (5, 6271), (6, 6280), (7, 6334), (11, 6412), (18, 6502), (19, 6505), (20, 6523), (21, 6544), (23, 6583), (32, 6718),

Gene: Teacup_9 Start: 6133, Stop: 6714, Start Num: 2
Candidate Starts for Teacup_9:
(Start: 2 @6133 has 42 MA's), (4, 6157), (5, 6169), (6, 6178), (7, 6232), (11, 6310), (18, 6400), (19, 6403), (20, 6421), (21, 6442), (22, 6478), (32, 6616),

Gene: Tenno_10 Start: 7384, Stop: 7965, Start Num: 2
Candidate Starts for Tenno_10:
(Start: 2 @7384 has 42 MA's), (4, 7408), (5, 7420), (6, 7429), (7, 7483), (11, 7561), (18, 7651), (19, 7654), (20, 7672), (21, 7693), (22, 7729), (23, 7732), (32, 7867),

Gene: Tipton_10 Start: 6713, Stop: 7315, Start Num: 2
Candidate Starts for Tipton_10:
(Start: 2 @6713 has 42 MA's), (4, 6740), (6, 6761), (7, 6815), (18, 6974), (19, 6977), (21, 7016), (28, 7145), (38, 7292),

Gene: Tokki_10 Start: 6722, Stop: 7324, Start Num: 2
Candidate Starts for Tokki_10:
(Start: 2 @6722 has 42 MA's), (4, 6749), (6, 6770), (7, 6824), (13, 6917), (18, 6983), (19, 6986), (21, 7025), (23, 7064), (28, 7154), (38, 7301),

Gene: Truckee_9 Start: 6191, Stop: 6766, Start Num: 2
Candidate Starts for Truckee_9:
(Start: 2 @6191 has 42 MA's), (4, 6218), (5, 6230), (6, 6239), (7, 6290), (18, 6449), (19, 6452), (21, 6491), (36, 6698),

Gene: Trustiboi_9 Start: 6319, Stop: 6897, Start Num: 2
Candidate Starts for Trustiboi_9:
(Start: 2 @6319 has 42 MA's), (4, 6343), (5, 6355), (6, 6364), (7, 6418), (11, 6496), (18, 6586), (20, 6607), (21, 6628), (23, 6667), (32, 6802),

Gene: Westerlin_9 Start: 7381, Stop: 7962, Start Num: 2
Candidate Starts for Westerlin_9:
(Start: 2 @7381 has 42 MA's), (4, 7405), (5, 7417), (6, 7426), (7, 7480), (11, 7558), (18, 7648), (19, 7651), (20, 7669), (21, 7690), (23, 7729), (32, 7864),

Gene: Zippen_10 Start: 6409, Stop: 6984, Start Num: 2
Candidate Starts for Zippen_10:
(Start: 2 @6409 has 42 MA's), (4, 6433), (5, 6445), (6, 6454), (7, 6508), (12, 6589), (16, 6634), (17, 6649), (18, 6667), (19, 6670), (21, 6709), (22, 6745), (23, 6748), (32, 6889),