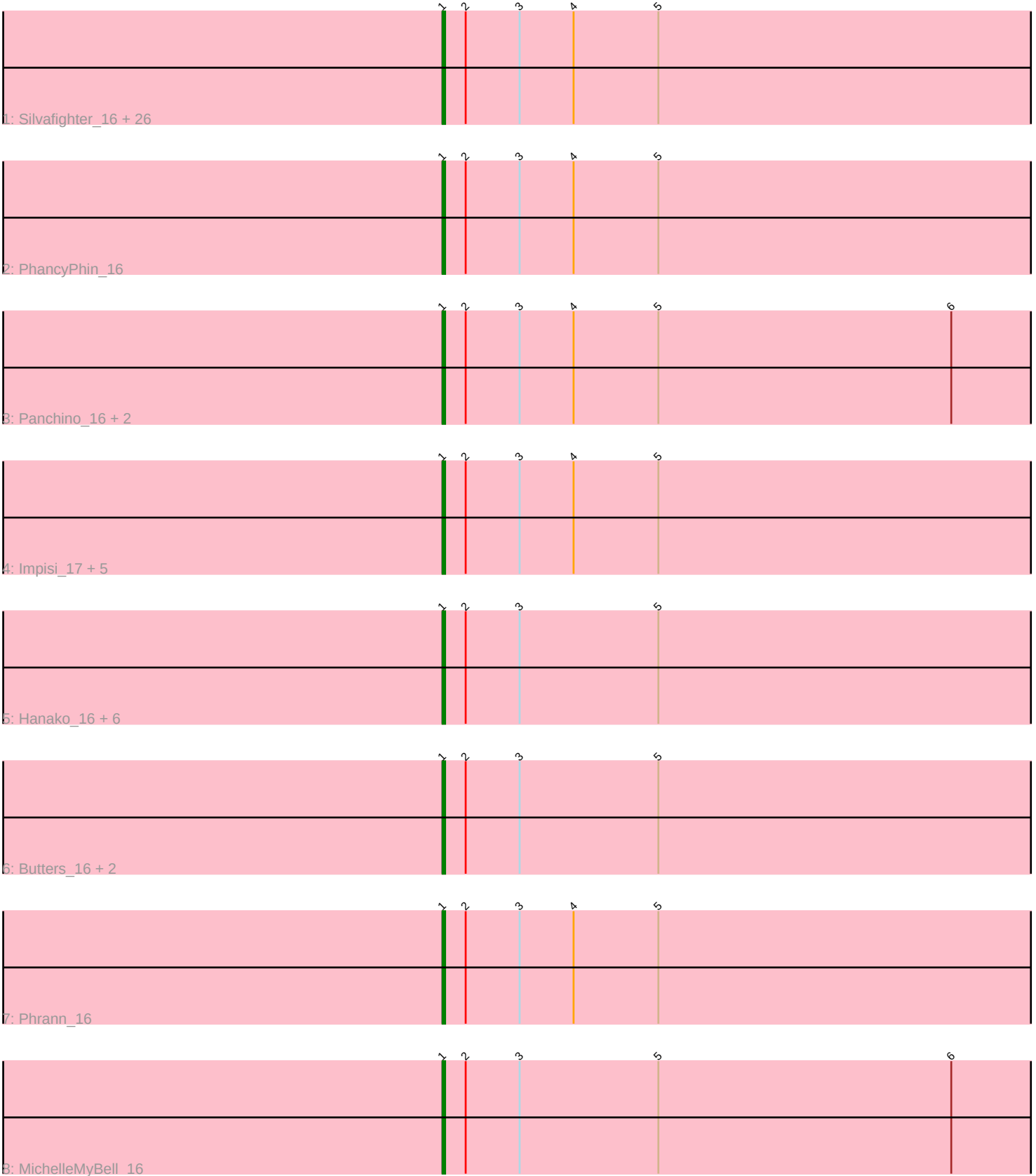


Zoomed Pham 280542



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 280542 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280542 has 49 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Silvafighter_16, Charlie_16, Duplicity_16, Cubone_16, Phloss_16, Tapioca_16, Carcharodon_16, Gex_16, Aggie_16, Fulbright_16, Magsby_16, Journey_16, Silvy_16, Melville_16, EGUnicorn_16, Scitech_16, Xerxes_16, Bosection6_16, Tortoise12_16, Chewbacca_16, Parmesanjohn_16, Xeno_16, Schnauzer_16, Pipsqueaks_16, Andies_16, Philonius_16, Smurph_16
- Track 2 : PhancyPhin_16
- Track 3 : Panchino_16, SkinnyPete_16, Rebel_16
- Track 4 : Impisi_17, Jamie19_16, Raymond7_16, SpongeBob_16, Snekmaggedon_16, Shweta_16
- Track 5 : Hanako_16, ShrimpFriedEgg_16, Purgamenstris_16, Spinach_16, Nenae_16, BabeRuth_16, Redi_16
- Track 6 : Butters_16, Kevin1_16, Rubeelu_16
- Track 7 : Phrann_16
- Track 8 : MichelleMyBell_16

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

The start number called the most often in the published annotations is 1, it was called in 46 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aggie_16, Andies_16, BabeRuth_16, Bosection6_16, Butters_16, Carcharodon_16, Charlie_16, Chewbacca_16, Cubone_16, Duplicity_16, EGUnicorn_16, Fulbright_16, Gex_16, Hanako_16, Impisi_17, Jamie19_16, Journey_16, Kevin1_16, Magsby_16, Melville_16, MichelleMyBell_16, Nenae_16, Panchino_16, Parmesanjohn_16, PhancyPhin_16, Philonius_16, Phloss_16, Phrann_16, Pipsqueaks_16, Purgamenstris_16, Raymond7_16, Rebel_16, Redi_16, Rubeelu_16, Schnauzer_16, Scitech_16, ShrimpFriedEgg_16, Shweta_16, Silvafighter_16, Silvy_16, SkinnyPete_16, Smurph_16, Snekmaggedon_16, Spinach_16, SpongeBob_16, Tapioca_16, Tortoise12_16, Xeno_16, Xerxes_16,

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 1:

- Found in 49 of 49 (100.0%) of genes in pham
- Manual Annotations of this start: 46 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aggie_16 (N), Andies_16 (N), BabeRuth_16 (N), Bosection6_16 (N), Butters_16 (N), Carcharodon_16 (N), Charlie_16 (N), Chewbacca_16 (N), Cubone_16 (N), Duplicity_16 (N), EGUnicorn_16 (N), Fulbright_16 (N), Gex_16 (N), Hanako_16 (N), Impisi_17 (N), Jamie19_16 (N), Journey_16 (N), Kevin1_16 (N), Magsby_16 (N), Melville_16 (N), MichelleMyBell_16 (N), Nena_16 (N), Panchino_16 (N), Parmesanjohn_16 (N), PhancyPhin_16 (N), Philonius_16 (N), Phloss_16 (N), Phrann_16 (N), Pipsqueaks_16 (N), Purgamenstris_16 (N), Raymond7_16 (N), Rebel_16 (N), Redi_16 (N), Rubeelu_16 (N), Schnauzer_16 (N), Scitech_16 (N), ShrimpFriedEgg_16 (N), Shweta_16 (N), Silvafighter_16 (N), Silvy_16 (N), SkinnyPete_16 (N), Smurph_16 (N), Snekmaggon_16 (N), Spinach_16 (N), SpongeBob_16 (N), Tapioca_16 (N), Tortoise12_16 (N), Xeno_16 (N), Xerxes_16 (N),

Summary by clusters:

There is one cluster represented in this pham: N

Info for manual annotations of cluster N:

- Start number 1 was manually annotated 46 times for cluster N.

Gene Information:

Gene: Aggie_16 Start: 10124, Stop: 13267, Start Num: 1

Candidate Starts for Aggie_16:

(Start: 1 @10124 has 46 MA's), (2, 10133), (3, 10154), (4, 10175), (5, 10208), (8, 10472), (10, 10487), (11, 10496), (13, 10541), (14, 10550), (15, 10715), (18, 10748), (19, 10772), (20, 10817), (21, 10826), (22, 10859), (23, 10880), (32, 11381), (33, 11384), (36, 11453), (37, 11543), (38, 11552), (39, 11585), (42, 11645), (43, 11663), (44, 11684), (45, 11726), (46, 11765), (47, 11807), (49, 11849), (51, 11903), (52, 11906), (53, 11987), (54, 12104), (56, 12257), (60, 12479), (63, 12617), (64, 12635), (66, 12656), (68, 12719), (69, 12764), (71, 12833), (72, 12854), (73, 12863), (76, 12998), (77, 13016), (78, 13058), (79, 13166),

Gene: Andies_16 Start: 10123, Stop: 13263, Start Num: 1

Candidate Starts for Andies_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12253), (60, 12475), (63, 12613), (64, 12631), (66, 12652), (68, 12715), (69, 12760), (71, 12829), (72, 12850), (73, 12859), (76, 12994), (77, 13012), (78, 13054), (79, 13162),

Gene: BabeRuth_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for BabeRuth_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (62, 12626), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (70, 12779), (71, 12836), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235),

Gene: Bosection6_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Bosection6_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Butters_16 Start: 10144, Stop: 13233, Start Num: 1

Candidate Starts for Butters_16:

(Start: 1 @10144 has 46 MA's), (2, 10153), (3, 10174), (5, 10228), (9, 10495), (11, 10516), (12, 10528), (16, 10738), (17, 10756), (18, 10768), (19, 10792), (21, 10846), (22, 10879), (23, 10900), (24, 11008), (25, 11011), (27, 11086), (28, 11236), (29, 11296), (31, 11365), (32, 11401), (33, 11404), (34, 11419), (35, 11452), (38, 11548), (39, 11581), (41, 11641), (42, 11644), (45, 11725), (46, 11764), (48, 11809), (49, 11848), (50, 11863), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (55, 12187), (56, 12253), (59, 12376), (60, 12475), (61, 12487), (69, 12727), (71, 12799), (75, 12943), (76, 12964), (77, 12982), (78, 13024), (79, 13132),

Gene: Carcharodon_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Carcharodon_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Charlie_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Charlie_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Chewbacca_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Chewbacca_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Cubone_16 Start: 10148, Stop: 13288, Start Num: 1

Candidate Starts for Cubone_16:

(Start: 1 @10148 has 46 MA's), (2, 10157), (3, 10178), (4, 10199), (5, 10232), (8, 10496), (10, 10511), (11, 10520), (13, 10565), (14, 10574), (15, 10739), (18, 10772), (19, 10796), (20, 10841), (21, 10850), (22, 10883), (23, 10904), (32, 11405), (33, 11408), (36, 11477), (37, 11567), (38, 11576), (39, 11609), (42, 11669), (43, 11687), (44, 11708), (45, 11750), (46, 11789), (47, 11831), (49, 11873), (51, 11927), (52, 11930), (53, 12011), (54, 12128), (56, 12278), (60, 12500), (63, 12638), (64, 12656), (66, 12677), (68, 12740), (69, 12785), (71, 12854), (72, 12875), (73, 12884), (76, 13019), (77, 13037), (78, 13079), (79, 13187),

Gene: Duplicity_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Duplicity_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: EGUunicorn_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for EGUunicorn_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Fulbright_16 Start: 10123, Stop: 13263, Start Num: 1

Candidate Starts for Fulbright_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12253), (60, 12475), (63, 12613), (64, 12631), (66, 12652), (68, 12715), (69, 12760), (71, 12829), (72, 12850), (73, 12859), (76, 12994), (77, 13012), (78, 13054), (79, 13162),

Gene: Gex_16 Start: 10122, Stop: 13262, Start Num: 1

Candidate Starts for Gex_16:

(Start: 1 @10122 has 46 MA's), (2, 10131), (3, 10152), (4, 10173), (5, 10206), (8, 10470), (10, 10485), (11, 10494), (13, 10539), (14, 10548), (15, 10713), (18, 10746), (19, 10770), (20, 10815), (21, 10824), (22, 10857), (23, 10878), (32, 11379), (33, 11382), (36, 11451), (37, 11541), (38, 11550), (39, 11583),

(42, 11643), (43, 11661), (44, 11682), (45, 11724), (46, 11763), (47, 11805), (49, 11847), (51, 11901), (52, 11904), (53, 11985), (54, 12102), (56, 12252), (60, 12474), (63, 12612), (64, 12630), (66, 12651), (68, 12714), (69, 12759), (71, 12828), (72, 12849), (73, 12858), (76, 12993), (77, 13011), (78, 13053), (79, 13161),

Gene: Hanako_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Hanako_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (62, 12626), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (70, 12779), (71, 12836), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235),

Gene: Impisi_17 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Impisi_17:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12836), (74, 12920), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235), (81, 13250),

Gene: Jamie19_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Jamie19_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12836), (74, 12920), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235), (81, 13250),

Gene: Journey_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Journey_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Kevin1_16 Start: 10145, Stop: 13234, Start Num: 1

Candidate Starts for Kevin1_16:

(Start: 1 @10145 has 46 MA's), (2, 10154), (3, 10175), (5, 10229), (9, 10496), (11, 10517), (12, 10529), (16, 10739), (17, 10757), (18, 10769), (19, 10793), (21, 10847), (22, 10880), (23, 10901), (24, 11009), (25, 11012), (27, 11087), (28, 11237), (29, 11297), (31, 11366), (32, 11402), (33, 11405), (34, 11420), (35, 11453), (38, 11549), (39, 11582), (41, 11642), (42, 11645), (45, 11726), (46, 11765), (48, 11810), (49, 11849), (50, 11864), (51, 11903), (52, 11906), (53, 11987), (54, 12104), (55, 12188), (56, 12254), (59, 12377), (60, 12476), (61, 12488), (69, 12728), (71, 12800), (75, 12944), (76, 12965), (77, 12983),

(78, 13025), (79, 13133),

Gene: Magsby_16 Start: 10123, Stop: 13263, Start Num: 1

Candidate Starts for Magsby_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12253), (60, 12475), (63, 12613), (64, 12631), (66, 12652), (68, 12715), (69, 12760), (71, 12829), (72, 12850), (73, 12859), (76, 12994), (77, 13012), (78, 13054), (79, 13162),

Gene: Melville_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Melville_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: MichelleMyBell_16 Start: 10163, Stop: 13264, Start Num: 1

Candidate Starts for MichelleMyBell_16:

(Start: 1 @10163 has 46 MA's), (2, 10172), (3, 10193), (5, 10247), (6, 10361), (9, 10514), (11, 10535), (12, 10547), (16, 10757), (17, 10775), (18, 10787), (19, 10811), (21, 10865), (22, 10898), (23, 10919), (24, 11027), (25, 11030), (27, 11105), (28, 11255), (29, 11315), (31, 11384), (32, 11420), (33, 11423), (34, 11438), (35, 11471), (38, 11567), (39, 11600), (41, 11660), (42, 11663), (46, 11783), (48, 11828), (49, 11867), (50, 11882), (51, 11921), (52, 11924), (54, 12122), (56, 12269), (57, 12320), (58, 12362), (59, 12392), (60, 12491), (61, 12503), (62, 12617), (65, 12644), (67, 12710), (68, 12719), (69, 12758), (71, 12830), (74, 12914), (75, 12974), (76, 12995), (78, 13055), (79, 13163),

Gene: Nenae_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Nenae_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (62, 12626), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (70, 12779), (71, 12836), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235),

Gene: Panchino_16 Start: 10145, Stop: 13243, Start Num: 1

Candidate Starts for Panchino_16:

(Start: 1 @10145 has 46 MA's), (2, 10154), (3, 10175), (4, 10196), (5, 10229), (6, 10343), (7, 10385), (11, 10517), (12, 10529), (14, 10571), (15, 10736), (16, 10739), (17, 10757), (18, 10769), (19, 10793), (21, 10847), (22, 10880), (23, 10901), (24, 11009), (25, 11012), (26, 11042), (27, 11087), (29, 11297), (30, 11363), (31, 11366), (32, 11402), (33, 11405), (34, 11420), (35, 11453), (38, 11549), (39, 11582), (40, 11627), (41, 11642), (42, 11645), (44, 11684), (45, 11726), (46, 11765), (48, 11810), (50, 11864), (51, 11903), (52, 11906), (54, 12104), (56, 12254), (59, 12377), (60, 12476), (65, 12626), (67, 12692), (68, 12701), (69, 12740), (71, 12809), (74, 12893), (75, 12953), (76, 12974), (78, 13034), (79, 13142), (80, 13208), (81, 13223),

Gene: Parmesanjohn_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Parmesanjohn_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: PhancyPhin_16 Start: 10169, Stop: 13267, Start Num: 1

Candidate Starts for PhancyPhin_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (61, 12512), (62, 12626), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12833), (75, 12977), (76, 12998), (77, 13016), (78, 13058), (79, 13166), (80, 13232), (81, 13247),

Gene: Philonius_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Philonius_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Phloss_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Phloss_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Phrann_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Phrann_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (62, 12626), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12836), (74, 12920), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235), (81, 13250),

Gene: Pipsqueaks_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Pipsqueaks_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Purgamenstris_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Purgamenstris_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (62, 12626), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (70, 12779), (71, 12836), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235),

Gene: Raymond7_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Raymond7_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12836), (74, 12920), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235), (81, 13250),

Gene: Rebel_16 Start: 10169, Stop: 13267, Start Num: 1

Candidate Starts for Rebel_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (6, 10367), (7, 10409), (11, 10541), (12, 10553), (14, 10595), (15, 10760), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (29, 11321), (30, 11387), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12833), (74, 12917), (75, 12977), (76, 12998), (78, 13058), (79, 13166), (80, 13232), (81, 13247),

Gene: Redi_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Redi_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (62, 12626), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (70, 12779), (71, 12836), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235),

Gene: Rubeelu_16 Start: 10144, Stop: 13233, Start Num: 1

Candidate Starts for Rubeelu_16:

(Start: 1 @10144 has 46 MA's), (2, 10153), (3, 10174), (5, 10228), (9, 10495), (11, 10516), (12, 10528), (16, 10738), (17, 10756), (18, 10768), (19, 10792), (21, 10846), (22, 10879), (23, 10900), (24, 11008),

(25, 11011), (27, 11086), (28, 11236), (29, 11296), (31, 11365), (32, 11401), (33, 11404), (34, 11419), (35, 11452), (38, 11548), (39, 11581), (41, 11641), (42, 11644), (45, 11725), (46, 11764), (48, 11809), (49, 11848), (50, 11863), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (55, 12187), (56, 12253), (59, 12376), (60, 12475), (61, 12487), (69, 12727), (71, 12799), (75, 12943), (76, 12964), (77, 12982), (78, 13024), (79, 13132),

Gene: Schnauzer_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Schnauzer_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Scitech_16 Start: 10123, Stop: 13263, Start Num: 1

Candidate Starts for Scitech_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12253), (60, 12475), (63, 12613), (64, 12631), (66, 12652), (68, 12715), (69, 12760), (71, 12829), (72, 12850), (73, 12859), (76, 12994), (77, 13012), (78, 13054), (79, 13162),

Gene: ShrimpFriedEgg_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for ShrimpFriedEgg_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (62, 12626), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (70, 12779), (71, 12836), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235),

Gene: Shweta_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Shweta_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12836), (74, 12920), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235), (81, 13250),

Gene: Silvafighter_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Silvafighter_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655),

(68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Silvy_16 Start: 10124, Stop: 13267, Start Num: 1

Candidate Starts for Silvy_16:

(Start: 1 @10124 has 46 MA's), (2, 10133), (3, 10154), (4, 10175), (5, 10208), (8, 10472), (10, 10487), (11, 10496), (13, 10541), (14, 10550), (15, 10715), (18, 10748), (19, 10772), (20, 10817), (21, 10826), (22, 10859), (23, 10880), (32, 11381), (33, 11384), (36, 11453), (37, 11543), (38, 11552), (39, 11585), (42, 11645), (43, 11663), (44, 11684), (45, 11726), (46, 11765), (47, 11807), (49, 11849), (51, 11903), (52, 11906), (53, 11987), (54, 12104), (56, 12257), (60, 12479), (63, 12617), (64, 12635), (66, 12656), (68, 12719), (69, 12764), (71, 12833), (72, 12854), (73, 12863), (76, 12998), (77, 13016), (78, 13058), (79, 13166),

Gene: SkinnyPete_16 Start: 10169, Stop: 13267, Start Num: 1

Candidate Starts for SkinnyPete_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (6, 10367), (7, 10409), (11, 10541), (12, 10553), (14, 10595), (15, 10760), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (29, 11321), (30, 11387), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12833), (74, 12917), (75, 12977), (76, 12998), (78, 13058), (79, 13166), (80, 13232), (81, 13247),

Gene: Smurph_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Smurph_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Snekmaggedon_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Snekmaggedon_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12836), (74, 12920), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235), (81, 13250),

Gene: Spinach_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for Spinach_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (62, 12626), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (70, 12779), (71, 12836), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235),

Gene: SpongeBob_16 Start: 10169, Stop: 13270, Start Num: 1

Candidate Starts for SpongeBob_16:

(Start: 1 @10169 has 46 MA's), (2, 10178), (3, 10199), (4, 10220), (5, 10253), (7, 10409), (11, 10541), (12, 10553), (16, 10763), (17, 10781), (18, 10793), (19, 10817), (21, 10871), (22, 10904), (23, 10925), (24, 11033), (25, 11036), (26, 11066), (27, 11111), (28, 11261), (29, 11321), (31, 11390), (32, 11426), (33, 11429), (34, 11444), (35, 11477), (38, 11573), (39, 11606), (40, 11651), (41, 11666), (42, 11669), (44, 11708), (45, 11750), (46, 11789), (48, 11834), (50, 11888), (51, 11927), (52, 11930), (54, 12128), (56, 12278), (59, 12401), (60, 12500), (65, 12650), (67, 12716), (68, 12725), (69, 12764), (71, 12836), (74, 12920), (75, 12980), (76, 13001), (78, 13061), (79, 13169), (80, 13235), (81, 13250),

Gene: Tapioca_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Tapioca_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Tortoise12_16 Start: 10123, Stop: 13266, Start Num: 1

Candidate Starts for Tortoise12_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12256), (60, 12478), (63, 12616), (64, 12634), (66, 12655), (68, 12718), (69, 12763), (71, 12832), (72, 12853), (73, 12862), (76, 12997), (77, 13015), (78, 13057), (79, 13165),

Gene: Xeno_16 Start: 10123, Stop: 13263, Start Num: 1

Candidate Starts for Xeno_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12253), (60, 12475), (63, 12613), (64, 12631), (66, 12652), (68, 12715), (69, 12760), (71, 12829), (72, 12850), (73, 12859), (76, 12994), (77, 13012), (78, 13054), (79, 13162),

Gene: Xerxes_16 Start: 10123, Stop: 13263, Start Num: 1

Candidate Starts for Xerxes_16:

(Start: 1 @10123 has 46 MA's), (2, 10132), (3, 10153), (4, 10174), (5, 10207), (8, 10471), (10, 10486), (11, 10495), (13, 10540), (14, 10549), (15, 10714), (18, 10747), (19, 10771), (20, 10816), (21, 10825), (22, 10858), (23, 10879), (32, 11380), (33, 11383), (36, 11452), (37, 11542), (38, 11551), (39, 11584), (42, 11644), (43, 11662), (44, 11683), (45, 11725), (46, 11764), (47, 11806), (49, 11848), (51, 11902), (52, 11905), (53, 11986), (54, 12103), (56, 12253), (60, 12475), (63, 12613), (64, 12631), (66, 12652), (68, 12715), (69, 12760), (71, 12829), (72, 12850), (73, 12859), (76, 12994), (77, 13012), (78, 13054), (79, 13162),