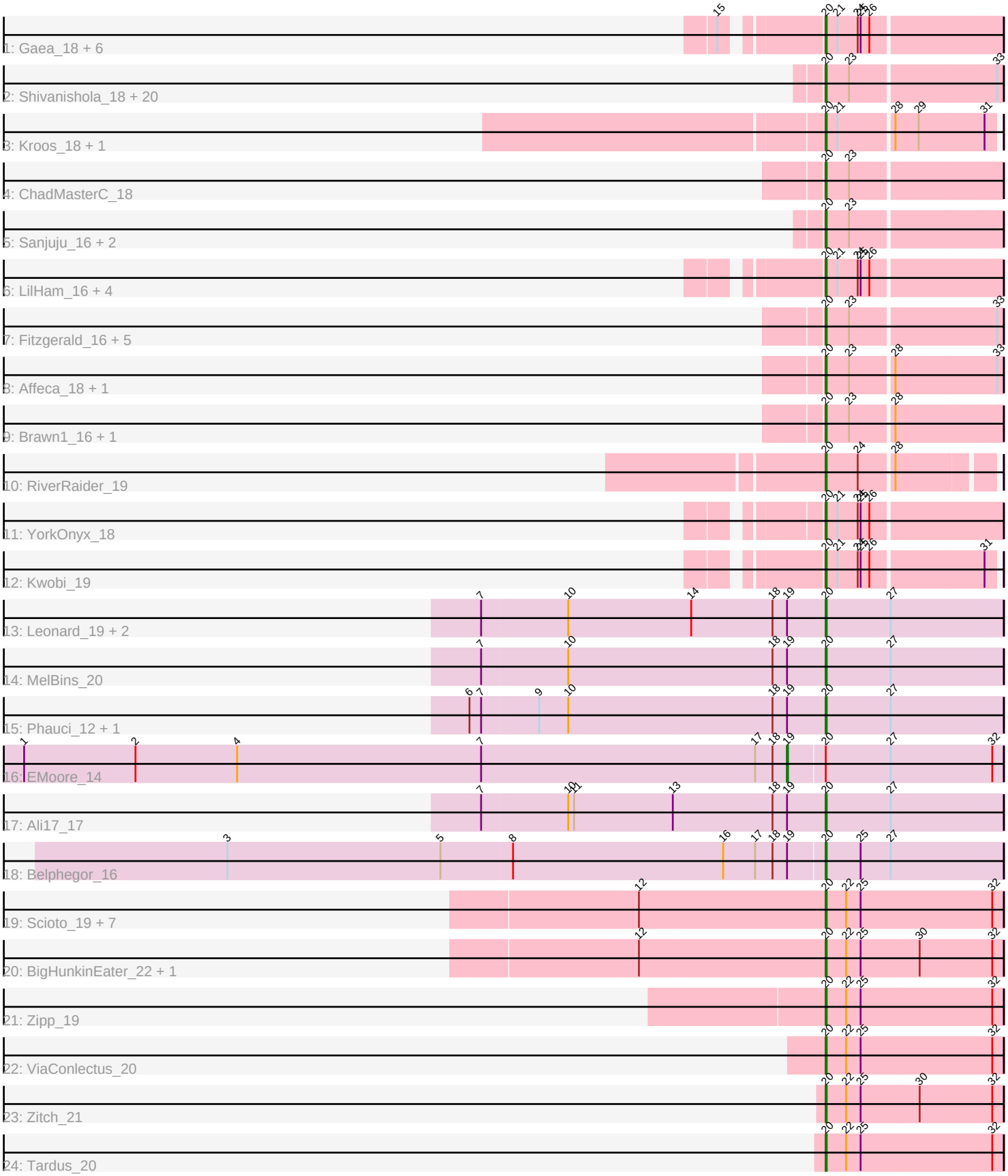
Pham 342092


1: Gaea_18 + 6
2: Shivanishola_18 + 20
3: Kroos_18 + 1
4: ChadMasterC_18
5: Sanjuju_16 + 2
6: LilHam_16 + 4
7: Fitzgerald_16 + 5
8: Affeca_18 + 1
9: Brawn1_16 + 1
10: RiverRaider_19
11: YorkOnyx_18
12: Kwobi_19
13: Leonard_19 + 2
14: MelBins_20
15: Phauci_12 + 1
16: EMoore_14
17: Ali17_17
18: Belphegor_16
19: Scioto_19 + 7
20: BigHunkinEater_22 + 1
21: Zipp_19
22: ViaConlectus_20
23: Zitch_21
24: Tardus_20

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 342092 Report

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

Pham number 342092 has 75 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Gaea_18, Tangerine_18, Saronaya_18, Gustavo_18, Ashertheman_19, Baumdotcom_18, StorminNorm_18
• Track 2 : Shivanishola_18, Barsten_18, Nordenberg_12, Fosterous_15, Sitar_19, Kamashten_19, BobBob_15, Bibwit_18, Thing3_19, Keitabear_19, Lennon_19, Vivi2_17, Paries_18, Love_19, Ailee_18, Tangent_15, Sedona_19, Charming_15, FuegoCuervo_21, McKinley_19, Brandonk123_20
• Track 3 : Kroos_18, Ribeye_19
• Track 4 : ChadMasterC_18
• Track 5 : Sanjuju_16, Stultus_18, Jabberwocky_16
• Track 6 : LilHam_16, Flatwoods_19, Bizzy_19, Tycho_18, SchottB_17
• Track 7 : Fitzgerald_16, Rofo_17, McCrothy_18, Geodirt_17, MoontowerMania_17, Galadriel_19
• Track 8 : Affeca_18, Angelicage_18
• Track 9 : Brawn1_16, Kewpiedoll_19
• Track 10 : RiverRaider_19
• Track 11 : YorkOnyx_18
• Track 12 : Kwobi_19
• Track 13 : Leonard_19, Inspectinfecti_20, Phinally_19
• Track 14 : MelBins_20
• Track 15 : Phauci_12, Hans_21
• Track 16 : EMoore_14
• Track 17 : Ali17_17
• Track 18 : Belphegor_16
• Track 19 : Scioto_19, Sampson_19, DoctorFroggo_19, Abblin_19, Natkenzie_19, Delrey21_19, Pumpkiney_21, Verity_19
• Track 20 : BigHunkinEater_22, APunk_21
• Track 21 : Zipp_19
• Track 22 : ViaConlectus_20
• Track 23 : Zitch_21
• Track 24 : Tardus_20

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

The start number called the most often in the published annotations is 20, it was called in 71 of the 72 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• APunk_21, Abblin_19, Affeca_18, Ailee_18, Ali17_17, Angelicage_18, Asherthеman_19, Barsten_18, Baumdotcom_18, Belphegor_16, Bibwit_18, BigHunkinEater_22, Bizzy_19, BobBob_15, Brandonk123_20, Brawn1_16, ChadMasterC_18, Charming_15, Delrey21_19, DoctorFroggo_19, Fitzgerald_16, Flatwoods_19, Fosterous_15, FuegoCuervo_21, Gaea_18, Galadriel_19, Geodirt_17, Gustavo_18, Hans_21, Inspectinfecti_20, Jabberwocky_16, Kamashten_19, Keitabear_19, Kewpiedoll_19, Kroos_18, Kwobi_19, Lennon_19, Leonard_19, LilHam_16, Love_19, McCrothy_18, McKinley_19, MelBins_20, MoontowerMania_17, Natkenzie_19, Nordenberg_12, Paries_18, Phauci_12, Phinally_19, Pumpkiney_21, Ribeye_19, RiverRaider_19, Rofo_17, Sampson_19, Sanjuju_16, Saronaya_18, SchottB_17, Scioto_19, Sedona_19, Shivanishola_18, Sitar_19, StorminNorm_18, Stultus_18, Tangent_15, Tangerine_18, Tardus_20, Thing3_19, Tycho_18, Verity_19, ViaConlectus_20, Vivi2_17, YorkOnyx_18, Zipp_19, Zitch_21,

Genes that have the "Most Annotated" start but do not call it:
• EMoore_14,

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

Summary by start number:

Start 19:
• Found in 9 of 75 (12.0%) of genes in pham
• Manual Annotations of this start: 1 of 72
• Called 11.1% of time when present
• Phage (with cluster) where this start called: EMoore_14 (DE2),

Start 20:
• Found in 75 of 75 (100.0%) of genes in pham
• Manual Annotations of this start: 71 of 72
• Called 98.7% of time when present
• Phage (with cluster) where this start called: APunk_21 (DE4), Abblin_19 (DE4), Affeca_18 (DE1), Ailee_18 (DE1), Ali17_17 (DE2), Angelicage_18 (DE1), Asherthеman_19 (DE1), Barsten_18 (DE1), Baumdotcom_18 (DE1), Belphegor_16 (DE2), Bibwit_18 (DE1), BigHunkinEater_22 (DE4), Bizzy_19 (DE1), BobBob_15 (DE1), Brandonk123_20 (DE1), Brawn1_16 (DE1), ChadMasterC_18 (DE1), Charming_15 (DE1), Delrey21_19 (DE4), DoctorFroggo_19 (DE4), Fitzgerald_16 (DE1), Flatwoods_19 (DE1), Fosterous_15 (DE1), FuegoCuervo_21 (DE1), Gaea_18 (DE1), Galadriel_19 (DE1), Geodirt_17 (DE1), Gustavo_18 (DE1), Hans_21 (DE2), Inspectinfecti_20 (DE2), Jabberwocky_16 (DE1), Kamashten_19 (DE1), Keitabear_19 (DE1), Kewpiedoll_19 (DE1), Kroos_18 (DE1), Kwobi_19 (DE1), Lennon_19 (DE1), Leonard_19 (DE2), LilHam_16 (DE1), Love_19 (DE1), McCrothy_18 (DE1), McKinley_19 (DE1), MelBins_20 (DE2), MoontowerMania_17 (DE1), Natkenzie_19 (DE4), Nordenberg_12 (DE1), Paries_18 (DE1), Phauci_12 (DE2), Phinally_19 (DE2), Pumpkiney_21 (DE4), Ribeye_19 (DE1), RiverRaider_19 (DE1), Rofo_17 (DE1), Sampson_19 (DE4), Sanjuju_16 (DE1), Saronaya_18 (DE1), SchottB_17 (DE1), Scioto_19 (DE4), Sedona_19 (DE1), Shivanishola_18 (DE1), Sitar_19 (DE1), StorminNorm_18 (DE1), Stultus_18 (DE1), Tangent_15 (DE1), Tangerine_18 (DE1),

Tardus_20 (DE4), Thing3_19 (DE1), Tycho_18 (DE1), Verity_19 (DE4), ViaConlectus_20 (DE4), Vivi2_17 (DE1), YorkOnyx_18 (DE1), Zipp_19 (DE4), Zitch_21 (DE4),

Summary by clusters:

There are 3 clusters represented in this pham: DE1, DE2, DE4,

Info for manual annotations of cluster DE1:
•Start number 20 was manually annotated 50 times for cluster DE1.

Info for manual annotations of cluster DE2:
•Start number 19 was manually annotated 1 time for cluster DE2.
•Start number 20 was manually annotated 8 times for cluster DE2.

Info for manual annotations of cluster DE4:
•Start number 20 was manually annotated 13 times for cluster DE4.

Gene Information:

Gene: APunk_21 Start: 15881, Stop: 16063, Start Num: 20
Candidate Starts for APunk_21:
(12, 15689), (Start: 20 @15881 has 71 MA's), (22, 15902), (25, 15917), (30, 15977), (32, 16052),

Gene: Abblin_19 Start: 15094, Stop: 15276, Start Num: 20
Candidate Starts for Abblin_19:
(12, 14902), (Start: 20 @15094 has 71 MA's), (22, 15115), (25, 15130), (32, 15265),

Gene: Affeca_18 Start: 14929, Stop: 15102, Start Num: 20
Candidate Starts for Affeca_18:
(Start: 20 @14929 has 71 MA's), (23, 14953), (28, 14995), (33, 15097),

Gene: Ailee_18 Start: 14837, Stop: 15010, Start Num: 20
Candidate Starts for Ailee_18:
(Start: 20 @14837 has 71 MA's), (23, 14861), (33, 15005),

Gene: Ali17_17 Start: 14222, Stop: 14404, Start Num: 20
Candidate Starts for Ali17_17:
(7, 13871), (10, 13958), (11, 13964), (13, 14066), (18, 14168), (Start: 19 @14183 has 1 MA's), (Start: 20 @14222 has 71 MA's), (27, 14288),

Gene: Angelicage_18 Start: 15352, Stop: 15525, Start Num: 20
Candidate Starts for Angelicage_18:
(Start: 20 @15352 has 71 MA's), (23, 15376), (28, 15418), (33, 15520),

Gene: Ashertheman_19 Start: 14435, Stop: 14608, Start Num: 20
Candidate Starts for Ashertheman_19:
(15, 14348), (Start: 20 @14435 has 71 MA's), (21, 14447), (24, 14468), (25, 14471), (26, 14480),

Gene: Barsten_18 Start: 14428, Stop: 14601, Start Num: 20
Candidate Starts for Barsten_18:

(Start: 20 @14428 has 71 MA's), (23, 14452), (33, 14596),

Gene: Baumdotcom_18 Start: 14051, Stop: 14224, Start Num: 20
Candidate Starts for Baumdotcom_18:
(15, 13964), (Start: 20 @14051 has 71 MA's), (21, 14063), (24, 14084), (25, 14087), (26, 14096),

Gene: Belphegor_16 Start: 13327, Stop: 13509, Start Num: 20
Candidate Starts for Belphegor_16:
(3, 12718), (5, 12937), (8, 13009), (16, 13225), (17, 13258), (18, 13276), (Start: 19 @13291 has 1 MA's), (Start: 20 @13327 has 71 MA's), (25, 13363), (27, 13393),

Gene: Bibwit_18 Start: 14672, Stop: 14845, Start Num: 20
Candidate Starts for Bibwit_18:
(Start: 20 @14672 has 71 MA's), (23, 14696), (33, 14840),

Gene: BigHunkinEater_22 Start: 14206, Stop: 14388, Start Num: 20
Candidate Starts for BigHunkinEater_22:
(12, 14014), (Start: 20 @14206 has 71 MA's), (22, 14227), (25, 14242), (30, 14302), (32, 14377),

Gene: Bizzy_19 Start: 14330, Stop: 14503, Start Num: 20
Candidate Starts for Bizzy_19:
(Start: 20 @14330 has 71 MA's), (21, 14342), (24, 14363), (25, 14366), (26, 14375),

Gene: BobBob_15 Start: 13282, Stop: 13455, Start Num: 20
Candidate Starts for BobBob_15:
(Start: 20 @13282 has 71 MA's), (23, 13306), (33, 13450),

Gene: Brandonk123_20 Start: 14411, Stop: 14584, Start Num: 20
Candidate Starts for Brandonk123_20:
(Start: 20 @14411 has 71 MA's), (23, 14435), (33, 14579),

Gene: Brawn1_16 Start: 14094, Stop: 14267, Start Num: 20
Candidate Starts for Brawn1_16:
(Start: 20 @14094 has 71 MA's), (23, 14118), (28, 14160),

Gene: ChadMasterC_18 Start: 14829, Stop: 15002, Start Num: 20
Candidate Starts for ChadMasterC_18:
(Start: 20 @14829 has 71 MA's), (23, 14853),

Gene: Charming_15 Start: 13284, Stop: 13457, Start Num: 20
Candidate Starts for Charming_15:
(Start: 20 @13284 has 71 MA's), (23, 13308), (33, 13452),

Gene: Delrey21_19 Start: 14557, Stop: 14739, Start Num: 20
Candidate Starts for Delrey21_19:
(12, 14365), (Start: 20 @14557 has 71 MA's), (22, 14578), (25, 14593), (32, 14728),

Gene: DoctorFroggo_19 Start: 14557, Stop: 14739, Start Num: 20
Candidate Starts for DoctorFroggo_19:
(12, 14365), (Start: 20 @14557 has 71 MA's), (22, 14578), (25, 14593), (32, 14728),

Gene: EMoore_14 Start: 12548, Stop: 12766, Start Num: 19
Candidate Starts for EMoore_14:

(1, 11762), (2, 11876), (4, 11981), (7, 12233), (17, 12515), (18, 12533), (Start: 19 @12548 has 1 MA's), (Start: 20 @12584 has 71 MA's), (27, 12650), (32, 12755),

Gene: Fitzgerald_16 Start: 14147, Stop: 14320, Start Num: 20
Candidate Starts for Fitzgerald_16:
(Start: 20 @14147 has 71 MA's), (23, 14171), (33, 14315),

Gene: Flatwoods_19 Start: 14337, Stop: 14510, Start Num: 20
Candidate Starts for Flatwoods_19:
(Start: 20 @14337 has 71 MA's), (21, 14349), (24, 14370), (25, 14373), (26, 14382),

Gene: Fosterous_15 Start: 14173, Stop: 14346, Start Num: 20
Candidate Starts for Fosterous_15:
(Start: 20 @14173 has 71 MA's), (23, 14197), (33, 14341),

Gene: FuegoCuervo_21 Start: 13899, Stop: 14072, Start Num: 20
Candidate Starts for FuegoCuervo_21:
(Start: 20 @13899 has 71 MA's), (23, 13923), (33, 14067),

Gene: Gaea_18 Start: 14031, Stop: 14204, Start Num: 20
Candidate Starts for Gaea_18:
(15, 13944), (Start: 20 @14031 has 71 MA's), (21, 14043), (24, 14064), (25, 14067), (26, 14076),

Gene: Galadriel_19 Start: 14032, Stop: 14205, Start Num: 20
Candidate Starts for Galadriel_19:
(Start: 20 @14032 has 71 MA's), (23, 14056), (33, 14200),

Gene: Geodirt_17 Start: 14674, Stop: 14847, Start Num: 20
Candidate Starts for Geodirt_17:
(Start: 20 @14674 has 71 MA's), (23, 14698), (33, 14842),

Gene: Gustavo_18 Start: 14142, Stop: 14315, Start Num: 20
Candidate Starts for Gustavo_18:
(15, 14055), (Start: 20 @14142 has 71 MA's), (21, 14154), (24, 14175), (25, 14178), (26, 14187),

Gene: Hans_21 Start: 14883, Stop: 15065, Start Num: 20
Candidate Starts for Hans_21:
(6, 14520), (7, 14532), (9, 14589), (10, 14619), (18, 14829), (Start: 19 @14844 has 1 MA's), (Start: 20 @14883 has 71 MA's), (27, 14949),

Gene: Inspectinfecti_20 Start: 15305, Stop: 15487, Start Num: 20
Candidate Starts for Inspectinfecti_20:
(7, 14954), (10, 15041), (14, 15167), (18, 15251), (Start: 19 @15266 has 1 MA's), (Start: 20 @15305 has 71 MA's), (27, 15371),

Gene: Jabberwocky_16 Start: 14581, Stop: 14754, Start Num: 20
Candidate Starts for Jabberwocky_16:
(Start: 20 @14581 has 71 MA's), (23, 14605),

Gene: Kamashten_19 Start: 15264, Stop: 15437, Start Num: 20
Candidate Starts for Kamashten_19:
(Start: 20 @15264 has 71 MA's), (23, 15288), (33, 15432),

Gene: Keitabear_19 Start: 16376, Stop: 16549, Start Num: 20
Candidate Starts for Keitabear_19:
(Start: 20 @16376 has 71 MA's), (23, 16400), (33, 16544),

Gene: Kewpiedoll_19 Start: 14627, Stop: 14800, Start Num: 20
Candidate Starts for Kewpiedoll_19:
(Start: 20 @14627 has 71 MA's), (23, 14651), (28, 14693),

Gene: Kroos_18 Start: 14451, Stop: 14618, Start Num: 20
Candidate Starts for Kroos_18:
(Start: 20 @14451 has 71 MA's), (21, 14463), (28, 14517), (29, 14541), (31, 14607),

Gene: Kwobi_19 Start: 14427, Stop: 14594, Start Num: 20
Candidate Starts for Kwobi_19:
(Start: 20 @14427 has 71 MA's), (21, 14439), (24, 14460), (25, 14463), (26, 14472), (31, 14583),

Gene: Lennon_19 Start: 15480, Stop: 15653, Start Num: 20
Candidate Starts for Lennon_19:
(Start: 20 @15480 has 71 MA's), (23, 15504), (33, 15648),

Gene: Leonard_19 Start: 14900, Stop: 15082, Start Num: 20
Candidate Starts for Leonard_19:
(7, 14549), (10, 14636), (14, 14762), (18, 14846), (Start: 19 @14861 has 1 MA's), (Start: 20 @14900 has 71 MA's), (27, 14966),

Gene: LilHam_16 Start: 13449, Stop: 13622, Start Num: 20
Candidate Starts for LilHam_16:
(Start: 20 @13449 has 71 MA's), (21, 13461), (24, 13482), (25, 13485), (26, 13494),

Gene: Love_19 Start: 14343, Stop: 14516, Start Num: 20
Candidate Starts for Love_19:
(Start: 20 @14343 has 71 MA's), (23, 14367), (33, 14511),

Gene: McCrothy_18 Start: 14209, Stop: 14382, Start Num: 20
Candidate Starts for McCrothy_18:
(Start: 20 @14209 has 71 MA's), (23, 14233), (33, 14377),

Gene: McKinley_19 Start: 14802, Stop: 14975, Start Num: 20
Candidate Starts for McKinley_19:
(Start: 20 @14802 has 71 MA's), (23, 14826), (33, 14970),

Gene: MelBins_20 Start: 15104, Stop: 15286, Start Num: 20
Candidate Starts for MelBins_20:
(7, 14753), (10, 14840), (18, 15050), (Start: 19 @15065 has 1 MA's), (Start: 20 @15104 has 71 MA's), (27, 15170),

Gene: MoontowerMania_17 Start: 13786, Stop: 13959, Start Num: 20
Candidate Starts for MoontowerMania_17:
(Start: 20 @13786 has 71 MA's), (23, 13810), (33, 13954),

Gene: Natkenzie_19 Start: 15094, Stop: 15276, Start Num: 20
Candidate Starts for Natkenzie_19:
(12, 14902), (Start: 20 @15094 has 71 MA's), (22, 15115), (25, 15130), (32, 15265),

Gene: Nordenberg_12 Start: 12663, Stop: 12836, Start Num: 20
Candidate Starts for Nordenberg_12:
(Start: 20 @12663 has 71 MA's), (23, 12687), (33, 12831),

Gene: Paries_18 Start: 14031, Stop: 14204, Start Num: 20
Candidate Starts for Paries_18:
(Start: 20 @14031 has 71 MA's), (23, 14055), (33, 14199),

Gene: Phauci_12 Start: 11467, Stop: 11649, Start Num: 20
Candidate Starts for Phauci_12:
(6, 11104), (7, 11116), (9, 11173), (10, 11203), (18, 11413), (Start: 19 @11428 has 1 MA's), (Start: 20 @11467 has 71 MA's), (27, 11533),

Gene: Phinally_19 Start: 14897, Stop: 15079, Start Num: 20
Candidate Starts for Phinally_19:
(7, 14546), (10, 14633), (14, 14759), (18, 14843), (Start: 19 @14858 has 1 MA's), (Start: 20 @14897 has 71 MA's), (27, 14963),

Gene: Pumpkiney_21 Start: 13807, Stop: 13989, Start Num: 20
Candidate Starts for Pumpkiney_21:
(12, 13615), (Start: 20 @13807 has 71 MA's), (22, 13828), (25, 13843), (32, 13978),

Gene: Ribeye_19 Start: 14905, Stop: 15072, Start Num: 20
Candidate Starts for Ribeye_19:
(Start: 20 @14905 has 71 MA's), (21, 14917), (28, 14971), (29, 14995), (31, 15061),

Gene: RiverRaider_19 Start: 13773, Stop: 13931, Start Num: 20
Candidate Starts for RiverRaider_19:
(Start: 20 @13773 has 71 MA's), (24, 13806), (28, 13839),

Gene: Rofo_17 Start: 14283, Stop: 14456, Start Num: 20
Candidate Starts for Rofo_17:
(Start: 20 @14283 has 71 MA's), (23, 14307), (33, 14451),

Gene: Sampson_19 Start: 15039, Stop: 15221, Start Num: 20
Candidate Starts for Sampson_19:
(12, 14847), (Start: 20 @15039 has 71 MA's), (22, 15060), (25, 15075), (32, 15210),

Gene: Sanjuju_16 Start: 14232, Stop: 14405, Start Num: 20
Candidate Starts for Sanjuju_16:
(Start: 20 @14232 has 71 MA's), (23, 14256),

Gene: Saronaya_18 Start: 14142, Stop: 14315, Start Num: 20
Candidate Starts for Saronaya_18:
(15, 14055), (Start: 20 @14142 has 71 MA's), (21, 14154), (24, 14175), (25, 14178), (26, 14187),

Gene: SchottB_17 Start: 15131, Stop: 15304, Start Num: 20
Candidate Starts for SchottB_17:
(Start: 20 @15131 has 71 MA's), (21, 15143), (24, 15164), (25, 15167), (26, 15176),

Gene: Scioto_19 Start: 15094, Stop: 15276, Start Num: 20
Candidate Starts for Scioto_19:

(12, 14902), (Start: 20 @15094 has 71 MA's), (22, 15115), (25, 15130), (32, 15265),

Gene: Sedona_19 Start: 16109, Stop: 16282, Start Num: 20
Candidate Starts for Sedona_19:
(Start: 20 @16109 has 71 MA's), (23, 16133), (33, 16277),

Gene: Shivanishola_18 Start: 14525, Stop: 14698, Start Num: 20
Candidate Starts for Shivanishola_18:
(Start: 20 @14525 has 71 MA's), (23, 14549), (33, 14693),

Gene: Sitar_19 Start: 15480, Stop: 15653, Start Num: 20
Candidate Starts for Sitar_19:
(Start: 20 @15480 has 71 MA's), (23, 15504), (33, 15648),

Gene: StorminNorm_18 Start: 14022, Stop: 14195, Start Num: 20
Candidate Starts for StorminNorm_18:
(15, 13935), (Start: 20 @14022 has 71 MA's), (21, 14034), (24, 14055), (25, 14058), (26, 14067),

Gene: Stultus_18 Start: 14527, Stop: 14700, Start Num: 20
Candidate Starts for Stultus_18:
(Start: 20 @14527 has 71 MA's), (23, 14551),

Gene: Tangent_15 Start: 13284, Stop: 13457, Start Num: 20
Candidate Starts for Tangent_15:
(Start: 20 @13284 has 71 MA's), (23, 13308), (33, 13452),

Gene: Tangerine_18 Start: 14028, Stop: 14201, Start Num: 20
Candidate Starts for Tangerine_18:
(15, 13941), (Start: 20 @14028 has 71 MA's), (21, 14040), (24, 14061), (25, 14064), (26, 14073),

Gene: Tardus_20 Start: 14374, Stop: 14556, Start Num: 20
Candidate Starts for Tardus_20:
(Start: 20 @14374 has 71 MA's), (22, 14395), (25, 14410), (32, 14545),

Gene: Thing3_19 Start: 15264, Stop: 15437, Start Num: 20
Candidate Starts for Thing3_19:
(Start: 20 @15264 has 71 MA's), (23, 15288), (33, 15432),

Gene: Tycho_18 Start: 14145, Stop: 14318, Start Num: 20
Candidate Starts for Tycho_18:
(Start: 20 @14145 has 71 MA's), (21, 14157), (24, 14178), (25, 14181), (26, 14190),

Gene: Verity_19 Start: 14557, Stop: 14739, Start Num: 20
Candidate Starts for Verity_19:
(12, 14365), (Start: 20 @14557 has 71 MA's), (22, 14578), (25, 14593), (32, 14728),

Gene: ViaConlectus_20 Start: 15109, Stop: 15291, Start Num: 20
Candidate Starts for ViaConlectus_20:
(Start: 20 @15109 has 71 MA's), (22, 15130), (25, 15145), (32, 15280),

Gene: Vivi2_17 Start: 14455, Stop: 14628, Start Num: 20
Candidate Starts for Vivi2_17:
(Start: 20 @14455 has 71 MA's), (23, 14479), (33, 14623),

Gene: YorkOnyx_18 Start: 13977, Stop: 14150, Start Num: 20
Candidate Starts for YorkOnyx_18:
(Start: 20 @13977 has 71 MA's), (21, 13989), (24, 14010), (25, 14013), (26, 14022),

Gene: Zipp_19 Start: 15206, Stop: 15388, Start Num: 20
Candidate Starts for Zipp_19:
(Start: 20 @15206 has 71 MA's), (22, 15227), (25, 15242), (32, 15377),

Gene: Zitch_21 Start: 14336, Stop: 14518, Start Num: 20
Candidate Starts for Zitch_21:
(Start: 20 @14336 has 71 MA's), (22, 14357), (25, 14372), (30, 14432), (32, 14507),