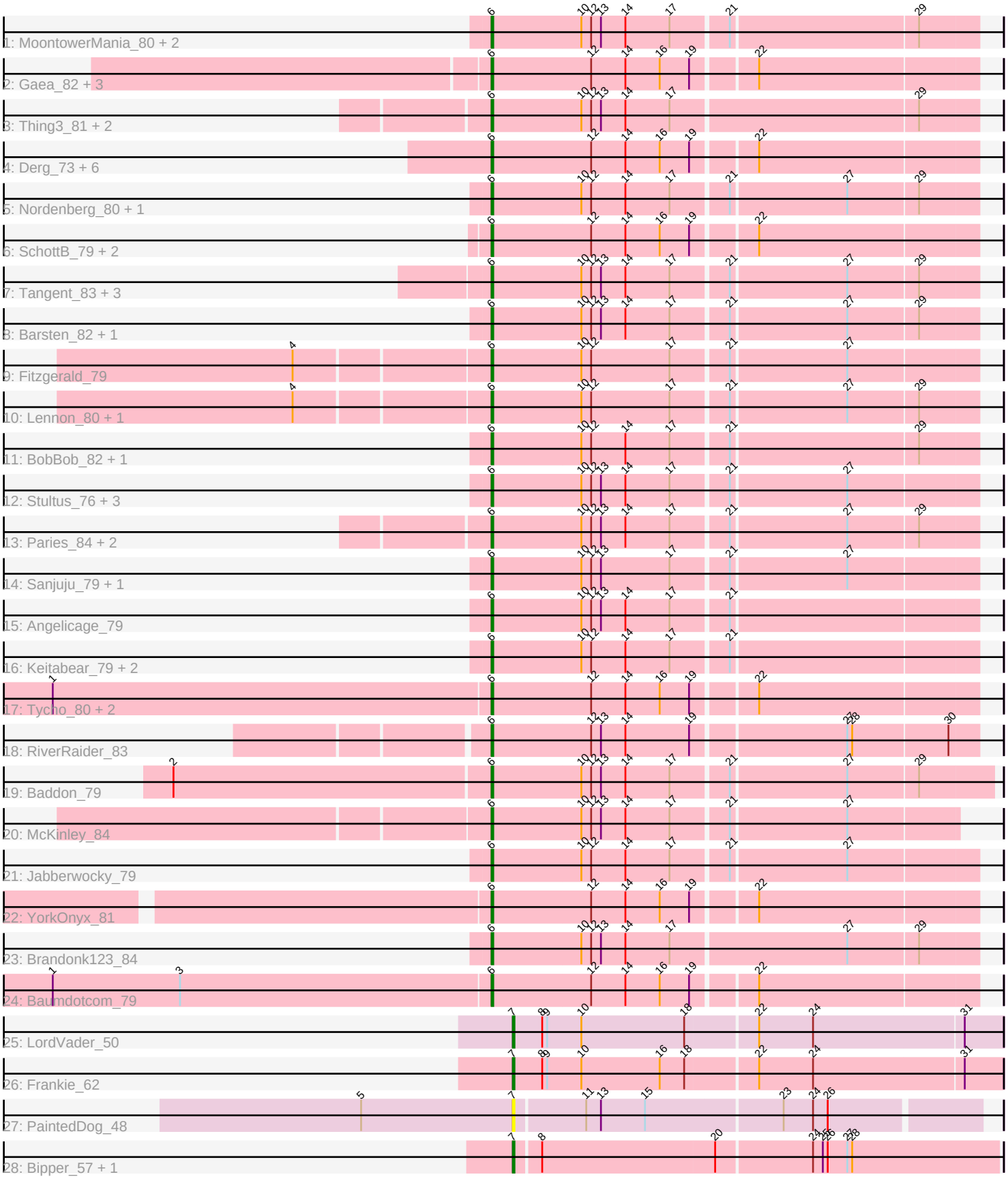
Pham 347633


1: MoontowerMania_80 + 2
2: Gaea_82 + 3
3: Thing3_81 + 2
4: Derg_73 + 6
5: Nordenberg_80 + 1
6: SchottB_79 + 2
7: Tangent_83 + 3
8: Barsten_82 + 1
9: Fitzgerald_79
10: Lennon_80 + 1
11: BobBob_82 + 1
12: Stultus_76 + 3
13: Paries_84 + 2
14: Sanjuju_79 + 1
15: Angelicage_79
16: Keitabear_79 + 2
17: Tycho_80 + 2
18: RiverRaider_83
19: Baddon_79
20: McKinley_84
21: Jabberwocky_79
22: YorkOnyx_81
23: Brandonk123_84
24: Baumdotcom_79
25: LordVader_50
26: Frankie_62
27: PaintedDog_48
28: Bipper_57 + 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 347633 Report

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

Pham number 347633 has 61 members, 4 are drafts.

Phages represented in each track:
• Track 1 : MoontowerMania_80, FuegoCuervo_84, Affeca_82
• Track 2 : Gaea_82, Stichling_77, Ashertheman_81, Kroos_81
• Track 3 : Thing3_81, Galadriel_81, Kamashten_81
• Track 4 : Derg_73, Ribeye_80, Bizzy_81, Tangerine_81, Saronaya_82, Gustavo_82, JKSyngboy_78
• Track 5 : Nordenberg_80, Love_87
• Track 6 : SchottB_79, LilHam_75, Kwobi_83
• Track 7 : Tangent_83, Vivi2_84, Rofo_80, Charming_83
• Track 8 : Barsten_82, McCrothy_79
• Track 9 : Fitzgerald_79
• Track 10 : Lennon_80, Geodirt_80
• Track 11 : BobBob_82, Fosterous_82
• Track 12 : Stultus_76, Shivanishola_82, Ailee_78, Sitar_80
• Track 13 : Paries_84, ChadMasterC_81, Kewpiedoll_80
• Track 14 : Sanjuju_79, Brawn1_78
• Track 15 : Angelicage_79
• Track 16 : Keitabear_79, Sedona_79, Bibwit_79
• Track 17 : Tycho_80, StorminNorm_82, Flatwoods_81
• Track 18 : RiverRaider_83
• Track 19 : Baddon_79
• Track 20 : McKinley_84
• Track 21 : Jabberwocky_79
• Track 22 : YorkOnyx_81
• Track 23 : Brandonk123_84
• Track 24 : Baumdotcom_79
• Track 25 : LordVader_50
• Track 26 : Frankie_62
• Track 27 : PaintedDog_48
• Track 28 : Bipper_57, Cracklewink_57

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

The start number called the most often in the published annotations is 6, it was called in 53 of the 57 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Affeca_82, Ailee_78, Angelicage_79, Ashertheman_81, Baddon_79, Barsten_82, Baumdotcom_79, Bibwit_79, Bizzy_81, BobBob_82, Brandonk123_84, Brawn1_78, ChadMasterC_81, Charming_83, Derg_73, Fitzgerald_79, Flatwoods_81, Fosterous_82, FuegoCuervo_84, Gaea_82, Galadriel_81, Geodirt_80, Gustavo_82, JKSyngboy_78, Jabberwocky_79, Kamashten_81, Keitabear_79, Kewpiedoll_80, Kroos_81, Kwobi_83, Lennon_80, LilHam_75, Love_87, McCrothy_79, McKinley_84, MoontowerMania_80, Nordenberg_80, Paries_84, Ribeye_80, RiverRaider_83, Rofo_80, Sanjuju_79, Saronaya_82, SchottB_79, Sedona_79, Shivanishola_82, Sitar_80, Stichling_77, StorminNorm_82, Stultus_76, Tangent_83, Tangerine_81, Thing3_81, Tycho_80, Vivi2_84, YorkOnyx_81,

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

Genes that do not have the "Most Annotated" start:
• Bipper_57, Cracklewink_57, Frankie_62, LordVader_50, PaintedDog_48,

Summary by start number:

Start 6:
• Found in 56 of 61 (91.8%) of genes in pham
• Manual Annotations of this start: 53 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Affeca_82 (DE1), Ailee_78 (DE1), Angelicage_79 (DE1), Ashertheman_81 (DE1), Baddon_79 (DE1), Barsten_82 (DE1), Baumdotcom_79 (DE1), Bibwit_79 (DE1), Bizzy_81 (DE1), BobBob_82 (DE1), Brandonk123_84 (DE1), Brawn1_78 (DE1), ChadMasterC_81 (DE1), Charming_83 (DE1), Derg_73 (DE1), Fitzgerald_79 (DE1), Flatwoods_81 (DE1), Fosterous_82 (DE1), FuegoCuervo_84 (DE1), Gaea_82 (DE1), Galadriel_81 (DE1), Geodirt_80 (DE1), Gustavo_82 (DE1), JKSyngboy_78 (DE1), Jabberwocky_79 (DE1), Kamashten_81 (DE1), Keitabear_79 (DE1), Kewpiedoll_80 (DE1), Kroos_81 (DE1), Kwobi_83 (DE1), Lennon_80 (DE1), LilHam_75 (DE1), Love_87 (DE1), McCrothy_79 (DE1), McKinley_84 (DE1), MoontowerMania_80 (DE1), Nordenberg_80 (DE1), Paries_84 (DE1), Ribeye_80 (DE1), RiverRaider_83 (DE1), Rofo_80 (DE1), Sanjuju_79 (DE1), Saronaya_82 (DE1), SchottB_79 (DE1), Sedona_79 (DE1), Shivanishola_82 (DE1), Sitar_80 (DE1), Stichling_77 (DE1), StorminNorm_82 (DE1), Stultus_76 (DE1), Tangent_83 (DE1), Tangerine_81 (DE1), Thing3_81 (DE1), Tycho_80 (DE1), Vivi2_84 (DE1), YorkOnyx_81 (DE1),

Start 7:
• Found in 5 of 61 (8.2%) of genes in pham
• Manual Annotations of this start: 4 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bipper_57 (Y), Cracklewink_57 (Y), Frankie_62 (F1), LordVader_50 (F), PaintedDog_48 (I1),

Summary by clusters:

There are 5 clusters represented in this pham: Y, DE1, F, I1, F1,

Info for manual annotations of cluster DE1:

•Start number 6 was manually annotated 53 times for cluster DE1.

Info for manual annotations of cluster F:
•Start number 7 was manually annotated 1 time for cluster F.

Info for manual annotations of cluster F1:
•Start number 7 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster Y:
•Start number 7 was manually annotated 2 times for cluster Y.

Gene Information:

Gene: Affeca_82 Start: 57030, Stop: 57317, Start Num: 6
Candidate Starts for Affeca_82:
(Start: 6 @57030 has 53 MA's), (10, 57084), (12, 57090), (13, 57096), (14, 57111), (17, 57138), (21, 57171), (29, 57282),

Gene: Ailee_78 Start: 56057, Stop: 56344, Start Num: 6
Candidate Starts for Ailee_78:
(Start: 6 @56057 has 53 MA's), (10, 56111), (12, 56117), (13, 56123), (14, 56138), (17, 56165), (21, 56198), (27, 56267),

Gene: Angelicage_79 Start: 56998, Stop: 57285, Start Num: 6
Candidate Starts for Angelicage_79:
(Start: 6 @56998 has 53 MA's), (10, 57052), (12, 57058), (13, 57064), (14, 57079), (17, 57106), (21, 57139),

Gene: Ashertheman_81 Start: 55563, Stop: 55850, Start Num: 6
Candidate Starts for Ashertheman_81:
(Start: 6 @55563 has 53 MA's), (12, 55623), (14, 55644), (16, 55665), (19, 55683), (22, 55719),

Gene: Baddon_79 Start: 56196, Stop: 56492, Start Num: 6
Candidate Starts for Baddon_79:
(2, 56004), (Start: 6 @56196 has 53 MA's), (10, 56250), (12, 56256), (13, 56262), (14, 56277), (17, 56304), (21, 56337), (27, 56406), (29, 56448),

Gene: Barsten_82 Start: 56961, Stop: 57248, Start Num: 6
Candidate Starts for Barsten_82:
(Start: 6 @56961 has 53 MA's), (10, 57015), (12, 57021), (13, 57027), (14, 57042), (17, 57069), (21, 57102), (27, 57171), (29, 57213),

Gene: Baumdotcom_79 Start: 55672, Stop: 55959, Start Num: 6
Candidate Starts for Baumdotcom_79:
(1, 55405), (3, 55483), (Start: 6 @55672 has 53 MA's), (12, 55732), (14, 55753), (16, 55774), (19, 55792), (22, 55828),

Gene: Bibwit_79 Start: 55698, Stop: 55985, Start Num: 6
Candidate Starts for Bibwit_79:
(Start: 6 @55698 has 53 MA's), (10, 55752), (12, 55758), (14, 55779), (17, 55806), (21, 55839),

Gene: Bipper_57 Start: 42062, Stop: 42352, Start Num: 7
Candidate Starts for Bipper_57:
(Start: 7 @42062 has 4 MA's), (8, 42077), (20, 42182), (24, 42239), (25, 42245), (26, 42248), (27, 42260), (28, 42263),

Gene: Bizzy_81 Start: 55359, Stop: 55646, Start Num: 6
Candidate Starts for Bizzy_81:
(Start: 6 @55359 has 53 MA's), (12, 55419), (14, 55440), (16, 55461), (19, 55479), (22, 55515),

Gene: BobBob_82 Start: 56223, Stop: 56510, Start Num: 6
Candidate Starts for BobBob_82:
(Start: 6 @56223 has 53 MA's), (10, 56277), (12, 56283), (14, 56304), (17, 56331), (21, 56364), (29, 56475),

Gene: Brandonk123_84 Start: 56391, Stop: 56681, Start Num: 6
Candidate Starts for Brandonk123_84:
(Start: 6 @56391 has 53 MA's), (10, 56445), (12, 56451), (13, 56457), (14, 56472), (17, 56499), (27, 56604), (29, 56646),

Gene: Brawn1_78 Start: 55842, Stop: 56129, Start Num: 6
Candidate Starts for Brawn1_78:
(Start: 6 @55842 has 53 MA's), (10, 55896), (12, 55902), (13, 55908), (17, 55950), (21, 55983), (27, 56052),

Gene: ChadMasterC_81 Start: 57956, Stop: 58243, Start Num: 6
Candidate Starts for ChadMasterC_81:
(Start: 6 @57956 has 53 MA's), (10, 58010), (12, 58016), (13, 58022), (14, 58037), (17, 58064), (21, 58097), (27, 58166), (29, 58208),

Gene: Charming_83 Start: 55682, Stop: 55969, Start Num: 6
Candidate Starts for Charming_83:
(Start: 6 @55682 has 53 MA's), (10, 55736), (12, 55742), (13, 55748), (14, 55763), (17, 55790), (21, 55823), (27, 55892), (29, 55934),

Gene: Cracklewink_57 Start: 42055, Stop: 42333, Start Num: 7
Candidate Starts for Cracklewink_57:
(Start: 7 @42055 has 4 MA's), (8, 42070), (20, 42175), (24, 42232), (25, 42238), (26, 42241), (27, 42253), (28, 42256),

Gene: Derg_73 Start: 53981, Stop: 54268, Start Num: 6
Candidate Starts for Derg_73:
(Start: 6 @53981 has 53 MA's), (12, 54041), (14, 54062), (16, 54083), (19, 54101), (22, 54137),

Gene: Fitzgerald_79 Start: 56848, Stop: 57135, Start Num: 6
Candidate Starts for Fitzgerald_79:
(4, 56734), (Start: 6 @56848 has 53 MA's), (10, 56902), (12, 56908), (17, 56956), (21, 56989), (27, 57058),

Gene: Flatwoods_81 Start: 54894, Stop: 55181, Start Num: 6
Candidate Starts for Flatwoods_81:
(1, 54627), (Start: 6 @54894 has 53 MA's), (12, 54954), (14, 54975), (16, 54996), (19, 55014), (22, 55050),

Gene: Fosterous_82 Start: 56675, Stop: 56962, Start Num: 6
Candidate Starts for Fosterous_82:
(Start: 6 @56675 has 53 MA's), (10, 56729), (12, 56735), (14, 56756), (17, 56783), (21, 56816), (29, 56927),

Gene: Frankie_62 Start: 41047, Stop: 41340, Start Num: 7
Candidate Starts for Frankie_62:
(Start: 7 @41047 has 4 MA's), (8, 41065), (9, 41068), (10, 41089), (16, 41137), (18, 41152), (22, 41194), (24, 41227), (31, 41317),

Gene: FuegoCuervo_84 Start: 56500, Stop: 56787, Start Num: 6
Candidate Starts for FuegoCuervo_84:
(Start: 6 @56500 has 53 MA's), (10, 56554), (12, 56560), (13, 56566), (14, 56581), (17, 56608), (21, 56641), (29, 56752),

Gene: Gaea_82 Start: 55481, Stop: 55768, Start Num: 6
Candidate Starts for Gaea_82:
(Start: 6 @55481 has 53 MA's), (12, 55541), (14, 55562), (16, 55583), (19, 55601), (22, 55637),

Gene: Galadriel_81 Start: 56894, Stop: 57184, Start Num: 6
Candidate Starts for Galadriel_81:
(Start: 6 @56894 has 53 MA's), (10, 56948), (12, 56954), (13, 56960), (14, 56975), (17, 57002), (29, 57149),

Gene: Geodirt_80 Start: 57194, Stop: 57481, Start Num: 6
Candidate Starts for Geodirt_80:
(4, 57080), (Start: 6 @57194 has 53 MA's), (10, 57248), (12, 57254), (17, 57302), (21, 57335), (27, 57404), (29, 57446),

Gene: Gustavo_82 Start: 56077, Stop: 56364, Start Num: 6
Candidate Starts for Gustavo_82:
(Start: 6 @56077 has 53 MA's), (12, 56137), (14, 56158), (16, 56179), (19, 56197), (22, 56233),

Gene: JKSyngboy_78 Start: 55994, Stop: 56281, Start Num: 6
Candidate Starts for JKSyngboy_78:
(Start: 6 @55994 has 53 MA's), (12, 56054), (14, 56075), (16, 56096), (19, 56114), (22, 56150),

Gene: Jabberwocky_79 Start: 57070, Stop: 57357, Start Num: 6
Candidate Starts for Jabberwocky_79:
(Start: 6 @57070 has 53 MA's), (10, 57124), (12, 57130), (14, 57151), (17, 57178), (21, 57211), (27, 57280),

Gene: Kamashten_81 Start: 56788, Stop: 57078, Start Num: 6
Candidate Starts for Kamashten_81:
(Start: 6 @56788 has 53 MA's), (10, 56842), (12, 56848), (13, 56854), (14, 56869), (17, 56896), (29, 57043),

Gene: Keitabear_79 Start: 57619, Stop: 57906, Start Num: 6
Candidate Starts for Keitabear_79:
(Start: 6 @57619 has 53 MA's), (10, 57673), (12, 57679), (14, 57700), (17, 57727), (21, 57760),

Gene: Kewpiedoll_80 Start: 56868, Stop: 57155, Start Num: 6

Candidate Starts for Kewpiedoll_80:
(Start: 6 @56868 has 53 MA's), (10, 56922), (12, 56928), (13, 56934), (14, 56949), (17, 56976), (21, 57009), (27, 57078), (29, 57120),

Gene: Kroos_81 Start: 56020, Stop: 56307, Start Num: 6
Candidate Starts for Kroos_81:
(Start: 6 @56020 has 53 MA's), (12, 56080), (14, 56101), (16, 56122), (19, 56140), (22, 56176),

Gene: Kwobi_83 Start: 56529, Stop: 56816, Start Num: 6
Candidate Starts for Kwobi_83:
(Start: 6 @56529 has 53 MA's), (12, 56589), (14, 56610), (16, 56631), (19, 56649), (22, 56685),

Gene: Lennon_80 Start: 57735, Stop: 58022, Start Num: 6
Candidate Starts for Lennon_80:
(4, 57621), (Start: 6 @57735 has 53 MA's), (10, 57789), (12, 57795), (17, 57843), (21, 57876), (27, 57945), (29, 57987),

Gene: LilHam_75 Start: 53611, Stop: 53898, Start Num: 6
Candidate Starts for LilHam_75:
(Start: 6 @53611 has 53 MA's), (12, 53671), (14, 53692), (16, 53713), (19, 53731), (22, 53767),

Gene: LordVader_50 Start: 34408, Stop: 34701, Start Num: 7
Candidate Starts for LordVader_50:
(Start: 7 @34408 has 4 MA's), (8, 34426), (9, 34429), (10, 34450), (18, 34513), (22, 34555), (24, 34588), (31, 34678),

Gene: Love_87 Start: 57810, Stop: 58112, Start Num: 6
Candidate Starts for Love_87:
(Start: 6 @57810 has 53 MA's), (10, 57864), (12, 57870), (14, 57891), (17, 57918), (21, 57951), (27, 58020), (29, 58062),

Gene: McCrothy_79 Start: 57521, Stop: 57808, Start Num: 6
Candidate Starts for McCrothy_79:
(Start: 6 @57521 has 53 MA's), (10, 57575), (12, 57581), (13, 57587), (14, 57602), (17, 57629), (21, 57662), (27, 57731), (29, 57773),

Gene: McKinley_84 Start: 56852, Stop: 57127, Start Num: 6
Candidate Starts for McKinley_84:
(Start: 6 @56852 has 53 MA's), (10, 56906), (12, 56912), (13, 56918), (14, 56933), (17, 56960), (21, 56993), (27, 57062),

Gene: MoontowerMania_80 Start: 57411, Stop: 57698, Start Num: 6
Candidate Starts for MoontowerMania_80:
(Start: 6 @57411 has 53 MA's), (10, 57465), (12, 57471), (13, 57477), (14, 57492), (17, 57519), (21, 57552), (29, 57663),

Gene: Nordenberg_80 Start: 55529, Stop: 55816, Start Num: 6
Candidate Starts for Nordenberg_80:
(Start: 6 @55529 has 53 MA's), (10, 55583), (12, 55589), (14, 55610), (17, 55637), (21, 55670), (27, 55739), (29, 55781),

Gene: PaintedDog_48 Start: 33635, Stop: 33910, Start Num: 7
Candidate Starts for PaintedDog_48:

(5, 33542), (Start: 7 @33635 has 4 MA's), (11, 33677), (13, 33686), (15, 33713), (23, 33794), (24, 33812), (26, 33821),

Gene: Paries_84 Start: 57817, Stop: 58104, Start Num: 6
Candidate Starts for Paries_84:
(Start: 6 @57817 has 53 MA's), (10, 57871), (12, 57877), (13, 57883), (14, 57898), (17, 57925), (21, 57958), (27, 58027), (29, 58069),

Gene: Ribeye_80 Start: 55220, Stop: 55507, Start Num: 6
Candidate Starts for Ribeye_80:
(Start: 6 @55220 has 53 MA's), (12, 55280), (14, 55301), (16, 55322), (19, 55340), (22, 55376),

Gene: RiverRaider_83 Start: 54876, Stop: 55163, Start Num: 6
Candidate Starts for RiverRaider_83:
(Start: 6 @54876 has 53 MA's), (12, 54936), (13, 54942), (14, 54957), (19, 54996), (27, 55086), (28, 55089), (30, 55146),

Gene: Rofo_80 Start: 56258, Stop: 56545, Start Num: 6
Candidate Starts for Rofo_80:
(Start: 6 @56258 has 53 MA's), (10, 56312), (12, 56318), (13, 56324), (14, 56339), (17, 56366), (21, 56399), (27, 56468), (29, 56510),

Gene: Sanjuju_79 Start: 56934, Stop: 57221, Start Num: 6
Candidate Starts for Sanjuju_79:
(Start: 6 @56934 has 53 MA's), (10, 56988), (12, 56994), (13, 57000), (17, 57042), (21, 57075), (27, 57144),

Gene: Saronaya_82 Start: 56077, Stop: 56364, Start Num: 6
Candidate Starts for Saronaya_82:
(Start: 6 @56077 has 53 MA's), (12, 56137), (14, 56158), (16, 56179), (19, 56197), (22, 56233),

Gene: SchottB_79 Start: 56086, Stop: 56373, Start Num: 6
Candidate Starts for SchottB_79:
(Start: 6 @56086 has 53 MA's), (12, 56146), (14, 56167), (16, 56188), (19, 56206), (22, 56242),

Gene: Sedona_79 Start: 57431, Stop: 57718, Start Num: 6
Candidate Starts for Sedona_79:
(Start: 6 @57431 has 53 MA's), (10, 57485), (12, 57491), (14, 57512), (17, 57539), (21, 57572),

Gene: Shivanishola_82 Start: 55356, Stop: 55643, Start Num: 6
Candidate Starts for Shivanishola_82:
(Start: 6 @55356 has 53 MA's), (10, 55410), (12, 55416), (13, 55422), (14, 55437), (17, 55464), (21, 55497), (27, 55566),

Gene: Sitar_80 Start: 57478, Stop: 57765, Start Num: 6
Candidate Starts for Sitar_80:
(Start: 6 @57478 has 53 MA's), (10, 57532), (12, 57538), (13, 57544), (14, 57559), (17, 57586), (21, 57619), (27, 57688),

Gene: Stichling_77 Start: 55023, Stop: 55310, Start Num: 6
Candidate Starts for Stichling_77:
(Start: 6 @55023 has 53 MA's), (12, 55083), (14, 55104), (16, 55125), (19, 55143), (22, 55179),

Gene: StorminNorm_82 Start: 56257, Stop: 56544, Start Num: 6
Candidate Starts for StorminNorm_82:
(1, 55990), (Start: 6 @56257 has 53 MA's), (12, 56317), (14, 56338), (16, 56359), (19, 56377), (22, 56413),

Gene: Stultus_76 Start: 55725, Stop: 56012, Start Num: 6
Candidate Starts for Stultus_76:
(Start: 6 @55725 has 53 MA's), (10, 55779), (12, 55785), (13, 55791), (14, 55806), (17, 55833), (21, 55866), (27, 55935),

Gene: Tangent_83 Start: 55963, Stop: 56250, Start Num: 6
Candidate Starts for Tangent_83:
(Start: 6 @55963 has 53 MA's), (10, 56017), (12, 56023), (13, 56029), (14, 56044), (17, 56071), (21, 56104), (27, 56173), (29, 56215),

Gene: Tangerine_81 Start: 55353, Stop: 55640, Start Num: 6
Candidate Starts for Tangerine_81:
(Start: 6 @55353 has 53 MA's), (12, 55413), (14, 55434), (16, 55455), (19, 55473), (22, 55509),

Gene: Thing3_81 Start: 56788, Stop: 57078, Start Num: 6
Candidate Starts for Thing3_81:
(Start: 6 @56788 has 53 MA's), (10, 56842), (12, 56848), (13, 56854), (14, 56869), (17, 56896), (29, 57043),

Gene: Tycho_80 Start: 55555, Stop: 55842, Start Num: 6
Candidate Starts for Tycho_80:
(1, 55288), (Start: 6 @55555 has 53 MA's), (12, 55615), (14, 55636), (16, 55657), (19, 55675), (22, 55711),

Gene: Vivi2_84 Start: 57019, Stop: 57306, Start Num: 6
Candidate Starts for Vivi2_84:
(Start: 6 @57019 has 53 MA's), (10, 57073), (12, 57079), (13, 57085), (14, 57100), (17, 57127), (21, 57160), (27, 57229), (29, 57271),

Gene: YorkOnyx_81 Start: 55704, Stop: 55991, Start Num: 6
Candidate Starts for YorkOnyx_81:
(Start: 6 @55704 has 53 MA's), (12, 55764), (14, 55785), (16, 55806), (19, 55824), (22, 55860),