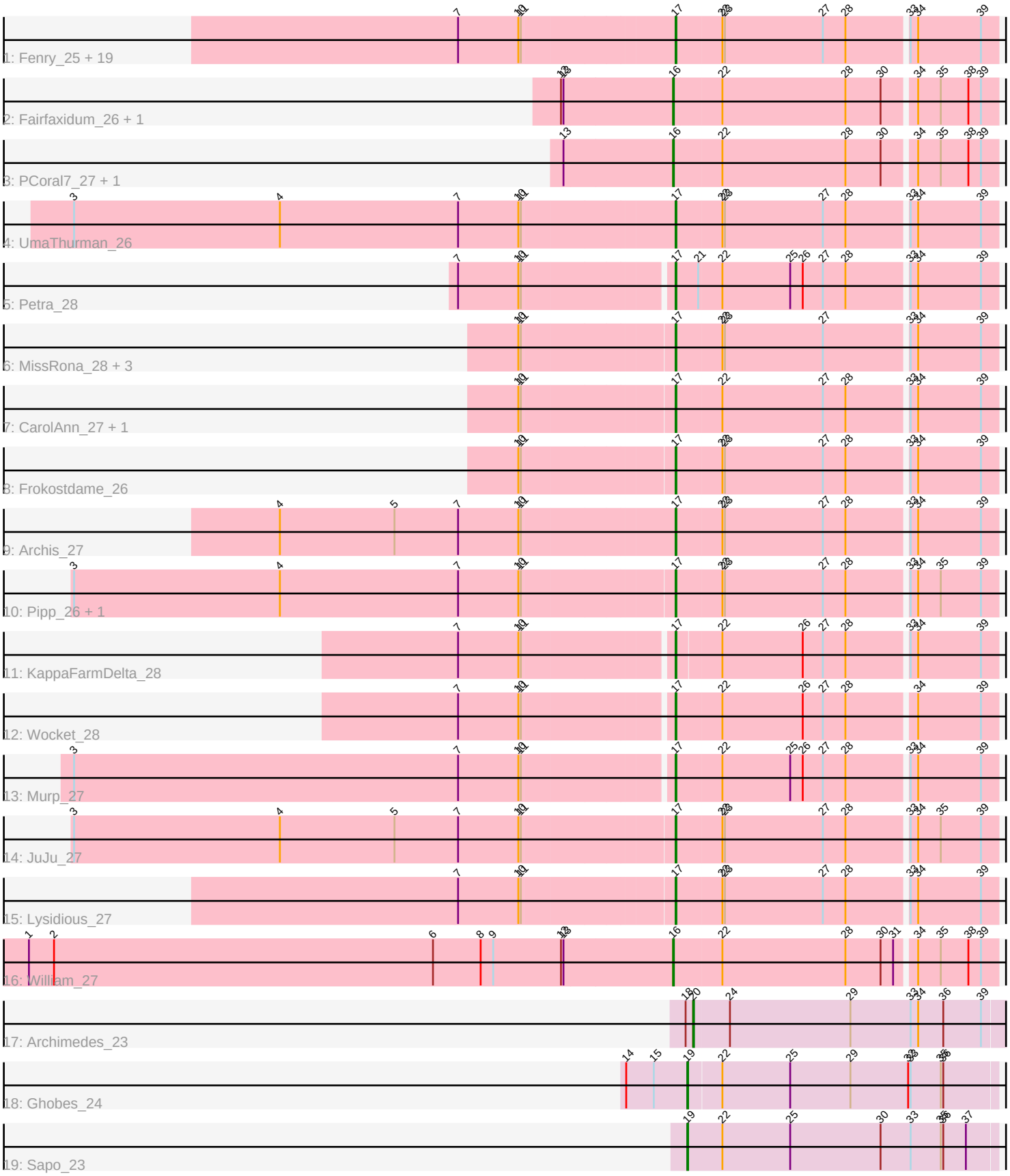
Pham 1996


1: Fenry_25 + 19
2: Fairfaxidum_26 + 1
3: PCoral7_27 + 1
4: UmaThurman_26
5: Petra_28
6: MissRona_28 + 3
7: CarolAnn_27 + 1
8: Frokostdame_26
9: Archis_27
10: Pipp_26 + 1
11: KappaFarmDelta_28
12: Wocket_28
13: Murp_27
14: JuJu_27
15: Lysidious_27
16: William_27
17: Archimedes_23
18: Ghobes_24
19: Sapo_23

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 1996 Report

This analysis was run 04/12/24 on database version 558.

Pham number 1996 has 45 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Fenry_25, BlingBling_26, Zarbodnamra_26, Melba_26, JasperJr_26, Obliviate_26, PhrostedPhlake_28, Malachai_27, Hitter_26, Samba_26, Barco_26, Jalammah_28, ZiggyZoo_26, Guacamole_26, Begonia_27, MintFen_26, CaptainKirk2_26, Mellie_25, Wisp_25, Walrus_28
• Track 2 : Fairfaxidum_26, PrincePatrick_26
• Track 3 : PCoral7_27, Toast_27
• Track 4 : UmaThurman_26
• Track 5 : Petra_28
• Track 6 : MissRona_28, Gambino_28, Blueberry_28, Azula_28
• Track 7 : CarolAnn_27, Blino_27
• Track 8 : Frokostdame_26
• Track 9 : Archis_27
• Track 10 : Pipp_26, Utz_26
• Track 11 : KappaFarmDelta_28
• Track 12 : Wocket_28
• Track 13 : Murp_27
• Track 14 : JuJu_27
• Track 15 : Lysidious_27
• Track 16 : William_27
• Track 17 : Archimedes_23
• Track 18 : Ghobes_24
• Track 19 : Sapo_23

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

The start number called the most often in the published annotations is 17, it was called in 36 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Archis_27, Azula_28, Barco_26, Begonia_27, BlingBling_26, Blino_27, Blueberry_28, CaptainKirk2_26, CarolAnn_27, Fenry_25, Frokostdame_26, Gambino_28, Guacamole_26, Hitter_26, Jalammah_28, JasperJr_26, JuJu_27, KappaFarmDelta_28, Lysidious_27, Malachai_27, Melba_26, Mellie_25, MintFen_26, MissRona_28, Murp_27, Obliviate_26, Petra_28, PhrostedPhlake_28, Pipp_26,

Samba_26, UmaThurman_26, Utz_26, Walrus_28, Wisp_25, Wocket_28, Zarbodnamra_26, ZiggyZoo_26,

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

Genes that do not have the "Most Annotated" start:
• Archimedes_23, Fairfaxidum_26, Ghobes_24, PCoral7_27, PrincePatrick_26, Sapo_23, Toast_27, William_27,

Summary by start number:

Start 16:
• Found in 5 of 45 (11.1%) of genes in pham
• Manual Annotations of this start: 4 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fairfaxidum_26 (CV), PCoral7_27 (CV), PrincePatrick_26 (CV), Toast_27 (CV), William_27 (CV),

Start 17:
• Found in 37 of 45 (82.2%) of genes in pham
• Manual Annotations of this start: 36 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Archis_27 (CV), Azula_28 (CV), Barco_26 (CV), Begonia_27 (CV), BlingBling_26 (CV), Blino_27 (CV), Blueberry_28 (CV), CaptainKirk2_26 (CV), CarolAnn_27 (CV), Fenry_25 (CV), Frokostdame_26 (CV), Gambino_28 (CV), Guacamole_26 (CV), Hitter_26 (CV), Jalammah_28 (CV), JasperJr_26 (CV), JuJu_27 (CV), KappaFarmDelta_28 (CV), Lysidious_27 (CV), Malachai_27 (CV), Melba_26 (CV), Mellie_25 (CV), MintFen_26 (CV), MissRona_28 (CV), Murp_27 (CV), Obliviate_26 (CV), Petra_28 (CV), PhrostedPhlake_28 (CV), Pipp_26 (CV), Samba_26 (CV), UmaThurman_26 (CV), Utz_26 (CV), Walrus_28 (CV), Wisp_25 (CV), Wocket_28 (CV), Zarbodnamra_26 (CV), ZiggyZoo_26 (CV),

Start 19:
• Found in 2 of 45 (4.4%) of genes in pham
• Manual Annotations of this start: 2 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ghobes_24 (DA), Sapo_23 (DA),

Start 20:
• Found in 1 of 45 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Archimedes_23 (DA),

Summary by clusters:

There are 2 clusters represented in this pham: CV, DA,

Info for manual annotations of cluster CV:
•Start number 16 was manually annotated 4 times for cluster CV.
•Start number 17 was manually annotated 36 times for cluster CV.

Info for manual annotations of cluster DA:
•Start number 19 was manually annotated 2 times for cluster DA.
•Start number 20 was manually annotated 1 time for cluster DA.

Gene Information:

Gene: Archimedes_23 Start: 19841, Stop: 20212, Start Num: 20
Candidate Starts for Archimedes_23:
(18, 19832), (Start: 20 @19841 has 1 MA's), (24, 19883), (29, 20027), (33, 20099), (34, 20108), (36, 20138), (39, 20183),

Gene: Archis_27 Start: 22163, Stop: 22537, Start Num: 17
Candidate Starts for Archis_27:
(4, 21704), (5, 21839), (7, 21914), (10, 21986), (11, 21989), (Start: 17 @22163 has 36 MA's), (22, 22217), (23, 22220), (27, 22337), (28, 22364), (33, 22433), (34, 22442), (39, 22517),

Gene: Azula_28 Start: 22261, Stop: 22635, Start Num: 17
Candidate Starts for Azula_28:
(10, 22087), (11, 22090), (Start: 17 @22261 has 36 MA's), (22, 22315), (23, 22318), (27, 22435), (33, 22531), (34, 22540), (39, 22615),

Gene: Barco_26 Start: 21952, Stop: 22326, Start Num: 17
Candidate Starts for Barco_26:
(7, 21703), (10, 21775), (11, 21778), (Start: 17 @21952 has 36 MA's), (22, 22006), (23, 22009), (27, 22126), (28, 22153), (33, 22222), (34, 22231), (39, 22306),

Gene: Begonia_27 Start: 22433, Stop: 22807, Start Num: 17
Candidate Starts for Begonia_27:
(7, 22184), (10, 22256), (11, 22259), (Start: 17 @22433 has 36 MA's), (22, 22487), (23, 22490), (27, 22607), (28, 22634), (33, 22703), (34, 22712), (39, 22787),

Gene: BlingBling_26 Start: 21952, Stop: 22326, Start Num: 17
Candidate Starts for BlingBling_26:
(7, 21703), (10, 21775), (11, 21778), (Start: 17 @21952 has 36 MA's), (22, 22006), (23, 22009), (27, 22126), (28, 22153), (33, 22222), (34, 22231), (39, 22306),

Gene: Blino_27 Start: 22043, Stop: 22417, Start Num: 17
Candidate Starts for Blino_27:
(10, 21869), (11, 21872), (Start: 17 @22043 has 36 MA's), (22, 22097), (27, 22217), (28, 22244), (33, 22313), (34, 22322), (39, 22397),

Gene: Blueberry_28 Start: 22261, Stop: 22635, Start Num: 17
Candidate Starts for Blueberry_28:
(10, 22087), (11, 22090), (Start: 17 @22261 has 36 MA's), (22, 22315), (23, 22318), (27, 22435), (33, 22531), (34, 22540), (39, 22615),

Gene: CaptainKirk2_26 Start: 21973, Stop: 22347, Start Num: 17
Candidate Starts for CaptainKirk2_26:
(7, 21724), (10, 21796), (11, 21799), (Start: 17 @21973 has 36 MA's), (22, 22027), (23, 22030), (27, 22147), (28, 22174), (33, 22243), (34, 22252), (39, 22327),

Gene: CarolAnn_27 Start: 22042, Stop: 22416, Start Num: 17
Candidate Starts for CarolAnn_27:
(10, 21868), (11, 21871), (Start: 17 @22042 has 36 MA's), (22, 22096), (27, 22216), (28, 22243), (33, 22312), (34, 22321), (39, 22396),

Gene: Fairfaxidum_26 Start: 22267, Stop: 22641, Start Num: 16
Candidate Starts for Fairfaxidum_26:
(12, 22135), (13, 22138), (Start: 16 @22267 has 4 MA's), (22, 22321), (28, 22468), (30, 22510), (34, 22546), (35, 22573), (38, 22606), (39, 22621),

Gene: Fenry_25 Start: 21671, Stop: 22045, Start Num: 17
Candidate Starts for Fenry_25:
(7, 21422), (10, 21494), (11, 21497), (Start: 17 @21671 has 36 MA's), (22, 21725), (23, 21728), (27, 21845), (28, 21872), (33, 21941), (34, 21950), (39, 22025),

Gene: Frokostdame_26 Start: 21915, Stop: 22289, Start Num: 17
Candidate Starts for Frokostdame_26:
(10, 21741), (11, 21744), (Start: 17 @21915 has 36 MA's), (22, 21969), (23, 21972), (27, 22089), (28, 22116), (33, 22185), (34, 22194), (39, 22269),

Gene: Gambino_28 Start: 22261, Stop: 22635, Start Num: 17
Candidate Starts for Gambino_28:
(10, 22087), (11, 22090), (Start: 17 @22261 has 36 MA's), (22, 22315), (23, 22318), (27, 22435), (33, 22531), (34, 22540), (39, 22615),

Gene: Ghobes_24 Start: 19966, Stop: 20331, Start Num: 19
Candidate Starts for Ghobes_24:
(14, 19894), (15, 19927), (Start: 19 @19966 has 2 MA's), (22, 20005), (25, 20086), (29, 20158), (32, 20227), (33, 20230), (35, 20266), (36, 20269),

Gene: Guacamole_26 Start: 21956, Stop: 22330, Start Num: 17
Candidate Starts for Guacamole_26:
(7, 21707), (10, 21779), (11, 21782), (Start: 17 @21956 has 36 MA's), (22, 22010), (23, 22013), (27, 22130), (28, 22157), (33, 22226), (34, 22235), (39, 22310),

Gene: Hitter_26 Start: 21952, Stop: 22326, Start Num: 17
Candidate Starts for Hitter_26:
(7, 21703), (10, 21775), (11, 21778), (Start: 17 @21952 has 36 MA's), (22, 22006), (23, 22009), (27, 22126), (28, 22153), (33, 22222), (34, 22231), (39, 22306),

Gene: Jalammah_28 Start: 22746, Stop: 23120, Start Num: 17
Candidate Starts for Jalammah_28:
(7, 22497), (10, 22569), (11, 22572), (Start: 17 @22746 has 36 MA's), (22, 22800), (23, 22803), (27, 22920), (28, 22947), (33, 23016), (34, 23025), (39, 23100),

Gene: JasperJr_26 Start: 21956, Stop: 22330, Start Num: 17
Candidate Starts for JasperJr_26:
(7, 21707), (10, 21779), (11, 21782), (Start: 17 @21956 has 36 MA's), (22, 22010), (23, 22013), (27, 22130), (28, 22157), (33, 22226), (34, 22235), (39, 22310),

Gene: JuJu_27 Start: 22015, Stop: 22389, Start Num: 17
Candidate Starts for JuJu_27:

(3, 21313), (4, 21559), (5, 21694), (7, 21769), (10, 21841), (11, 21844), (Start: 17 @22015 has 36 MA's), (22, 22069), (23, 22072), (27, 22189), (28, 22216), (33, 22285), (34, 22294), (35, 22321), (39, 22369),

Gene: KappaFarmDelta_28 Start: 22437, Stop: 22808, Start Num: 17
Candidate Starts for KappaFarmDelta_28:
(7, 22197), (10, 22269), (11, 22272), (Start: 17 @22437 has 36 MA's), (22, 22488), (26, 22584), (27, 22608), (28, 22635), (33, 22704), (34, 22713), (39, 22788),

Gene: Lysidious_27 Start: 22473, Stop: 22847, Start Num: 17
Candidate Starts for Lysidious_27:
(7, 22227), (10, 22299), (11, 22302), (Start: 17 @22473 has 36 MA's), (22, 22527), (23, 22530), (27, 22647), (28, 22674), (33, 22743), (34, 22752), (39, 22827),

Gene: Malachai_27 Start: 22433, Stop: 22807, Start Num: 17
Candidate Starts for Malachai_27:
(7, 22184), (10, 22256), (11, 22259), (Start: 17 @22433 has 36 MA's), (22, 22487), (23, 22490), (27, 22607), (28, 22634), (33, 22703), (34, 22712), (39, 22787),

Gene: Melba_26 Start: 21952, Stop: 22326, Start Num: 17
Candidate Starts for Melba_26:
(7, 21703), (10, 21775), (11, 21778), (Start: 17 @21952 has 36 MA's), (22, 22006), (23, 22009), (27, 22126), (28, 22153), (33, 22222), (34, 22231), (39, 22306),

Gene: Mellie_25 Start: 21713, Stop: 22087, Start Num: 17
Candidate Starts for Mellie_25:
(7, 21464), (10, 21536), (11, 21539), (Start: 17 @21713 has 36 MA's), (22, 21767), (23, 21770), (27, 21887), (28, 21914), (33, 21983), (34, 21992), (39, 22067),

Gene: MintFen_26 Start: 21952, Stop: 22326, Start Num: 17
Candidate Starts for MintFen_26:
(7, 21703), (10, 21775), (11, 21778), (Start: 17 @21952 has 36 MA's), (22, 22006), (23, 22009), (27, 22126), (28, 22153), (33, 22222), (34, 22231), (39, 22306),

Gene: MissRona_28 Start: 22261, Stop: 22635, Start Num: 17
Candidate Starts for MissRona_28:
(10, 22087), (11, 22090), (Start: 17 @22261 has 36 MA's), (22, 22315), (23, 22318), (27, 22435), (33, 22531), (34, 22540), (39, 22615),

Gene: Murp_27 Start: 22211, Stop: 22585, Start Num: 17
Candidate Starts for Murp_27:
(3, 21515), (7, 21971), (10, 22043), (11, 22046), (Start: 17 @22211 has 36 MA's), (22, 22265), (25, 22346), (26, 22361), (27, 22385), (28, 22412), (33, 22481), (34, 22490), (39, 22565),

Gene: Obliviate_26 Start: 21868, Stop: 22242, Start Num: 17
Candidate Starts for Obliviate_26:
(7, 21619), (10, 21691), (11, 21694), (Start: 17 @21868 has 36 MA's), (22, 21922), (23, 21925), (27, 22042), (28, 22069), (33, 22138), (34, 22147), (39, 22222),

Gene: PCoral7_27 Start: 22184, Stop: 22558, Start Num: 16
Candidate Starts for PCoral7_27:
(13, 22055), (Start: 16 @22184 has 4 MA's), (22, 22238), (28, 22385), (30, 22427), (34, 22463), (35, 22490), (38, 22523), (39, 22538),

Gene: Petra_28 Start: 21937, Stop: 22311, Start Num: 17
Candidate Starts for Petra_28:
(7, 21697), (10, 21769), (11, 21772), (Start: 17 @21937 has 36 MA's), (21, 21964), (22, 21991), (25, 22072), (26, 22087), (27, 22111), (28, 22138), (33, 22207), (34, 22216), (39, 22291),

Gene: PhrostedPhlake_28 Start: 22645, Stop: 23019, Start Num: 17
Candidate Starts for PhrostedPhlake_28:
(7, 22396), (10, 22468), (11, 22471), (Start: 17 @22645 has 36 MA's), (22, 22699), (23, 22702), (27, 22819), (28, 22846), (33, 22915), (34, 22924), (39, 22999),

Gene: Pipp_26 Start: 21943, Stop: 22317, Start Num: 17
Candidate Starts for Pipp_26:
(3, 21241), (4, 21487), (7, 21697), (10, 21769), (11, 21772), (Start: 17 @21943 has 36 MA's), (22, 21997), (23, 22000), (27, 22117), (28, 22144), (33, 22213), (34, 22222), (35, 22249), (39, 22297),

Gene: PrincePatrick_26 Start: 22263, Stop: 22637, Start Num: 16
Candidate Starts for PrincePatrick_26:
(12, 22131), (13, 22134), (Start: 16 @22263 has 4 MA's), (22, 22317), (28, 22464), (30, 22506), (34, 22542), (35, 22569), (38, 22602), (39, 22617),

Gene: Samba_26 Start: 22030, Stop: 22404, Start Num: 17
Candidate Starts for Samba_26:
(7, 21781), (10, 21853), (11, 21856), (Start: 17 @22030 has 36 MA's), (22, 22084), (23, 22087), (27, 22204), (28, 22231), (33, 22300), (34, 22309), (39, 22384),

Gene: Sapo_23 Start: 19934, Stop: 20302, Start Num: 19
Candidate Starts for Sapo_23:
(Start: 19 @19934 has 2 MA's), (22, 19976), (25, 20057), (30, 20165), (33, 20201), (35, 20237), (36, 20240), (37, 20267),

Gene: Toast_27 Start: 22184, Stop: 22558, Start Num: 16
Candidate Starts for Toast_27:
(13, 22055), (Start: 16 @22184 has 4 MA's), (22, 22238), (28, 22385), (30, 22427), (34, 22463), (35, 22490), (38, 22523), (39, 22538),

Gene: UmaThurman_26 Start: 22077, Stop: 22451, Start Num: 17
Candidate Starts for UmaThurman_26:
(3, 21372), (4, 21618), (7, 21828), (10, 21900), (11, 21903), (Start: 17 @22077 has 36 MA's), (22, 22131), (23, 22134), (27, 22251), (28, 22278), (33, 22347), (34, 22356), (39, 22431),

Gene: Utz_26 Start: 21944, Stop: 22318, Start Num: 17
Candidate Starts for Utz_26:
(3, 21242), (4, 21488), (7, 21698), (10, 21770), (11, 21773), (Start: 17 @21944 has 36 MA's), (22, 21998), (23, 22001), (27, 22118), (28, 22145), (33, 22214), (34, 22223), (35, 22250), (39, 22298),

Gene: Walrus_28 Start: 22492, Stop: 22866, Start Num: 17
Candidate Starts for Walrus_28:
(7, 22243), (10, 22315), (11, 22318), (Start: 17 @22492 has 36 MA's), (22, 22546), (23, 22549), (27, 22666), (28, 22693), (33, 22762), (34, 22771), (39, 22846),

Gene: William_27 Start: 22010, Stop: 22384, Start Num: 16
Candidate Starts for William_27:

(1, 21242), (2, 21272), (6, 21725), (8, 21782), (9, 21797), (12, 21878), (13, 21881), (Start: 16 @22010 has 4 MA's), (22, 22064), (28, 22211), (30, 22253), (31, 22268), (34, 22289), (35, 22316), (38, 22349), (39, 22364),

Gene: Wisp_25 Start: 21662, Stop: 22036, Start Num: 17
Candidate Starts for Wisp_25:
(7, 21413), (10, 21485), (11, 21488), (Start: 17 @21662 has 36 MA's), (22, 21716), (23, 21719), (27, 21836), (28, 21863), (33, 21932), (34, 21941), (39, 22016),

Gene: Wocket_28 Start: 22629, Stop: 23003, Start Num: 17
Candidate Starts for Wocket_28:
(7, 22389), (10, 22461), (11, 22464), (Start: 17 @22629 has 36 MA's), (22, 22683), (26, 22779), (27, 22803), (28, 22830), (34, 22908), (39, 22983),

Gene: Zarbodnamra_26 Start: 21951, Stop: 22325, Start Num: 17
Candidate Starts for Zarbodnamra_26:
(7, 21702), (10, 21774), (11, 21777), (Start: 17 @21951 has 36 MA's), (22, 22005), (23, 22008), (27, 22125), (28, 22152), (33, 22221), (34, 22230), (39, 22305),

Gene: ZiggyZoo_26 Start: 21868, Stop: 22242, Start Num: 17
Candidate Starts for ZiggyZoo_26:
(7, 21619), (10, 21691), (11, 21694), (Start: 17 @21868 has 36 MA's), (22, 21922), (23, 21925), (27, 22042), (28, 22069), (33, 22138), (34, 22147), (39, 22222),