Pham 283924

1: PCoral7_69 + 3

2: Azula_74 + 3

3: Mellie_66 + 7

4: Pipp_73 + 4

5: UmaThurman_69

6: JasperJr_68 + 1

7: MintFen_70 + 1

8: Lysidious_71

9: PhrostedPhlake_75

10: Murp_67

11: Malachai_68 + 1

12: Wocket_67

13: CheeseSpider_80

14: KappaFarmDelta_69

15: Melba_69

16: CaptainKirk2_70

17: JuJu_78

18: Utz_61

19: Petra_73

20: ZiggyZoo_70 + 1

21: Walrus_67

22: Zarbodnamra_72

23: SpeedDemon_470 + 1

24: Mollymur_46
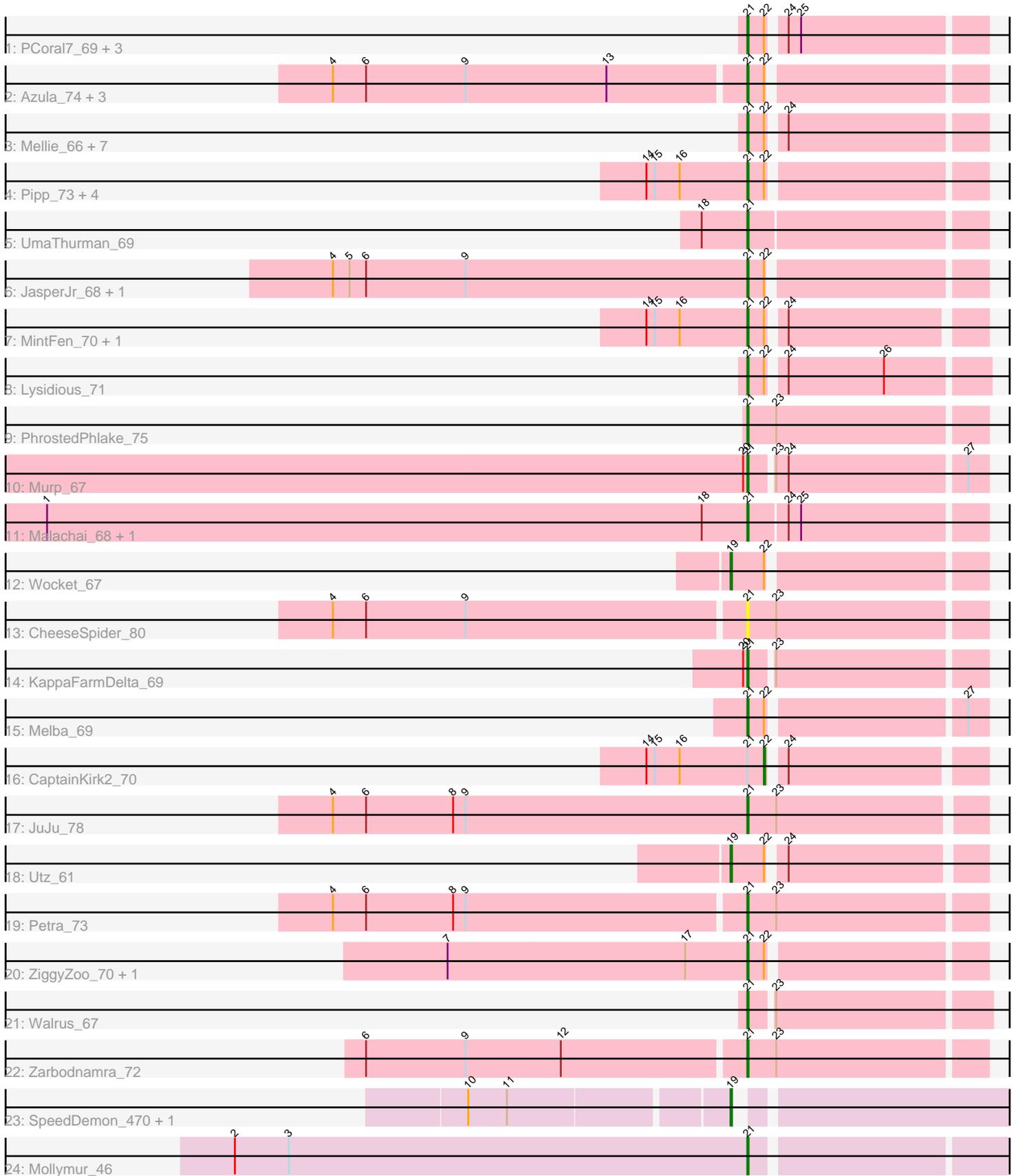
Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 283924 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283924 has 46 members, 2 are drafts.

Phages represented in each track:
• Track 1 : PCoral7_69, PrincePatrick_70, William_72, Toast_69
• Track 2 : Azula_74, MissRona_74, Gambino_76, Blueberry_73
• Track 3 : Mellie_66, Jalammah_72, Fenry_68, Hitter_69, Blino_71, Samba_69, Fairfaxidum_72, CarolAnn_70
• Track 4 : Pipp_73, Obliviate_68, Barco_66, BlingBling_65, Zilla_67
• Track 5 : UmaThurman_69
• Track 6 : JasperJr_68, Guacamole_68
• Track 7 : MintFen_70, Delian_73
• Track 8 : Lysidious_71
• Track 9 : PhrostedPhlake_75
• Track 10 : Murp_67
• Track 11 : Malachai_68, Begonia_68
• Track 12 : Wocket_67
• Track 13 : CheeseSpider_80
• Track 14 : KappaFarmDelta_69
• Track 15 : Melba_69
• Track 16 : CaptainKirk2_70
• Track 17 : JuJu_78
• Track 18 : Utz_61
• Track 19 : Petra_73
• Track 20 : ZiggyZoo_70, Archis_71
• Track 21 : Walrus_67
• Track 22 : Zarbodnamra_72
• Track 23 : SpeedDemon_470, Bantam_46
• Track 24 : Mollymur_46

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

The start number called the most often in the published annotations is 21, it was called in 39 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Archis_71, Azula_74, Barco_66, Begonia_68, BlingBling_65, Blino_71, Blueberry_73, CarolAnn_70, CheeseSpider_80, Delian_73, Fairfaxidum_72,

Fenry_68, Gambino_76, Guacamole_68, Hitter_69, Jalammah_72, JasperJr_68, JuJu_78, KappaFarmDelta_69, Lysidious_71, Malachai_68, Melba_69, Mellie_66, MintFen_70, MissRona_74, Mollymur_46, Murp_67, Obliviate_68, PCoral7_69, Petra_73, PhrostedPhlake_75, Pipp_73, PrincePatrick_70, Samba_69, Toast_69, UmaThurman_69, Walrus_67, William_72, Zarbodnamra_72, ZiggyZoo_70, Zilla_67,

Genes that have the "Most Annotated" start but do not call it:
• CaptainKirk2_70,

Genes that do not have the "Most Annotated" start:
• Bantam_46, SpeedDemon_470, Utz_61, Wocket_67,

Summary by start number:

Start 19:
• Found in 4 of 46 (8.7%) of genes in pham
• Manual Annotations of this start: 4 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bantam_46 (DL), SpeedDemon_470 (DL), Utz_61 (CV), Wocket_67 (CV),

Start 21:
• Found in 42 of 46 (91.3%) of genes in pham
• Manual Annotations of this start: 39 of 44
• Called 97.6% of time when present
• Phage (with cluster) where this start called: Archis_71 (CV), Azula_74 (CV), Barco_66 (CV), Begonia_68 (CV), BlingBling_65 (CV), Blino_71 (CV), Blueberry_73 (CV), CarolAnn_70 (CV), CheeseSpider_80 (CV), Delian_73 (CV), Fairfaxidum_72 (CV), Fenry_68 (CV), Gambino_76 (CV), Guacamole_68 (CV), Hitter_69 (CV), Jalammah_72 (CV), JasperJr_68 (CV), JuJu_78 (CV), KappaFarmDelta_69 (CV), Lysidious_71 (CV), Malachai_68 (CV), Melba_69 (CV), Mellie_66 (CV), MintFen_70 (CV), MissRona_74 (CV), Mollymur_46 (DL), Murp_67 (CV), Obliviate_68 (CV), PCoral7_69 (CV), Petra_73 (CV), PhrostedPhlake_75 (CV), Pipp_73 (CV), PrincePatrick_70 (CV), Samba_69 (CV), Toast_69 (CV), UmaThurman_69 (CV), Walrus_67 (CV), William_72 (CV), Zarbodnamra_72 (CV), ZiggyZoo_70 (CV), Zilla_67 (CV),

Start 22:
• Found in 32 of 46 (69.6%) of genes in pham
• Manual Annotations of this start: 1 of 44
• Called 3.1% of time when present
• Phage (with cluster) where this start called: CaptainKirk2_70 (CV),

Summary by clusters:

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

Info for manual annotations of cluster CV:
•Start number 19 was manually annotated 2 times for cluster CV.
•Start number 21 was manually annotated 38 times for cluster CV.
•Start number 22 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DL:

•Start number 19 was manually annotated 2 times for cluster DL.
•Start number 21 was manually annotated 1 time for cluster DL.

Gene Information:

Gene: Archis_71 Start: 42723, Stop: 42881, Start Num: 21
Candidate Starts for Archis_71:
(7, 42507), (17, 42678), (Start: 21 @42723 has 39 MA's), (Start: 22 @42735 has 1 MA's),

Gene: Azula_74 Start: 46615, Stop: 46773, Start Num: 21
Candidate Starts for Azula_74:
(4, 46321), (6, 46345), (9, 46417), (13, 46519), (Start: 21 @46615 has 39 MA's), (Start: 22 @46627 has 1 MA's),

Gene: Bantam_46 Start: 40945, Stop: 41127, Start Num: 19
Candidate Starts for Bantam_46:
(10, 40768), (11, 40795), (Start: 19 @40945 has 4 MA's),

Gene: Barco_66 Start: 42553, Stop: 42711, Start Num: 21
Candidate Starts for Barco_66:
(14, 42481), (15, 42487), (16, 42505), (Start: 21 @42553 has 39 MA's), (Start: 22 @42565 has 1 MA's),

Gene: Begonia_68 Start: 45480, Stop: 45644, Start Num: 21
Candidate Starts for Begonia_68:
(1, 44973), (18, 45447), (Start: 21 @45480 has 39 MA's), (24, 45507), (25, 45516),

Gene: BlingBling_65 Start: 43435, Stop: 43593, Start Num: 21
Candidate Starts for BlingBling_65:
(14, 43363), (15, 43369), (16, 43387), (Start: 21 @43435 has 39 MA's), (Start: 22 @43447 has 1 MA's),

Gene: Blino_71 Start: 48216, Stop: 48371, Start Num: 21
Candidate Starts for Blino_71:
(Start: 21 @48216 has 39 MA's), (Start: 22 @48228 has 1 MA's), (24, 48237),

Gene: Blueberry_73 Start: 46615, Stop: 46773, Start Num: 21
Candidate Starts for Blueberry_73:
(4, 46321), (6, 46345), (9, 46417), (13, 46519), (Start: 21 @46615 has 39 MA's), (Start: 22 @46627 has 1 MA's),

Gene: CaptainKirk2_70 Start: 42213, Stop: 42356, Start Num: 22
Candidate Starts for CaptainKirk2_70:
(14, 42129), (15, 42135), (16, 42153), (Start: 21 @42201 has 39 MA's), (Start: 22 @42213 has 1 MA's), (24, 42222),

Gene: CarolAnn_70 Start: 48215, Stop: 48370, Start Num: 21
Candidate Starts for CarolAnn_70:
(Start: 21 @48215 has 39 MA's), (Start: 22 @48227 has 1 MA's), (24, 48236),

Gene: CheeseSpider_80 Start: 46540, Stop: 46707, Start Num: 21
Candidate Starts for CheeseSpider_80:
(4, 46246), (6, 46270), (9, 46342), (Start: 21 @46540 has 39 MA's), (23, 46561),

Gene: Delian_73 Start: 42199, Stop: 42354, Start Num: 21
Candidate Starts for Delian_73:
(14, 42127), (15, 42133), (16, 42151), (Start: 21 @42199 has 39 MA's), (Start: 22 @42211 has 1 MA's),
(24, 42220),

Gene: Fairfaxidum_72 Start: 44764, Stop: 44922, Start Num: 21
Candidate Starts for Fairfaxidum_72:
(Start: 21 @44764 has 39 MA's), (Start: 22 @44776 has 1 MA's), (24, 44785),

Gene: Fenry_68 Start: 44226, Stop: 44384, Start Num: 21
Candidate Starts for Fenry_68:
(Start: 21 @44226 has 39 MA's), (Start: 22 @44238 has 1 MA's), (24, 44247),

Gene: Gambino_76 Start: 46615, Stop: 46773, Start Num: 21
Candidate Starts for Gambino_76:
(4, 46321), (6, 46345), (9, 46417), (13, 46519), (Start: 21 @46615 has 39 MA's), (Start: 22 @46627
has 1 MA's),

Gene: Guacamole_68 Start: 43616, Stop: 43774, Start Num: 21
Candidate Starts for Guacamole_68:
(4, 43316), (5, 43328), (6, 43340), (9, 43412), (Start: 21 @43616 has 39 MA's), (Start: 22 @43628 has
1 MA's),

Gene: Hitter_69 Start: 42159, Stop: 42317, Start Num: 21
Candidate Starts for Hitter_69:
(Start: 21 @42159 has 39 MA's), (Start: 22 @42171 has 1 MA's), (24, 42180),

Gene: Jalammah_72 Start: 45129, Stop: 45290, Start Num: 21
Candidate Starts for Jalammah_72:
(Start: 21 @45129 has 39 MA's), (Start: 22 @45141 has 1 MA's), (24, 45150),

Gene: JasperJr_68 Start: 43616, Stop: 43774, Start Num: 21
Candidate Starts for JasperJr_68:
(4, 43316), (5, 43328), (6, 43340), (9, 43412), (Start: 21 @43616 has 39 MA's), (Start: 22 @43628 has
1 MA's),

Gene: JuJu_78 Start: 48352, Stop: 48516, Start Num: 21
Candidate Starts for JuJu_78:
(4, 48052), (6, 48076), (8, 48139), (9, 48148), (Start: 21 @48352 has 39 MA's), (23, 48373),

Gene: KappaFarmDelta_69 Start: 43192, Stop: 43353, Start Num: 21
Candidate Starts for KappaFarmDelta_69:
(20, 43189), (Start: 21 @43192 has 39 MA's), (23, 43207),

Gene: Lysidious_71 Start: 44855, Stop: 45016, Start Num: 21
Candidate Starts for Lysidious_71:
(Start: 21 @44855 has 39 MA's), (Start: 22 @44867 has 1 MA's), (24, 44876), (26, 44945),

Gene: Malachai_68 Start: 45480, Stop: 45644, Start Num: 21
Candidate Starts for Malachai_68:
(1, 44973), (18, 45447), (Start: 21 @45480 has 39 MA's), (24, 45507), (25, 45516),

Gene: Melba_69 Start: 42570, Stop: 42728, Start Num: 21
Candidate Starts for Melba_69:
(Start: 21 @42570 has 39 MA's), (Start: 22 @42582 has 1 MA's), (27, 42714),

Gene: Mellie_66 Start: 42417, Stop: 42575, Start Num: 21
Candidate Starts for Mellie_66:
(Start: 21 @42417 has 39 MA's), (Start: 22 @42429 has 1 MA's), (24, 42438),

Gene: MintFen_70 Start: 42815, Stop: 42970, Start Num: 21
Candidate Starts for MintFen_70:
(14, 42743), (15, 42749), (16, 42767), (Start: 21 @42815 has 39 MA's), (Start: 22 @42827 has 1 MA's),
(24, 42836),

Gene: MissRona_74 Start: 46616, Stop: 46774, Start Num: 21
Candidate Starts for MissRona_74:
(4, 46322), (6, 46346), (9, 46418), (13, 46520), (Start: 21 @46616 has 39 MA's), (Start: 22 @46628
has 1 MA's),

Gene: Mollymur_46 Start: 41494, Stop: 41667, Start Num: 21
Candidate Starts for Mollymur_46:
(2, 41125), (3, 41164), (Start: 21 @41494 has 39 MA's),

Gene: Murp_67 Start: 45821, Stop: 45982, Start Num: 21
Candidate Starts for Murp_67:
(20, 45818), (Start: 21 @45821 has 39 MA's), (23, 45836), (24, 45845), (27, 45968),

Gene: Obliviate_68 Start: 42724, Stop: 42882, Start Num: 21
Candidate Starts for Obliviate_68:
(14, 42652), (15, 42658), (16, 42676), (Start: 21 @42724 has 39 MA's), (Start: 22 @42736 has 1 MA's),

Gene: PCoral7_69 Start: 43537, Stop: 43695, Start Num: 21
Candidate Starts for PCoral7_69:
(Start: 21 @43537 has 39 MA's), (Start: 22 @43549 has 1 MA's), (24, 43558), (25, 43567),

Gene: Petra_73 Start: 44768, Stop: 44935, Start Num: 21
Candidate Starts for Petra_73:
(4, 44474), (6, 44498), (8, 44561), (9, 44570), (Start: 21 @44768 has 39 MA's), (23, 44789),

Gene: PhrostedPhlake_75 Start: 45016, Stop: 45183, Start Num: 21
Candidate Starts for PhrostedPhlake_75:
(Start: 21 @45016 has 39 MA's), (23, 45037),

Gene: Pipp_73 Start: 44772, Stop: 44930, Start Num: 21
Candidate Starts for Pipp_73:
(14, 44700), (15, 44706), (16, 44724), (Start: 21 @44772 has 39 MA's), (Start: 22 @44784 has 1 MA's),

Gene: PrincePatrick_70 Start: 42596, Stop: 42754, Start Num: 21
Candidate Starts for PrincePatrick_70:
(Start: 21 @42596 has 39 MA's), (Start: 22 @42608 has 1 MA's), (24, 42617), (25, 42626),

Gene: Samba_69 Start: 45554, Stop: 45712, Start Num: 21
Candidate Starts for Samba_69:
(Start: 21 @45554 has 39 MA's), (Start: 22 @45566 has 1 MA's), (24, 45575),

Gene: SpeedDemon_470 Start: 42648, Stop: 42830, Start Num: 19
Candidate Starts for SpeedDemon_470:
(10, 42471), (11, 42498), (Start: 19 @42648 has 4 MA's),

Gene: Toast_69 Start: 43537, Stop: 43695, Start Num: 21
Candidate Starts for Toast_69:
(Start: 21 @43537 has 39 MA's), (Start: 22 @43549 has 1 MA's), (24, 43558), (25, 43567),

Gene: UmaThurman_69 Start: 43900, Stop: 44064, Start Num: 21
Candidate Starts for UmaThurman_69:
(18, 43867), (Start: 21 @43900 has 39 MA's),

Gene: Utz_61 Start: 43181, Stop: 43348, Start Num: 19
Candidate Starts for Utz_61:
(Start: 19 @43181 has 4 MA's), (Start: 22 @43205 has 1 MA's), (24, 43214),

Gene: Walrus_67 Start: 43261, Stop: 43425, Start Num: 21
Candidate Starts for Walrus_67:
(Start: 21 @43261 has 39 MA's), (23, 43276),

Gene: William_72 Start: 44944, Stop: 45102, Start Num: 21
Candidate Starts for William_72:
(Start: 21 @44944 has 39 MA's), (Start: 22 @44956 has 1 MA's), (24, 44965), (25, 44974),

Gene: Wocket_67 Start: 43577, Stop: 43747, Start Num: 19
Candidate Starts for Wocket_67:
(Start: 19 @43577 has 4 MA's), (Start: 22 @43601 has 1 MA's),

Gene: Zarbodnamra_72 Start: 43709, Stop: 43876, Start Num: 21
Candidate Starts for Zarbodnamra_72:
(6, 43439), (9, 43511), (12, 43580), (Start: 21 @43709 has 39 MA's), (23, 43730),

Gene: ZiggyZoo_70 Start: 45187, Stop: 45345, Start Num: 21
Candidate Starts for ZiggyZoo_70:
(7, 44971), (17, 45142), (Start: 21 @45187 has 39 MA's), (Start: 22 @45199 has 1 MA's),

Gene: Zilla_67 Start: 42570, Stop: 42728, Start Num: 21
Candidate Starts for Zilla_67:
(14, 42498), (15, 42504), (16, 42522), (Start: 21 @42570 has 39 MA's), (Start: 22 @42582 has 1 MA's),