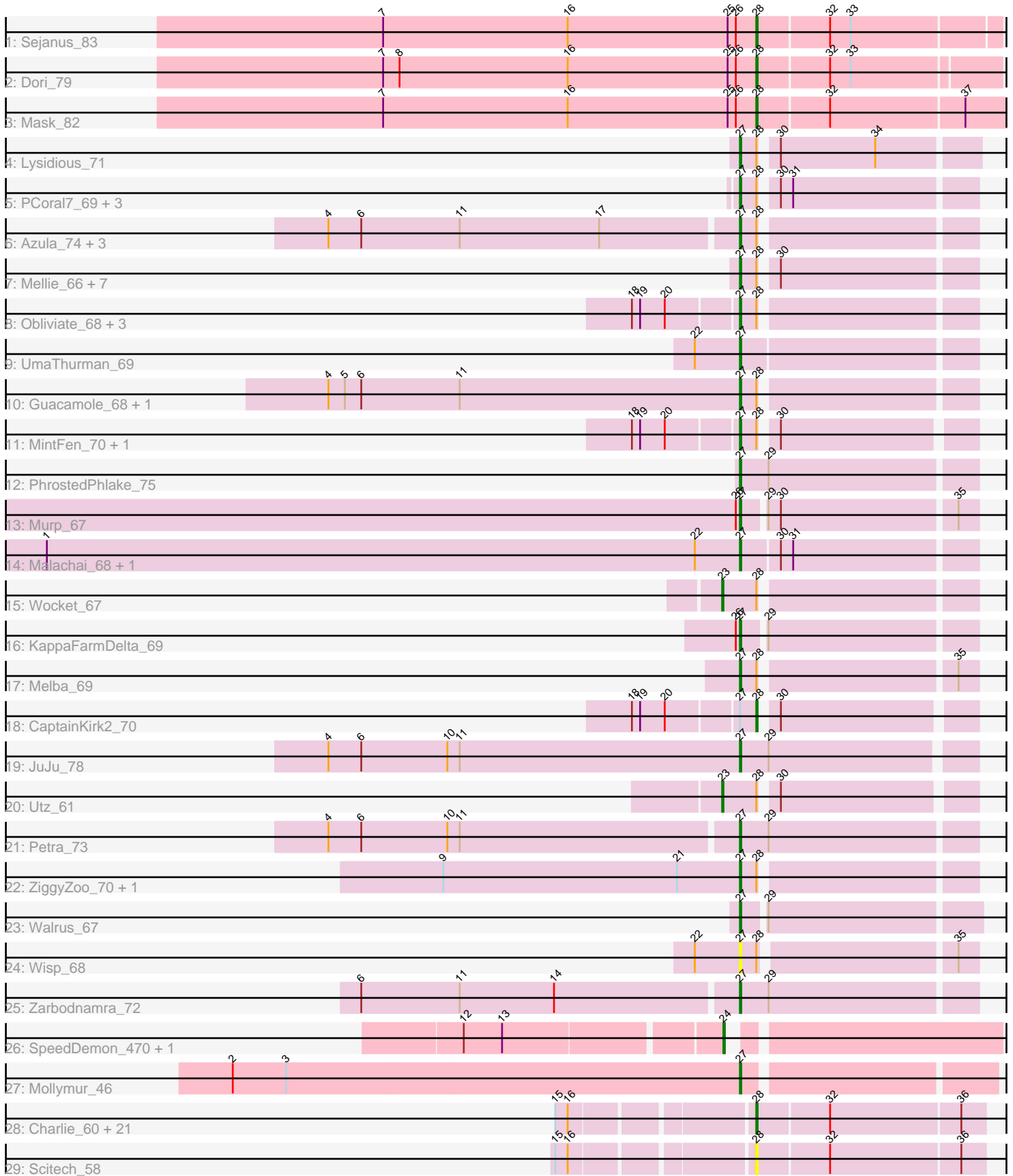


Pham 163580



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 163580 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163580 has 71 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Sejanus_83
- Track 2 : Dori_79
- Track 3 : Mask_82
- Track 4 : Lysidious_71
- Track 5 : PCoral7_69, PrincePatrick_70, William_72, Toast_69
- Track 6 : Azula_74, MissRona_74, Gambino_76, Blueberry_73
- Track 7 : Mellie_66, Jalammah_72, Fenry_68, Hitter_69, Blino_71, Samba_69, Fairfaxidum_72, CarolAnn_70
- Track 8 : Obliviate_68, Barco_66, Pipp_73, BlingBling_65
- Track 9 : UmaThurman_69
- Track 10 : Guacamole_68, JasperJr_68
- Track 11 : MintFen_70, Delian_73
- Track 12 : PhrostedPhlake_75
- Track 13 : Murp_67
- Track 14 : Malachai_68, Begonia_68
- Track 15 : Wocket_67
- Track 16 : KappaFarmDelta_69
- Track 17 : Melba_69
- Track 18 : CaptainKirk2_70
- Track 19 : JuJu_78
- Track 20 : Utz_61
- Track 21 : Petra_73
- Track 22 : ZiggyZoo_70, Archis_71
- Track 23 : Walrus_67
- Track 24 : Wisp_68
- Track 25 : Zarbodnamra_72
- Track 26 : SpeedDemon_470, Bantam_46
- Track 27 : Mollymur_46
- Track 28 : Charlie_60, Melville_68, Magsby_62, Bosection6_62, Chewbacca_66, Pipsqueaks_64, Xerxes_63, Schnauzer_64, Philonius_63, Fulbright_61, Gex_64, Smurph_63, Aggie_59, Silvafighter_65, SkinnyPete_60, Phloss_61, Parmesanjohn_63, Silvy_64, Andies_57, Tapioca_61, Carcharodon_63, Duplicity_61
- Track 29 : Scitech_58

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

The start number called the most often in the published annotations is 27, it was called in 38 of the 65 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, Delian_73, Fairfaxidum_72, Ferry_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, Wisp_68, Zarbodnamra_72, ZiggyZoo_70,

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

- CaptainKirk2_70,

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

- Aggie_59, Andies_57, Bantam_46, Bosection6_62, Carcharodon_63, Charlie_60, Chewbacca_66, Dori_79, Duplicity_61, Fulbright_61, Gex_64, Magsby_62, Mask_82, Melville_68, Parmesanjohn_63, Philonius_63, Phloss_61, Pipsqueaks_64, Schnauzer_64, Scitech_58, Sejanus_83, Silvafighter_65, Silvy_64, SkinnyPete_60, Smurph_63, SpeedDemon_470, Tapioca_61, Utz_61, Wocket_67, Xerxes_63,

Summary by start number:

Start 23:

- Found in 2 of 71 (2.8%) of genes in pham
- Manual Annotations of this start: 2 of 65
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Utz_61 (CV), Wocket_67 (CV),

Start 24:

- Found in 2 of 71 (2.8%) of genes in pham
- Manual Annotations of this start: 2 of 65
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam_46 (DL), SpeedDemon_470 (DL),

Start 27:

- Found in 41 of 71 (57.7%) of genes in pham
- Manual Annotations of this start: 38 of 65
- 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), Delian_73 (CV), Fairfaxidum_72 (CV), Ferry_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), Wisp_68 (CV), Zarbodnamra_72 (CV), ZiggyZoo_70 (CV),

Start 28:

- Found in 58 of 71 (81.7%) of genes in pham
- Manual Annotations of this start: 23 of 65
- Called 46.6% of time when present
- Phage (with cluster) where this start called: Aggie_59 (N), Andies_57 (N), Bosection6_62 (N), CaptainKirk2_70 (CV), Carcharodon_63 (N), Charlie_60 (N), Chewbacca_66 (N), Dori_79 (AD), Duplicity_61 (N), Fulbright_61 (N), Gex_64 (N), Magsby_62 (N), Mask_82 (AD), Melville_68 (N), Parmesanjohn_63 (N), Philonius_63 (N), Phloss_61 (N), Pipsqueaks_64 (N), Schnauzer_64 (N), Scitech_58 (N), Sejanus_83 (AD), Silvafighter_65 (N), Silvy_64 (N), SkinnyPete_60 (N), Smurph_63 (N), Tapioca_61 (N), Xerxes_63 (N),

Summary by clusters:

There are 4 clusters represented in this pham: AD, DL, CV, N,

Info for manual annotations of cluster AD:

- Start number 28 was manually annotated 3 times for cluster AD.

Info for manual annotations of cluster CV:

- Start number 23 was manually annotated 2 times for cluster CV.
- Start number 27 was manually annotated 37 times for cluster CV.
- Start number 28 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DL:

- Start number 24 was manually annotated 2 times for cluster DL.
- Start number 27 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster N:

- Start number 28 was manually annotated 19 times for cluster N.

Gene Information:

Gene: Aggie_59 Start: 39996, Stop: 40157, Start Num: 28

Candidate Starts for Aggie_59:

(15, 39867), (16, 39876), (Start: 28 @39996 has 23 MA's), (32, 40047), (36, 40140),

Gene: Andies_57 Start: 39441, Stop: 39602, Start Num: 28

Candidate Starts for Andies_57:

(15, 39312), (16, 39321), (Start: 28 @39441 has 23 MA's), (32, 39492), (36, 39585),

Gene: Archis_71 Start: 42723, Stop: 42881, Start Num: 27

Candidate Starts for Archis_71:

(9, 42507), (21, 42678), (Start: 27 @42723 has 38 MA's), (Start: 28 @42735 has 23 MA's),

Gene: Azula_74 Start: 46615, Stop: 46773, Start Num: 27

Candidate Starts for Azula_74:

(4, 46321), (6, 46345), (11, 46417), (17, 46519), (Start: 27 @46615 has 38 MA's), (Start: 28 @46627 has 23 MA's),

Gene: Bantam_46 Start: 40945, Stop: 41127, Start Num: 24

Candidate Starts for Bantam_46:
(12, 40768), (13, 40795), (Start: 24 @40945 has 2 MA's),

Gene: Barco_66 Start: 42553, Stop: 42711, Start Num: 27
Candidate Starts for Barco_66:
(18, 42481), (19, 42487), (20, 42505), (Start: 27 @42553 has 38 MA's), (Start: 28 @42565 has 23 MA's),

Gene: Begonia_68 Start: 45480, Stop: 45644, Start Num: 27
Candidate Starts for Begonia_68:
(1, 44973), (22, 45447), (Start: 27 @45480 has 38 MA's), (30, 45507), (31, 45516),

Gene: BlingBling_65 Start: 43435, Stop: 43593, Start Num: 27
Candidate Starts for BlingBling_65:
(18, 43363), (19, 43369), (20, 43387), (Start: 27 @43435 has 38 MA's), (Start: 28 @43447 has 23 MA's),

Gene: Blino_71 Start: 48216, Stop: 48371, Start Num: 27
Candidate Starts for Blino_71:
(Start: 27 @48216 has 38 MA's), (Start: 28 @48228 has 23 MA's), (30, 48237),

Gene: Blueberry_73 Start: 46615, Stop: 46773, Start Num: 27
Candidate Starts for Blueberry_73:
(4, 46321), (6, 46345), (11, 46417), (17, 46519), (Start: 27 @46615 has 38 MA's), (Start: 28 @46627 has 23 MA's),

Gene: Bosection6_62 Start: 39045, Stop: 39206, Start Num: 28
Candidate Starts for Bosection6_62:
(15, 38916), (16, 38925), (Start: 28 @39045 has 23 MA's), (32, 39096), (36, 39189),

Gene: CaptainKirk2_70 Start: 42213, Stop: 42356, Start Num: 28
Candidate Starts for CaptainKirk2_70:
(18, 42129), (19, 42135), (20, 42153), (Start: 27 @42201 has 38 MA's), (Start: 28 @42213 has 23 MA's), (30, 42222),

Gene: Carcharodon_63 Start: 39343, Stop: 39504, Start Num: 28
Candidate Starts for Carcharodon_63:
(15, 39214), (16, 39223), (Start: 28 @39343 has 23 MA's), (32, 39394), (36, 39487),

Gene: CarolAnn_70 Start: 48215, Stop: 48370, Start Num: 27
Candidate Starts for CarolAnn_70:
(Start: 27 @48215 has 38 MA's), (Start: 28 @48227 has 23 MA's), (30, 48236),

Gene: Charlie_60 Start: 38669, Stop: 38830, Start Num: 28
Candidate Starts for Charlie_60:
(15, 38540), (16, 38549), (Start: 28 @38669 has 23 MA's), (32, 38720), (36, 38813),

Gene: Chewbacca_66 Start: 39238, Stop: 39399, Start Num: 28
Candidate Starts for Chewbacca_66:
(15, 39109), (16, 39118), (Start: 28 @39238 has 23 MA's), (32, 39289), (36, 39382),

Gene: Delian_73 Start: 42199, Stop: 42354, Start Num: 27
Candidate Starts for Delian_73:

(18, 42127), (19, 42133), (20, 42151), (Start: 27 @42199 has 38 MA's), (Start: 28 @42211 has 23 MA's), (30, 42220),

Gene: Dori_79 Start: 57323, Stop: 57493, Start Num: 28

Candidate Starts for Dori_79:

(7, 57050), (8, 57062), (16, 57185), (25, 57302), (26, 57308), (Start: 28 @57323 has 23 MA's), (32, 57374), (33, 57389),

Gene: Duplicity_61 Start: 38600, Stop: 38761, Start Num: 28

Candidate Starts for Duplicity_61:

(15, 38471), (16, 38480), (Start: 28 @38600 has 23 MA's), (32, 38651), (36, 38744),

Gene: Fairfaxidum_72 Start: 44764, Stop: 44922, Start Num: 27

Candidate Starts for Fairfaxidum_72:

(Start: 27 @44764 has 38 MA's), (Start: 28 @44776 has 23 MA's), (30, 44785),

Gene: Fenry_68 Start: 44226, Stop: 44384, Start Num: 27

Candidate Starts for Fenry_68:

(Start: 27 @44226 has 38 MA's), (Start: 28 @44238 has 23 MA's), (30, 44247),

Gene: Fulbright_61 Start: 38037, Stop: 38198, Start Num: 28

Candidate Starts for Fulbright_61:

(15, 37908), (16, 37917), (Start: 28 @38037 has 23 MA's), (32, 38088), (36, 38181),

Gene: Gambino_76 Start: 46615, Stop: 46773, Start Num: 27

Candidate Starts for Gambino_76:

(4, 46321), (6, 46345), (11, 46417), (17, 46519), (Start: 27 @46615 has 38 MA's), (Start: 28 @46627 has 23 MA's),

Gene: Gex_64 Start: 39359, Stop: 39520, Start Num: 28

Candidate Starts for Gex_64:

(15, 39230), (16, 39239), (Start: 28 @39359 has 23 MA's), (32, 39410), (36, 39503),

Gene: Guacamole_68 Start: 43616, Stop: 43774, Start Num: 27

Candidate Starts for Guacamole_68:

(4, 43316), (5, 43328), (6, 43340), (11, 43412), (Start: 27 @43616 has 38 MA's), (Start: 28 @43628 has 23 MA's),

Gene: Hitter_69 Start: 42159, Stop: 42317, Start Num: 27

Candidate Starts for Hitter_69:

(Start: 27 @42159 has 38 MA's), (Start: 28 @42171 has 23 MA's), (30, 42180),

Gene: Jalammah_72 Start: 45129, Stop: 45290, Start Num: 27

Candidate Starts for Jalammah_72:

(Start: 27 @45129 has 38 MA's), (Start: 28 @45141 has 23 MA's), (30, 45150),

Gene: JasperJr_68 Start: 43616, Stop: 43774, Start Num: 27

Candidate Starts for JasperJr_68:

(4, 43316), (5, 43328), (6, 43340), (11, 43412), (Start: 27 @43616 has 38 MA's), (Start: 28 @43628 has 23 MA's),

Gene: JuJu_78 Start: 48352, Stop: 48516, Start Num: 27

Candidate Starts for JuJu_78:

(4, 48052), (6, 48076), (10, 48139), (11, 48148), (Start: 27 @48352 has 38 MA's), (29, 48373),

Gene: KappaFarmDelta_69 Start: 43192, Stop: 43353, Start Num: 27

Candidate Starts for KappaFarmDelta_69:

(26, 43189), (Start: 27 @43192 has 38 MA's), (29, 43207),

Gene: Lysidious_71 Start: 44855, Stop: 45016, Start Num: 27

Candidate Starts for Lysidious_71:

(Start: 27 @44855 has 38 MA's), (Start: 28 @44867 has 23 MA's), (30, 44876), (34, 44945),

Gene: Magsby_62 Start: 39305, Stop: 39466, Start Num: 28

Candidate Starts for Magsby_62:

(15, 39176), (16, 39185), (Start: 28 @39305 has 23 MA's), (32, 39356), (36, 39449),

Gene: Malachai_68 Start: 45480, Stop: 45644, Start Num: 27

Candidate Starts for Malachai_68:

(1, 44973), (22, 45447), (Start: 27 @45480 has 38 MA's), (30, 45507), (31, 45516),

Gene: Mask_82 Start: 58615, Stop: 58812, Start Num: 28

Candidate Starts for Mask_82:

(7, 58342), (16, 58477), (25, 58594), (26, 58600), (Start: 28 @58615 has 23 MA's), (32, 58666), (37, 58762),

Gene: Melba_69 Start: 42570, Stop: 42728, Start Num: 27

Candidate Starts for Melba_69:

(Start: 27 @42570 has 38 MA's), (Start: 28 @42582 has 23 MA's), (35, 42714),

Gene: Mellie_66 Start: 42417, Stop: 42575, Start Num: 27

Candidate Starts for Mellie_66:

(Start: 27 @42417 has 38 MA's), (Start: 28 @42429 has 23 MA's), (30, 42438),

Gene: Melville_68 Start: 38914, Stop: 39075, Start Num: 28

Candidate Starts for Melville_68:

(15, 38785), (16, 38794), (Start: 28 @38914 has 23 MA's), (32, 38965), (36, 39058),

Gene: MintFen_70 Start: 42815, Stop: 42970, Start Num: 27

Candidate Starts for MintFen_70:

(18, 42743), (19, 42749), (20, 42767), (Start: 27 @42815 has 38 MA's), (Start: 28 @42827 has 23 MA's), (30, 42836),

Gene: MissRona_74 Start: 46616, Stop: 46774, Start Num: 27

Candidate Starts for MissRona_74:

(4, 46322), (6, 46346), (11, 46418), (17, 46520), (Start: 27 @46616 has 38 MA's), (Start: 28 @46628 has 23 MA's),

Gene: Mollymur_46 Start: 41494, Stop: 41667, Start Num: 27

Candidate Starts for Mollymur_46:

(2, 41125), (3, 41164), (Start: 27 @41494 has 38 MA's),

Gene: Murp_67 Start: 45821, Stop: 45982, Start Num: 27

Candidate Starts for Murp_67:

(26, 45818), (Start: 27 @45821 has 38 MA's), (29, 45836), (30, 45845), (35, 45968),

Gene: Obliviate_68 Start: 42724, Stop: 42882, Start Num: 27
Candidate Starts for Obliviate_68:
(18, 42652), (19, 42658), (20, 42676), (Start: 27 @42724 has 38 MA's), (Start: 28 @42736 has 23 MA's),

Gene: PCoral7_69 Start: 43537, Stop: 43695, Start Num: 27
Candidate Starts for PCoral7_69:
(Start: 27 @43537 has 38 MA's), (Start: 28 @43549 has 23 MA's), (30, 43558), (31, 43567),

Gene: Parmesanjohn_63 Start: 39363, Stop: 39524, Start Num: 28
Candidate Starts for Parmesanjohn_63:
(15, 39234), (16, 39243), (Start: 28 @39363 has 23 MA's), (32, 39414), (36, 39507),

Gene: Petra_73 Start: 44768, Stop: 44935, Start Num: 27
Candidate Starts for Petra_73:
(4, 44474), (6, 44498), (10, 44561), (11, 44570), (Start: 27 @44768 has 38 MA's), (29, 44789),

Gene: Philonius_63 Start: 39528, Stop: 39689, Start Num: 28
Candidate Starts for Philonius_63:
(15, 39399), (16, 39408), (Start: 28 @39528 has 23 MA's), (32, 39579), (36, 39672),

Gene: Phloss_61 Start: 38770, Stop: 38931, Start Num: 28
Candidate Starts for Phloss_61:
(15, 38641), (16, 38650), (Start: 28 @38770 has 23 MA's), (32, 38821), (36, 38914),

Gene: PhrostedPhlake_75 Start: 45016, Stop: 45183, Start Num: 27
Candidate Starts for PhrostedPhlake_75:
(Start: 27 @45016 has 38 MA's), (29, 45037),

Gene: Pipp_73 Start: 44772, Stop: 44930, Start Num: 27
Candidate Starts for Pipp_73:
(18, 44700), (19, 44706), (20, 44724), (Start: 27 @44772 has 38 MA's), (Start: 28 @44784 has 23 MA's),

Gene: Pipsqueaks_64 Start: 39341, Stop: 39502, Start Num: 28
Candidate Starts for Pipsqueaks_64:
(15, 39212), (16, 39221), (Start: 28 @39341 has 23 MA's), (32, 39392), (36, 39485),

Gene: PrincePatrick_70 Start: 42596, Stop: 42754, Start Num: 27
Candidate Starts for PrincePatrick_70:
(Start: 27 @42596 has 38 MA's), (Start: 28 @42608 has 23 MA's), (30, 42617), (31, 42626),

Gene: Samba_69 Start: 45554, Stop: 45712, Start Num: 27
Candidate Starts for Samba_69:
(Start: 27 @45554 has 38 MA's), (Start: 28 @45566 has 23 MA's), (30, 45575),

Gene: Schnauzer_64 Start: 39363, Stop: 39524, Start Num: 28
Candidate Starts for Schnauzer_64:
(15, 39234), (16, 39243), (Start: 28 @39363 has 23 MA's), (32, 39414), (36, 39507),

Gene: Scitech_58 Start: 38766, Stop: 38927, Start Num: 28
Candidate Starts for Scitech_58:
(15, 38637), (16, 38646), (Start: 28 @38766 has 23 MA's), (32, 38817), (36, 38910),

Gene: Sejanus_83 Start: 57471, Stop: 57641, Start Num: 28
Candidate Starts for Sejanus_83:
(7, 57198), (16, 57333), (25, 57450), (26, 57456), (Start: 28 @57471 has 23 MA's), (32, 57522), (33, 57537),

Gene: Silvafighter_65 Start: 38906, Stop: 39067, Start Num: 28
Candidate Starts for Silvafighter_65:
(15, 38777), (16, 38786), (Start: 28 @38906 has 23 MA's), (32, 38957), (36, 39050),

Gene: Silvy_64 Start: 39996, Stop: 40157, Start Num: 28
Candidate Starts for Silvy_64:
(15, 39867), (16, 39876), (Start: 28 @39996 has 23 MA's), (32, 40047), (36, 40140),

Gene: SkinnyPete_60 Start: 39110, Stop: 39271, Start Num: 28
Candidate Starts for SkinnyPete_60:
(15, 38981), (16, 38990), (Start: 28 @39110 has 23 MA's), (32, 39161), (36, 39254),

Gene: Smurph_63 Start: 39363, Stop: 39524, Start Num: 28
Candidate Starts for Smurph_63:
(15, 39234), (16, 39243), (Start: 28 @39363 has 23 MA's), (32, 39414), (36, 39507),

Gene: SpeedDemon_470 Start: 42648, Stop: 42830, Start Num: 24
Candidate Starts for SpeedDemon_470:
(12, 42471), (13, 42498), (Start: 24 @42648 has 2 MA's),

Gene: Tapioca_61 Start: 39880, Stop: 40041, Start Num: 28
Candidate Starts for Tapioca_61:
(15, 39751), (16, 39760), (Start: 28 @39880 has 23 MA's), (32, 39931), (36, 40024),

Gene: Toast_69 Start: 43537, Stop: 43695, Start Num: 27
Candidate Starts for Toast_69:
(Start: 27 @43537 has 38 MA's), (Start: 28 @43549 has 23 MA's), (30, 43558), (31, 43567),

Gene: UmaThurman_69 Start: 43900, Stop: 44064, Start Num: 27
Candidate Starts for UmaThurman_69:
(22, 43867), (Start: 27 @43900 has 38 MA's),

Gene: Utz_61 Start: 43181, Stop: 43348, Start Num: 23
Candidate Starts for Utz_61:
(Start: 23 @43181 has 2 MA's), (Start: 28 @43205 has 23 MA's), (30, 43214),

Gene: Walrus_67 Start: 43261, Stop: 43425, Start Num: 27
Candidate Starts for Walrus_67:
(Start: 27 @43261 has 38 MA's), (29, 43276),

Gene: William_72 Start: 44944, Stop: 45102, Start Num: 27
Candidate Starts for William_72:
(Start: 27 @44944 has 38 MA's), (Start: 28 @44956 has 23 MA's), (30, 44965), (31, 44974),

Gene: Wisp_68 Start: 43598, Stop: 43756, Start Num: 27
Candidate Starts for Wisp_68:
(22, 43565), (Start: 27 @43598 has 38 MA's), (Start: 28 @43610 has 23 MA's), (35, 43742),

Gene: Wocket_67 Start: 43577, Stop: 43747, Start Num: 23

Candidate Starts for Wocket_67:

(Start: 23 @43577 has 2 MA's), (Start: 28 @43601 has 23 MA's),

Gene: Xerxes_63 Start: 39360, Stop: 39521, Start Num: 28

Candidate Starts for Xerxes_63:

(15, 39231), (16, 39240), (Start: 28 @39360 has 23 MA's), (32, 39411), (36, 39504),

Gene: Zarbodnamra_72 Start: 43709, Stop: 43876, Start Num: 27

Candidate Starts for Zarbodnamra_72:

(6, 43439), (11, 43511), (14, 43580), (Start: 27 @43709 has 38 MA's), (29, 43730),

Gene: ZiggyZoo_70 Start: 45187, Stop: 45345, Start Num: 27

Candidate Starts for ZiggyZoo_70:

(9, 44971), (21, 45142), (Start: 27 @45187 has 38 MA's), (Start: 28 @45199 has 23 MA's),