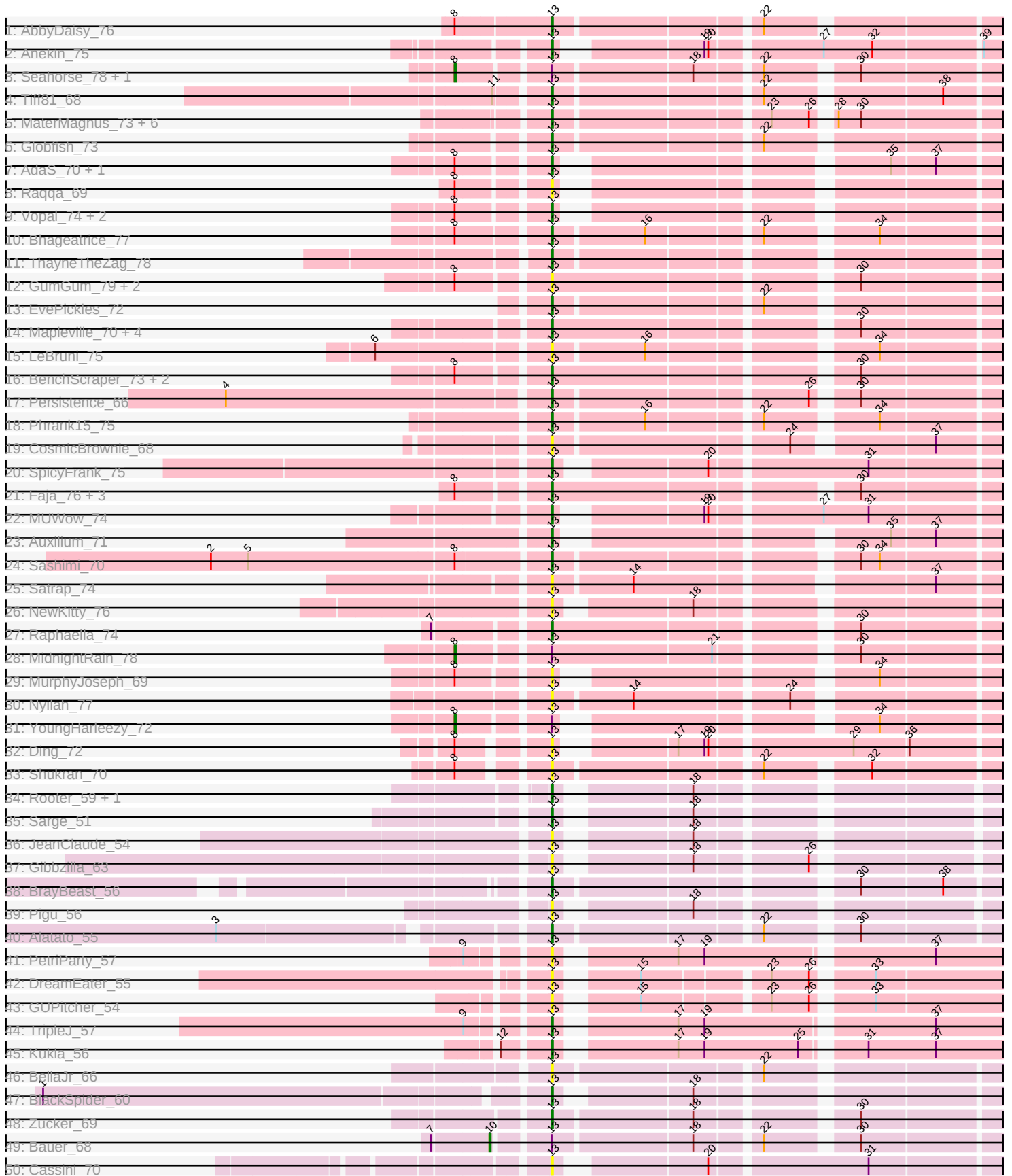


Pham 278163



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 278163 Report

This analysis was run 02/07/26 on database version 634.

Pham number 278163 has 72 members, 29 are drafts.

Phages represented in each track:

- Track 1 : AbbyDaisy_76
- Track 2 : Anekin_75
- Track 3 : Seahorse_78, Richie_76
- Track 4 : Tiff81_68
- Track 5 : MaterMagnus_73, Sakai_71, SonDevVon_80, Aikyam_72, Sporco_76, Gorpy_72, BlueShadow_72
- Track 6 : Globfish_73
- Track 7 : AdaS_70, BillyTP_74
- Track 8 : Raqqa_69
- Track 9 : Vopal_74, Hillester_77, RadFad_77
- Track 10 : Bhageatrice_77
- Track 11 : ThayneTheZag_78
- Track 12 : GumGum_79, DarwinJr_79, Crescenzo_78
- Track 13 : EvePickles_72
- Track 14 : Mapleville_70, Lasker_76, Kabloowy_74, Lawnathon_76, Windest_77
- Track 15 : LeBruni_75
- Track 16 : BenchScraper_73, Isolde_71, CookieBear_72
- Track 17 : Persistence_66
- Track 18 : Phrank15_75
- Track 19 : CosmicBrownie_68
- Track 20 : SpicyFrank_75
- Track 21 : Faja_76, JellyBread_71, Hestia_67, BasketStar_74
- Track 22 : MUWow_74
- Track 23 : Auxilium_71
- Track 24 : Sashimi_70
- Track 25 : Satrap_74
- Track 26 : NewKitty_76
- Track 27 : Raphaella_74
- Track 28 : MidnightRain_78
- Track 29 : MurphyJoseph_69
- Track 30 : Nyilah_77
- Track 31 : YoungHarleezy_72
- Track 32 : Ding_72
- Track 33 : Shukran_70
- Track 34 : Rooter_59, Shoya_56
- Track 35 : Sarge_51
- Track 36 : JeanClaude_54

- Track 37 : Gibbzilla_63
- Track 38 : BrayBeast_56
- Track 39 : Pigu_56
- Track 40 : Alatato_55
- Track 41 : PetriParty_57
- Track 42 : DreamEater_55
- Track 43 : GUPitcher_54
- Track 44 : TripleJ_57
- Track 45 : Kukla_56
- Track 46 : BellaJr_66
- Track 47 : BlackSpider_60
- Track 48 : Zucker_69
- Track 49 : Bauer_68
- Track 50 : Cassini_70

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

The start number called the most often in the published annotations is 13, it was called in 38 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AbbyDaisy_76, AdaS_70, Aikyam_72, Alatato_55, Anekin_75, Auxilium_71, BasketStar_74, BellaJr_66, BenchScraper_73, Bhageatrice_77, BillyTP_74, BlackSpider_60, BlueShadow_72, BrayBeast_56, Cassini_70, CookieBear_72, CosmicBrownie_68, Crescenzo_78, DarwinJr_79, Ding_72, DreamEater_55, EvePickles_72, Faja_76, GUPitcher_54, Gibbzilla_63, Globfish_73, Gorpy_72, GumGum_79, Hestia_67, Hillester_77, Isolde_71, JeanClaude_54, JellyBread_71, Kabloowy_74, Kukla_56, Lasker_76, Lawnathon_76, LeBruni_75, MUWow_74, Mapleville_70, MaterMagnus_73, MurphyJoseph_69, NewKitty_76, Nyilah_77, Persistence_66, PetriParty_57, Phrank15_75, Pigu_56, RadFad_77, Raphaella_74, Raqqa_69, Rooter_59, Sakai_71, Sarge_51, Sashimi_70, Satrap_74, Shoya_56, Shukran_70, SonDevVon_80, SpicyFrank_75, Sporco_76, ThayneTheZag_78, Tiff81_68, TripleJ_57, Vopal_74, Windest_77, Zucker_69,

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

• Bauer_68, MidnightRain_78, Richie_76, Seahorse_78, YoungHarleezy_72,

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

•

Summary by start number:

Start 8:

- Found in 26 of 72 (36.1%) of genes in pham
- Manual Annotations of this start: 4 of 43
- Called 15.4% of time when present
- Phage (with cluster) where this start called: MidnightRain_78 (AY), Richie_76 (AY), Seahorse_78 (AY), YoungHarleezy_72 (AY),

Start 10:

- Found in 1 of 72 (1.4%) 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: Bauer_68 (FN),

Start 13:

- Found in 72 of 72 (100.0%) of genes in pham
- Manual Annotations of this start: 38 of 43
- Called 93.1% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_76 (AY), AdaS_70 (AY), Aikyam_72 (AY), Alatato_55 (FB), Anekin_75 (AY), Auxilium_71 (AY), BasketStar_74 (AY), BellaJr_66 (FN), BenchScraper_73 (AY), Bhageatrice_77 (AY), BillyTP_74 (AY), BlackSpider_60 (FN), BlueShadow_72 (AY), BrayBeast_56 (FB), Cassini_70 (FN), CookieBear_72 (AY), CosmicBrownie_68 (AY), Crescenzo_78 (AY), DarwinJr_79 (AY), Ding_72 (AY), DreamEater_55 (FJ), EvePickles_72 (AY), Faja_76 (AY), GUPitcher_54 (FJ), Gibbzilla_63 (FB), Globfish_73 (AY), Gorpy_72 (AY), GumGum_79 (AY), Hestia_67 (AY), Hillester_77 (AY), Isolde_71 (AY), JeanClaude_54 (FB), JellyBread_71 (AY), Kabloowy_74 (AY), Kukla_56 (FJ), Lasker_76 (AY), Lawnathon_76 (AY), LeBruni_75 (AY), MUWow_74 (AY), Mapleville_70 (AY), MaterMagnus_73 (AY), MurphyJoseph_69 (AY), NewKitty_76 (AY), Nyilah_77 (AY), Persistence_66 (AY), PetriParty_57 (FJ), Phrank15_75 (AY), Pigu_56 (FB), RadFad_77 (AY), Raphaella_74 (AY), Raqqa_69 (AY), Rooter_59 (FB), Sakai_71 (AY), Sarge_51 (FB), Sashimi_70 (AY), Satrap_74 (AY), Shoya_56 (FB), Shukran_70 (AY), SonDevVon_80 (AY), SpicyFrank_75 (AY), Sporco_76 (AY), ThayneTheZag_78 (AY), Tiff81_68 (AY), TripleJ_57 (FJ), Vopal_74 (AY), Windest_77 (AY), Zucker_69 (FN),

Summary by clusters:

There are 4 clusters represented in this pham: AY, FB, FJ, FN,

Info for manual annotations of cluster AY:

- Start number 8 was manually annotated 4 times for cluster AY.
- Start number 13 was manually annotated 30 times for cluster AY.

Info for manual annotations of cluster FB:

- Start number 13 was manually annotated 4 times for cluster FB.

Info for manual annotations of cluster FJ:

- Start number 13 was manually annotated 2 times for cluster FJ.

Info for manual annotations of cluster FN:

- Start number 10 was manually annotated 1 time for cluster FN.
- Start number 13 was manually annotated 2 times for cluster FN.

Gene Information:

Gene: AbbyDaisy_76 Start: 41022, Stop: 41339, Start Num: 13

Candidate Starts for AbbyDaisy_76:

(Start: 8 @40953 has 4 MA's), (Start: 13 @41022 has 38 MA's), (22, 41172),

Gene: AdaS_70 Start: 36753, Stop: 37049, Start Num: 13
Candidate Starts for AdaS_70:
(Start: 8 @36693 has 4 MA's), (Start: 13 @36753 has 38 MA's), (35, 36969), (37, 37002),

Gene: Aikyam_72 Start: 37441, Stop: 37758, Start Num: 13
Candidate Starts for Aikyam_72:
(Start: 13 @37441 has 38 MA's), (23, 37597), (26, 37627), (28, 37636), (30, 37654),

Gene: Alatato_55 Start: 32020, Stop: 32337, Start Num: 13
Candidate Starts for Alatato_55:
(3, 31789), (Start: 13 @32020 has 38 MA's), (22, 32170), (30, 32233),

Gene: Anekin_75 Start: 40019, Stop: 40330, Start Num: 13
Candidate Starts for Anekin_75:
(Start: 13 @40019 has 38 MA's), (19, 40112), (20, 40115), (27, 40196), (32, 40235), (39, 40316),

Gene: Auxilium_71 Start: 37005, Stop: 37301, Start Num: 13
Candidate Starts for Auxilium_71:
(Start: 13 @37005 has 38 MA's), (35, 37221), (37, 37254),

Gene: BasketStar_74 Start: 39773, Stop: 40096, Start Num: 13
Candidate Starts for BasketStar_74:
(Start: 8 @39713 has 4 MA's), (Start: 13 @39773 has 38 MA's), (30, 39992),

Gene: Bauer_68 Start: 38091, Stop: 38444, Start Num: 10
Candidate Starts for Bauer_68:
(7, 38049), (Start: 10 @38091 has 1 MA's), (Start: 13 @38127 has 38 MA's), (18, 38232), (22, 38277),
(30, 38340),

Gene: BellaJr_66 Start: 38431, Stop: 38748, Start Num: 13
Candidate Starts for BellaJr_66:
(Start: 13 @38431 has 38 MA's), (22, 38581),

Gene: BenchScraper_73 Start: 38140, Stop: 38463, Start Num: 13
Candidate Starts for BenchScraper_73:
(Start: 8 @38080 has 4 MA's), (Start: 13 @38140 has 38 MA's), (30, 38359),

Gene: Bhageatrice_77 Start: 41825, Stop: 42142, Start Num: 13
Candidate Starts for Bhageatrice_77:
(Start: 8 @41762 has 4 MA's), (Start: 13 @41825 has 38 MA's), (16, 41894), (22, 41975), (34, 42053),

Gene: BillyTP_74 Start: 39995, Stop: 40291, Start Num: 13
Candidate Starts for BillyTP_74:
(Start: 8 @39935 has 4 MA's), (Start: 13 @39995 has 38 MA's), (35, 40211), (37, 40244),

Gene: BlackSpider_60 Start: 36140, Stop: 36442, Start Num: 13
Candidate Starts for BlackSpider_60:
(1, 35759), (Start: 13 @36140 has 38 MA's), (18, 36230),

Gene: BlueShadow_72 Start: 39289, Stop: 39606, Start Num: 13
Candidate Starts for BlueShadow_72:
(Start: 13 @39289 has 38 MA's), (23, 39445), (26, 39475), (28, 39484), (30, 39502),

Gene: BrayBeast_56 Start: 31864, Stop: 32181, Start Num: 13

Candidate Starts for BrayBeast_56:

(Start: 13 @31864 has 38 MA's), (30, 32077), (38, 32140),

Gene: Cassini_70 Start: 38385, Stop: 38699, Start Num: 13

Candidate Starts for Cassini_70:

(Start: 13 @38385 has 38 MA's), (20, 38484), (31, 38601),

Gene: CookieBear_72 Start: 38614, Stop: 38937, Start Num: 13

Candidate Starts for CookieBear_72:

(Start: 8 @38554 has 4 MA's), (Start: 13 @38614 has 38 MA's), (30, 38833),

Gene: CosmicBrownie_68 Start: 37819, Stop: 38136, Start Num: 13

Candidate Starts for CosmicBrownie_68:

(Start: 13 @37819 has 38 MA's), (24, 37993), (37, 38089),

Gene: Crescenzo_78 Start: 41409, Stop: 41732, Start Num: 13

Candidate Starts for Crescenzo_78:

(Start: 8 @41349 has 4 MA's), (Start: 13 @41409 has 38 MA's), (30, 41628),

Gene: DarwinJr_79 Start: 41364, Stop: 41687, Start Num: 13

Candidate Starts for DarwinJr_79:

(Start: 8 @41304 has 4 MA's), (Start: 13 @41364 has 38 MA's), (30, 41583),

Gene: Ding_72 Start: 38655, Stop: 38966, Start Num: 13

Candidate Starts for Ding_72:

(Start: 8 @38598 has 4 MA's), (Start: 13 @38655 has 38 MA's), (17, 38727), (19, 38748), (20, 38751), (29, 38856), (36, 38898),

Gene: DreamEater_55 Start: 35811, Stop: 36119, Start Num: 13

Candidate Starts for DreamEater_55:

(Start: 13 @35811 has 38 MA's), (15, 35862), (23, 35952), (26, 35982), (33, 36021),

Gene: EvePickles_72 Start: 39884, Stop: 40201, Start Num: 13

Candidate Starts for EvePickles_72:

(Start: 13 @39884 has 38 MA's), (22, 40034),

Gene: Faja_76 Start: 40656, Stop: 40979, Start Num: 13

Candidate Starts for Faja_76:

(Start: 8 @40596 has 4 MA's), (Start: 13 @40656 has 38 MA's), (30, 40875),

Gene: GUPitcher_54 Start: 35925, Stop: 36233, Start Num: 13

Candidate Starts for GUPitcher_54:

(Start: 13 @35925 has 38 MA's), (15, 35976), (23, 36066), (26, 36096), (33, 36135),

Gene: Gibbzilla_63 Start: 33193, Stop: 33492, Start Num: 13

Candidate Starts for Gibbzilla_63:

(Start: 13 @33193 has 38 MA's), (18, 33283), (26, 33364),

Gene: Globfish_73 Start: 38348, Stop: 38665, Start Num: 13

Candidate Starts for Globfish_73:

(Start: 13 @38348 has 38 MA's), (22, 38498),

Gene: Gorpy_72 Start: 39861, Stop: 40178, Start Num: 13
Candidate Starts for Gorpy_72:
(Start: 13 @39861 has 38 MA's), (23, 40017), (26, 40047), (28, 40056), (30, 40074),

Gene: GumGum_79 Start: 39801, Stop: 40124, Start Num: 13
Candidate Starts for GumGum_79:
(Start: 8 @39741 has 4 MA's), (Start: 13 @39801 has 38 MA's), (30, 40020),

Gene: Hestia_67 Start: 36879, Stop: 37202, Start Num: 13
Candidate Starts for Hestia_67:
(Start: 8 @36819 has 4 MA's), (Start: 13 @36879 has 38 MA's), (30, 37098),

Gene: Hillester_77 Start: 39406, Stop: 39702, Start Num: 13
Candidate Starts for Hillester_77:
(Start: 8 @39346 has 4 MA's), (Start: 13 @39406 has 38 MA's),

Gene: Isolde_71 Start: 38725, Stop: 39048, Start Num: 13
Candidate Starts for Isolde_71:
(Start: 8 @38665 has 4 MA's), (Start: 13 @38725 has 38 MA's), (30, 38944),

Gene: JeanClaude_54 Start: 30349, Stop: 30648, Start Num: 13
Candidate Starts for JeanClaude_54:
(Start: 13 @30349 has 38 MA's), (18, 30439),

Gene: JellyBread_71 Start: 38870, Stop: 39193, Start Num: 13
Candidate Starts for JellyBread_71:
(Start: 8 @38810 has 4 MA's), (Start: 13 @38870 has 38 MA's), (30, 39089),

Gene: Kabloowy_74 Start: 39754, Stop: 40077, Start Num: 13
Candidate Starts for Kabloowy_74:
(Start: 13 @39754 has 38 MA's), (30, 39973),

Gene: Kukla_56 Start: 35378, Stop: 35701, Start Num: 13
Candidate Starts for Kukla_56:
(12, 35345), (Start: 13 @35378 has 38 MA's), (17, 35459), (19, 35480), (25, 35555), (31, 35594), (37, 35648),

Gene: Lasker_76 Start: 40249, Stop: 40572, Start Num: 13
Candidate Starts for Lasker_76:
(Start: 13 @40249 has 38 MA's), (30, 40468),

Gene: Lawnathon_76 Start: 38975, Stop: 39298, Start Num: 13
Candidate Starts for Lawnathon_76:
(Start: 13 @38975 has 38 MA's), (30, 39194),

Gene: LeBruni_75 Start: 38212, Stop: 38529, Start Num: 13
Candidate Starts for LeBruni_75:
(6, 38089), (Start: 13 @38212 has 38 MA's), (16, 38281), (34, 38440),

Gene: MUWow_74 Start: 40107, Stop: 40418, Start Num: 13
Candidate Starts for MUWow_74:
(Start: 13 @40107 has 38 MA's), (19, 40200), (20, 40203), (27, 40284), (31, 40320),

Gene: Mapleville_70 Start: 38294, Stop: 38617, Start Num: 13

Candidate Starts for Mapleville_70:

(Start: 13 @38294 has 38 MA's), (30, 38513),

Gene: MaterMagnus_73 Start: 39613, Stop: 39930, Start Num: 13

Candidate Starts for MaterMagnus_73:

(Start: 13 @39613 has 38 MA's), (23, 39769), (26, 39799), (28, 39808), (30, 39826),

Gene: MidnightRain_78 Start: 40135, Stop: 40518, Start Num: 8

Candidate Starts for MidnightRain_78:

(Start: 8 @40135 has 4 MA's), (Start: 13 @40195 has 38 MA's), (21, 40321), (30, 40414),

Gene: MurphyJoseph_69 Start: 37141, Stop: 37437, Start Num: 13

Candidate Starts for MurphyJoseph_69:

(Start: 8 @37081 has 4 MA's), (Start: 13 @37141 has 38 MA's), (34, 37348),

Gene: NewKitty_76 Start: 40595, Stop: 40897, Start Num: 13

Candidate Starts for NewKitty_76:

(Start: 13 @40595 has 38 MA's), (18, 40685),

Gene: Nyilah_77 Start: 38886, Stop: 39203, Start Num: 13

Candidate Starts for Nyilah_77:

(Start: 13 @38886 has 38 MA's), (14, 38946), (24, 39060),

Gene: Persistence_66 Start: 36801, Stop: 37118, Start Num: 13

Candidate Starts for Persistence_66:

(4, 36561), (Start: 13 @36801 has 38 MA's), (26, 36987), (30, 37014),

Gene: PetriParty_57 Start: 35402, Stop: 35725, Start Num: 13

Candidate Starts for PetriParty_57:

(9, 35351), (Start: 13 @35402 has 38 MA's), (17, 35483), (19, 35504), (37, 35672),

Gene: Phrank15_75 Start: 38696, Stop: 39013, Start Num: 13

Candidate Starts for Phrank15_75:

(Start: 13 @38696 has 38 MA's), (16, 38765), (22, 38846), (34, 38924),

Gene: Pigu_56 Start: 30796, Stop: 31095, Start Num: 13

Candidate Starts for Pigu_56:

(Start: 13 @30796 has 38 MA's), (18, 30886),

Gene: RadFad_77 Start: 39406, Stop: 39702, Start Num: 13

Candidate Starts for RadFad_77:

(Start: 8 @39346 has 4 MA's), (Start: 13 @39406 has 38 MA's),

Gene: Raphaella_74 Start: 38671, Stop: 38994, Start Num: 13

Candidate Starts for Raphaella_74:

(7, 38596), (Start: 13 @38671 has 38 MA's), (30, 38890),

Gene: Raqqa_69 Start: 36817, Stop: 37113, Start Num: 13

Candidate Starts for Raqqa_69:

(Start: 8 @36757 has 4 MA's), (Start: 13 @36817 has 38 MA's),

Gene: Richie_76 Start: 40479, Stop: 40859, Start Num: 8

Candidate Starts for Richie_76:

(Start: 8 @40479 has 4 MA's), (Start: 13 @40542 has 38 MA's), (18, 40647), (22, 40692), (30, 40755),

Gene: Rooter_59 Start: 32237, Stop: 32536, Start Num: 13

Candidate Starts for Rooter_59:

(Start: 13 @32237 has 38 MA's), (18, 32327),

Gene: Sakai_71 Start: 38572, Stop: 38889, Start Num: 13

Candidate Starts for Sakai_71:

(Start: 13 @38572 has 38 MA's), (23, 38728), (26, 38758), (28, 38767), (30, 38785),

Gene: Sarge_51 Start: 30199, Stop: 30498, Start Num: 13

Candidate Starts for Sarge_51:

(Start: 13 @30199 has 38 MA's), (18, 30289),

Gene: Sashimi_70 Start: 38667, Stop: 38984, Start Num: 13

Candidate Starts for Sashimi_70:

(2, 38412), (5, 38442), (Start: 8 @38604 has 4 MA's), (Start: 13 @38667 has 38 MA's), (30, 38880), (34, 38895),

Gene: Satrap_74 Start: 39319, Stop: 39636, Start Num: 13

Candidate Starts for Satrap_74:

(Start: 13 @39319 has 38 MA's), (14, 39379), (37, 39589),

Gene: Seahorse_78 Start: 41611, Stop: 41991, Start Num: 8

Candidate Starts for Seahorse_78:

(Start: 8 @41611 has 4 MA's), (Start: 13 @41674 has 38 MA's), (18, 41779), (22, 41824), (30, 41887),

Gene: Shoya_56 Start: 31813, Stop: 32112, Start Num: 13

Candidate Starts for Shoya_56:

(Start: 13 @31813 has 38 MA's), (18, 31903),

Gene: Shukran_70 Start: 37615, Stop: 37932, Start Num: 13

Candidate Starts for Shukran_70:

(Start: 8 @37558 has 4 MA's), (Start: 13 @37615 has 38 MA's), (22, 37765), (32, 37837),

Gene: SonDevVon_80 Start: 39621, Stop: 39938, Start Num: 13

Candidate Starts for SonDevVon_80:

(Start: 13 @39621 has 38 MA's), (23, 39777), (26, 39807), (28, 39816), (30, 39834),

Gene: SpicyFrank_75 Start: 38962, Stop: 39276, Start Num: 13

Candidate Starts for SpicyFrank_75:

(Start: 13 @38962 has 38 MA's), (20, 39061), (31, 39178),

Gene: Sporco_76 Start: 40357, Stop: 40674, Start Num: 13

Candidate Starts for Sporco_76:

(Start: 13 @40357 has 38 MA's), (23, 40513), (26, 40543), (28, 40552), (30, 40570),

Gene: ThayneTheZag_78 Start: 39595, Stop: 39912, Start Num: 13

Candidate Starts for ThayneTheZag_78:

(Start: 13 @39595 has 38 MA's),

Gene: Tiff81_68 Start: 37265, Stop: 37582, Start Num: 13

Candidate Starts for Tiff81_68:

(11, 37229), (Start: 13 @37265 has 38 MA's), (22, 37415), (38, 37541),

Gene: TripleJ_57 Start: 35331, Stop: 35654, Start Num: 13

Candidate Starts for TripleJ_57:

(9, 35280), (Start: 13 @35331 has 38 MA's), (17, 35412), (19, 35433), (37, 35601),

Gene: Vopal_74 Start: 40874, Stop: 41170, Start Num: 13

Candidate Starts for Vopal_74:

(Start: 8 @40814 has 4 MA's), (Start: 13 @40874 has 38 MA's),

Gene: Windest_77 Start: 38033, Stop: 38356, Start Num: 13

Candidate Starts for Windest_77:

(Start: 13 @38033 has 38 MA's), (30, 38252),

Gene: YoungHarleezy_72 Start: 38387, Stop: 38743, Start Num: 8

Candidate Starts for YoungHarleezy_72:

(Start: 8 @38387 has 4 MA's), (Start: 13 @38447 has 38 MA's), (34, 38654),

Gene: Zucker_69 Start: 40359, Stop: 40676, Start Num: 13

Candidate Starts for Zucker_69:

(Start: 13 @40359 has 38 MA's), (18, 40464), (30, 40572),