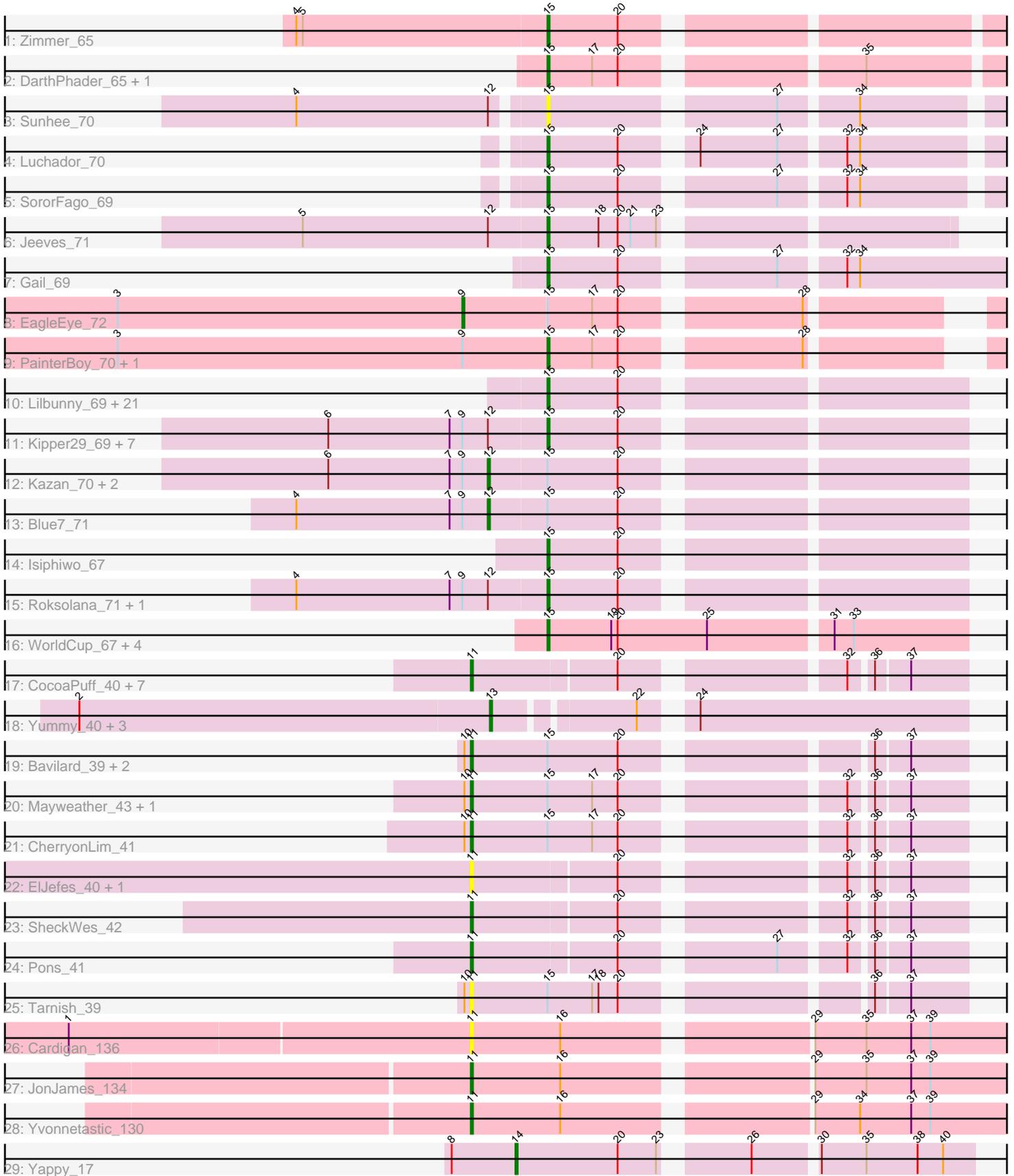


Pham 291087



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 291087 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291087 has 80 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Zimmer_65
- Track 2 : DarthPhader_65, Refuge_65
- Track 3 : Sunhee_70
- Track 4 : Luchador_70
- Track 5 : SororFago_69
- Track 6 : Jeeves_71
- Track 7 : Gail_69
- Track 8 : EagleEye_72
- Track 9 : PainterBoy_70, Lucyedi_71
- Track 10 : Lilbunny_69, Temprado_71, ToneTone_67, BennyP_69, Artemis2UCLA_70, Zaka_70, Koko_72, Hammer_70, Tucker_70, Rifter_70, Gladiator_67, Hexamo_70, Yokurt_69, Garak_71, Jeffabunny_70, Helmet_72, WunderPhul_70, BlessJoy_70, Wiks_69, Zulu_71, CloudWang3_71, Indra_73
- Track 11 : Kipper29_69, EricB_68, Hoot_64, VohminGhazi_69, Candra_67, Newrala_69, GreedyLawyer_66, Polyphemus_71
- Track 12 : Kazan_70, SmellyB_69, SuperAwesome_69
- Track 13 : Blue7_71
- Track 14 : Isiphiwo_67
- Track 15 : Roksolana_71, Gruunaga_70
- Track 16 : WorldCup_67, Bellris_67, Minispark_67, CogOmlette_67, Rahalelujah_69
- Track 17 : CocoaPuff_40, Balloona_38, Vine_42, SummitAcademy_39, Yucky_42, Feastonyeet_39, PotPie_40, BigChungus_39
- Track 18 : Yummy_40, Buttrmilkdreams_40, Horseradish_40, MScarn_41
- Track 19 : Bavidard_39, Elinal_43, KayGee_41
- Track 20 : Mayweather_43, Lauer_36
- Track 21 : CherryonLim_41
- Track 22 : ElJefes_40, McDazzle_41
- Track 23 : SheckWes_42
- Track 24 : Pons_41
- Track 25 : Tarnish_39
- Track 26 : Cardigan_136
- Track 27 : JonJames_134
- Track 28 : Yvonnetastic_130
- Track 29 : Yappy_17

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

The start number called the most often in the published annotations is 15, it was called in 40 of the 65 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artemis2UCLA_70, Bellris_67, BennyP_69, BlessJoy_70, Candra_67, CloudWang3_71, CogOmlette_67, DarthPhader_65, EricB_68, Gail_69, Garak_71, Gladiator_67, GreedyLawyer_66, Gruunaga_70, Hammer_70, Helmet_72, Hexamo_70, Hoot_64, Indra_73, Isiphiwo_67, Jeeves_71, Jeffabunny_70, Kipper29_69, Koko_72, Lilbunny_69, Luchador_70, Lucyedi_71, Minispark_67, Newrala_69, PainterBoy_70, Polyphemus_71, Rahalelujah_69, Refuge_65, Rifter_70, Roksolana_71, SororFago_69, Sunhee_70, Temprado_71, ToneTone_67, Tucker_70, VohminGhazi_69, Wiks_69, WorldCup_67, WunderPhul_70, Yokurt_69, Zaka_70, Zimmer_65, Zulu_71,

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

- Bavidard_39, Blue7_71, CherryonLim_41, EagleEye_72, Elinal_43, KayGee_41, Kazan_70, Lauer_36, Mayweather_43, SmellyB_69, SuperAwesome_69, Tarnish_39,

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

- Balloona_38, BigChungus_39, Buttrmlkdreams_40, Cardigan_136, CocoaPuff_40, ElJefes_40, Feastonyeet_39, Horseradish_40, JonJames_134, MScarn_41, McDazzle_41, Pons_41, PotPie_40, SheckWes_42, SummitAcademy_39, Vine_42, Yappy_17, Yucky_42, Yummy_40, Yvonnetastic_130,

Summary by start number:

Start 9:

- Found in 17 of 80 (21.2%) of genes in pham
- Manual Annotations of this start: 1 of 65
- Called 5.9% of time when present
- Phage (with cluster) where this start called: EagleEye_72 (A16),

Start 11:

- Found in 22 of 80 (27.5%) of genes in pham
- Manual Annotations of this start: 15 of 65
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Balloona_38 (CT), Bavidard_39 (CT), BigChungus_39 (CT), Cardigan_136 (DD), CherryonLim_41 (CT), CocoaPuff_40 (CT), ElJefes_40 (CT), Elinal_43 (CT), Feastonyeet_39 (CT), JonJames_134 (DD), KayGee_41 (CT), Lauer_36 (CT), Mayweather_43 (CT), McDazzle_41 (CT), Pons_41 (CT), PotPie_40 (CT), SheckWes_42 (CT), SummitAcademy_39 (CT), Tarnish_39 (CT), Vine_42 (CT), Yucky_42 (CT), Yvonnetastic_130 (DD),

Start 12:

- Found in 16 of 80 (20.0%) of genes in pham
- Manual Annotations of this start: 4 of 65
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Blue7_71 (A6), Kazan_70 (A6), SmellyB_69 (A6), SuperAwesome_69 (A6),

Start 13:

- Found in 4 of 80 (5.0%) of genes in pham
- Manual Annotations of this start: 4 of 65
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Buttrmlkdreams_40 (CT), Horseradish_40 (CT), MScarn_41 (CT), Yummy_40 (CT),

Start 14:

- Found in 1 of 80 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 65
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yappy_17 (singleton),

Start 15:

- Found in 60 of 80 (75.0%) of genes in pham
- Manual Annotations of this start: 40 of 65
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_70 (A6), Bellris_67 (A9), BennyP_69 (A6), BlessJoy_70 (A6), Candra_67 (A6), CloudWang3_71 (A6), CogOmllette_67 (A9), DarthPhader_65 (A12), EricB_68 (A6), Gail_69 (A14), Garak_71 (A6), Gladiator_67 (A6), GreedyLawyer_66 (A6), Gruunaga_70 (A6), Hammer_70 (A6), Helmet_72 (A6), Hexamo_70 (A6), Hoot_64 (A6), Indra_73 (A6), Isiphiwo_67 (A6), Jeeves_71 (A14), Jeffabunny_70 (A6), Kipper29_69 (A6), Koko_72 (A6), Lilbunny_69 (A6), Luchador_70 (A14), Lucyedi_71 (A16), Minispark_67 (A9), Newrala_69 (A6), PainterBoy_70 (A16), Polyphemus_71 (A6), Rahalelujah_69 (A9), Refuge_65 (A12), Rifter_70 (A6), Roksolana_71 (A6), SororFago_69 (A14), Sunhee_70 (A14), Temprado_71 (A6), ToneTone_67 (A6), Tucker_70 (A6), VohminGhazi_69 (A6), Wiks_69 (A6), WorldCup_67 (A9), WunderPhul_70 (A6), Yokurt_69 (A6), Zaka_70 (A6), Zimmer_65 (A12), Zulu_71 (A6),

Summary by clusters:

There are 8 clusters represented in this pham: A14, singleton, A16, A12, DD, A6, A9, CT,

Info for manual annotations of cluster A12:

- Start number 15 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 15 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A16:

- Start number 9 was manually annotated 1 time for cluster A16.
- Start number 15 was manually annotated 2 times for cluster A16.

Info for manual annotations of cluster A6:

- Start number 12 was manually annotated 4 times for cluster A6.
- Start number 15 was manually annotated 30 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 15 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster CT:

- Start number 11 was manually annotated 13 times for cluster CT.
- Start number 13 was manually annotated 4 times for cluster CT.

Info for manual annotations of cluster DD:

- Start number 11 was manually annotated 2 times for cluster DD.

Gene Information:

Gene: Artemis2UCLA_70 Start: 40238, Stop: 40059, Start Num: 15

Candidate Starts for Artemis2UCLA_70:

(Start: 15 @40238 has 40 MA's), (20, 40205),

Gene: Balloona_38 Start: 28381, Stop: 28175, Start Num: 11

Candidate Starts for Balloona_38:

(Start: 11 @28381 has 15 MA's), (20, 28315), (32, 28225), (36, 28216), (37, 28201),

Gene: Bavilard_39 Start: 28599, Stop: 28390, Start Num: 11

Candidate Starts for Bavilard_39:

(10, 28602), (Start: 11 @28599 has 15 MA's), (Start: 15 @28563 has 40 MA's), (20, 28530), (36, 28431), (37, 28416),

Gene: Bellris_67 Start: 41041, Stop: 40850, Start Num: 15

Candidate Starts for Bellris_67:

(Start: 15 @41041 has 40 MA's), (19, 41011), (20, 41008), (25, 40966), (31, 40912), (33, 40903),

Gene: BennyP_69 Start: 40308, Stop: 40129, Start Num: 15

Candidate Starts for BennyP_69:

(Start: 15 @40308 has 40 MA's), (20, 40275),

Gene: BigChungus_39 Start: 28782, Stop: 28576, Start Num: 11

Candidate Starts for BigChungus_39:

(Start: 11 @28782 has 15 MA's), (20, 28716), (32, 28626), (36, 28617), (37, 28602),

Gene: BlessJoy_70 Start: 40664, Stop: 40485, Start Num: 15

Candidate Starts for BlessJoy_70:

(Start: 15 @40664 has 40 MA's), (20, 40631),

Gene: Blue7_71 Start: 40393, Stop: 40187, Start Num: 12

Candidate Starts for Blue7_71:

(4, 40483), (7, 40411), (Start: 9 @40405 has 1 MA's), (Start: 12 @40393 has 4 MA's), (Start: 15 @40366 has 40 MA's), (20, 40333),

Gene: Buttrmlkdreams_40 Start: 27645, Stop: 27442, Start Num: 13

Candidate Starts for Buttrmlkdreams_40:

(2, 27837), (Start: 13 @27645 has 4 MA's), (22, 27585), (24, 27567),

Gene: Candra_67 Start: 40269, Stop: 40090, Start Num: 15

Candidate Starts for Candra_67:

(6, 40371), (7, 40314), (Start: 9 @40308 has 1 MA's), (Start: 12 @40296 has 4 MA's), (Start: 15 @40269 has 40 MA's), (20, 40236),

Gene: Cardigan_136 Start: 76837, Stop: 77085, Start Num: 11
Candidate Starts for Cardigan_136:
(1, 76651), (Start: 11 @76837 has 15 MA's), (16, 76879), (29, 76984), (35, 77008), (37, 77029), (39, 77038),

Gene: CherryonLim_41 Start: 29932, Stop: 29723, Start Num: 11
Candidate Starts for CherryonLim_41:
(10, 29935), (Start: 11 @29932 has 15 MA's), (Start: 15 @29896 has 40 MA's), (17, 29875), (20, 29863), (32, 29773), (36, 29764), (37, 29749),

Gene: CloudWang3_71 Start: 40750, Stop: 40571, Start Num: 15
Candidate Starts for CloudWang3_71:
(Start: 15 @40750 has 40 MA's), (20, 40717),

Gene: CocoaPuff_40 Start: 28796, Stop: 28590, Start Num: 11
Candidate Starts for CocoaPuff_40:
(Start: 11 @28796 has 15 MA's), (20, 28730), (32, 28640), (36, 28631), (37, 28616),

Gene: CogOmlette_67 Start: 41038, Stop: 40847, Start Num: 15
Candidate Starts for CogOmlette_67:
(Start: 15 @41038 has 40 MA's), (19, 41008), (20, 41005), (25, 40963), (31, 40909), (33, 40900),

Gene: DARTHPhader_65 Start: 42262, Stop: 42065, Start Num: 15
Candidate Starts for DARTHPhader_65:
(Start: 15 @42262 has 40 MA's), (17, 42241), (20, 42229), (35, 42130),

Gene: EagleEye_72 Start: 41949, Stop: 41728, Start Num: 9
Candidate Starts for EagleEye_72:
(3, 42111), (Start: 9 @41949 has 1 MA's), (Start: 15 @41910 has 40 MA's), (17, 41889), (20, 41877), (28, 41802),

Gene: ElJefes_40 Start: 29121, Stop: 28915, Start Num: 11
Candidate Starts for ElJefes_40:
(Start: 11 @29121 has 15 MA's), (20, 29055), (32, 28965), (36, 28956), (37, 28941),

Gene: Elinal_43 Start: 29167, Stop: 28958, Start Num: 11
Candidate Starts for Elinal_43:
(10, 29170), (Start: 11 @29167 has 15 MA's), (Start: 15 @29131 has 40 MA's), (20, 29098), (36, 28999), (37, 28984),

Gene: EricB_68 Start: 40226, Stop: 40047, Start Num: 15
Candidate Starts for EricB_68:
(6, 40328), (7, 40271), (Start: 9 @40265 has 1 MA's), (Start: 12 @40253 has 4 MA's), (Start: 15 @40226 has 40 MA's), (20, 40193),

Gene: Feastonyeet_39 Start: 28782, Stop: 28576, Start Num: 11
Candidate Starts for Feastonyeet_39:
(Start: 11 @28782 has 15 MA's), (20, 28716), (32, 28626), (36, 28617), (37, 28602),

Gene: Gail_69 Start: 42059, Stop: 41856, Start Num: 15
Candidate Starts for Gail_69:
(Start: 15 @42059 has 40 MA's), (20, 42026), (27, 41963), (32, 41936), (34, 41930),

Gene: Garak_71 Start: 40605, Stop: 40426, Start Num: 15

Candidate Starts for Garak_71:

(Start: 15 @40605 has 40 MA's), (20, 40572),

Gene: Gladiator_67 Start: 39830, Stop: 39651, Start Num: 15

Candidate Starts for Gladiator_67:

(Start: 15 @39830 has 40 MA's), (20, 39797),

Gene: GreedyLawyer_66 Start: 40199, Stop: 40020, Start Num: 15

Candidate Starts for GreedyLawyer_66:

(6, 40301), (7, 40244), (Start: 9 @40238 has 1 MA's), (Start: 12 @40226 has 4 MA's), (Start: 15 @40199 has 40 MA's), (20, 40166),

Gene: Gruunaga_70 Start: 40563, Stop: 40384, Start Num: 15

Candidate Starts for Gruunaga_70:

(4, 40680), (7, 40608), (Start: 9 @40602 has 1 MA's), (Start: 12 @40590 has 4 MA's), (Start: 15 @40563 has 40 MA's), (20, 40530),

Gene: Hammer_70 Start: 40170, Stop: 39991, Start Num: 15

Candidate Starts for Hammer_70:

(Start: 15 @40170 has 40 MA's), (20, 40137),

Gene: Helmet_72 Start: 40605, Stop: 40426, Start Num: 15

Candidate Starts for Helmet_72:

(Start: 15 @40605 has 40 MA's), (20, 40572),

Gene: Hexamo_70 Start: 40235, Stop: 40056, Start Num: 15

Candidate Starts for Hexamo_70:

(Start: 15 @40235 has 40 MA's), (20, 40202),

Gene: Hoot_64 Start: 38084, Stop: 37905, Start Num: 15

Candidate Starts for Hoot_64:

(6, 38186), (7, 38129), (Start: 9 @38123 has 1 MA's), (Start: 12 @38111 has 4 MA's), (Start: 15 @38084 has 40 MA's), (20, 38051),

Gene: Horseradish_40 Start: 27173, Stop: 26970, Start Num: 13

Candidate Starts for Horseradish_40:

(2, 27365), (Start: 13 @27173 has 4 MA's), (22, 27113), (24, 27095),

Gene: Indra_73 Start: 40606, Stop: 40427, Start Num: 15

Candidate Starts for Indra_73:

(Start: 15 @40606 has 40 MA's), (20, 40573),

Gene: Isiphiwo_67 Start: 39765, Stop: 39586, Start Num: 15

Candidate Starts for Isiphiwo_67:

(Start: 15 @39765 has 40 MA's), (20, 39732),

Gene: Jeeves_71 Start: 41042, Stop: 40869, Start Num: 15

Candidate Starts for Jeeves_71:

(5, 41156), (Start: 12 @41069 has 4 MA's), (Start: 15 @41042 has 40 MA's), (18, 41018), (20, 41009), (21, 41003), (23, 40991),

Gene: Jeffabunny_70 Start: 40232, Stop: 40053, Start Num: 15

Candidate Starts for Jeffabunny_70:
(Start: 15 @40232 has 40 MA's), (20, 40199),

Gene: JonJames_134 Start: 77470, Stop: 77718, Start Num: 11
Candidate Starts for JonJames_134:
(Start: 11 @77470 has 15 MA's), (16, 77512), (29, 77617), (35, 77641), (37, 77662), (39, 77671),

Gene: KayGee_41 Start: 29167, Stop: 28958, Start Num: 11
Candidate Starts for KayGee_41:
(10, 29170), (Start: 11 @29167 has 15 MA's), (Start: 15 @29131 has 40 MA's), (20, 29098), (36, 28999), (37, 28984),

Gene: Kazan_70 Start: 40266, Stop: 40060, Start Num: 12
Candidate Starts for Kazan_70:
(6, 40341), (7, 40284), (Start: 9 @40278 has 1 MA's), (Start: 12 @40266 has 4 MA's), (Start: 15 @40239 has 40 MA's), (20, 40206),

Gene: Kipper29_69 Start: 40252, Stop: 40073, Start Num: 15
Candidate Starts for Kipper29_69:
(6, 40354), (7, 40297), (Start: 9 @40291 has 1 MA's), (Start: 12 @40279 has 4 MA's), (Start: 15 @40252 has 40 MA's), (20, 40219),

Gene: Koko_72 Start: 41090, Stop: 40911, Start Num: 15
Candidate Starts for Koko_72:
(Start: 15 @41090 has 40 MA's), (20, 41057),

Gene: Lauer_36 Start: 29997, Stop: 29788, Start Num: 11
Candidate Starts for Lauer_36:
(10, 30000), (Start: 11 @29997 has 15 MA's), (Start: 15 @29961 has 40 MA's), (17, 29940), (20, 29928), (32, 29838), (36, 29829), (37, 29814),

Gene: Lilbunny_69 Start: 40236, Stop: 40057, Start Num: 15
Candidate Starts for Lilbunny_69:
(Start: 15 @40236 has 40 MA's), (20, 40203),

Gene: Luchador_70 Start: 42522, Stop: 42328, Start Num: 15
Candidate Starts for Luchador_70:
(Start: 15 @42522 has 40 MA's), (20, 42489), (24, 42462), (27, 42426), (32, 42399), (34, 42393),

Gene: Lucyedi_71 Start: 42106, Stop: 41924, Start Num: 15
Candidate Starts for Lucyedi_71:
(3, 42307), (Start: 9 @42145 has 1 MA's), (Start: 15 @42106 has 40 MA's), (17, 42085), (20, 42073), (28, 41998),

Gene: MScarn_41 Start: 27313, Stop: 27110, Start Num: 13
Candidate Starts for MScarn_41:
(2, 27505), (Start: 13 @27313 has 4 MA's), (22, 27253), (24, 27235),

Gene: Mayweather_43 Start: 29791, Stop: 29582, Start Num: 11
Candidate Starts for Mayweather_43:
(10, 29794), (Start: 11 @29791 has 15 MA's), (Start: 15 @29755 has 40 MA's), (17, 29734), (20, 29722), (32, 29632), (36, 29623), (37, 29608),

Gene: McDazzle_41 Start: 29115, Stop: 28909, Start Num: 11

Candidate Starts for McDazzle_41:

(Start: 11 @29115 has 15 MA's), (20, 29049), (32, 28959), (36, 28950), (37, 28935),

Gene: Minispark_67 Start: 41035, Stop: 40844, Start Num: 15

Candidate Starts for Minispark_67:

(Start: 15 @41035 has 40 MA's), (19, 41005), (20, 41002), (25, 40960), (31, 40906), (33, 40897),

Gene: Newrala_69 Start: 40200, Stop: 40021, Start Num: 15

Candidate Starts for Newrala_69:

(6, 40302), (7, 40245), (Start: 9 @40239 has 1 MA's), (Start: 12 @40227 has 4 MA's), (Start: 15 @40200 has 40 MA's), (20, 40167),

Gene: PainterBoy_70 Start: 41815, Stop: 41633, Start Num: 15

Candidate Starts for PainterBoy_70:

(3, 42016), (Start: 9 @41854 has 1 MA's), (Start: 15 @41815 has 40 MA's), (17, 41794), (20, 41782), (28, 41707),

Gene: Polyphemus_71 Start: 40586, Stop: 40407, Start Num: 15

Candidate Starts for Polyphemus_71:

(6, 40688), (7, 40631), (Start: 9 @40625 has 1 MA's), (Start: 12 @40613 has 4 MA's), (Start: 15 @40586 has 40 MA's), (20, 40553),

Gene: Pons_41 Start: 29139, Stop: 28933, Start Num: 11

Candidate Starts for Pons_41:

(Start: 11 @29139 has 15 MA's), (20, 29073), (27, 29010), (32, 28983), (36, 28974), (37, 28959),

Gene: PotPie_40 Start: 30073, Stop: 29867, Start Num: 11

Candidate Starts for PotPie_40:

(Start: 11 @30073 has 15 MA's), (20, 30007), (32, 29917), (36, 29908), (37, 29893),

Gene: Rahalelujah_69 Start: 41050, Stop: 40859, Start Num: 15

Candidate Starts for Rahalelujah_69:

(Start: 15 @41050 has 40 MA's), (19, 41020), (20, 41017), (25, 40975), (31, 40921), (33, 40912),

Gene: Refuge_65 Start: 42312, Stop: 42115, Start Num: 15

Candidate Starts for Refuge_65:

(Start: 15 @42312 has 40 MA's), (17, 42291), (20, 42279), (35, 42180),

Gene: Rifter_70 Start: 39766, Stop: 39587, Start Num: 15

Candidate Starts for Rifter_70:

(Start: 15 @39766 has 40 MA's), (20, 39733),

Gene: Roksolana_71 Start: 40600, Stop: 40421, Start Num: 15

Candidate Starts for Roksolana_71:

(4, 40717), (7, 40645), (Start: 9 @40639 has 1 MA's), (Start: 12 @40627 has 4 MA's), (Start: 15 @40600 has 40 MA's), (20, 40567),

Gene: SheckWes_42 Start: 28660, Stop: 28454, Start Num: 11

Candidate Starts for SheckWes_42:

(Start: 11 @28660 has 15 MA's), (20, 28594), (32, 28504), (36, 28495), (37, 28480),

Gene: SmellyB_69 Start: 40260, Stop: 40054, Start Num: 12

Candidate Starts for SmellyB_69:

(6, 40335), (7, 40278), (Start: 9 @40272 has 1 MA's), (Start: 12 @40260 has 4 MA's), (Start: 15 @40233 has 40 MA's), (20, 40200),

Gene: SororFago_69 Start: 42242, Stop: 42048, Start Num: 15

Candidate Starts for SororFago_69:

(Start: 15 @42242 has 40 MA's), (20, 42209), (27, 42146), (32, 42119), (34, 42113),

Gene: SummitAcademy_39 Start: 28702, Stop: 28496, Start Num: 11

Candidate Starts for SummitAcademy_39:

(Start: 11 @28702 has 15 MA's), (20, 28636), (32, 28546), (36, 28537), (37, 28522),

Gene: Sunhee_70 Start: 40582, Stop: 40388, Start Num: 15

Candidate Starts for Sunhee_70:

(4, 40693), (Start: 12 @40603 has 4 MA's), (Start: 15 @40582 has 40 MA's), (27, 40486), (34, 40453),

Gene: SuperAwesome_69 Start: 40265, Stop: 40059, Start Num: 12

Candidate Starts for SuperAwesome_69:

(6, 40340), (7, 40283), (Start: 9 @40277 has 1 MA's), (Start: 12 @40265 has 4 MA's), (Start: 15 @40238 has 40 MA's), (20, 40205),

Gene: Tarnish_39 Start: 29209, Stop: 29000, Start Num: 11

Candidate Starts for Tarnish_39:

(10, 29212), (Start: 11 @29209 has 15 MA's), (Start: 15 @29173 has 40 MA's), (17, 29152), (18, 29149), (20, 29140), (36, 29041), (37, 29026),

Gene: Temprado_71 Start: 40605, Stop: 40426, Start Num: 15

Candidate Starts for Temprado_71:

(Start: 15 @40605 has 40 MA's), (20, 40572),

Gene: ToneTone_67 Start: 40165, Stop: 39986, Start Num: 15

Candidate Starts for ToneTone_67:

(Start: 15 @40165 has 40 MA's), (20, 40132),

Gene: Tucker_70 Start: 40368, Stop: 40189, Start Num: 15

Candidate Starts for Tucker_70:

(Start: 15 @40368 has 40 MA's), (20, 40335),

Gene: Vine_42 Start: 29438, Stop: 29232, Start Num: 11

Candidate Starts for Vine_42:

(Start: 11 @29438 has 15 MA's), (20, 29372), (32, 29282), (36, 29273), (37, 29258),

Gene: VohminGhazi_69 Start: 40234, Stop: 40055, Start Num: 15

Candidate Starts for VohminGhazi_69:

(6, 40336), (7, 40279), (Start: 9 @40273 has 1 MA's), (Start: 12 @40261 has 4 MA's), (Start: 15 @40234 has 40 MA's), (20, 40201),

Gene: Wiks_69 Start: 40236, Stop: 40057, Start Num: 15

Candidate Starts for Wiks_69:

(Start: 15 @40236 has 40 MA's), (20, 40203),

Gene: WorldCup_67 Start: 41044, Stop: 40853, Start Num: 15

Candidate Starts for WorldCup_67:

(Start: 15 @41044 has 40 MA's), (19, 41014), (20, 41011), (25, 40969), (31, 40915), (33, 40906),

Gene: WunderPhul_70 Start: 40234, Stop: 40055, Start Num: 15

Candidate Starts for WunderPhul_70:

(Start: 15 @40234 has 40 MA's), (20, 40201),

Gene: Yappy_17 Start: 5650, Stop: 5847, Start Num: 14

Candidate Starts for Yappy_17:

(8, 5620), (Start: 14 @5650 has 1 MA's), (20, 5698), (23, 5716), (26, 5749), (30, 5776), (35, 5797), (38, 5821), (40, 5833),

Gene: Yokurt_69 Start: 40236, Stop: 40057, Start Num: 15

Candidate Starts for Yokurt_69:

(Start: 15 @40236 has 40 MA's), (20, 40203),

Gene: Yucky_42 Start: 29378, Stop: 29172, Start Num: 11

Candidate Starts for Yucky_42:

(Start: 11 @29378 has 15 MA's), (20, 29312), (32, 29222), (36, 29213), (37, 29198),

Gene: Yummy_40 Start: 27287, Stop: 27084, Start Num: 13

Candidate Starts for Yummy_40:

(2, 27479), (Start: 13 @27287 has 4 MA's), (22, 27227), (24, 27209),

Gene: Yvonnetastic_130 Start: 73750, Stop: 73998, Start Num: 11

Candidate Starts for Yvonnetastic_130:

(Start: 11 @73750 has 15 MA's), (16, 73792), (29, 73897), (34, 73918), (37, 73942), (39, 73951),

Gene: Zaka_70 Start: 40236, Stop: 40057, Start Num: 15

Candidate Starts for Zaka_70:

(Start: 15 @40236 has 40 MA's), (20, 40203),

Gene: Zimmer_65 Start: 42012, Stop: 41815, Start Num: 15

Candidate Starts for Zimmer_65:

(4, 42129), (5, 42126), (Start: 15 @42012 has 40 MA's), (20, 41979),

Gene: Zulu_71 Start: 40614, Stop: 40435, Start Num: 15

Candidate Starts for Zulu_71:

(Start: 15 @40614 has 40 MA's), (20, 40581),