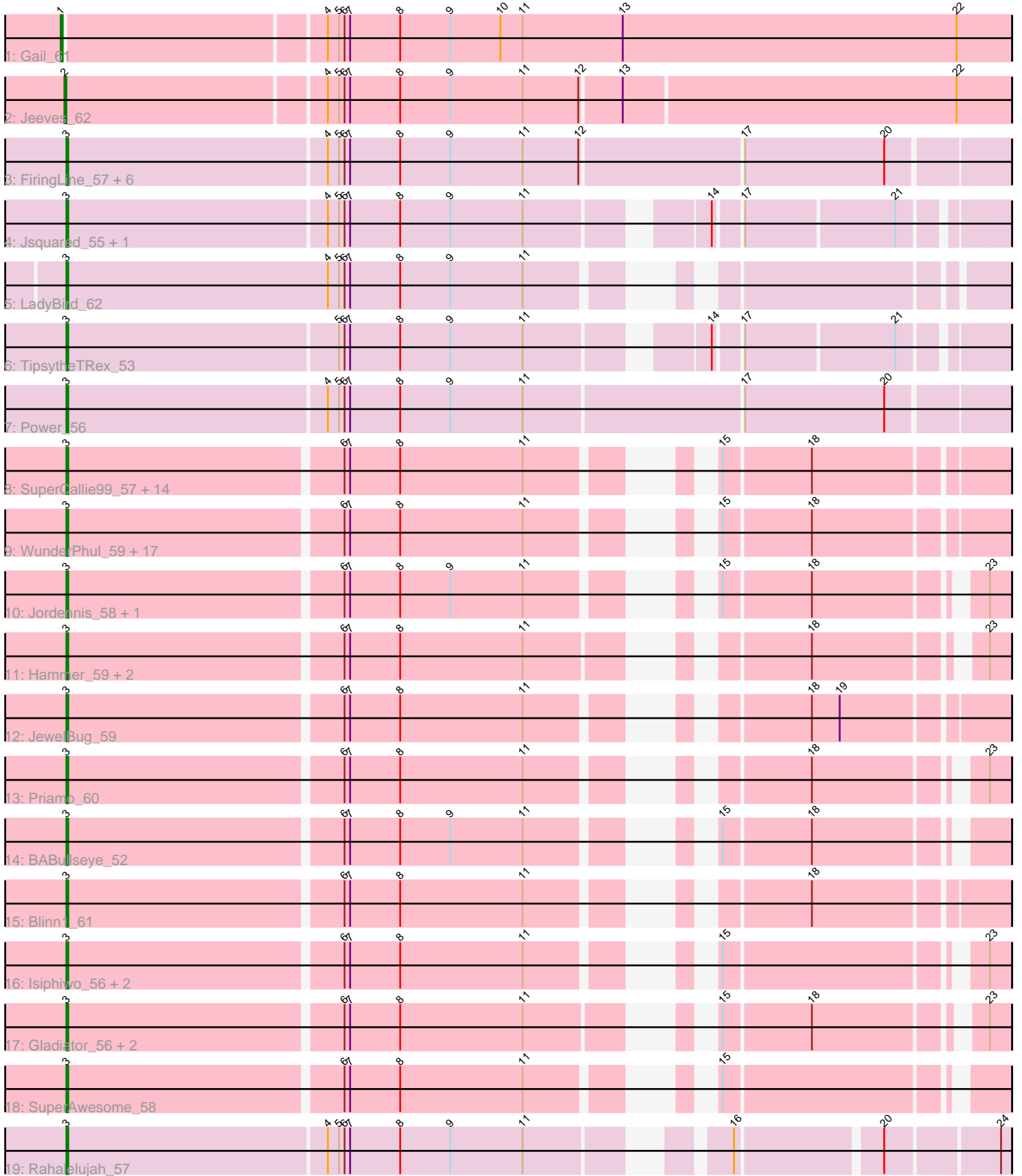


Pham 216161



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 216161 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216161 has 64 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Gail_61
- Track 2 : Jeeves_62
- Track 3 : FiringLine_57, Crucio_57, SnapTap_57, QueenBeesly_57, SemperFi_58, SweetiePie_57, Georgie2_58
- Track 4 : Jsquared_55, Serenity_57
- Track 5 : LadyBird_62
- Track 6 : TopsytheTRex_53
- Track 7 : Power_56
- Track 8 : SuperCallie99_57, Hoot_53, Neeharika16_57, Cookiedough_58, Candra_58, GreedyLawyer_58, Kipper29_58, McFly_58, Kazan_59, EricB_58, SmellyB_58, VohminGhazi_58, Pmask_58, Polyphemus_60, Newrala_58
- Track 9 : WunderPhul_59, Garak_61, BlessJoy_59, Zulu_60, CloudWang3_59, Lilbunny_58, Jeffabunny_59, Temprado_61, Artemis2UCLA_59, ToneTone_56, Zaka_59, Tucker_59, Wiks_58, Koko_60, Indra_62, Helmet_61, Yokurt_59, Hexamo_59
- Track 10 : Jordennis_58, Dorothea_58
- Track 11 : Hammer_59, Rifter_59, Roksolana_60
- Track 12 : JewelBug_59
- Track 13 : Priamo_60
- Track 14 : BABullseye_52
- Track 15 : Blinn1_61
- Track 16 : Isiphiwo_56, Chartreuse_57, DaVinci_57
- Track 17 : Gladiator_56, Gruunaga_59, Blue7_60
- Track 18 : SuperAwesome_58
- Track 19 : Rahalelujah_57

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

The start number called the most often in the published annotations is 3, it was called in 55 of the 57 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artemis2UCLA_59, BABullseye_52, BlessJoy_59, Blinn1_61, Blue7_60, Candra_58, Chartreuse_57, CloudWang3_59, Cookiedough_58, Crucio_57, DaVinci_57,

Dorothea_58, EricB_58, FiringLine_57, Garak_61, Georgie2_58, Gladiator_56, GreedyLawyer_58, Gruunaga_59, Hammer_59, Helmet_61, Hexamo_59, Hoot_53, Indra_62, Isiphiwo_56, Jeffabunny_59, JewelBug_59, Jordennis_58, Jsquared_55, Kazan_59, Kipper29_58, Koko_60, LadyBird_62, Lilbunny_58, McFly_58, Neeharika16_57, Newrala_58, Pmask_58, Polyphemus_60, Power_56, Priamo_60, QueenBeesly_57, Rahalelujah_57, Rifter_59, Roksolana_60, SemperFi_58, Serenity_57, SmellyB_58, SnapTap_57, SuperAwesome_58, SuperCallie99_57, SweetiePie_57, Temprado_61, TopsytheTRex_53, ToneTone_56, Tucker_59, VohminGhazi_58, Wiks_58, WunderPhul_59, Yokurt_59, Zaka_59, Zulu_60,

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

-

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

- Gail_61, Jeeves_62,

Summary by start number:

Start 1:

- Found in 1 of 64 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gail_61 (A14),

Start 2:

- Found in 1 of 64 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jeeves_62 (A14),

Start 3:

- Found in 62 of 64 (96.9%) of genes in pham
- Manual Annotations of this start: 55 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_59 (A6), BABullseye_52 (A6), BlessJoy_59 (A6), Blinn1_61 (A6), Blue7_60 (A6), Candra_58 (A6), Chartreuse_57 (A6), CloudWang3_59 (A6), Cookiedough_58 (A6), Crucio_57 (A2), DaVinci_57 (A6), Dorothea_58 (A6), EricB_58 (A6), FiringLine_57 (A2), Garak_61 (A6), Georgie2_58 (A2), Gladiator_56 (A6), GreedyLawyer_58 (A6), Gruunaga_59 (A6), Hammer_59 (A6), Helmet_61 (A6), Hexamo_59 (A6), Hoot_53 (A6), Indra_62 (A6), Isiphiwo_56 (A6), Jeffabunny_59 (A6), JewelBug_59 (A6), Jordennis_58 (A6), Jsquared_55 (A2), Kazan_59 (A6), Kipper29_58 (A6), Koko_60 (A6), LadyBird_62 (A2), Lilbunny_58 (A6), McFly_58 (A6), Neeharika16_57 (A6), Newrala_58 (A6), Pmask_58 (A6), Polyphemus_60 (A6), Power_56 (A2), Priamo_60 (A6), QueenBeesly_57 (A2), Rahalelujah_57 (A9), Rifter_59 (A6), Roksolana_60 (A6), SemperFi_58 (A2), Serenity_57 (A2), SmellyB_58 (A6), SnapTap_57 (A2), SuperAwesome_58 (A6), SuperCallie99_57 (A6), SweetiePie_57 (A2), Temprado_61 (A6), TopsytheTRex_53 (A2), ToneTone_56 (A6), Tucker_59 (A6), VohminGhazi_58 (A6), Wiks_58 (A6), WunderPhul_59 (A6), Yokurt_59 (A6), Zaka_59 (A6), Zulu_60 (A6),

Summary by clusters:

There are 4 clusters represented in this pham: A9, A14, A2, A6,

Info for manual annotations of cluster A14:

- Start number 1 was manually annotated 1 time for cluster A14.
- Start number 2 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A2:

- Start number 3 was manually annotated 12 times for cluster A2.

Info for manual annotations of cluster A6:

- Start number 3 was manually annotated 42 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 3 was manually annotated 1 time for cluster A9.

Gene Information:

Gene: Artemis2UCLA_59 Start: 37105, Stop: 36662, Start Num: 3

Candidate Starts for Artemis2UCLA_59:

(Start: 3 @37105 has 55 MA's), (6, 36961), (7, 36958), (8, 36931), (11, 36865), (15, 36805), (18, 36760),

Gene: BABullseye_52 Start: 34678, Stop: 34244, Start Num: 3

Candidate Starts for BABullseye_52:

(Start: 3 @34678 has 55 MA's), (6, 34534), (7, 34531), (8, 34504), (9, 34477), (11, 34438), (15, 34378), (18, 34333),

Gene: BlessJoy_59 Start: 37531, Stop: 37088, Start Num: 3

Candidate Starts for BlessJoy_59:

(Start: 3 @37531 has 55 MA's), (6, 37387), (7, 37384), (8, 37357), (11, 37291), (15, 37231), (18, 37186),

Gene: Blinn1_61 Start: 37123, Stop: 36680, Start Num: 3

Candidate Starts for Blinn1_61:

(Start: 3 @37123 has 55 MA's), (6, 36979), (7, 36976), (8, 36949), (11, 36883), (18, 36778),

Gene: Blue7_60 Start: 37199, Stop: 36762, Start Num: 3

Candidate Starts for Blue7_60:

(Start: 3 @37199 has 55 MA's), (6, 37055), (7, 37052), (8, 37025), (11, 36959), (15, 36896), (18, 36851), (23, 36773),

Gene: Candra_58 Start: 37045, Stop: 36602, Start Num: 3

Candidate Starts for Candra_58:

(Start: 3 @37045 has 55 MA's), (6, 36901), (7, 36898), (8, 36871), (11, 36805), (15, 36745), (18, 36700),

Gene: Chartreuse_57 Start: 36396, Stop: 35962, Start Num: 3

Candidate Starts for Chartreuse_57:

(Start: 3 @36396 has 55 MA's), (6, 36252), (7, 36249), (8, 36222), (11, 36156), (15, 36096), (23, 35973),

Gene: CloudWang3_59 Start: 37193, Stop: 36750, Start Num: 3
Candidate Starts for CloudWang3_59:
(Start: 3 @37193 has 55 MA's), (6, 37049), (7, 37046), (8, 37019), (11, 36953), (15, 36893), (18, 36848),

Gene: Cookiedough_58 Start: 37024, Stop: 36581, Start Num: 3
Candidate Starts for Cookiedough_58:
(Start: 3 @37024 has 55 MA's), (6, 36880), (7, 36877), (8, 36850), (11, 36784), (15, 36724), (18, 36679),

Gene: Crucio_57 Start: 38174, Stop: 37680, Start Num: 3
Candidate Starts for Crucio_57:
(Start: 3 @38174 has 55 MA's), (4, 38036), (5, 38030), (6, 38027), (7, 38024), (8, 37997), (9, 37970), (11, 37931), (12, 37901), (17, 37817), (20, 37742),

Gene: DaVinci_57 Start: 36450, Stop: 36016, Start Num: 3
Candidate Starts for DaVinci_57:
(Start: 3 @36450 has 55 MA's), (6, 36306), (7, 36303), (8, 36276), (11, 36210), (15, 36150), (23, 36027),

Gene: Dorothea_58 Start: 37019, Stop: 36585, Start Num: 3
Candidate Starts for Dorothea_58:
(Start: 3 @37019 has 55 MA's), (6, 36875), (7, 36872), (8, 36845), (9, 36818), (11, 36779), (15, 36719), (18, 36674), (23, 36596),

Gene: EricB_58 Start: 37002, Stop: 36559, Start Num: 3
Candidate Starts for EricB_58:
(Start: 3 @37002 has 55 MA's), (6, 36858), (7, 36855), (8, 36828), (11, 36762), (15, 36702), (18, 36657),

Gene: FiringLine_57 Start: 38155, Stop: 37661, Start Num: 3
Candidate Starts for FiringLine_57:
(Start: 3 @38155 has 55 MA's), (4, 38017), (5, 38011), (6, 38008), (7, 38005), (8, 37978), (9, 37951), (11, 37912), (12, 37882), (17, 37798), (20, 37723),

Gene: Gail_61 Start: 39377, Stop: 38874, Start Num: 1
Candidate Starts for Gail_61:
(Start: 1 @39377 has 1 MA's), (4, 39242), (5, 39236), (6, 39233), (7, 39230), (8, 39203), (9, 39176), (10, 39149), (11, 39137), (13, 39083), (22, 38903),

Gene: Garak_61 Start: 37472, Stop: 37029, Start Num: 3
Candidate Starts for Garak_61:
(Start: 3 @37472 has 55 MA's), (6, 37328), (7, 37325), (8, 37298), (11, 37232), (15, 37172), (18, 37127),

Gene: Georgie2_58 Start: 38200, Stop: 37706, Start Num: 3
Candidate Starts for Georgie2_58:
(Start: 3 @38200 has 55 MA's), (4, 38062), (5, 38056), (6, 38053), (7, 38050), (8, 38023), (9, 37996), (11, 37957), (12, 37927), (17, 37843), (20, 37768),

Gene: Gladiator_56 Start: 36697, Stop: 36260, Start Num: 3
Candidate Starts for Gladiator_56:

(Start: 3 @36697 has 55 MA's), (6, 36553), (7, 36550), (8, 36523), (11, 36457), (15, 36394), (18, 36349), (23, 36271),

Gene: GreedyLawyer_58 Start: 37009, Stop: 36566, Start Num: 3

Candidate Starts for GreedyLawyer_58:

(Start: 3 @37009 has 55 MA's), (6, 36865), (7, 36862), (8, 36835), (11, 36769), (15, 36709), (18, 36664),

Gene: Gruunaga_59 Start: 37396, Stop: 36959, Start Num: 3

Candidate Starts for Gruunaga_59:

(Start: 3 @37396 has 55 MA's), (6, 37252), (7, 37249), (8, 37222), (11, 37156), (15, 37093), (18, 37048), (23, 36970),

Gene: Hammer_59 Start: 37003, Stop: 36566, Start Num: 3

Candidate Starts for Hammer_59:

(Start: 3 @37003 has 55 MA's), (6, 36859), (7, 36856), (8, 36829), (11, 36763), (18, 36655), (23, 36577),

Gene: Helmet_61 Start: 37472, Stop: 37029, Start Num: 3

Candidate Starts for Helmet_61:

(Start: 3 @37472 has 55 MA's), (6, 37328), (7, 37325), (8, 37298), (11, 37232), (15, 37172), (18, 37127),

Gene: Hexamo_59 Start: 37102, Stop: 36659, Start Num: 3

Candidate Starts for Hexamo_59:

(Start: 3 @37102 has 55 MA's), (6, 36958), (7, 36955), (8, 36928), (11, 36862), (15, 36802), (18, 36757),

Gene: Hoot_53 Start: 34860, Stop: 34417, Start Num: 3

Candidate Starts for Hoot_53:

(Start: 3 @34860 has 55 MA's), (6, 34716), (7, 34713), (8, 34686), (11, 34620), (15, 34560), (18, 34515),

Gene: Indra_62 Start: 37473, Stop: 37030, Start Num: 3

Candidate Starts for Indra_62:

(Start: 3 @37473 has 55 MA's), (6, 37329), (7, 37326), (8, 37299), (11, 37233), (15, 37173), (18, 37128),

Gene: Isiphiwo_56 Start: 36576, Stop: 36142, Start Num: 3

Candidate Starts for Isiphiwo_56:

(Start: 3 @36576 has 55 MA's), (6, 36432), (7, 36429), (8, 36402), (11, 36336), (15, 36276), (23, 36153),

Gene: Jeeves_62 Start: 38354, Stop: 37857, Start Num: 2

Candidate Starts for Jeeves_62:

(Start: 2 @38354 has 1 MA's), (4, 38219), (5, 38213), (6, 38210), (7, 38207), (8, 38180), (9, 38153), (11, 38114), (12, 38084), (13, 38063), (22, 37886),

Gene: Jeffabunny_59 Start: 37099, Stop: 36656, Start Num: 3

Candidate Starts for Jeffabunny_59:

(Start: 3 @37099 has 55 MA's), (6, 36955), (7, 36952), (8, 36925), (11, 36859), (15, 36799), (18, 36754),

Gene: JewelBug_59 Start: 37215, Stop: 36772, Start Num: 3

Candidate Starts for JewelBug_59:

(Start: 3 @37215 has 55 MA's), (6, 37071), (7, 37068), (8, 37041), (11, 36975), (18, 36870), (19, 36855),

Gene: Jordennis_58 Start: 36696, Stop: 36262, Start Num: 3

Candidate Starts for Jordennis_58:

(Start: 3 @36696 has 55 MA's), (6, 36552), (7, 36549), (8, 36522), (9, 36495), (11, 36456), (15, 36396), (18, 36351), (23, 36273),

Gene: Jsquared_55 Start: 37136, Stop: 36672, Start Num: 3

Candidate Starts for Jsquared_55:

(Start: 3 @37136 has 55 MA's), (4, 36998), (5, 36992), (6, 36989), (7, 36986), (8, 36959), (9, 36932), (11, 36893), (14, 36812), (17, 36800), (21, 36722),

Gene: Kazan_59 Start: 37015, Stop: 36572, Start Num: 3

Candidate Starts for Kazan_59:

(Start: 3 @37015 has 55 MA's), (6, 36871), (7, 36868), (8, 36841), (11, 36775), (15, 36715), (18, 36670),

Gene: Kipper29_58 Start: 37028, Stop: 36585, Start Num: 3

Candidate Starts for Kipper29_58:

(Start: 3 @37028 has 55 MA's), (6, 36884), (7, 36881), (8, 36854), (11, 36788), (15, 36728), (18, 36683),

Gene: Koko_60 Start: 37533, Stop: 37090, Start Num: 3

Candidate Starts for Koko_60:

(Start: 3 @37533 has 55 MA's), (6, 37389), (7, 37386), (8, 37359), (11, 37293), (15, 37233), (18, 37188),

Gene: LadyBird_62 Start: 39099, Stop: 38653, Start Num: 3

Candidate Starts for LadyBird_62:

(Start: 3 @39099 has 55 MA's), (4, 38958), (5, 38952), (6, 38949), (7, 38946), (8, 38919), (9, 38892), (11, 38853),

Gene: Lilbunny_58 Start: 37103, Stop: 36660, Start Num: 3

Candidate Starts for Lilbunny_58:

(Start: 3 @37103 has 55 MA's), (6, 36959), (7, 36956), (8, 36929), (11, 36863), (15, 36803), (18, 36758),

Gene: McFly_58 Start: 37009, Stop: 36566, Start Num: 3

Candidate Starts for McFly_58:

(Start: 3 @37009 has 55 MA's), (6, 36865), (7, 36862), (8, 36835), (11, 36769), (15, 36709), (18, 36664),

Gene: Neeharika16_57 Start: 36469, Stop: 36026, Start Num: 3

Candidate Starts for Neeharika16_57:

(Start: 3 @36469 has 55 MA's), (6, 36325), (7, 36322), (8, 36295), (11, 36229), (15, 36169), (18, 36124),

Gene: Newrala_58 Start: 37011, Stop: 36568, Start Num: 3

Candidate Starts for Newrala_58:

(Start: 3 @37011 has 55 MA's), (6, 36867), (7, 36864), (8, 36837), (11, 36771), (15, 36711), (18, 36666),

Gene: Pmask_58 Start: 37012, Stop: 36569, Start Num: 3

Candidate Starts for Pmask_58:

(Start: 3 @37012 has 55 MA's), (6, 36868), (7, 36865), (8, 36838), (11, 36772), (15, 36712), (18, 36667),

Gene: Polyphemus_60 Start: 37394, Stop: 36951, Start Num: 3

Candidate Starts for Polyphemus_60:

(Start: 3 @37394 has 55 MA's), (6, 37250), (7, 37247), (8, 37220), (11, 37154), (15, 37094), (18, 37049),

Gene: Power_56 Start: 38208, Stop: 37714, Start Num: 3

Candidate Starts for Power_56:

(Start: 3 @38208 has 55 MA's), (4, 38070), (5, 38064), (6, 38061), (7, 38058), (8, 38031), (9, 38004), (11, 37965), (17, 37851), (20, 37776),

Gene: Priamo_60 Start: 36762, Stop: 36328, Start Num: 3

Candidate Starts for Priamo_60:

(Start: 3 @36762 has 55 MA's), (6, 36618), (7, 36615), (8, 36588), (11, 36522), (18, 36417), (23, 36339),

Gene: QueenBeesly_57 Start: 38155, Stop: 37661, Start Num: 3

Candidate Starts for QueenBeesly_57:

(Start: 3 @38155 has 55 MA's), (4, 38017), (5, 38011), (6, 38008), (7, 38005), (8, 37978), (9, 37951), (11, 37912), (12, 37882), (17, 37798), (20, 37723),

Gene: Rahalelujah_57 Start: 37729, Stop: 37271, Start Num: 3

Candidate Starts for Rahalelujah_57:

(Start: 3 @37729 has 55 MA's), (4, 37591), (5, 37585), (6, 37582), (7, 37579), (8, 37552), (9, 37525), (11, 37486), (16, 37405), (20, 37333), (24, 37276),

Gene: Rifter_59 Start: 36599, Stop: 36162, Start Num: 3

Candidate Starts for Rifter_59:

(Start: 3 @36599 has 55 MA's), (6, 36455), (7, 36452), (8, 36425), (11, 36359), (18, 36251), (23, 36173),

Gene: Roksolana_60 Start: 37433, Stop: 36996, Start Num: 3

Candidate Starts for Roksolana_60:

(Start: 3 @37433 has 55 MA's), (6, 37289), (7, 37286), (8, 37259), (11, 37193), (18, 37085), (23, 37007),

Gene: SemperFi_58 Start: 38423, Stop: 37929, Start Num: 3

Candidate Starts for SemperFi_58:

(Start: 3 @38423 has 55 MA's), (4, 38285), (5, 38279), (6, 38276), (7, 38273), (8, 38246), (9, 38219), (11, 38180), (12, 38150), (17, 38066), (20, 37991),

Gene: Serenity_57 Start: 37359, Stop: 36895, Start Num: 3

Candidate Starts for Serenity_57:

(Start: 3 @37359 has 55 MA's), (4, 37221), (5, 37215), (6, 37212), (7, 37209), (8, 37182), (9, 37155), (11, 37116), (14, 37035), (17, 37023), (21, 36945),

Gene: SmellyB_58 Start: 37009, Stop: 36566, Start Num: 3
Candidate Starts for SmellyB_58:
(Start: 3 @37009 has 55 MA's), (6, 36865), (7, 36862), (8, 36835), (11, 36769), (15, 36709), (18, 36664),

Gene: SnapTap_57 Start: 38234, Stop: 37740, Start Num: 3
Candidate Starts for SnapTap_57:
(Start: 3 @38234 has 55 MA's), (4, 38096), (5, 38090), (6, 38087), (7, 38084), (8, 38057), (9, 38030), (11, 37991), (12, 37961), (17, 37877), (20, 37802),

Gene: SuperAwesome_58 Start: 37014, Stop: 36580, Start Num: 3
Candidate Starts for SuperAwesome_58:
(Start: 3 @37014 has 55 MA's), (6, 36870), (7, 36867), (8, 36840), (11, 36774), (15, 36714),

Gene: SuperCallie99_57 Start: 36896, Stop: 36453, Start Num: 3
Candidate Starts for SuperCallie99_57:
(Start: 3 @36896 has 55 MA's), (6, 36752), (7, 36749), (8, 36722), (11, 36656), (15, 36596), (18, 36551),

Gene: SweetiePie_57 Start: 38366, Stop: 37872, Start Num: 3
Candidate Starts for SweetiePie_57:
(Start: 3 @38366 has 55 MA's), (4, 38228), (5, 38222), (6, 38219), (7, 38216), (8, 38189), (9, 38162), (11, 38123), (12, 38093), (17, 38009), (20, 37934),

Gene: Temprado_61 Start: 37472, Stop: 37029, Start Num: 3
Candidate Starts for Temprado_61:
(Start: 3 @37472 has 55 MA's), (6, 37328), (7, 37325), (8, 37298), (11, 37232), (15, 37172), (18, 37127),

Gene: TipsytheTRex_53 Start: 37429, Stop: 36965, Start Num: 3
Candidate Starts for TipsytheTRex_53:
(Start: 3 @37429 has 55 MA's), (5, 37285), (6, 37282), (7, 37279), (8, 37252), (9, 37225), (11, 37186), (14, 37105), (17, 37093), (21, 37015),

Gene: ToneTone_56 Start: 37032, Stop: 36589, Start Num: 3
Candidate Starts for ToneTone_56:
(Start: 3 @37032 has 55 MA's), (6, 36888), (7, 36885), (8, 36858), (11, 36792), (15, 36732), (18, 36687),

Gene: Tucker_59 Start: 37201, Stop: 36758, Start Num: 3
Candidate Starts for Tucker_59:
(Start: 3 @37201 has 55 MA's), (6, 37057), (7, 37054), (8, 37027), (11, 36961), (15, 36901), (18, 36856),

Gene: VohminGhazi_58 Start: 37010, Stop: 36567, Start Num: 3
Candidate Starts for VohminGhazi_58:
(Start: 3 @37010 has 55 MA's), (6, 36866), (7, 36863), (8, 36836), (11, 36770), (15, 36710), (18, 36665),

Gene: Wiks_58 Start: 37103, Stop: 36660, Start Num: 3
Candidate Starts for Wiks_58:
(Start: 3 @37103 has 55 MA's), (6, 36959), (7, 36956), (8, 36929), (11, 36863), (15, 36803), (18, 36758),

Gene: WunderPhul_59 Start: 37101, Stop: 36658, Start Num: 3

Candidate Starts for WunderPhul_59:

(Start: 3 @37101 has 55 MA's), (6, 36957), (7, 36954), (8, 36927), (11, 36861), (15, 36801), (18, 36756),

Gene: Yokurt_59 Start: 37103, Stop: 36660, Start Num: 3

Candidate Starts for Yokurt_59:

(Start: 3 @37103 has 55 MA's), (6, 36959), (7, 36956), (8, 36929), (11, 36863), (15, 36803), (18, 36758),

Gene: Zaka_59 Start: 37103, Stop: 36660, Start Num: 3

Candidate Starts for Zaka_59:

(Start: 3 @37103 has 55 MA's), (6, 36959), (7, 36956), (8, 36929), (11, 36863), (15, 36803), (18, 36758),

Gene: Zulu_60 Start: 37481, Stop: 37038, Start Num: 3

Candidate Starts for Zulu_60:

(Start: 3 @37481 has 55 MA's), (6, 37337), (7, 37334), (8, 37307), (11, 37241), (15, 37181), (18, 37136),