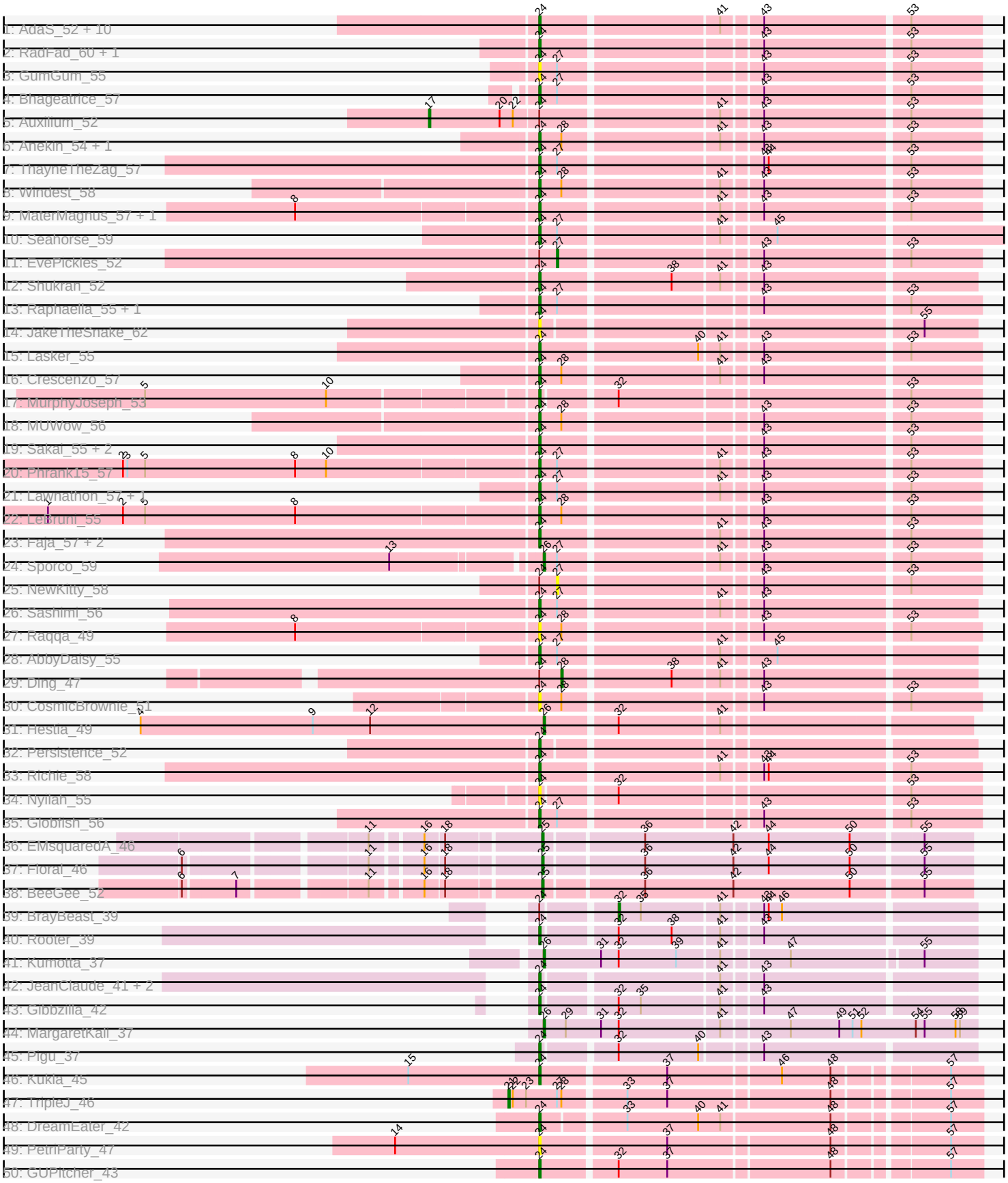
Pham 347527


1: AdaS_52 + 10
2: RadFad_60 + 1
3: GumGum_55
4: Bhageatrice_57
5: Auxilium_52
6: Anekin_54 + 1
7: ThayneTheZag_57
8: Windest_58
9: MatenMagnus_57 + 1
10: Seahorse_59
11: EvePickles_52
12: Shukran_52
13: Raphaella_55 + 1
14: JakeTheSnake_62
15: Lasker_55
16: Crescenzo_57
17: MurphyJoseph_53
18: MOWow_56
19: Sakai_55 + 2
20: Phrank15_57
21: Lawnathon_57 + 1
22: LeBrunl_55
23: Faja_57 + 2
24: Sporco_59
25: NewKitty_58
26: Sashimi_56
27: Raqqa_49
28: AbbyDaisy_55
29: Ding_47
30: CosmicBrownie_51
31: Hestia_49
32: Persistence_52
33: Richie_58
34: Nyllan_55
35: Globlish_56
36: EMsquaredA_46
37: Floral_46
38: BeeGee_52
39: BrayBeast_39
40: Rooter_39
41: Kumotta_37
42: JeanClaude_41 + 2
43: Gibbzilla_42
44: MargaretKali_37
45: Pigu_37
46: Kukla_45
47: TripleJ_46
48: DreamEater_42
49: PetriParty_47
50: GUPitcher_43

Pham 347527


51: Cassini_51 + 1
52: Zucker_48
53: Bauer_48
54: BlackSpider_43
55: BellaJr_46
56: Arv2_39
57: Jace_34
58: DillyDally_33

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 347527 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347527 has 80 members, 14 are drafts.

Phages represented in each track:
• Track 1 : AdaS_52, Mapleville_52, BenchScraper_55, MidnightRain_60, BillyTP_58, Vopal_59, CookieBear_56, Isolde_55, JellyBread_53, BasketStar_58, YoungHarleezy_56
• Track 2 : RadFad_60, Hillester_60
• Track 3 : GumGum_55
• Track 4 : Bhageatrice_57
• Track 5 : Auxilium_52
• Track 6 : Anekin_54, DarwinJr_59
• Track 7 : ThayneTheZag_57
• Track 8 : Windest_58
• Track 9 : MaterMagnus_57, Aikyam_55
• Track 10 : Seahorse_59
• Track 11 : EvePickles_52
• Track 12 : Shukran_52
• Track 13 : Raphaella_55, Kabloowy_56
• Track 14 : JakeTheSnake_62
• Track 15 : Lasker_55
• Track 16 : Crescenzo_57
• Track 17 : MurphyJoseph_53
• Track 18 : MUWow_56
• Track 19 : Sakai_55, BlueShadow_56, Gorpy_56
• Track 20 : Phrank15_57
• Track 21 : Lawnathon_57, SonDevVon_60
• Track 22 : LeBruni_55
• Track 23 : Faja_57, Tiff81_52, Satrap_57
• Track 24 : Sporco_59
• Track 25 : NewKitty_58
• Track 26 : Sashimi_56
• Track 27 : Raqqa_49
• Track 28 : AbbyDaisy_55
• Track 29 : Ding_47
• Track 30 : CosmicBrownie_51
• Track 31 : Hestia_49
• Track 32 : Persistence_52
• Track 33 : Richie_58
• Track 34 : Nyilah_55
• Track 35 : Globfish_56

• Track 36 : EMsquaredA_46
• Track 37 : Floral_46
• Track 38 : BeeGee_52
• Track 39 : BrayBeast_39
• Track 40 : Rooter_39
• Track 41 : Kumotta_37
• Track 42 : JeanClaude_41, Sarge_37, Shoya_43
• Track 43 : Gibbzilla_42
• Track 44 : MargaretKali_37
• Track 45 : Pigu_37
• Track 46 : Kukla_45
• Track 47 : TripleJ_46
• Track 48 : DreamEater_42
• Track 49 : PetriParty_47
• Track 50 : GUPitcher_43
• Track 51 : Cassini_51, SpicyFrank_60
• Track 52 : Zucker_48
• Track 53 : Bauer_48
• Track 54 : BlackSpider_43
• Track 55 : BellaJr_46
• Track 56 : ArV2_39
• Track 57 : Jace_34
• Track 58 : DillyDally_33

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

The start number called the most often in the published annotations is 24, it was called in 51 of the 66 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AbbyDaisy_55, AdaS_52, Aikyam_55, Anekin_54, BasketStar_58, BellaJr_46, BenchScraper_55, Bhageatrice_57, BillyTP_58, BlackSpider_43, BlueShadow_56, Cassini_51, CookieBear_56, CosmicBrownie_51, Crescenzo_57, DarwinJr_59, DillyDally_33, DreamEater_42, Faja_57, GUPitcher_43, Gibbzilla_42, Globfish_56, Gorpy_56, GumGum_55, Hillester_60, Isolde_55, JakeTheSnake_62, JeanClaude_41, JellyBread_53, Kabloowy_56, Kukla_45, Lasker_55, Lawnathon_57, LeBruni_55, MUWow_56, Mapleville_52, MaterMagnus_57, MidnightRain_60, MurphyJoseph_53, Nyilah_55, Persistence_52, PetriParty_47, Phrank15_57, Pigu_37, RadFad_60, Raphaella_55, Raqqa_49, Richie_58, Rooter_39, Sakai_55, Sarge_37, Sashimi_56, Satrap_57, Seahorse_59, Shoya_43, Shukran_52, SonDevVon_60, SpicyFrank_60, ThayneTheZag_57, Tiff81_52, Vopal_59, Windest_58, YoungHarleezy_56,

Genes that have the "Most Annotated" start but do not call it:
• Auxilium_52, BrayBeast_39, Ding_47, EvePickles_52, NewKitty_58,

Genes that do not have the "Most Annotated" start:
• ArV2_39, Bauer_48, BeeGee_52, EMsquaredA_46, Floral_46, Hestia_49, Jace_34, Kumotta_37, MargaretKali_37, Sporco_59, TripleJ_46, Zucker_48,

Summary by start number:

Start 17:
• Found in 1 of 80 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 66
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Auxilium_52 (AY),

Start 21:
• Found in 1 of 80 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 66
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TripleJ_46 (FJ),

Start 24:
• Found in 68 of 80 (85.0%) of genes in pham
• Manual Annotations of this start: 51 of 66
• Called 92.6% of time when present
• Phage (with cluster) where this start called: AbbyDaisy_55 (AY), AdaS_52 (AY), Aikyam_55 (AY), Anekin_54 (AY), BasketStar_58 (AY), BellaJr_46 (FN), BenchScraper_55 (AY), Bhageatrice_57 (AY), BillyTP_58 (AY), BlackSpider_43 (FN), BlueShadow_56 (AY), Cassini_51 (FN), CookieBear_56 (AY), CosmicBrownie_51 (AY), Crescenzo_57 (AY), DarwinJr_59 (AY), DillyDally_33 (singleton), DreamEater_42 (FJ), Faja_57 (AY), GUPitcher_43 (FJ), Gibbzilla_42 (FB), Globfish_56 (AY), Gorpy_56 (AY), GumGum_55 (AY), Hillester_60 (AY), Isolde_55 (AY), JakeTheSnake_62 (AY), JeanClaude_41 (FB), JellyBread_53 (AY), Kabloowy_56 (AY), Kukla_45 (FJ), Lasker_55 (AY), Lawnathon_57 (AY), LeBruni_55 (AY), MUWow_56 (AY), Mapleville_52 (AY), MaterMagnus_57 (AY), MidnightRain_60 (AY), MurphyJoseph_53 (AY), Nyilah_55 (AY), Persistence_52 (AY), PetriParty_47 (FJ), Phrank15_57 (AY), Pigu_37 (FB), RadFad_60 (AY), Raphaella_55 (AY), Raqqa_49 (AY), Richie_58 (AY), Rooter_39 (FB), Sakai_55 (AY), Sarge_37 (FB), Sashimi_56 (AY), Satrap_57 (AY), Seahorse_59 (AY), Shoya_43 (FB), Shukran_52 (AY), SonDevVon_60 (AY), SpicyFrank_60 (AY), ThayneTheZag_57 (AY), Tiff81_52 (AY), Vopal_59 (AY), Windest_58 (AY), YoungHarleezy_56 (AY),

Start 25:
• Found in 3 of 80 (3.8%) of genes in pham
• Manual Annotations of this start: 3 of 66
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BeeGee_52 (CY5), EMsquaredA_46 (CY1), Floral_46 (CY1),

Start 26:
• Found in 8 of 80 (10.0%) of genes in pham
• Manual Annotations of this start: 6 of 66
• Called 87.5% of time when present
• Phage (with cluster) where this start called: ArV2_39 (singleton), Bauer_48 (FN), Hestia_49 (AY), Kumotta_37 (FB), MargaretKali_37 (FB), Sporco_59 (AY), Zucker_48 (FN),

Start 27:
• Found in 16 of 80 (20.0%) of genes in pham
• Manual Annotations of this start: 1 of 66

• Called 12.5% of time when present
• Phage (with cluster) where this start called: EvePickles_52 (AY), NewKitty_58 (AY),

Start 28:
• Found in 10 of 80 (12.5%) of genes in pham
• Manual Annotations of this start: 1 of 66
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Ding_47 (AY),

Start 30:
• Found in 1 of 80 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 66
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jace_34 (singleton),

Start 32:
• Found in 13 of 80 (16.2%) of genes in pham
• Manual Annotations of this start: 1 of 66
• Called 7.7% of time when present
• Phage (with cluster) where this start called: BrayBeast_39 (FB),

Summary by clusters:

There are 7 clusters represented in this pham: CY1, CY5, singleton, FB, AY, FJ, FN,

Info for manual annotations of cluster AY:
•Start number 17 was manually annotated 1 time for cluster AY.
•Start number 24 was manually annotated 40 times for cluster AY.
•Start number 26 was manually annotated 2 times for cluster AY.
•Start number 27 was manually annotated 1 time for cluster AY.
•Start number 28 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CY1:
•Start number 25 was manually annotated 2 times for cluster CY1.

Info for manual annotations of cluster CY5:
•Start number 25 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster FB:
•Start number 24 was manually annotated 5 times for cluster FB.
•Start number 26 was manually annotated 2 times for cluster FB.
•Start number 32 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FJ:
•Start number 21 was manually annotated 1 time for cluster FJ.
•Start number 24 was manually annotated 3 times for cluster FJ.

Info for manual annotations of cluster FN:
•Start number 24 was manually annotated 2 times for cluster FN.
•Start number 26 was manually annotated 2 times for cluster FN.

Gene Information:

Gene: AbbyDaisy_55 Start: 33488, Stop: 33763, Start Num: 24
Candidate Starts for AbbyDaisy_55:
(Start: 24 @33488 has 51 MA's), (Start: 27 @33500 has 1 MA's), (41, 33602), (45, 33635),

Gene: AdaS_52 Start: 31425, Stop: 31703, Start Num: 24
Candidate Starts for AdaS_52:
(Start: 24 @31425 has 51 MA's), (41, 31539), (43, 31563), (53, 31656),

Gene: Aikyam_55 Start: 31597, Stop: 31875, Start Num: 24
Candidate Starts for Aikyam_55:
(8, 31441), (Start: 24 @31597 has 51 MA's), (41, 31711), (43, 31735), (53, 31828),

Gene: Anekin_54 Start: 33269, Stop: 33547, Start Num: 24
Candidate Starts for Anekin_54:
(Start: 24 @33269 has 51 MA's), (Start: 28 @33284 has 1 MA's), (41, 33383), (43, 33407), (53, 33500),

Gene: ArV2_39 Start: 25620, Stop: 25892, Start Num: 26
Candidate Starts for ArV2_39:
(Start: 26 @25620 has 6 MA's), (41, 25731), (59, 25881),

Gene: Auxilium_52 Start: 30682, Stop: 31032, Start Num: 17
Candidate Starts for Auxilium_52:
(Start: 17 @30682 has 1 MA's), (20, 30730), (22, 30739), (Start: 24 @30754 has 51 MA's), (41, 30868), (43, 30892), (53, 30985),

Gene: BasketStar_58 Start: 34095, Stop: 34373, Start Num: 24
Candidate Starts for BasketStar_58:
(Start: 24 @34095 has 51 MA's), (41, 34209), (43, 34233), (53, 34326),

Gene: Bauer_48 Start: 30759, Stop: 31028, Start Num: 26
Candidate Starts for Bauer_48:
(Start: 26 @30759 has 6 MA's), (Start: 32 @30804 has 1 MA's), (41, 30870),

Gene: BeeGee_52 Start: 36970, Stop: 37248, Start Num: 25
Candidate Starts for BeeGee_52:
(6, 36766), (7, 36799), (11, 36874), (16, 36904), (18, 36916), (Start: 25 @36970 has 3 MA's), (36, 37033), (42, 37093), (50, 37171), (55, 37216),

Gene: BellaJr_46 Start: 31330, Stop: 31605, Start Num: 24
Candidate Starts for BellaJr_46:
(Start: 24 @31330 has 51 MA's), (41, 31447), (49, 31522),

Gene: BenchScraper_55 Start: 32919, Stop: 33197, Start Num: 24
Candidate Starts for BenchScraper_55:
(Start: 24 @32919 has 51 MA's), (41, 33033), (43, 33057), (53, 33150),

Gene: Bhageatrice_57 Start: 35193, Stop: 35471, Start Num: 24
Candidate Starts for Bhageatrice_57:
(Start: 24 @35193 has 51 MA's), (Start: 27 @35205 has 1 MA's), (43, 35331), (53, 35424),

Gene: BillyTP_58 Start: 34791, Stop: 35069, Start Num: 24

Candidate Starts for BillyTP_58:
(Start: 24 @34791 has 51 MA's), (41, 34905), (43, 34929), (53, 35022),

Gene: BlackSpider_43 Start: 29911, Stop: 30186, Start Num: 24
Candidate Starts for BlackSpider_43:
(Start: 24 @29911 has 51 MA's), (41, 30028), (49, 30103),

Gene: BlueShadow_56 Start: 33581, Stop: 33859, Start Num: 24
Candidate Starts for BlueShadow_56:
(Start: 24 @33581 has 51 MA's), (43, 33719), (53, 33812),

Gene: BrayBeast_39 Start: 26993, Stop: 27220, Start Num: 32
Candidate Starts for BrayBeast_39:
(Start: 24 @26948 has 51 MA's), (Start: 32 @26993 has 1 MA's), (35, 27008), (41, 27059), (43, 27083), (44, 27086), (46, 27095),

Gene: Cassini_51 Start: 32280, Stop: 32558, Start Num: 24
Candidate Starts for Cassini_51:
(10, 32145), (Start: 24 @32280 has 51 MA's), (43, 32418), (53, 32511),

Gene: CookieBear_56 Start: 33175, Stop: 33453, Start Num: 24
Candidate Starts for CookieBear_56:
(Start: 24 @33175 has 51 MA's), (41, 33289), (43, 33313), (53, 33406),

Gene: CosmicBrownie_51 Start: 31627, Stop: 31905, Start Num: 24
Candidate Starts for CosmicBrownie_51:
(Start: 24 @31627 has 51 MA's), (Start: 28 @31642 has 1 MA's), (43, 31765), (53, 31858),

Gene: Crescenzo_57 Start: 34320, Stop: 34598, Start Num: 24
Candidate Starts for Crescenzo_57:
(Start: 24 @34320 has 51 MA's), (Start: 28 @34335 has 1 MA's), (41, 34434), (43, 34458),

Gene: DarwinJr_59 Start: 34388, Stop: 34666, Start Num: 24
Candidate Starts for DarwinJr_59:
(Start: 24 @34388 has 51 MA's), (Start: 28 @34403 has 1 MA's), (41, 34502), (43, 34526), (53, 34619),

Gene: DillyDally_33 Start: 25298, Stop: 25567, Start Num: 24
Candidate Starts for DillyDally_33:
(Start: 24 @25298 has 51 MA's), (Start: 26 @25301 has 6 MA's), (Start: 32 @25346 has 1 MA's), (34, 25358), (55, 25538),

Gene: Ding_47 Start: 31537, Stop: 31797, Start Num: 28
Candidate Starts for Ding_47:
(Start: 24 @31522 has 51 MA's), (Start: 28 @31537 has 1 MA's), (38, 31606), (41, 31636), (43, 31660),

Gene: DreamEater_42 Start: 31457, Stop: 31732, Start Num: 24
Candidate Starts for DreamEater_42:
(Start: 24 @31457 has 51 MA's), (33, 31508), (40, 31556), (41, 31571), (48, 31643), (57, 31712),

Gene: EMsquaredA_46 Start: 35783, Stop: 36061, Start Num: 25
Candidate Starts for EMsquaredA_46:
(11, 35687), (16, 35717), (18, 35729), (Start: 25 @35783 has 3 MA's), (36, 35846), (42, 35906), (44, 35930), (50, 35984), (55, 36029),

Gene: EvePickles_52 Start: 33387, Stop: 33653, Start Num: 27
Candidate Starts for EvePickles_52:
(Start: 24 @33375 has 51 MA's), (Start: 27 @33387 has 1 MA's), (43, 33513), (53, 33606),

Gene: Faja_57 Start: 34759, Stop: 35037, Start Num: 24
Candidate Starts for Faja_57:
(Start: 24 @34759 has 51 MA's), (41, 34873), (43, 34897), (53, 34990),

Gene: Floral_46 Start: 37267, Stop: 37545, Start Num: 25
Candidate Starts for Floral_46:
(6, 37063), (11, 37171), (16, 37201), (18, 37213), (Start: 25 @37267 has 3 MA's), (36, 37330), (42, 37390), (44, 37414), (50, 37468), (55, 37513),

Gene: GUPitcher_43 Start: 31945, Stop: 32220, Start Num: 24
Candidate Starts for GUPitcher_43:
(Start: 24 @31945 has 51 MA's), (Start: 32 @31993 has 1 MA's), (37, 32026), (48, 32131), (57, 32200),

Gene: Gibbzilla_42 Start: 27501, Stop: 27773, Start Num: 24
Candidate Starts for Gibbzilla_42:
(Start: 24 @27501 has 51 MA's), (Start: 32 @27546 has 1 MA's), (35, 27561), (41, 27612), (43, 27636),

Gene: Globfish_56 Start: 33274, Stop: 33552, Start Num: 24
Candidate Starts for Globfish_56:
(Start: 24 @33274 has 51 MA's), (Start: 27 @33286 has 1 MA's), (43, 33412), (53, 33505),

Gene: Gorpy_56 Start: 34167, Stop: 34445, Start Num: 24
Candidate Starts for Gorpy_56:
(Start: 24 @34167 has 51 MA's), (43, 34305), (53, 34398),

Gene: GumGum_55 Start: 32309, Stop: 32587, Start Num: 24
Candidate Starts for GumGum_55:
(Start: 24 @32309 has 51 MA's), (Start: 27 @32321 has 1 MA's), (43, 32447), (53, 32540),

Gene: Hestia_49 Start: 30820, Stop: 31089, Start Num: 26
Candidate Starts for Hestia_49:
(4, 30547), (9, 30664), (12, 30703), (Start: 26 @30820 has 6 MA's), (Start: 32 @30865 has 1 MA's), (41, 30931),

Gene: Hillester_60 Start: 34520, Stop: 34798, Start Num: 24
Candidate Starts for Hillester_60:
(Start: 24 @34520 has 51 MA's), (43, 34658), (53, 34751),

Gene: Isolde_55 Start: 32844, Stop: 33122, Start Num: 24
Candidate Starts for Isolde_55:
(Start: 24 @32844 has 51 MA's), (41, 32958), (43, 32982), (53, 33075),

Gene: Jace_34 Start: 27442, Stop: 27693, Start Num: 30
Candidate Starts for Jace_34:
(19, 27382), (Start: 30 @27442 has 1 MA's), (40, 27520), (42, 27544), (56, 27667),

Gene: JakeTheSnake_62 Start: 35618, Stop: 35890, Start Num: 24
Candidate Starts for JakeTheSnake_62:

(Start: 24 @35618 has 51 MA's), (55, 35855),

Gene: JeanClaude_41 Start: 25994, Stop: 26266, Start Num: 24
Candidate Starts for JeanClaude_41:
(Start: 24 @25994 has 51 MA's), (41, 26105), (43, 26129),

Gene: JellyBread_53 Start: 31965, Stop: 32243, Start Num: 24
Candidate Starts for JellyBread_53:
(Start: 24 @31965 has 51 MA's), (41, 32079), (43, 32103), (53, 32196),

Gene: Kabloowy_56 Start: 33861, Stop: 34139, Start Num: 24
Candidate Starts for Kabloowy_56:
(Start: 24 @33861 has 51 MA's), (Start: 27 @33873 has 1 MA's), (43, 33999), (53, 34092),

Gene: Kukla_45 Start: 31182, Stop: 31457, Start Num: 24
Candidate Starts for Kukla_45:
(15, 31095), (Start: 24 @31182 has 51 MA's), (37, 31263), (46, 31335), (48, 31368), (57, 31437),

Gene: Kumotta_37 Start: 27134, Stop: 27412, Start Num: 26
Candidate Starts for Kumotta_37:
(Start: 26 @27134 has 6 MA's), (31, 27173), (Start: 32 @27185 has 1 MA's), (39, 27224), (41, 27251), (47, 27293), (55, 27377),

Gene: Lasker_55 Start: 33619, Stop: 33897, Start Num: 24
Candidate Starts for Lasker_55:
(Start: 24 @33619 has 51 MA's), (40, 33721), (41, 33733), (43, 33757), (53, 33850),

Gene: Lawnathon_57 Start: 33336, Stop: 33614, Start Num: 24
Candidate Starts for Lawnathon_57:
(Start: 24 @33336 has 51 MA's), (Start: 27 @33348 has 1 MA's), (41, 33450), (43, 33474), (53, 33567),

Gene: LeBruni_55 Start: 32543, Stop: 32821, Start Num: 24
Candidate Starts for LeBruni_55:
(1, 32219), (2, 32270), (5, 32285), (8, 32387), (Start: 24 @32543 has 51 MA's), (Start: 28 @32558 has 1 MA's), (43, 32681), (53, 32774),

Gene: MUWow_56 Start: 33256, Stop: 33534, Start Num: 24
Candidate Starts for MUWow_56:
(Start: 24 @33256 has 51 MA's), (Start: 28 @33271 has 1 MA's), (43, 33394), (53, 33487),

Gene: Mapleville_52 Start: 32667, Stop: 32945, Start Num: 24
Candidate Starts for Mapleville_52:
(Start: 24 @32667 has 51 MA's), (41, 32781), (43, 32805), (53, 32898),

Gene: MargaretKali_37 Start: 26763, Stop: 27047, Start Num: 26
Candidate Starts for MargaretKali_37:
(Start: 26 @26763 has 6 MA's), (29, 26778), (31, 26802), (Start: 32 @26814 has 1 MA's), (41, 26880), (47, 26922), (49, 26955), (51, 26964), (52, 26970), (54, 27006), (55, 27012), (58, 27033), (59, 27036),

Gene: MaterMagnus_57 Start: 33769, Stop: 34047, Start Num: 24
Candidate Starts for MaterMagnus_57:
(8, 33613), (Start: 24 @33769 has 51 MA's), (41, 33883), (43, 33907), (53, 34000),

Gene: MidnightRain_60 Start: 34697, Stop: 34975, Start Num: 24
Candidate Starts for MidnightRain_60:
(Start: 24 @34697 has 51 MA's), (41, 34811), (43, 34835), (53, 34928),

Gene: MurphyJoseph_53 Start: 32108, Stop: 32383, Start Num: 24
Candidate Starts for MurphyJoseph_53:
(5, 31856), (10, 31979), (Start: 24 @32108 has 51 MA's), (Start: 32 @32153 has 1 MA's), (53, 32336),

Gene: NewKitty_58 Start: 33052, Stop: 33318, Start Num: 27
Candidate Starts for NewKitty_58:
(Start: 24 @33040 has 51 MA's), (Start: 27 @33052 has 1 MA's), (43, 33178), (53, 33271),

Gene: Nyilah_55 Start: 31786, Stop: 32061, Start Num: 24
Candidate Starts for Nyilah_55:
(Start: 24 @31786 has 51 MA's), (Start: 32 @31831 has 1 MA's), (53, 32014),

Gene: Persistence_52 Start: 32315, Stop: 32587, Start Num: 24
Candidate Starts for Persistence_52:
(Start: 24 @32315 has 51 MA's),

Gene: PetriParty_47 Start: 31419, Stop: 31694, Start Num: 24
Candidate Starts for PetriParty_47:
(14, 31323), (Start: 24 @31419 has 51 MA's), (37, 31500), (48, 31605), (57, 31674),

Gene: Phrank15_57 Start: 33473, Stop: 33751, Start Num: 24
Candidate Starts for Phrank15_57:
(2, 33200), (3, 33203), (5, 33215), (8, 33317), (10, 33338), (Start: 24 @33473 has 51 MA's), (Start: 27 @33485 has 1 MA's), (41, 33587), (43, 33611), (53, 33704),

Gene: Pigu_37 Start: 26113, Stop: 26385, Start Num: 24
Candidate Starts for Pigu_37:
(Start: 24 @26113 has 51 MA's), (Start: 32 @26158 has 1 MA's), (40, 26212), (43, 26248),

Gene: RadFad_60 Start: 34520, Stop: 34798, Start Num: 24
Candidate Starts for RadFad_60:
(Start: 24 @34520 has 51 MA's), (43, 34658), (53, 34751),

Gene: Raphaella_55 Start: 32779, Stop: 33057, Start Num: 24
Candidate Starts for Raphaella_55:
(Start: 24 @32779 has 51 MA's), (Start: 27 @32791 has 1 MA's), (43, 32917), (53, 33010),

Gene: Raqqa_49 Start: 30784, Stop: 31062, Start Num: 24
Candidate Starts for Raqqa_49:
(8, 30628), (Start: 24 @30784 has 51 MA's), (Start: 28 @30799 has 1 MA's), (43, 30922), (53, 31015),

Gene: Richie_58 Start: 33845, Stop: 34123, Start Num: 24
Candidate Starts for Richie_58:
(Start: 24 @33845 has 51 MA's), (41, 33959), (43, 33983), (44, 33986), (53, 34076),

Gene: Rooter_39 Start: 26486, Stop: 26758, Start Num: 24
Candidate Starts for Rooter_39:
(Start: 24 @26486 has 51 MA's), (Start: 32 @26531 has 1 MA's), (38, 26567), (41, 26597), (43, 26621),

Gene: Sakai_55 Start: 32878, Stop: 33156, Start Num: 24
Candidate Starts for Sakai_55:
(Start: 24 @32878 has 51 MA's), (43, 33016), (53, 33109),

Gene: Sarge_37 Start: 25294, Stop: 25566, Start Num: 24
Candidate Starts for Sarge_37:
(Start: 24 @25294 has 51 MA's), (41, 25405), (43, 25429),

Gene: Sashimi_56 Start: 34105, Stop: 34380, Start Num: 24
Candidate Starts for Sashimi_56:
(Start: 24 @34105 has 51 MA's), (Start: 27 @34117 has 1 MA's), (41, 34219), (43, 34243),

Gene: Satrap_57 Start: 33307, Stop: 33585, Start Num: 24
Candidate Starts for Satrap_57:
(Start: 24 @33307 has 51 MA's), (41, 33421), (43, 33445), (53, 33538),

Gene: Seahorse_59 Start: 35114, Stop: 35410, Start Num: 24
Candidate Starts for Seahorse_59:
(Start: 24 @35114 has 51 MA's), (Start: 27 @35126 has 1 MA's), (41, 35228), (45, 35261),

Gene: Shoya_43 Start: 27262, Stop: 27534, Start Num: 24
Candidate Starts for Shoya_43:
(Start: 24 @27262 has 51 MA's), (41, 27373), (43, 27397),

Gene: Shukran_52 Start: 31705, Stop: 31980, Start Num: 24
Candidate Starts for Shukran_52:
(Start: 24 @31705 has 51 MA's), (38, 31789), (41, 31819), (43, 31843),

Gene: SonDevVon_60 Start: 33484, Stop: 33762, Start Num: 24
Candidate Starts for SonDevVon_60:
(Start: 24 @33484 has 51 MA's), (Start: 27 @33496 has 1 MA's), (41, 33598), (43, 33622), (53, 33715),

Gene: SpicyFrank_60 Start: 34383, Stop: 34661, Start Num: 24
Candidate Starts for SpicyFrank_60:
(10, 34248), (Start: 24 @34383 has 51 MA's), (43, 34521), (53, 34614),

Gene: Sporco_59 Start: 34336, Stop: 34611, Start Num: 26
Candidate Starts for Sporco_59:
(13, 34246), (Start: 26 @34336 has 6 MA's), (Start: 27 @34345 has 1 MA's), (41, 34447), (43, 34471), (53, 34564),

Gene: ThayneTheZag_57 Start: 32952, Stop: 33230, Start Num: 24
Candidate Starts for ThayneTheZag_57:
(Start: 24 @32952 has 51 MA's), (Start: 27 @32964 has 1 MA's), (43, 33090), (44, 33093), (53, 33183),

Gene: Tiff81_52 Start: 31289, Stop: 31567, Start Num: 24
Candidate Starts for Tiff81_52:
(Start: 24 @31289 has 51 MA's), (41, 31403), (43, 31427), (53, 31520),

Gene: TripleJ_46 Start: 31114, Stop: 31410, Start Num: 21
Candidate Starts for TripleJ_46:
(Start: 21 @31114 has 1 MA's), (22, 31117), (23, 31126), (Start: 27 @31147 has 1 MA's), (Start: 28 @31150 has 1 MA's), (33, 31189), (37, 31216), (48, 31321), (57, 31390),

Gene: Vopal_59 Start: 36414, Stop: 36692, Start Num: 24
Candidate Starts for Vopal_59:
(Start: 24 @36414 has 51 MA's), (41, 36528), (43, 36552), (53, 36645),

Gene: Windest_58 Start: 32184, Stop: 32462, Start Num: 24
Candidate Starts for Windest_58:
(Start: 24 @32184 has 51 MA's), (Start: 28 @32199 has 1 MA's), (41, 32298), (43, 32322), (53, 32415),

Gene: YoungHarleezy_56 Start: 33342, Stop: 33620, Start Num: 24
Candidate Starts for YoungHarleezy_56:
(Start: 24 @33342 has 51 MA's), (41, 33456), (43, 33480), (53, 33573),

Gene: Zucker_48 Start: 31843, Stop: 32112, Start Num: 26
Candidate Starts for Zucker_48:
(Start: 26 @31843 has 6 MA's), (Start: 32 @31888 has 1 MA's), (41, 31954),