Pham 347425


1: Gail_51
2: Sunhee_49
3: Nedarya_44
4: Ravana_50
5: EagleEye_47 + 2
6: Agape74_48 + 4
7: HippoHollow_46 + 1
8: Equemioh13_47 + 10
9: LadyBird_49 + 3
10: SwirlSquare_47
11: Bugsy_48
12: CRB1_48
13: Smeagan_49 + 4
14: Pukovnik_45
15: HarryHoudini_47
16: Trooper_47
17: 20ES_47 + 3
18: IronMan_46
19: Leviathan_48
20: Herbertwm_43
21: Echild_46 + 1
22: BabyBack_44
23: Piro94_46 + 1
24: MissWhite_44
25: Fameo_46
26: Landor_46 + 1
27: TarsusIV_44
28: FatCactus_37
29: Anthony_41
30: Lilbunny_45 + 25
31: BennyP_47 + 9
32: Garak_48 + 4
33: Priamo_48
34: GreedyLawyer_46
35: Hammer_48
36: Blue7_49 + 1
37: Koko_48
38: Blinn1_49 + 1
39: Celestialunch_43
40: SheaKeira_44
41: Klodlith_44 + 2
42: MegTheThird_44

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 347425 Report

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

Pham number 347425 has 114 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Gail_51
• Track 2 : Sunhee_49
• Track 3 : Nedarya_44
• Track 4 : Ravana_50
• Track 5 : EagleEye_47, PainterBoy_46, Lucyedi_46
• Track 6 : Agape74_48, Iwokeuplikedis_49, JoshKayV_48, Turbido_47, Jerm_48
• Track 7 : HippoHollow_46, Heffalump_45
• Track 8 : Equemioh13_47, WideWale_47, MiculUcigas_46, Baehexic_45, Updawg_47, Centaur_47, Gratitude_47, NaSiaTalie_46, Sknot_46, Terrific_47, Flare16_46
• Track 9 : LadyBird_49, AN3_47, DudeLittle_45, VA6_45
• Track 10 : SwirlSquare_47
• Track 11 : Bugsy_48
• Track 12 : CRB1_48
• Track 13 : Smeagan_49, Dignity_48, AbbyPaige_48, Whabigail7_47, LilTurb_47
• Track 14 : Pukovnik_45
• Track 15 : HarryHoudini_47
• Track 16 : Trooper_47
• Track 17 : 20ES_47, First_0046, BengiVuitton_46, Deloris_45
• Track 18 : IronMan_46
• Track 19 : Leviathan_48
• Track 20 : Herbertwm_43
• Track 21 : Echild_46, Benvolio_43
• Track 22 : BabyBack_44
• Track 23 : Piro94_46, Drake55_48
• Track 24 : MissWhite_44
• Track 25 : Fameo_46
• Track 26 : Landor_46, Bactobuster_45
• Track 27 : TarsusIV_44
• Track 28 : FatCactus_37
• Track 29 : Anthony_41
• Track 30 : Lilbunny_45, Artemis2UCLA_46, ToneTone_43, Isiphiwo_44, Wiks_45, SuperAwesome_46, WunderPhul_46, DaVinci_46, Cookiedough_46, Newrala_46, Zaka_46, Roksolana_47, Pmask_46, Chartreuse_46, Yokurt_46, Neeharika16_46, JewelBug_48, BlessJoy_47, Zulu_47, CloudWang3_46, Hexamo_46, Jeffabunny_46, Jordennis_46, Imbriano_47, Tucker_47, Gruunaga_46

• Track 31 : BennyP_47, Candra_47, Kipper29_46, SmellyB_46, Dorothea_46, VohminGhazi_46, Kazan_47, McFly_46, EricB_46, Hoot_46
• Track 32 : Garak_48, Temprado_47, Helmet_48, Indra_49, Polyphemus_47
• Track 33 : Priamo_48
• Track 34 : GreedyLawyer_46
• Track 35 : Hammer_48
• Track 36 : Blue7_49, Rifter_48
• Track 37 : Koko_48
• Track 38 : Blinn1_49, BABullseye_44
• Track 39 : Celestialunch_43
• Track 40 : SheaKeira_44
• Track 41 : Klodlith_44, Charm_43, DreamTeam1_43
• Track 42 : MegTheThird_44

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

The start number called the most often in the published annotations is 9, it was called in 105 of the 108 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 20ES_47, AN3_47, AbbyPaige_48, Agape74_48, Anthony_41, Artemis2UCLA_46, BABullseye_44, BabyBack_44, Bactobuster_45, Baehexic_45, BengiVuitton_46, BennyP_47, Benvolio_43, BlessJoy_47, Blinn1_49, Blue7_49, Bugsy_48, CRB1_48, Candra_47, Celestialunch_43, Centaur_47, Chartreuse_46, CloudWang3_46, Cookiedough_46, DaVinci_46, Deloris_45, Dignity_48, Dorothea_46, Drake55_48, DudeLittle_45, EagleEye_47, Echild_46, Equemioh13_47, EricB_46, Fameo_46, FatCactus_37, First_0046, Flare16_46, Gail_51, Garak_48, Gratitude_47, GreedyLawyer_46, Gruunaga_46, Hammer_48, HarryHoudini_47, Heffalump_45, Helmet_48, Hexamo_46, HippoHollow_46, Hoot_46, Imbriano_47, Indra_49, IronMan_46, Isiphiwo_44, Iwokeuplikedis_49, Jeffabunny_46, Jerm_48, JewelBug_48, Jordennis_46, JoshKayV_48, Kazan_47, Kipper29_46, Koko_48, LadyBird_49, Landor_46, Leviathan_48, LilTurb_47, Lilbunny_45, Lucyedi_46, McFly_46, MiculUcigas_46, MissWhite_44, NaSiaTalie_46, Nedarya_44, Neeharika16_46, Newrala_46, PainterBoy_46, Piro94_46, Pmask_46, Polyphemus_47, Priamo_48, Pukovnik_45, Ravana_50, Rifter_48, Roksolana_47, SheaKeira_44, Sknot_46, Smeagan_49, SmellyB_46, Sunhee_49, SuperAwesome_46, SwirlSquare_47, TarsusIV_44, Temprado_47, Terrific_47, ToneTone_43, Trooper_47, Tucker_47, Turbido_47, Updawg_47, VA6_45, VohminGhazi_46, Whabigail7_47, WideWale_47, Wiks_45, WunderPhul_46, Yokurt_46, Zaka_46, Zulu_47,

Genes that have the "Most Annotated" start but do not call it:
• MegTheThird_44,

Genes that do not have the "Most Annotated" start:
• Charm_43, DreamTeam1_43, Herbertwm_43, Klodlith_44,

Summary by start number:

Start 6:

• Found in 1 of 114 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 108
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Herbertwm_43 (A2),

Start 8:
• Found in 6 of 114 (5.3%) of genes in pham
• Manual Annotations of this start: 2 of 108
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Charm_43 (A9), DreamTeam1_43 (A9), Klodlith_44 (A9), MegTheThird_44 (A9),

Start 9:
• Found in 110 of 114 (96.5%) of genes in pham
• Manual Annotations of this start: 105 of 108
• Called 99.1% of time when present
• Phage (with cluster) where this start called: 20ES_47 (A2), AN3_47 (A2), AbbyPaige_48 (A2), Agape74_48 (A2), Anthony_41 (A20), Artemis2UCLA_46 (A6), BABullseye_44 (A6), BabyBack_44 (A2), Bactobuster_45 (A2), Baehexic_45 (A2), BengiVuitton_46 (A2), BennyP_47 (A6), Benvolio_43 (A2), BlessJoy_47 (A6), Blinn1_49 (A6), Blue7_49 (A6), Bugsy_48 (A2), CRB1_48 (A2), Candra_47 (A6), Celestialunch_43 (A9), Centaur_47 (A2), Chartreuse_46 (A6), CloudWang3_46 (A6), Cookiedough_46 (A6), DaVinci_46 (A6), Deloris_45 (A2), Dignity_48 (A2), Dorothea_46 (A6), Drake55_48 (A2), DudeLittle_45 (A2), EagleEye_47 (A16), Echild_46 (A2), Equemioh13_47 (A2), EricB_46 (A6), Fameo_46 (A2), FatCactus_37 (A20), First_0046 (A2), Flare16_46 (A2), Gail_51 (A14), Garak_48 (A6), Gratitude_47 (A2), GreedyLawyer_46 (A6), Gruunaga_46 (A6), Hammer_48 (A6), HarryHoudini_47 (A2), Heffalump_45 (A2), Helmet_48 (A6), Hexamo_46 (A6), HippoHollow_46 (A2), Hoot_46 (A6), Imbriano_47 (A6), Indra_49 (A6), IronMan_46 (A2), Isiphiwo_44 (A6), Iwokeuplikedis_49 (A2), Jeffabunny_46 (A6), Jerm_48 (A2), JewelBug_48 (A6), Jordennis_46 (A6), JoshKayV_48 (A2), Kazan_47 (A6), Kipper29_46 (A6), Koko_48 (A6), LadyBird_49 (A2), Landor_46 (A2), Leviathan_48 (A2), LilTurb_47 (A2), Lilbunny_45 (A6), Lucyedi_46 (A16), McFly_46 (A6), MiculUcigas_46 (A2), MissWhite_44 (A2), NaSiaTalie_46 (A2), Nedarya_44 (A15), Neeharika16_46 (A6), Newrala_46 (A6), PainterBoy_46 (A16), Piro94_46 (A2), Pmask_46 (A6), Polyphemus_47 (A6), Priamo_48 (A6), Pukovnik_45 (A2), Ravana_50 (A15), Rifter_48 (A6), Roksolana_47 (A6), SheaKeira_44 (A9), Sknot_46 (A2), Smeagan_49 (A2), SmellyB_46 (A6), Sunhee_49 (A14), SuperAwesome_46 (A6), SwirlSquare_47 (A2), TarsusIV_44 (A2), Temprado_47 (A6), Terrific_47 (A2), ToneTone_43 (A6), Trooper_47 (A2), Tucker_47 (A6), Turbido_47 (A2), Updawg_47 (A2), VA6_45 (A2), VohminGhazi_46 (A6), Whabigail7_47 (A2), WideWale_47 (A2), Wiks_45 (A6), WunderPhul_46 (A6), Yokurt_46 (A6), Zaka_46 (A6), Zulu_47 (A6),

Summary by clusters:

There are 7 clusters represented in this pham: A15, A14, A16, A20, A2, A6, A9,

Info for manual annotations of cluster A14:
•Start number 9 was manually annotated 2 times for cluster A14.

Info for manual annotations of cluster A15:
•Start number 9 was manually annotated 2 times for cluster A15.

Info for manual annotations of cluster A16:
•Start number 9 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A2:
•Start number 6 was manually annotated 1 time for cluster A2.
•Start number 9 was manually annotated 46 times for cluster A2.

Info for manual annotations of cluster A20:
•Start number 9 was manually annotated 2 times for cluster A20.

Info for manual annotations of cluster A6:
•Start number 9 was manually annotated 48 times for cluster A6.

Info for manual annotations of cluster A9:
•Start number 8 was manually annotated 2 times for cluster A9.
•Start number 9 was manually annotated 2 times for cluster A9.

Gene Information:

Gene: 20ES_47 Start: 31813, Stop: 31625, Start Num: 9
Candidate Starts for 20ES_47:
(Start: 9 @31813 has 105 MA's), (34, 31639),

Gene: AN3_47 Start: 32193, Stop: 32005, Start Num: 9
Candidate Starts for AN3_47:
(Start: 9 @32193 has 105 MA's), (27, 32043),

Gene: AbbyPaige_48 Start: 32194, Stop: 32009, Start Num: 9
Candidate Starts for AbbyPaige_48:
(Start: 9 @32194 has 105 MA's), (13, 32149), (27, 32044),

Gene: Agape74_48 Start: 32179, Stop: 31994, Start Num: 9
Candidate Starts for Agape74_48:
(Start: 9 @32179 has 105 MA's), (27, 32029),

Gene: Anthony_41 Start: 29481, Stop: 29272, Start Num: 9
Candidate Starts for Anthony_41:
(Start: 9 @29481 has 105 MA's), (14, 29433), (16, 29430), (26, 29337), (35, 29304),

Gene: Artemis2UCLA_46 Start: 29520, Stop: 29332, Start Num: 9
Candidate Starts for Artemis2UCLA_46:
(Start: 9 @29520 has 105 MA's), (22, 29436), (23, 29433), (24, 29412), (26, 29388),

Gene: BABullseye_44 Start: 29366, Stop: 29178, Start Num: 9
Candidate Starts for BABullseye_44:
(Start: 9 @29366 has 105 MA's), (22, 29282), (23, 29279), (24, 29258),

Gene: BabyBack_44 Start: 32081, Stop: 31851, Start Num: 9
Candidate Starts for BabyBack_44:
(4, 32216), (Start: 9 @32081 has 105 MA's), (17, 32027), (23, 31988), (34, 31913),

Gene: Bactobuster_45 Start: 32677, Stop: 32492, Start Num: 9
Candidate Starts for Bactobuster_45:
(Start: 9 @32677 has 105 MA's), (11, 32644), (27, 32527),

Gene: Baehexic_45 Start: 31869, Stop: 31684, Start Num: 9
Candidate Starts for Baehexic_45:
(Start: 9 @31869 has 105 MA's), (27, 31719),

Gene: BengiVuitton_46 Start: 31775, Stop: 31587, Start Num: 9
Candidate Starts for BengiVuitton_46:
(Start: 9 @31775 has 105 MA's), (34, 31601),

Gene: BennyP_47 Start: 29968, Stop: 29780, Start Num: 9
Candidate Starts for BennyP_47:
(Start: 9 @29968 has 105 MA's), (15, 29923), (23, 29881), (26, 29836),

Gene: Benvolio_43 Start: 31141, Stop: 30953, Start Num: 9
Candidate Starts for Benvolio_43:
(1, 31576), (Start: 9 @31141 has 105 MA's), (27, 30991),

Gene: BlessJoy_47 Start: 29981, Stop: 29793, Start Num: 9
Candidate Starts for BlessJoy_47:
(Start: 9 @29981 has 105 MA's), (22, 29897), (23, 29894), (24, 29873), (26, 29849),

Gene: Blinn1_49 Start: 30331, Stop: 30152, Start Num: 9
Candidate Starts for Blinn1_49:
(Start: 9 @30331 has 105 MA's), (22, 30247), (23, 30244), (24, 30223),

Gene: Blue7_49 Start: 30167, Stop: 29988, Start Num: 9
Candidate Starts for Blue7_49:
(Start: 9 @30167 has 105 MA's), (15, 30122), (23, 30080), (25, 30038), (31, 30014),

Gene: Bugsy_48 Start: 32239, Stop: 32054, Start Num: 9
Candidate Starts for Bugsy_48:
(Start: 9 @32239 has 105 MA's), (13, 32194), (27, 32089),

Gene: CRB1_48 Start: 32159, Stop: 31977, Start Num: 9
Candidate Starts for CRB1_48:
(Start: 9 @32159 has 105 MA's),

Gene: Candra_47 Start: 29859, Stop: 29671, Start Num: 9
Candidate Starts for Candra_47:
(Start: 9 @29859 has 105 MA's), (15, 29814), (23, 29772), (26, 29727),

Gene: Celestialunch_43 Start: 31004, Stop: 30789, Start Num: 9
Candidate Starts for Celestialunch_43:
(Start: 8 @31007 has 2 MA's), (Start: 9 @31004 has 105 MA's), (10, 30992), (29, 30860),

Gene: Centaur_47 Start: 32086, Stop: 31901, Start Num: 9
Candidate Starts for Centaur_47:
(Start: 9 @32086 has 105 MA's), (27, 31936),

Gene: Charm_43 Start: 31035, Stop: 30844, Start Num: 8

Candidate Starts for Charm_43:
(4, 31164), (Start: 8 @31035 has 2 MA's), (17, 30984), (36, 30852),

Gene: Chartreuse_46 Start: 29770, Stop: 29582, Start Num: 9
Candidate Starts for Chartreuse_46:
(Start: 9 @29770 has 105 MA's), (22, 29686), (23, 29683), (24, 29662), (26, 29638),

Gene: CloudWang3_46 Start: 29620, Stop: 29432, Start Num: 9
Candidate Starts for CloudWang3_46:
(Start: 9 @29620 has 105 MA's), (22, 29536), (23, 29533), (24, 29512), (26, 29488),

Gene: Cookiedough_46 Start: 29835, Stop: 29647, Start Num: 9
Candidate Starts for Cookiedough_46:
(Start: 9 @29835 has 105 MA's), (22, 29751), (23, 29748), (24, 29727), (26, 29703),

Gene: DaVinci_46 Start: 29824, Stop: 29636, Start Num: 9
Candidate Starts for DaVinci_46:
(Start: 9 @29824 has 105 MA's), (22, 29740), (23, 29737), (24, 29716), (26, 29692),

Gene: Deloris_45 Start: 31444, Stop: 31256, Start Num: 9
Candidate Starts for Deloris_45:
(Start: 9 @31444 has 105 MA's), (34, 31270),

Gene: Dignity_48 Start: 32259, Stop: 32074, Start Num: 9
Candidate Starts for Dignity_48:
(Start: 9 @32259 has 105 MA's), (13, 32214), (27, 32109),

Gene: Dorothea_46 Start: 29842, Stop: 29654, Start Num: 9
Candidate Starts for Dorothea_46:
(Start: 9 @29842 has 105 MA's), (15, 29797), (23, 29755), (26, 29710),

Gene: Drake55_48 Start: 32183, Stop: 31998, Start Num: 9
Candidate Starts for Drake55_48:
(3, 32552), (Start: 9 @32183 has 105 MA's), (13, 32138), (27, 32033),

Gene: DreamTeam1_43 Start: 30909, Stop: 30718, Start Num: 8
Candidate Starts for DreamTeam1_43:
(4, 31038), (Start: 8 @30909 has 2 MA's), (17, 30858), (36, 30726),

Gene: DudeLittle_45 Start: 31828, Stop: 31643, Start Num: 9
Candidate Starts for DudeLittle_45:
(Start: 9 @31828 has 105 MA's), (27, 31678),

Gene: EagleEye_47 Start: 30973, Stop: 30788, Start Num: 9
Candidate Starts for EagleEye_47:
(Start: 9 @30973 has 105 MA's), (17, 30916), (20, 30892), (28, 30823),

Gene: Echild_46 Start: 31165, Stop: 30977, Start Num: 9
Candidate Starts for Echild_46:
(1, 31600), (Start: 9 @31165 has 105 MA's), (27, 31015),

Gene: Equemioh13_47 Start: 31988, Stop: 31803, Start Num: 9
Candidate Starts for Equemioh13_47:

(Start: 9 @31988 has 105 MA's), (27, 31838),

Gene: EricB_46 Start: 29816, Stop: 29628, Start Num: 9
Candidate Starts for EricB_46:
(Start: 9 @29816 has 105 MA's), (15, 29771), (23, 29729), (26, 29684),

Gene: Fameo_46 Start: 32004, Stop: 31819, Start Num: 9
Candidate Starts for Fameo_46:
(Start: 9 @32004 has 105 MA's), (11, 31971), (27, 31854), (34, 31830),

Gene: FatCactus_37 Start: 28563, Stop: 28351, Start Num: 9
Candidate Starts for FatCactus_37:
(Start: 9 @28563 has 105 MA's), (16, 28512), (21, 28479), (25, 28422), (26, 28419),

Gene: First_0046 Start: 31689, Stop: 31501, Start Num: 9
Candidate Starts for First_0046:
(Start: 9 @31689 has 105 MA's), (34, 31515),

Gene: Flare16_46 Start: 31747, Stop: 31562, Start Num: 9
Candidate Starts for Flare16_46:
(Start: 9 @31747 has 105 MA's), (27, 31597),

Gene: Gail_51 Start: 33528, Stop: 33352, Start Num: 9
Candidate Starts for Gail_51:
(Start: 9 @33528 has 105 MA's), (30, 33375), (33, 33363),

Gene: Garak_48 Start: 29987, Stop: 29799, Start Num: 9
Candidate Starts for Garak_48:
(Start: 9 @29987 has 105 MA's), (23, 29900), (24, 29879), (26, 29855),

Gene: Gratitude_47 Start: 31988, Stop: 31803, Start Num: 9
Candidate Starts for Gratitude_47:
(Start: 9 @31988 has 105 MA's), (27, 31838),

Gene: GreedyLawyer_46 Start: 29823, Stop: 29635, Start Num: 9
Candidate Starts for GreedyLawyer_46:
(Start: 9 @29823 has 105 MA's), (15, 29778), (22, 29739), (23, 29736), (24, 29715), (26, 29691),

Gene: Gruunaga_46 Start: 29823, Stop: 29635, Start Num: 9
Candidate Starts for Gruunaga_46:
(Start: 9 @29823 has 105 MA's), (22, 29739), (23, 29736), (24, 29715), (26, 29691),

Gene: Hammer_48 Start: 29977, Stop: 29798, Start Num: 9
Candidate Starts for Hammer_48:
(Start: 9 @29977 has 105 MA's), (15, 29932), (25, 29848), (31, 29824),

Gene: HarryHoudini_47 Start: 32192, Stop: 32007, Start Num: 9
Candidate Starts for HarryHoudini_47:
(3, 32561), (Start: 9 @32192 has 105 MA's), (27, 32042),

Gene: Heffalump_45 Start: 32472, Stop: 32287, Start Num: 9
Candidate Starts for Heffalump_45:
(Start: 9 @32472 has 105 MA's), (11, 32439), (27, 32322),

Gene: Helmet_48 Start: 29987, Stop: 29799, Start Num: 9
Candidate Starts for Helmet_48:
(Start: 9 @29987 has 105 MA's), (23, 29900), (24, 29879), (26, 29855),

Gene: Herbertwm_43 Start: 30942, Stop: 30700, Start Num: 6
Candidate Starts for Herbertwm_43:
(Start: 6 @30942 has 1 MA's), (7, 30933), (12, 30882), (18, 30861), (19, 30846), (23, 30825), (32, 30753),

Gene: Hexamo_46 Start: 29608, Stop: 29420, Start Num: 9
Candidate Starts for Hexamo_46:
(Start: 9 @29608 has 105 MA's), (22, 29524), (23, 29521), (24, 29500), (26, 29476),

Gene: HippoHollow_46 Start: 33225, Stop: 33037, Start Num: 9
Candidate Starts for HippoHollow_46:
(Start: 9 @33225 has 105 MA's), (11, 33192), (27, 33075),

Gene: Hoot_46 Start: 29801, Stop: 29613, Start Num: 9
Candidate Starts for Hoot_46:
(Start: 9 @29801 has 105 MA's), (15, 29756), (23, 29714), (26, 29669),

Gene: Imbriano_47 Start: 29841, Stop: 29653, Start Num: 9
Candidate Starts for Imbriano_47:
(Start: 9 @29841 has 105 MA's), (22, 29757), (23, 29754), (24, 29733), (26, 29709),

Gene: Indra_49 Start: 29988, Stop: 29800, Start Num: 9
Candidate Starts for Indra_49:
(Start: 9 @29988 has 105 MA's), (23, 29901), (24, 29880), (26, 29856),

Gene: IronMan_46 Start: 32860, Stop: 32675, Start Num: 9
Candidate Starts for IronMan_46:
(Start: 9 @32860 has 105 MA's), (11, 32827), (27, 32710), (34, 32686),

Gene: Isiphiwo_44 Start: 29360, Stop: 29172, Start Num: 9
Candidate Starts for Isiphiwo_44:
(Start: 9 @29360 has 105 MA's), (22, 29276), (23, 29273), (24, 29252), (26, 29228),

Gene: Iwokeuplikedis_49 Start: 31788, Stop: 31606, Start Num: 9
Candidate Starts for Iwokeuplikedis_49:
(Start: 9 @31788 has 105 MA's), (27, 31638),

Gene: Jeffabunny_46 Start: 29644, Stop: 29456, Start Num: 9
Candidate Starts for Jeffabunny_46:
(Start: 9 @29644 has 105 MA's), (22, 29560), (23, 29557), (24, 29536), (26, 29512),

Gene: Jerm_48 Start: 32252, Stop: 32067, Start Num: 9
Candidate Starts for Jerm_48:
(Start: 9 @32252 has 105 MA's), (27, 32102),

Gene: JewelBug_48 Start: 29992, Stop: 29804, Start Num: 9
Candidate Starts for JewelBug_48:
(Start: 9 @29992 has 105 MA's), (22, 29908), (23, 29905), (24, 29884), (26, 29860),

Gene: Jordennis_46 Start: 29831, Stop: 29643, Start Num: 9
Candidate Starts for Jordennis_46:
(Start: 9 @29831 has 105 MA's), (22, 29747), (23, 29744), (24, 29723), (26, 29699),

Gene: JoshKayV_48 Start: 32333, Stop: 32151, Start Num: 9
Candidate Starts for JoshKayV_48:
(Start: 9 @32333 has 105 MA's), (27, 32183),

Gene: Kazan_47 Start: 29829, Stop: 29641, Start Num: 9
Candidate Starts for Kazan_47:
(Start: 9 @29829 has 105 MA's), (15, 29784), (23, 29742), (26, 29697),

Gene: Kipper29_46 Start: 29842, Stop: 29654, Start Num: 9
Candidate Starts for Kipper29_46:
(Start: 9 @29842 has 105 MA's), (15, 29797), (23, 29755), (26, 29710),

Gene: Klodlith_44 Start: 30926, Stop: 30735, Start Num: 8
Candidate Starts for Klodlith_44:
(4, 31055), (Start: 8 @30926 has 2 MA's), (17, 30875), (36, 30743),

Gene: Koko_48 Start: 30516, Stop: 30337, Start Num: 9
Candidate Starts for Koko_48:
(Start: 9 @30516 has 105 MA's), (15, 30471), (25, 30387), (31, 30363),

Gene: LadyBird_49 Start: 32124, Stop: 31936, Start Num: 9
Candidate Starts for LadyBird_49:
(Start: 9 @32124 has 105 MA's), (27, 31974),

Gene: Landor_46 Start: 32938, Stop: 32753, Start Num: 9
Candidate Starts for Landor_46:
(Start: 9 @32938 has 105 MA's), (11, 32905), (27, 32788),

Gene: Leviathan_48 Start: 32308, Stop: 32123, Start Num: 9
Candidate Starts for Leviathan_48:
(Start: 9 @32308 has 105 MA's), (27, 32158),

Gene: LilTurb_47 Start: 32141, Stop: 31956, Start Num: 9
Candidate Starts for LilTurb_47:
(Start: 9 @32141 has 105 MA's), (13, 32096), (27, 31991),

Gene: Lilbunny_45 Start: 29618, Stop: 29430, Start Num: 9
Candidate Starts for Lilbunny_45:
(Start: 9 @29618 has 105 MA's), (22, 29534), (23, 29531), (24, 29510), (26, 29486),

Gene: Lucyedi_46 Start: 31168, Stop: 30983, Start Num: 9
Candidate Starts for Lucyedi_46:
(Start: 9 @31168 has 105 MA's), (17, 31111), (20, 31087), (28, 31018),

Gene: McFly_46 Start: 29823, Stop: 29635, Start Num: 9
Candidate Starts for McFly_46:
(Start: 9 @29823 has 105 MA's), (15, 29778), (23, 29736), (26, 29691),

Gene: MegTheThird_44 Start: 31006, Stop: 30788, Start Num: 8
Candidate Starts for MegTheThird_44:
(Start: 8 @31006 has 2 MA's), (Start: 9 @31003 has 105 MA's), (10, 30991), (29, 30859),

Gene: MiculUcigas_46 Start: 31647, Stop: 31462, Start Num: 9
Candidate Starts for MiculUcigas_46:
(Start: 9 @31647 has 105 MA's), (27, 31497),

Gene: MissWhite_44 Start: 29921, Stop: 29754, Start Num: 9
Candidate Starts for MissWhite_44:
(Start: 9 @29921 has 105 MA's), (17, 29867),

Gene: NaSiaTalie_46 Start: 31744, Stop: 31559, Start Num: 9
Candidate Starts for NaSiaTalie_46:
(Start: 9 @31744 has 105 MA's), (27, 31594),

Gene: Nedarya_44 Start: 29716, Stop: 29513, Start Num: 9
Candidate Starts for Nedarya_44:
(Start: 9 @29716 has 105 MA's),

Gene: Neeharika16_46 Start: 29834, Stop: 29646, Start Num: 9
Candidate Starts for Neeharika16_46:
(Start: 9 @29834 has 105 MA's), (22, 29750), (23, 29747), (24, 29726), (26, 29702),

Gene: Newrala_46 Start: 29834, Stop: 29646, Start Num: 9
Candidate Starts for Newrala_46:
(Start: 9 @29834 has 105 MA's), (22, 29750), (23, 29747), (24, 29726), (26, 29702),

Gene: PainterBoy_46 Start: 31104, Stop: 30919, Start Num: 9
Candidate Starts for PainterBoy_46:
(Start: 9 @31104 has 105 MA's), (17, 31047), (20, 31023), (28, 30954),

Gene: Piro94_46 Start: 32109, Stop: 31924, Start Num: 9
Candidate Starts for Piro94_46:
(3, 32478), (Start: 9 @32109 has 105 MA's), (13, 32064), (27, 31959),

Gene: Pmask_46 Start: 29835, Stop: 29647, Start Num: 9
Candidate Starts for Pmask_46:
(Start: 9 @29835 has 105 MA's), (22, 29751), (23, 29748), (24, 29727), (26, 29703),

Gene: Polyphemus_47 Start: 29978, Stop: 29790, Start Num: 9
Candidate Starts for Polyphemus_47:
(Start: 9 @29978 has 105 MA's), (23, 29891), (24, 29870), (26, 29846),

Gene: Priamo_48 Start: 30135, Stop: 29947, Start Num: 9
Candidate Starts for Priamo_48:
(5, 30213), (Start: 9 @30135 has 105 MA's), (22, 30051), (23, 30048), (24, 30027), (26, 30003),

Gene: Pukovnik_45 Start: 32528, Stop: 32343, Start Num: 9
Candidate Starts for Pukovnik_45:
(Start: 9 @32528 has 105 MA's),

Gene: Ravana_50 Start: 30946, Stop: 30728, Start Num: 9

Candidate Starts for Ravana_50:
(2, 31333), (Start: 9 @30946 has 105 MA's),

Gene: Rifter_48 Start: 29940, Stop: 29761, Start Num: 9
Candidate Starts for Rifter_48:
(Start: 9 @29940 has 105 MA's), (15, 29895), (23, 29853), (25, 29811), (31, 29787),

Gene: Roksolana_47 Start: 29871, Stop: 29683, Start Num: 9
Candidate Starts for Roksolana_47:
(Start: 9 @29871 has 105 MA's), (22, 29787), (23, 29784), (24, 29763), (26, 29739),

Gene: SheaKeira_44 Start: 31011, Stop: 30799, Start Num: 9
Candidate Starts for SheaKeira_44:
(4, 31143), (Start: 8 @31014 has 2 MA's), (Start: 9 @31011 has 105 MA's), (10, 30999), (17, 30960), (26, 30879), (29, 30867),

Gene: Sknot_46 Start: 31747, Stop: 31562, Start Num: 9
Candidate Starts for Sknot_46:
(Start: 9 @31747 has 105 MA's), (27, 31597),

Gene: Smeagan_49 Start: 32395, Stop: 32210, Start Num: 9
Candidate Starts for Smeagan_49:
(Start: 9 @32395 has 105 MA's), (13, 32350), (27, 32245),

Gene: SmellyB_46 Start: 29823, Stop: 29635, Start Num: 9
Candidate Starts for SmellyB_46:
(Start: 9 @29823 has 105 MA's), (15, 29778), (23, 29736), (26, 29691),

Gene: Sunhee_49 Start: 31730, Stop: 31551, Start Num: 9
Candidate Starts for Sunhee_49:
(Start: 9 @31730 has 105 MA's),

Gene: SuperAwesome_46 Start: 29834, Stop: 29646, Start Num: 9
Candidate Starts for SuperAwesome_46:
(Start: 9 @29834 has 105 MA's), (22, 29750), (23, 29747), (24, 29726), (26, 29702),

Gene: SwirlSquare_47 Start: 30451, Stop: 30257, Start Num: 9
Candidate Starts for SwirlSquare_47:
(Start: 9 @30451 has 105 MA's), (23, 30358), (25, 30319), (32, 30292), (36, 30265),

Gene: TarsusIV_44 Start: 31542, Stop: 31357, Start Num: 9
Candidate Starts for TarsusIV_44:
(Start: 9 @31542 has 105 MA's),

Gene: Temprado_47 Start: 29987, Stop: 29799, Start Num: 9
Candidate Starts for Temprado_47:
(Start: 9 @29987 has 105 MA's), (23, 29900), (24, 29879), (26, 29855),

Gene: Terrific_47 Start: 32101, Stop: 31916, Start Num: 9
Candidate Starts for Terrific_47:
(Start: 9 @32101 has 105 MA's), (27, 31951),

Gene: ToneTone_43 Start: 29550, Stop: 29362, Start Num: 9

Candidate Starts for ToneTone_43:
(Start: 9 @29550 has 105 MA's), (22, 29466), (23, 29463), (24, 29442), (26, 29418),

Gene: Trooper_47 Start: 32104, Stop: 31925, Start Num: 9
Candidate Starts for Trooper_47:
(Start: 9 @32104 has 105 MA's), (13, 32059),

Gene: Tucker_47 Start: 29988, Stop: 29800, Start Num: 9
Candidate Starts for Tucker_47:
(Start: 9 @29988 has 105 MA's), (22, 29904), (23, 29901), (24, 29880), (26, 29856),

Gene: Turbido_47 Start: 32138, Stop: 31950, Start Num: 9
Candidate Starts for Turbido_47:
(Start: 9 @32138 has 105 MA's), (27, 31988),

Gene: Updawg_47 Start: 31988, Stop: 31803, Start Num: 9
Candidate Starts for Updawg_47:
(Start: 9 @31988 has 105 MA's), (27, 31838),

Gene: VA6_45 Start: 31667, Stop: 31479, Start Num: 9
Candidate Starts for VA6_45:
(Start: 9 @31667 has 105 MA's), (27, 31517),

Gene: VohminGhazi_46 Start: 29824, Stop: 29636, Start Num: 9
Candidate Starts for VohminGhazi_46:
(Start: 9 @29824 has 105 MA's), (15, 29779), (23, 29737), (26, 29692),

Gene: Whabigail7_47 Start: 32123, Stop: 31938, Start Num: 9
Candidate Starts for Whabigail7_47:
(Start: 9 @32123 has 105 MA's), (13, 32078), (27, 31973),

Gene: WideWale_47 Start: 31988, Stop: 31803, Start Num: 9
Candidate Starts for WideWale_47:
(Start: 9 @31988 has 105 MA's), (27, 31838),

Gene: Wiks_45 Start: 29618, Stop: 29430, Start Num: 9
Candidate Starts for Wiks_45:
(Start: 9 @29618 has 105 MA's), (22, 29534), (23, 29531), (24, 29510), (26, 29486),

Gene: WunderPhul_46 Start: 29616, Stop: 29428, Start Num: 9
Candidate Starts for WunderPhul_46:
(Start: 9 @29616 has 105 MA's), (22, 29532), (23, 29529), (24, 29508), (26, 29484),

Gene: Yokurt_46 Start: 29618, Stop: 29430, Start Num: 9
Candidate Starts for Yokurt_46:
(Start: 9 @29618 has 105 MA's), (22, 29534), (23, 29531), (24, 29510), (26, 29486),

Gene: Zaka_46 Start: 29618, Stop: 29430, Start Num: 9
Candidate Starts for Zaka_46:
(Start: 9 @29618 has 105 MA's), (22, 29534), (23, 29531), (24, 29510), (26, 29486),

Gene: Zulu_47 Start: 29969, Stop: 29781, Start Num: 9
Candidate Starts for Zulu_47:

(Start: 9 @29969 has 105 MA's), (22, 29885), (23, 29882), (24, 29861), (26, 29837),